

UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Head Office: Università degli Studi di Padova

Department of Philosophy, Sociology, Education and Applied Psychology

**Ph.D. COURSE IN: Social Sciences: Interactions, Communication, and
Cultural Constructions**

SERIES XXXI

**Public engagement and social acceptability
in energy system change:
A socio-psychological analysis of a regional case study**

Thesis written with the financial contribution of the University of Padua

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Abstract

The transition towards distributed low-carbon energy systems coincides with the introduction and materialization of renewable energy technologies (RETs) and associated infrastructures at the local level and implies a complex re-organization of the territories and a careful consideration of the relationship between energy sources and technologies and the local scale. Indeed, the design and effective implementation of energy policies and technologies require engaging multiple actors across scales in identifying measures ideally fitting with the given political, socio-cultural, economic and territorial contexts, building the acceptability and support of diverse publics.

Social research on social acceptance of RETs and associated infrastructures has grown in the last decades proposing several conceptual frameworks. However, this literature still presents some limitations, such as the scarcity of studies on social acceptance of the whole energy system change instead of single technologies/projects. Moreover, studies often rely and focus only on a single level or dimension of social acceptance, notably community acceptance at the local level, or political and socio-economic acceptance at the national level. Thus, studies integrating market, socio-political and community aspects or triangulating/combining findings from different levels are limited.

This thesis presents a longitudinal and multi-scalar investigation of public discourse and stakeholders' perspectives on energy policies and technologies in the Marche region (Italy) by connecting public and institutional arenas. The research adopts Social Representations, Justice and Identity Theories and a discursive analytical approach to investigate public engagement and social acceptability in energy system change. The research consists of three studies: a longitudinal discourse analysis of the public sphere (2011-2017), involving document materials and naturalistic data (i.e. local media, political and public debates) to examine the historicity and territorialisation of RETs and related people's responses; an analysis of public consultations and environmental assessments' reports (2015-2016) regarding the regional energy plan 2020 and twenty-two narrative interviews (2017-2018) with key informants and actors operating at different scales (i.e. policy, market, expert and civil society actors).

The first study shows that people opposition to the territorialisation of RETs were motivated by different factors involving procedural (engagement, authorisation, regulation, guidelines, and assessment in RET deployment), distributional (environmental and social impacts, fit with place materiality and symbolic meanings, distribution of costs and benefits between places and

actors) and recognition elements of justice (recognition and treatment of local communities and authorities).

Moreover, the study found that different RETs are conceptualized as strongly intertwined, considering distributed generation of RETs as a physical aggression and multiplication of impacts devastating the territory. Territorial features and memories of unsustainable economies (overbuilding and soil consumption, widespread industries and pollution, landscape disruption) played a great role in public conceptualization of and responses to RETs considered as aggravating environmental criticalities, putting at risk local economies based on agriculture and tourism and reinforcing distrust toward firms and politics.

To face this situation, the Regional Government started a re-configuration process with the elaboration of energy and environmental policies by means of preliminary and inclusive participation. Despite the institutional participatory pathways have addressed many critical issues, enhancing the timely recognition and inclusion of different normative appraisals in planning and decision-making, and enhancing the overall quality and legitimacy of the plan, this remains constrained by different factors constraining the potential for a sustainable and effective implementation of the strategy and undermining socio-political, economic, and community acceptance.

The findings are discussed in light of the theoretical, methodological and applied (policy) implications of the research on social acceptance and deliberative governance.

Introduction and summary

The change in the global biosphere in relation to human activities began to be recognised as a treat for humankind since the '70s, with the seminal study and book “The limits of growth” (Meadows, Meadows, Randers, & Behrens, 1972). Phenomena like biodiversity loss, climate change, air pollution or progressive depletion of natural resources are all global bio-physical events determined on what is done at the local level (Bonnes, Carrus & Passafaro, 2006). All these environmental challenges are recognised in the broader global environmental change, with some scholars arguing that the planet has entered in a new geological era: the Anthropocene (Crutzen & Stoermer, 2000).

The global environmental change is driven by different kinds of human activities, such as the increasing demand of natural resources and environmental services, which derive from the growth in human population and increase of resource consumption per person, and from the way human settlements are organised in extracting and exploiting resources from the environment while producing negative environmental externalities within it (Dietz, Ostrom & Stern, 2003).

Anthropogenic climate change is the most well-known and pressing problem of our century, with fossil fuels combustion and consequent emissions of CO₂ in the atmosphere having the major responsibility (IPCC, 2014). Indeed, worldwide governments are fully committed in taking action to reach the goal of Paris Agreement – of limiting the planet warming well below 2 C° above pre-industrial levels and pursue efforts for 1,5 C° - requiring an unprecedented reconfiguration in the energy sector that generates around two thirds of global greenhouse gasses' emissions (IEA, 2016).

This requires a radical transformation of current societies towards a sustainable and low-carbon future, from what we consume, the technologies we adopt, and the forms of social organization we deploy for production and consumption patterns. Social science, as the study of society and how people behave and contribute to its construction, has in this context a vital role to understand and address issues underlying these problems. To achieve positive outcomes, techno-scientific innovations and system transformations have to be accompanied by deep cultural changes, meaning that we must take both techno-scientific and social issues into account (Sarrica et al., 2016; Sovacool, 2014a).

Dealing with this complexity social sciences have the difficult task to integrate their knowledge on human systems and behaviours and engage in multi-disciplinary dialogue not only within the social science and humanity domain but also with science, technology, engineering and

math disciplines. As Stern, Sovacool and Dietz (2016, p. 2) argue, “[s]ocial forces—power, culture, institutional arrangements—shape the scale, content, techniques, and trajectories of production, distribution, and use of goods and services and the associated uses of energy. Thus, an adequate analysis of the Anthropocene cannot proceed without the substantial engagement of the social sciences. At the same time, the social sciences cannot make much progress working in isolation from the physical, ecological, health and engineering sciences”. Aware of the partiality of scientific knowledge obtainable by single disciplines and theoretical perspectives, within environmental social sciences seem maturing the idea and agreement that nothing can advance the knowledge we have on a given object or phenomena under analysis, as facing the practical problem integrating diverse perspectives (Stern, 2014). To summarise, the awareness that structures influence meanings and agency in the same ways agency and meanings contribute to stability or change of structures means that every research effort theoretically disciplined and focused on only one of these aspects sheds light on a single part of the wider system. This sectorial knowledge results often unusable in real life if not supported by disciplinary, theoretical and/or empirical triangulation. It is with this inspiration that this thesis aims to give a contribution. Far from being naïf and pretend to provide an interdisciplinary understanding of the research object, this thesis aims to integrate different theoretical and disciplinary perspectives from energy research and social sciences to analyse the structure-agency-meanings relation at stake in the transformation of a regional energy system. To reflect and analyse this dynamic relation, the thesis will rely mostly on sociological, political, geographical and psychological sciences’ literature to provide a deeper understanding of how techno-scientific, legal-political, and public sphere innovations interact in dealing with the transition toward renewable sources and the territorialisation of low-carbon technologies.

Thus, the first chapter will present a theoretical reasoning on energy transition that moves from the macro-level of structures to the micro-level of meanings and agency and then focuses on public engagement and social acceptance in the energy field as the main objects of the study. This literature overview is intended to provide an account of and introduce to the governance of energy transition as a complex social change process with techno-scientific, legal, socio-political and territorial/geographical aspects to take into account.

The second chapter will present the psychosocial theoretical frameworks guiding the research. In particular, the chapter will introduce the societal psychological perspective adopted to connect individual levels of analysis with the analysis of the relational and social dynamics that shape, give meaning and essence to political behaviour and phenomena, and examine change within its own social and historical context, critically engaging with the politics of change, and

revealing the multiplicity of factors and perspectives at stake in supporting or resisting change (Doise & Staerklè, 2002; Howarth et al., 2013; Lopes & Gaskell, 2015; Reicher & Haslam, 2013). The chapter then introduces the reader the main psychosocial theories fitting with such a societal perspective and relevant with regard to the psychosocial objects of this thesis (intergroup relations, shared and contested meanings, common identities, shared perceptions of risk/injustice/grievance/deprivation, or of power, socio-political control). These theoretical perspectives are identified in Social Representations Theory, Identity theories (group/social identity, place identity, community identity) and Justice theories (comprising distributive justice, procedural fairness and recognition dimensions), used as a means to better understand psychosocial factors at play in public engagement and social acceptance about energy system change.

The third chapter introduces the context of the study. Given the greater relevance that this research approach gives to the contextual dimension, the chapter provides the reader with an in-depth contextualization of the case of study by providing an account of the national and regional context and scenario. Adopting a societal psychology perspective, the research focuses on both planned top-down and bottom-up emergent change, acknowledging the possible tensions between top-down and bottom-up change ambitions and projects, the nonlinearity of change, and the different social forces acting to promote or resist change from different positions (Howarth et al., 2013). In this regard, the chapter provides an (historical) overview of the Italian energy policy scenario, through a literature review focusing on the decentralization of energy governance and the distribution of competencies across scales, the market-based policies for renewable energy development, public involvement and institutionalised participation, and a brief introduction to the recently approved national energy strategy. With regard to the regional context case of study, the chapter proceeds to provide a geographical and spatial account of the regional territory. Then, the chapter provides a historical account of the regional economic and demographic changes, i.e. industrialization and urbanization dynamics, and how these changes influenced the regional environment. Finally, the chapter presents the regional energy policy and governance scenario in the period 2005-2017, by deepening the deployment of renewables in the region.

The fourth chapter presents the methodological approach and describes the aims, design, process and materials of the research. First, the chapter introduces the reader to qualitative research, the underlying epistemologies, methodological debates and scientific criteria. From this introduction, the reader is presented with the techniques of data analysis adopted in the research: thematic analysis (Braun & Clarke, 2006; Joffe & Yardley, 2004), and discourse

analysis (Billig, 1987; Fairclough, 1992; Hajer, 1995). First, it is presented thematic analysis by comparing it with content analysis, showing the different strengths and limits of the methods, and underlining their potential of application depending on research questions and interests. The last part of the chapter is intended to provide a literature overview of discourse analysis and rhetorical approaches in social psychology and the field of environmental politics and discuss the potential of integration between the Social Representations approach and discourse analysis for the study of environmental issues. This literature review is not intended to be comprehensive - rather it is extremely selective - but aimed to provide the reader with the reasoning behind the methodological approach and the choices made during the research process. Furthermore, it discusses the potential of adopting a discourse analytical approach to integrate structure and agency in the study of environmental conflicts and decision-making. The chapter concludes by presenting the research aims, process and materials of the research project and introduces the three studies that make it up.

The fifth chapter presents the first of the empirical studies composing the research: a longitudinal analysis (2011-2017) of public discourse on renewable energies and related policies. The study uses and triangulates natural documents and naturalistic data about public, political and media debate to reconstruct and analyse the historicity and territorialisation of renewable energies and the related public responses and discourses accompanying RETs deployment and diffusion. At first, the chapter introduces the research aims, methods and materials, and proceeds in providing a first picture of the analysed data set, presenting an analysis of voice (presence of different actors and groups), main themes and discourse intertextuality (how texts are linked together and in what relations they stand).

Then, the results are presented and discussed according to the analyses undertaken using a top-down (coding framework relies on the literature) and bottom-up approach to coding (coding is undertaken to let emerge or to summarise the main content and function of the utterance remaining grounded to the data) that resulted in three main macro-themes and dimensions: arguments representing distributional injustices in RET deployment (impacts on human health and well-being; place-related impacts and fit with place; distribution of costs and benefits), arguments representing procedural injustices in RET development (assessment and authorizations; regulation and guidelines; participation), and arguments on recognition (of societal actors involved in the argumentative battle), that is, how actors represent and position self and others.

The findings are presented by analysing and discussing the main discourses/arguments composing the themes, looking at their intertextuality and the kind of relations linking them,

and their intended and pragmatic effects in social and political relations.

The sixth chapter presents the other two studies composing the research, triangulating data (natural documents and narrative episodic interviews) and methods (thematic analysis and thematic discourse analysis) to investigate social acceptability and public engagement about energy system change in context. The studies approach public engagement and social acceptability of RETs and related policies by different publics as expressions and products of communicative and interactive processes grounded with power and institutional relations and practices, as well as historically, culturally and territorially situated and influenced by pre-existent knowledge and experience (Batel & Devine-Wright, 2015). Both public engagement and social acceptance are analysed in their processual/temporal dimension (Wolsink, 2018a), continuously produced in a constant struggle over meanings and positionings actors strategically use to get influence and recognition and fully participate in the definition of the (representational) regional energy project. The first study that is presented concerns a document analysis (Bowen, 2009; Flick, 2009) of public consultations' documents regarding the regional energy planning process (a listening campaign, open and preliminary to the elaboration of the plan -2015- and public consultations undertaken within the procedure of Strategic Environmental Assessment of the plan -2016). The study aimed to investigate the (conditional) socio-political acceptance of RETs and related policies by deepening the representations/discourses and related systems of meanings used and conveyed by different actors to define the regional energy project. The analysis looked how different elements on energy system change (e.g. RETs and associated infrastructures; policies, plans and laws; place meanings and constraints, guiding principles, visions etc.) are conceived, conceptualised and conveyed by different groups and coalitions in the political sphere. The findings of the thematic analysis are presented by highlighting the (sharing, opposing, overlapping) perspectives at stake in defining the fundamental pillars of the energy strategy.

Finally, the chapter concludes by triangulating these findings with the findings of the interview study with key regional and local informants. The narrative episodic interview aimed to deepen actors' representations, experience and viewpoints on public engagement practices and energy policies and technologies. More in-depth, it aimed to deepen the perspective of key actors on institutional change and arrangements (policies and institutional practices: e.g. land use policies, public involvement practices) as well as renewable energy technologies and related issues at stake (e.g. the places and the territorial dimension) by adopting a perspective sensitive to time, space and relations. Indeed, the rationale of the interview study is that the meanings about RETs and associated social objects are highly dependent and grounded on experienced

(power) relations. In this view, meanings about RETs and energy system change are socially constructed and emergent in the knowledge relational encounters - imagined or real - reflecting the knowledge of significant others.

The findings of the interview study are presented and discussed by focusing on: the geographical/spatial aspects at play in the transformation of the energy systems, and the role of territorial history, features and meanings in the current energy transition; the relational/social side of regional energy transition involving mutual recognition and expectations at play in knowledge encounters; the perspectives and acceptability about the regional energy strategy (final decision), involving the socio-technical configurations of RETs and related institutional change and arrangements; and the experiences and practices of bottom-up and institutionalised participation as a means to enhance quality and legitimacy of decisions and build capacities required for transformation.

The thesis concludes by discussing how the findings connect with and advance earlier literature on social acceptance of RETs and socio-technical system change and outlining the theoretical, methodological and applied (policy) implications for public engagement and deliberative governance.

CHAPTER 1 - TRANSITIONING TOWARDS LOW-CARBON ENERGY SYSTEMS: AN INTRODUCTION TO THE RESEARCH PROBLEM AND OBJECT

1.1. Governance of sustainability transitions: techno-scientific, legal and social innovations for socio-technical systems' change

In the last decades, the increased awareness on the limits of the planet has pushed social research to develop new ways of conceptualising, understanding, and orienting the governance of societal transformations required on different sectors, such as water, transport, food, waste, energy (Smith, Stirling & Berkhout, 2005; Grin et. al, 2010). According to socio-technical transition (STT) literature, these sectors are conceived as socio-technical systems, recognising the interaction of individual and collective actors, institutions, material artefacts and knowledge in the supply of goods and services for our current societies (Geels, 2004; Markard, 2011; Weber, 2003). STT represents an interdisciplinary academic approach informed by studies of science, technology and innovations, evolutionary and environmental economics, and history and sociology of technology. Within it, the socio-technical adjective is used to explain and consider the differences with the mere technological innovations and transitions, thus including a change in social practices and institutions (Markard, Raven & Truffer, 2012). Reasoning in terms of socio-technical transitions means to assume that technology and society are mutually co-implicated and the result of co-construction and co-evolution processes between social-human, socio-ecological and techno-scientific dimensions (Geels et al., 2015). Thus, a socio-technical transition requires far-reaching change across different scales and dimensions linked together – technological, organizational, institutional, socio-cultural, political, economic – and involving multiple actors (Geels e Schot, 2007; Kemp, 1994). In other words, conceptualising energy as a socio-technical system implies that governing the energy systems' transformation does not call upon a simple (and material) substitution of energy sources and technologies. Instead, STT literature suggests us to bear in mind that energy systems are composed of multiple and interconnected areas and that while techno-scientific innovations are crucial to sustainable change, (the right) governance is fundamental to enable and promote sustainable innovations (Kuzemko et al., 2016). In this regard, the low-carbon transition poses several challenges pertaining the energy-society relation, emphasising the necessity of transnational agreements and coordinated policies delivering a paradigm shift in the ways energy is produced, delivered and consumed (Adil & Ko, 2016). The necessity to adopt a multi-scalar and networked

approach to governance, linking the global and the local dimension to better understand, assess and face global environmental challenges is now widely acknowledged (Cash and Moser, 2000; Wilbanks, 2007). Taking into account multiple actors across multiple scales is indeed recognised as essential for designing regulatory responses and setting up governance arrangements (Bulkeley & Moser, 2007; Goldthau, 2014). Within STT literature, the Multi-Level Perspective (MLP) on socio-technical transitions (Geels, 2002), represent a prominent framework to account for technological change and system innovation within the socio-technical transition.

This perspective conceives transition to sustainability as the set of nonlinear processes resulting from the interplay and dynamics between three levels creating or constraining technological transitions (See Figure 1): the socio-technical regimes, socio-technical niches and socio-technical landscape (Rip & Kemp, 1998; Geels, 2002).

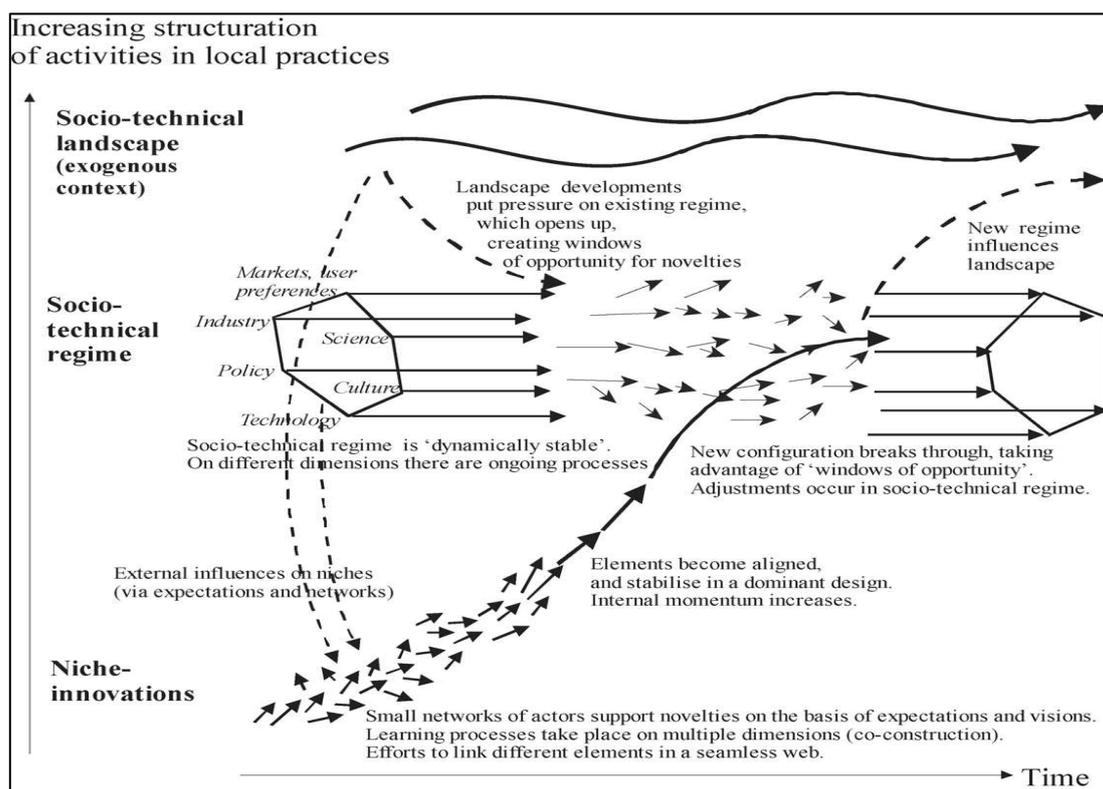


Figure 1. Multi-Level Perspective on socio-technical transitions (source: Geels & Schot, 2007, p.401)

The socio-technical systems, such as energy ones, are conceived and understood as socio-technical regimes, which comprise consolidated and dominant institutions, technologies, norms and practices that govern, stabilise and sustain the system (Geels, 2002). The socio-technical landscape represents the external structural context of socio-technical regimes, made up of

social and physical elements such as macroeconomics, deep cultural patterns, macro-political developments, and environmental conditions (Geels, & Schot, 2007). The socio-technical niches are conceived as the level where radical innovations emerge and develop, and that go to compete with the existing configurations for their wider adoption and diffusion within society (Grin et al., 2010). Transitions are the result of alignments of development between these three levels. Geels (2002) stresses that these levels do not represent an ontological description of reality. Rather, they provide heuristic analytical concepts to understand how socio-technical systems work and change or not, providing levels for structural analyses rather than of geographic or administrative levels (Geels, 2014). In this regard, Geels and Schot (2007, p. 402) argue that “[t]he analyst should first demarcate the empirical level of the object of analysis, and then operationalise the MLP”.

Transitions are thus defined as changes from one socio-technical regime (e.g. fossil fuel-based energy systems) to another (e.g. renewable energy systems) resulting from the interaction between niche innovations and existing regimes within a broader landscape. In this regard, the landscape interacts with and exercise an influence on existing regimes determining its stability or change and defining the trajectories of technological innovations originating at the niche level. Indeed, change at the landscape level (e.g. economic crises, environmental threats, demographic changes) may exercise pressures, usually in the long term, on existent regimes for their transformations (Geels, 2011, p. 26). In the case of energy systems, landscape pressures such as climate change, air pollution, depletion of fossil fuels to name a few, are destabilising the fossil fuels’ socio-technical regime, as the mainstream way of providing energy to society, and creating windows of opportunities for the development, adoption and diffusion of technological innovations, such as renewable energy technologies or electric vehicles, that are going to compete with existing regimes defining the trajectories and timing of socio-technical transitions (Hargreaves, Longhurst, Seyfang, 2012).

According to Geels & Schot (2007), the timing and nature of multi-level interactions influence the trajectory of socio-technical transitions. The timing is conceived as a crucial factor, for instance referring to the timing of landscape pressures on the regimes, or the stage of development of niches’ innovations. The nature of interactions refers to the type of relationship between niches and regimes. Niche-innovations may have a competitive relationship with the existing regime when they are intended to replace it, or a symbiotic relationship if they can be adopted as having an added value, solve problems or improve performance about an existing regime (Geels & Schot, 2007; pp.405-406). From the combination of timing and nature of interactions between niches, regimes and landscape may result in four main typologies of

transition pathways: transformation, reconfiguration, substitution, and de-alignment and re-alignment (see for an extensive explanation Geels & Schot, 2007; 2010). Transformation pathways are characterised by moderate landscape pressures producing a disruptive change at the time when innovations are not yet sufficiently developed. The transformation is made possible when regime actors perceive landscape change as relevant and respond to that modifying the direction of the development pathways and innovation activities. This path usually involves conflict, contestation and power struggles, with societal groups having a great role in contesting existing solutions and demanding new ones to regime actors. The de-alignment and re-alignment path refers to situations in which landscape change forces increase regime problems de-aligning or de-stabilising it. Niche-innovations are not yet sufficiently developed or stable and this creates space for multiple innovations co-existing and competing for attention and resources. When niches innovations become stable and developed this may lead to re-alignment and institutionalization of a new socio-technical regime. Technological substitution pathways are characterised by landscape exercising pressures on the regime at the time innovations are developed and stable to compete with the socio-technical regime. The path assumes innovations have sufficiently developed but they are stuck or slowed in their diffusion because of tensions and resistance from existing regime actors defending themselves. Technological substitution is made possible due to price or performance improvements and major landscape change forcing the regime to change and innovations to diffuse. Finally, the reconfiguration path refers to circumstances in which innovations are sufficiently developed and stable but initially adopted to solve minor local problems or for further adjustments of the regime. Reconfiguration happens when given the combination and cumulation of innovations the regime gradually shifts to a new one.

The MLP has revealed a fruitful heuristic framework to understand how and why processes of socio-technical changes happen, mostly basing its insights from historical analysis of socio-technical systems' transformations and highlighting the complex relationship of co-evolution between levels and sectors of society, and the nonlinearity of transition processes. Despite its recognised potential, the MLP attracted and had to respond to several criticisms in the years, something that has further developed and opened the theory to contributions of social sciences addressing its intrinsic gaps. MLP tends to emphasise the main locus of change in the way technological innovation emerge and develop to challenge and replace existing socio-technical regimes. Following this perspective, scholars mainly looked at the factors that nurture and protect niches' innovations, creating the political and market conditions for their diffusion and dissemination. For this reason, MLP has been criticised for a selective bias towards niche level

technological innovations recognised as the main locus of regime transformation (Genus & Cole, 2008; Berkhout et al, 2004). This view is argued to be overly functionalist and structuralist (Smith, Stirling & Berkhout, 2005), not paying adequate attention to agency and human needs (Shove & Walker, 2010). Criticisms to the MLP emphasised also its limited capacity of addressing issues of power, politics, hegemony and conflicts and their role in socio-technical change (Jorgensen, 2012; Smith et al., 2010), neglecting the role of resistances by regime actors or that of civil society in defining the trajectory of socio-technical transitions and the development and diffusion of innovations (Seyfang & Smith, 2007; Geels, 2014). Some authors questioned the ambiguity of the proposed conceptual levels of landscape, regimes and niches for their empirical application (Wells & Lin, 2015) emphasising also the lack of a territorial sensitivity, namely the attention to spatial/geographical aspects of transformations (Coenen, Benneworth & Truffer, 2012).

The MLP is indeed recognised as a framework to analyse transition societal processes in their entirety, tending to give less attention to actors. However, as Geels admits (2005, p.453): “transitions are contested with different groups struggling, negotiating and form coalitions”.

For instance, Batel and Devine-Wright (2015) argued that to fully understand the transition towards renewable and low-carbon energy systems, this should be assumed as a process at the crossroad of techno-scientific (Bauer, 1995) and legal innovations (Castro, 2012; Castro & Batel, 2008), and “connect analyses of the macro processes involved in social change with the micro-processes shaping, materialising and contesting it, in communication and discourse” (Batel & Devine-Wright, 2015, p.3)

In this vein, Castro (2012) proposes a different way to approach sustainability innovations focusing on the legal dimension. According to the author, in current western societies, innovations can emerge in three different spheres: socio-technical, political-legal, and public. The techno-scientific sphere coincides with the development and diffusion of technological and scientific innovations promoting a social change; the legal-political sphere refers to political and legal innovations promoting and accompanying change (e.g. promoting renewable energies, or public participation in environmental decision-making); while innovations in the public sphere (Jovchelovitch, 2007) refer to social change promoted through different processes, such as the influence of active minorities (Moscovici, 1961/1976) or the contact and interaction between different cultures or systems of knowledge (Jovchelovitch e Gervais, 1999; Batel e Castro, 2009), contesting or negotiating new meanings and practices, interacting and mediating the innovations originating in the other spheres (Castro, 2012). With public sphere, I refer to the perspective of Jovchelovitch (1995; 2000; 2007), that basing on the work of Mead

(1934), Habermas (1989) and Arendt (1958), developed a socio-psychological theory of public sphere focusing on three main interrelated phenomena: plurality, perspective and communication. Plurality and perspective introduce the problem of how to manage and treat the differences within society, which was a constant of Habermas theorising. Mead's notion of communicative acts is the unit of analysis for understanding human psychological life, and generalised other as the shared societal frame providing the background for human thinking and behaviour.

In this way, Jovchelovitch (2007) conceived public spheres as the co-constructed common ground that is created as much as creates collective and social representations (Durkheim, 1898/1996; Moscovici, 1989). The public sphere is defined (Jovchelovitch, 2007, p. 73), "a space that is common to all members of the community and where community life becomes visible and known to the community itself". Public spheres comprise political, spatial and social psychosocial dimensions. Politically they are arenas for institutionalised debate and exercise of the critical public opinion. These spaces are not governed by State or economic laws but are open to discuss and scrutinise in public the actions of the States and the market. Spatially, public spheres involve natural and built environments accessible to all and giving people the opportunity to meet and discuss. This spatiality comprises cities, villages, neighbourhood, parks, streets, squares, public markets and other built or natural environments. Finally, in psychosocial terms, public spheres are spaces of mediation and communication, where the self and the other can meet and create identities, representations and imagination (Jovchelovitch, 2007).

This perspective views social change as the result of the co-existence of multiple meanings and interests that compete in a constant battle of ideas (Castro e Lima, 2001; Spini e Doise, 1998; Wagner et al., 1999), and deriving from the coordination of discourse and action, meanings and practices (Giddens, 1979). In a temporal perspective and following an ideal trajectory of legal and political innovations, according to Castro (2012), these may go through four phases.

In the phase of emergency, where innovations emerge, and the process of social change can be promoted from the bottom-up (i.e. from the public opinion). In this phase, new ideas are vehiculated and diffuse through communication processes, while new meanings and discourses are constructed regarding the object of change. The second phase, the institutionalization, happens in the moment innovations start to reach a broad legitimacy and consensus within society, and this is translated in a set of legal, political, and institutional innovations (Castro, 2006), a process characterised by disputes, battle of ideas and conflicts with different social groups and actors trying to influence the outcomes of innovations (Moscovici, 1998). Once

innovations get a normative valence with subjects responsible for their reception, respect and implementation, it starts the generalization phase, where innovations are translated on the local situated level, promoting and diffusing them in society to transform meanings and coordinate them with associated practices. It is in the latter two phases, where social change is promoted in a top-down way, that resistance to change by different actors at different levels may intervene (Castro, 2012). When social change become generalised innovations go through the last phase, of stabilization, where meanings and practices are coordinated. In this phase, legal innovations move from the macro level of structures to the micro level of actors, and the normative systems (explicit and institutionalised norms) become embedded by individuals and organizations by means of beliefs, values, personal and social norms, and practices becoming effective in social and political relationships as well as in everyday decision-making processes (Mogaddham, 2008).

1.2. A territorial and socio-political perspective on energy transition

The transition from fossil fuels towards renewable energy sources, and from centralised to decentralised energy systems, involves several challenges pertaining to the energy-society relation. Indeed, energy systems' transformation comprises changes in the socio-technical configuration with which energy is produced, transmitted and consumed. However, too much often energy transition is reduced to the mere result and responsibility of more technical disciplines, such as engineering and economy, overlooking and leaving in the background the human dimension and social implications this involves.

From a territorial perspective, the provision of modern energy services has been dominated by a centralised paradigm of energy production, delivery and consumption. Fossil sources have generated energy systems organised in very long supply chains, with energy usually extracted and produced through few large-scale infrastructures at a considerable distance from the consumption sites (Elliott, 2000). This approach has represented an incredible de-territorialised model, in which no direct relationships existed (or at least not sufficiently problematised) between energy production and consumption sites, and where energy-related activities were largely distant, invisible, and overlooked (Bagliani, Dansero & Putilli, 2010).

The challenges posed by climate change, energy poverty and energy security require today an alternative approach that relies on renewable energy sources (RES) and technologies (RET) and that is based on more decentralised energy solutions and changes in the energy infrastructure paradigm (Goldthau, 2014). This approach coincides with a complex reorganisation of the

territories (Adil & Ko, 2016; Kellet, 2007; Brondi et al., 2014). The decentralised, distributed, and close to consumption sites paradigm of renewable energy production involves the territorialisation of energy facilities (such as wind turbines, biomasses or hydroelectric power plants) and associated infrastructures for energy storage and transmission (high voltage power lines, storage stations) with their negative externalities manifesting at the local scale. The territorialisation of these technologies and infrastructures is indeed often accompanied by different kinds of impacts depending on the sources and technologies, the structural, material, institutional and socio-economic conditions of the given territory (Devine-Wright et al., 2017). In fact, the adoption of RES requires careful consideration of their relationship with the territory, and more generally with the local scale (Bagliani, Dansero & Putilli, 2010; Miller et al., 2013), as for instance in identifying energy-saving measures, energy technologies and sources that better fit to a given place in light of its many features - ecological, socio-political, economic, and infrastructural elements (Brandoni & Polonara, 2012). The challenge of renewable energy has provoked within social sciences a renewed interest and sensitivity toward the territory and more in general the socio-spatial features of sustainability transition processes. Geographical approaches to energy have been recently conceived as an academic borderland allowing interdisciplinary dialogue and engagement, giving a further lens for looking at energy challenge, and so yield insight for changing research questions and practices. Many authors (among them: Bridge et al., 2013; Calvert, 2016; Fast, 2013) advocate for the usefulness of geographical concepts - such as place, space, scaling, landscape, spatial embeddedness, territoriality – to better understand responses to and trajectories of energy technologies, and the wider environment-society relation. Distributed energy generation indeed forces us to consider the territoriality of renewable energies. As argued by Raffestin (2012), territoriality refers to the complex system of relationships and exchanges between physical exteriority and social alterity, that is the interaction between individuals and collectives with the environment (exteriority) and with others (alterity). The territory assumes in this way the connotations of a physical and symbolic place, which is object of representational processes (e.g. combinations of meanings associated), transformation activities (i.e. a container, or the context for use and exploitation of related potential resources), and relational field (e.g. the place of encounter between local and/or non-local actors).

In this regard, the requirement for decentralised renewable energy systems is generating organizational forms in which local actors may and should play a crucial role, promoting the introduction of governance practices that involve the various publics in environmental management. From a socio-political perspective, energy systems' transformation requires

multi-scalar actions and coordinated policies not only between levels of governance, but also transversally to policy nested sectors, such as agriculture, transport, urban planning, land use, industry, and so on (Goldthau, 2014; Comodi et al., 2012). Further to this, it should be added also the necessity and difficulty of engaging multiple actors (inter)acting at different scales aiming to an adaptive governance of socio-technical transition processes (Dietz, Ostrom e Stern, 2003; Smith, Berkhout and Stirling, 2005; Bulkeley e Moser, 2007; Cash and Moser, 2000; Goldthau, 2014; Wilbanks, 2007). Indeed, from a socio-political standpoint, the transformation of energy systems implies that “top-down [...] approaches to combating climate change must be blended with bottom-up, local, grassroots schemes” (Sovacool and Brown, 2009, p.317). A coordination of energy planning and policy among the different levels of governance means that decentralised energy planning should be integrated into the centralised planning processes and vice versa (Goldthau, 2014; Comodi et al., 2012). We should add to this equation also the fact that local communities are described as key actors that should play a leading role in energy and climate policies, as the municipal level is recognised as the most suitable spatial scale for energy planning, and because cities are blamed for the majority of greenhouse gas (GHG) emissions (Nilsson & Martensson, 2003; Pasimeni et al., 2014).

The local scale is recognised as an effective level of governance in sustainability transition for several reasons. First, the local community stands for the primary context in which both active citizens and local institutions can own and embody sustainability (DEFRA, 2005; Seyfang & Smith, 2007).

In fact, the local community is recognised as the most fertile place for public involvement in carbon reduction activities, offering the opportunity to experiment with social and technological innovations, and to share and cultivate new practices and norms (Heiskanen, Johnson, Robinson, Vadovics, & Saastamoinen, 2010; Smith, Voß, & Grin, 2010), including for instance the use and adoption of RET and energy efficiency measures, change in consumption behaviours and patterns of mobility (Walker, 2011). As suggested by Mulugetta, Jackson and Van der Horst (2010), community context may provide new opportunities for citizen engagement in the political and economic frameworks pertaining carbon governance and challenge the dominant discourse about energy. From a political standpoint, local authorities can play a leading role in energy and climate policies: as shareholders in local energy utilities or owners of public buildings and properties they can act in the market and develop demonstrative initiatives aimed to cut carbon emissions and produce clean energy (Nilsson & Martensson, 2003; Comodi et al., 2012); as regulatory entities they can develop codes for buildings and permits for construction or renovation requiring higher energy efficiency

standards (Brandoni & Polonara, 2012); and due to their unique position of proximity to the citizens they can organise awareness-raising activities and targeted campaigns, involve the public in energy decisions and knowledge production, establish partnerships and support grassroots organizations and community projects (Middlemiss & Parrish, 2010).

Relying on these premises, energy transition implies a process of translation connecting national and supra-national policies, regulations and targets, with the agency of national, regional and district institutions and with discourses (incorporating visions, values and perceived needs) enacted at the local level (Scotti & Minervini, 2016; Spath & Rohracher, 2010)¹.

Indeed, energy policies and energy system changes will mostly not be implemented when they do not consider appropriately the values, concerns, and will of stakeholders and the publics that may be affected by or interested to energy policies and specific projects materialising in the territories (i.e. energy technologies and associated infrastructures such as wind turbines, biomass power plants or transmission power lines to name a few) (Bell, Gray & Haggett, 2005; Gross, 2007; Reed, 2008; Steg et al., 2015). This requires decisions around energy system change that acknowledge and address opinions, interests and concerns of different social groups to achieve social acceptance and support for an effective implementation (Wüstenhagen, Wolsink & Burer, 2007; Batel, Devine-Wright & Tangeland, 2013). In this regard, stakeholder participation is considered necessary and important in strategic energy planning at different levels, requiring effective involvement and interactions engaging a diverse range of stakeholders, enabling the inclusion of various kinds of knowledge and experience, which may support successful implementation in later stages (Fenton et al., 2015; 2016).

¹ To achieve EU 2020 targets, set by the Climate and Energy Package (cf. Directive 2009/28/EC and Effort Sharing Decision - ESD), the Italian energy and climate policy envisages the cooperation between the National Government, the Regional Authorities and the Local Administrations, assigning a key role to local institutions. National strategic choices and targets are distributed among Regions, which must define their own Energy and Environmental Regional Plan (PEAR). At the lowest level, the municipalities, in accordance with the provisions coming from the PEARS, define their own Municipal Energy Plan (PEC), or Sustainable Energy Action Plan (SEAP) if engaged with the Covenant of Mayors.

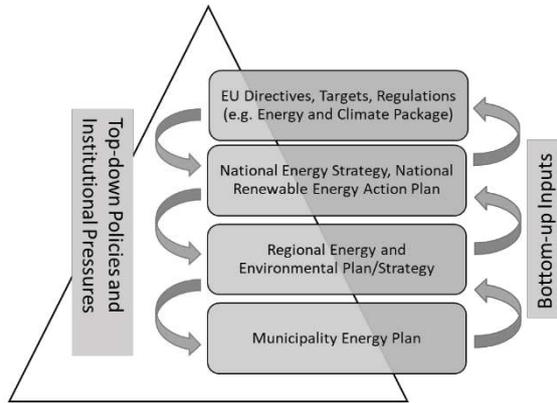


Figure 2. Multi-scalar perspective on energy governance. Source: our own elaboration

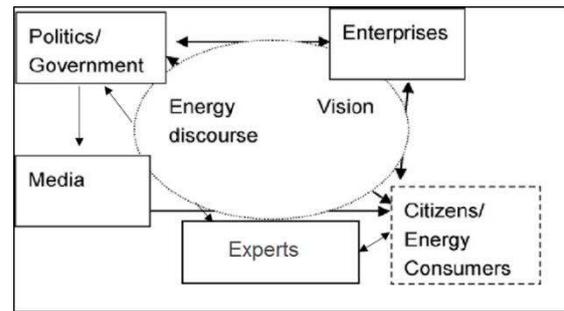


Figure 3. Multi-stakeholder perspective on energy governance. Adapted from: Späth & Rohrer (2010, p.454)

Thus, from a social science perspective, developing effective energy and climate strategies depends not only on economic, organizational and techno-scientific capacity and resources. It depends also on the capacity of institutions to build the necessary capacities to manage transformation (Smith et al., 2005), engage stakeholders and build a clear and (potentially) shared vision of socio-technical systems' change in ways that adhere to democratic and justice principles, meeting the needs of varied social groups at different scales and fairly distributing the costs and benefits of change (National Research Council, 2008; Stern, 2017).

What has been outlined so far, is just a simplified problematization of the different aspects in which the social sciences are called to contribute in supporting the transition to sustainable societies understanding how to encourage radical changes, build the capacities needed for transformation, recognise and overcome the obstacles for a just, democratic, and sustainable transition.

1.3. Public participation, social acceptance and conflicts about renewable energies

1.3.1. Social acceptance, acceptability and opposition toward renewable energy technologies: a fruitful research agenda for social psychological inquiry

Far from being something new, in the development and siting of energy infrastructures policy-makers, planners and project developers frequently meet the opposition of local communities living nearby. At first, social research on facility siting has labelled, defined and explained these kinds of opposition and the research field with the NIMBY concept (Not in my backyard). The NIMBY concept suggests people having positive attitudes towards a given object (the project

or technology) until the moment they must confront with it so that, at this stage, they oppose to it for selfish reasons (O'Hare, 1977).

The literature dealing with the NIMBY term originated in the USA since the late '80s to describe opponents to facility development. It referred to the "protectionist attitudes of and oppositional tactics adopted by community groups facing an unwelcome development in their neighbourhood" (Dear, 1992, p. 88). To put it clearly, the development and siting of facilities, infrastructures and services – e.g. prisons, waste incinerators, nuclear facilities, airports - is recognised as socially necessary but not wanted in the specific neighbourhood/community, denoting a selfish attitude.

The first studies on facility siting highlighted these type of protests as characterised by distrust on proponents and developers, insufficient information on the siting and functioning of the facilities, parochial and localist attitudes, as well as emotional orientation towards conflicts and strong concerns about risks associated with the project (Dear, 1992; Kraft & Carly, 1991). These studies largely neglected issues about democracy, power and fair treatment of local residents on unwanted land use, and framed the protest as mainly based on the proximity of facilities close to residential settlements (Mannarini, Roccatò & Russo, 2015).

Freudenberg and Pastor (1992) provided a first useful review on NIMBY literature showing three main ways through which the public is viewed and depicted through the NIMBY term. The first perspective sees NIMBY as an ignorant or irrational response, charging the opponents of scarce or lacking knowledge about the facilities' technical features, and irrational and emotive reactions based on fear because of a considerable gap between the real risks associated with the facility and the risk perceived by the public. In this view, opponents are considered to be wrong and thus they should be educated or bypassed by planners and decision-makers.

The second perspective sees NIMBY as a selfish response, assuming that people refusing the development/siting of facilities in their locality are motivated by self-interest and lacking civic sense. This kind of behaviour is conceived as an obstacle to the general interest, namely the attainment of societal goals, in favour of particular and local interest resulting in a selfish parochialism generating social conflict (Wolsink, 2007).

The last perspective considers NIMBY responses as a symptom of prudence and thus assuming that local opposition is based on a legitimate concern and well-grounded knowledge about the impacts of the facilities. As Burningham (2000, p.65) has pointed out "[r]esearch on local responses to proposed developments has developed quickly from a focus on understanding individual motives for the protest to analyses of the social causes and implications of localised resistance". In this regard, Irwin and colleagues (1994) argued that decision-making processes

have an effect on determining the forms and expressions of opposition. Since decision-making processes are characterised by little room for citizen involvement preliminary to implementation, citizens are obliged in some way to take a reactive and obstructive stance, that is a NIMBY response. According to this perspective, the opposition takes shape because of technocratic decision-making, based on the decide-announce-defend model (DAD), where the facility siting occurs without involvement and negotiation with local communities (Kemp, 1992; Gibson, 2005; Wolsink, 2010).

In light of this, NIMBY responses rather than representing selfish, ignorant and irrational actions can be considered as reactions to unfair and inadequate transparency in decision-making processes for the siting and building of facilities.

The literature analysing the phenomenon showed a set of NIMBY's triggering factors, such as the distrust in the technology or in the capacity of public and private entities to correctly manage and maintain the facilities, causing fear of potential effects for human health, or of loss of property value (Pol et al., 2002). Further, other triggering factors pertain to the role of perceived and implicit private interests hidden under explicit environmental motives (Pol et al., 2006).

Across time, empirical evidence started to show how in different geographical contexts, opposition to unwanted facilities may have a rational basis (Takahashi & Gaber, 1998), and that attitudes toward the given facility did not necessarily depend on the (lack of) knowledge about the project and its technical details (Dietz et al., 1989), nor on the distance of the facility from the residential area (Martin & Mayers, 2005). Rather, it highlighted the costs and negative externalities charged to the community hosting the facility. Nowadays, in the more critical literature, the NIMBY label has been substituted with the more neutral LULU concept (Locally Unwanted Land Use – Popper, 1981; Freudeneberg & Pastor, 1992).

However, despite the widespread recognition of the inadequacy of the concept, the NIMBY term has become a shorthand concept and a synonymous of local opposition, with the consequence of depicting local oppositions as ignorant, selfish and irrational responses. The term has been widely used by planners in conditions where the public perception of risks is considered wrong or invalid, not corresponding to scientific evidence, and therefore questioning the legitimacy and validity of protest (McAvoy, 1998). The label has been used unfortunately also within the academic community, describing in a pejorative way those opposing to the development of facilities (Burningham, 2000; Devine-Wright, 2005; McAvoy, 1998; Wolsink, 2006).

It is not a coincidence that the concept has diffused also in public discourse, often associated with the term 'syndrome' or 'effect', and therefore used in a stigmatising manner delegitimising

opposition perceived as a break for economic and infrastructural development, and for this reason considered dysfunctional for the societal functioning and advancement. The NIMBY label thus suffered from an initial perspective understanding local opposition in a functional way, which is a barrier to overcome in order to promote infrastructural development.

Burningham (2000) and Wolsink (2006) clearly criticised the persistent use of the NIMBY term by academics resulting in legitimising a negative view of the public in front of facilities development, and impeding a fully and better understanding and theoretical advancement on the topic, as “it obscures the real motives and impedes our understanding of what is really happening in facility siting conflicts” (Wolsink, 2006, p. 90). Burningham (2000) critically engages in the debate arguing that academic efforts to distinguish NIMBY from non-NIMBY can be counterproductive or add little of analytic value while suggesting that a fruitful research agenda should explore the language of NIMBY as part of environmental disputes. Indeed, protesters are aware of the negative connotations of being labelled as NIMBY. As a consequence, they can anticipate the accusation and act to deflect such representation that can undermine the protest and reject and disqualify protesters’ claims, for example using strategies that underline widely shared social values (Haggett & Toke, 2006; Castro et al., 2018) or by adopting the term in describing themselves as a claiming strategy (Van der Horst, 2007).

1.3.2. Beyond NIMBY explanations: a relational perspective on social acceptance and public responses to renewable energy technologies and policies

In the last decades, social science has increasingly faced issues surrounding the siting of renewable energy facilities, substantially questioning on what has been recognised as the social-individual or attitude-behaviour gap (Bell, Gray & Haggett, 2005; Haggett & Futak-Campbell, 2011). This concerns the revealed distance between a generally positive attitude towards renewable energy production from citizens in different countries, mostly detected through surveys and opinion polls, and the increase of local opposition towards renewable energy technologies when they are going to be sited in specific places. In this vein, academic research started to investigate the factors underlying this opposition or predicting and explaining the acceptance of renewable energy. Even in the case of renewable energy, academic research started to define and explain the opposition to renewable energy technologies with the NIMBY concept (Devine-Wright, 2005) even if diverse studies systematically found the NIMBY concept as invalid for explaining opposition. As Ellis, Barry and Robinson (2007) argued, most of the first studies conducted relied on quantitative and post-positivist methods, with an individual level of analysis focusing on attitudes toward renewable energy in general and

abstract terms. Moreover, although within conflicts about facility siting there are at least two sides, most of the research has focused exclusively on the side of opponents, ignoring the other actors of the disputes and in doing so telling us only half of the story (Wolsink, 2007). No attention was given to what project developers, planners, promoters, or policy-makers were doing or saying, and how decision-making processes were designed and undertaken (Devine-Wright, 2011). This kind of criticism emphasised the neglected social-relational side of renewable energy infrastructures' siting, and a functionalist approach of research serving economic and political interests by conceiving public opposition as a barrier to overcome. This kind of research overlooked the factors and processes stemming at the local level where technologies should be sited and built, and where promoters/proposers and place residents interact (or not) about the project at stake (Walker et al., 2011).

Therefore, from a methodological individualism, academic research started to adopt a more societal perspective to understand the factors and processes behind resistance. In this context, researchers began also to critically rethink the field of study, emphasising the need of theoretical integration and methodological pluralism (Bell et al., 2005; Devine-Wright, 2005; Ellis et al., 2007), as well as the need to critically re-name the research object and agenda to overcome the pejorative representation of the public embedded in the NIMBY concept (Batel & Devine-Wright, 2015). Among these, Wustenhagen, Wolsink and Burer (2007) at first developed a multi-dimensional framework and proposed the concept of social acceptance to reflect the complexity of societal responses to renewable energies. Social acceptance is conceived as the combination of three dimensions considered interdependent and dynamic: socio-political acceptance, namely the acceptance regarding the technology itself and related policies, comprising the perception of the public, key stakeholders and policy-makers; community acceptance, referring to specific project siting and design decisions, linked with trust and procedural and distributional justice; market acceptance, that is market adoption of technological innovations, referring to consumers, investors and intra-firm relations.

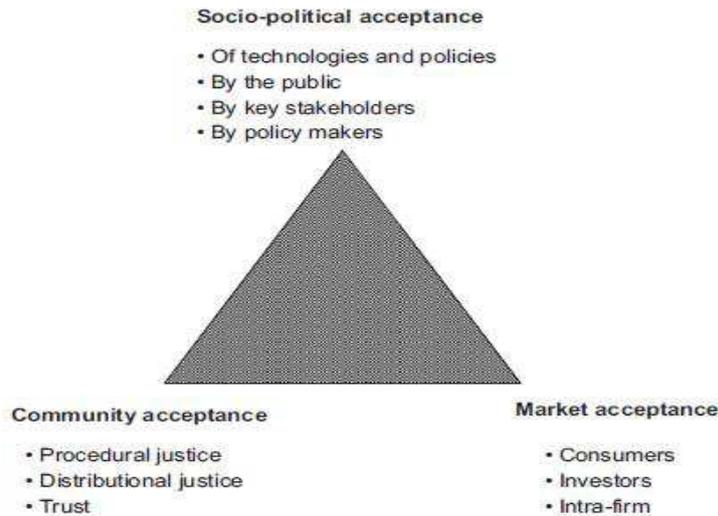


Figure 4. Theoretical framework of social acceptance of renewable energy innovation (source: Wustenhagen, Wolsink, & Burer, 2007, p.2684)

This framework has been very influential in the last decade, and the concept of social acceptance provoked a broader debate in the social sciences. Wolsink (2012) underlines that social acceptance of RET means acceptance among all relevant actors in society, thus it should be conceptually thought as different from the mere public or community acceptance, and “in short, social acceptance is about all kinds of decisions by a plethora of actors throughout the entire chain of energy production, distribution and consumption, and about the socio-political and economic context in which this chain develops” (Wolsink, 2012, p.84).

Despite the clear moving forward beyond NIMBY explanation, some authors criticised the framework for its inherent maintenance of an instrumental stand on public opposition, arguing that acceptance implies normatively a top-down perspective on RETs, where actors that should passively accept the development of new technologies (Lenoir-Improta et al., 2017). Indeed, some authors (see e.g., Batel et al., 2013; Schweizer-Ries, 2008; 2011; van der Horst, 2007) underlined the gaps in existing studies relying on the acceptance concept, especially on quantitative studies using empirical measures for social acceptance. The fact is that acceptance is recognised as one among the many possible responses to renewable energies, whereby active or passive opposition and support, preference, intolerance, apathy, represent other possible reactions often overlooked. It has been argued that words matter and have a practical effect. Schweizer-Ries et al. (2010, p. 11), underlined that ‘acceptance’ has been operationalised both as ‘no opposition’ and ‘active endorsement’. In this vein, Batel, Devine-Wright and Tangeland (2013), proved the shortcomings of wording use in survey methods assessing ‘social acceptance’ comparing measures of ‘acceptance’ with ‘support’, and proposed to re-name the

research field as ‘public responses to RET’ also to overcome the deficit and passive assumptions of the public, recognising to them a more active role, and highlighting the existence of a plurality of responses that researcher should look at (i.e. apathy, intolerance, support etc.).

This stresses that research should be more careful about the language and concepts used as empirical measures and differentiate among the responses to RETs. In this regard, other researchers emphasised the fact that the term acceptance is widely used to describe both the behavioural response and the attitudinal component and for this reason suggested to refer to acceptability when referring to the evaluative judgements on RET (Huijts et al., 2012). Other authors instead suggested the use of the more neutral label LULU (Locally Unwanted Land Use – Popper, 1981), rather than NIMBY, to define the type of conflicts (Rootes, 2007; Mannarini et al., 2011). Other proposals underline the idea of ‘conditional acceptance’, identifying conditions for the acceptance and support of different energy sources and technologies (Bell et al., 2005; 2013). The approach proposed by Szarka (2007), on the other hand refers, to social acceptability as a form of social contract involving three collective choices: socio-economic and technological choices, such as between decentralised renewable energy production or centralised large-scale one; the choice between public policy pathways, focusing on economic factors (e.g. energy dependency and security) or environmental ones (e.g. climate change mitigation); and governance choice, between sustainable development that links the economy with the environment and social development, or ecological modernisation as “narrowly industrial conceptualisation of the integration of environmental issues into the economy” (ibid, p.17). Several studies started to investigate the role of different factors, such as “project-related factors” or “institutional procedures”, in influencing the public perception and responses to RETs (Bell et al., 2005; Gross, 2007). Project-related factors depend on the type of technologies and sources. Moreover, the adoption of different technologies and sources may have different impacts and involve different externalities depending also on the given place and local community. For instance, public concerns on wind farms may rely on the aesthetic impacts on the landscape (Pasqualetti, 2011), noises of wind turbines (Pedersen et al., 2009), death of bats and birds (Wolsink, 2000), industrialization of the area during the construction phase - in light that these kinds of RET are mostly sited in rural, mountain and coastal areas because of the necessary wind conditions for their functioning. On the other hand, biomass power plants may involve greenhouse gasses and particulate matter’s emissions, olfactory impact (Bertsch et al., 2017), the intensive exploitation of local resources such as forest woods or dedicated cultivations of crops as raw supply material (Scheer, Konrad & Wasserman, 2017). Thus, perceived fit with the places (both in their physical and symbolic dimension) and community

values and concerns represent relevant factors determining responses to RET (Batel et al., 2015). Among the factors promoting the acceptance or rejection of RET, a particular role is played by justice issues², namely fairness and equity (Gross, 2007).

Social research has started to indicate at the basis of local opposition the different perceptions and evaluation on the value of energy projects, and how costs and benefits associated with energy projects are allocated (Huijts et al. 2012) – for example among local residents/communities and companies/communities of interests (Wirth, 2014) - and how decisions, such as the project design and siting, take shape, highlighting the role of public involvement practices (Devine-Wright, 2013; Mannarini & Roccato, 2016; Zoellener et al., 2008). Another factor influencing the acceptance of energy projects is represented by trust, namely the extent to which people trust actors involved, such as developers, governments, scientific experts. Indeed, when people have little knowledge about technological solutions, trust for the involved parties affect the evaluations and perceptions of the energy policy and project's proposal (Huijts et al., 2012). For example, trust in developers has been found as strongly linked with support for energy projects (Walker et al., 2010), while as previously said, trust in public entities managing and monitoring facilities can play an important role in promoting acceptance, influencing the perception of risks and benefits associated (Montijn-Dorgelo & Midden, 2008). According to Earle and Siegrist (2006), trust judgements are based on two main factors: the perceived competence, or how parties are perceived as having enough knowledge and expertise, and the perceived moral integrity or, how actors are perceived as honest, and open to listening, take into consideration and respond in a proper manner to people's concerns.

Some authors have emphasised the role of place-related factors in determining response to RET. In particular, Devine-Wright (2009) advanced a theoretical framework (discussed more in-depth in the paragraph on identity processes) to rethink local oppositions to energy projects and infrastructures as place-protective actions stemming from concerns on place change with which residents identify and feel attached.

Taking into account the relational side of RET development, Walker and colleagues (2011) proposed a framework highlighting the relevance of analysing symmetries (giving equal attention to the various actors involved), anticipations and expectations (influencing the way actors respond and strategically try to engage or not with others), dynamics (taking into account

² Justice issue and theories will be further discussed in the paragraph on environmental and energy justice

the fact that anticipations and expectations evolve across time influencing the debate and people’s actions), and last, contextuality (the broad policy and economic context, as well as the features of local places, politics, communities and cultures). The framework highlights the relevance for social research of examining the interactions between the publics and other relevant actors (e.g. decision-makers, project developers and promoters) with their mutual expectations and relations evolving across time, and the role of the wider context in which these take shape.

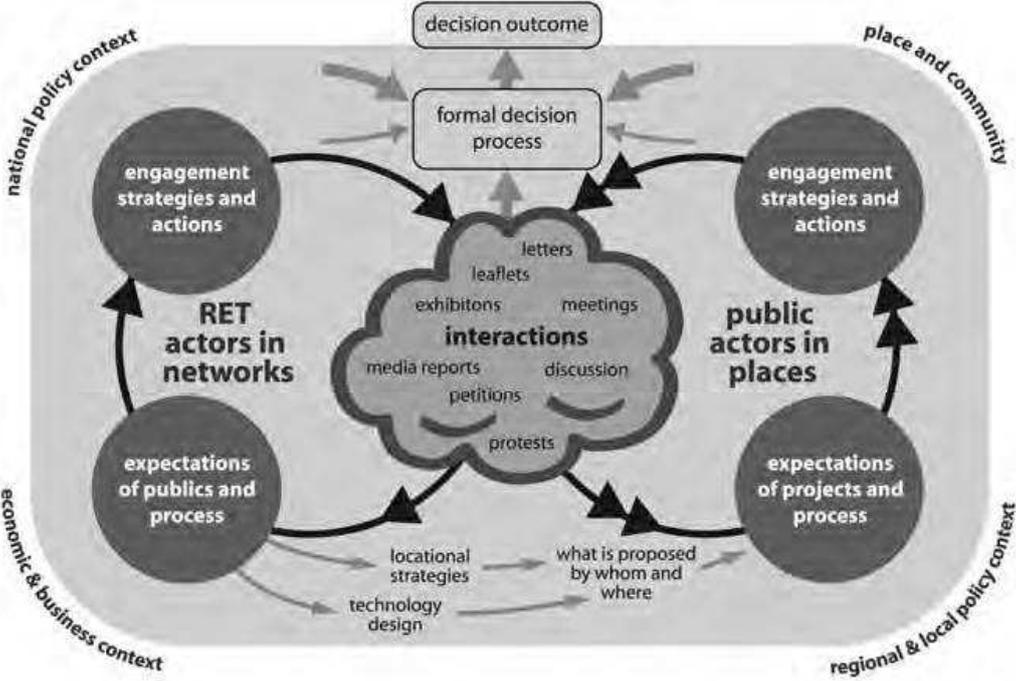


Figure 4. Framework for understanding public engagement with renewable energy (Source: Walker et al., 2011, p.11)

In this way, the proposal aimed to underline the role of different visions and expectations about the place, the technology, and others’ behaviours seeking to promote or oppose RET development. As Batel & Devine-Wright (2015) wrote, despite the advancement and shift from NIMBY concept most of the proposals still represent partial and limited ways to take into consideration the complexity of local opposition and acceptance about RET. Indeed, in their opinion, an integration at the theoretical level is needed so that social research can fruitfully engage with issues pertaining to power relations, the role of different actors beyond protesters, the role of place-related bonds and representations, and the contextuality and historicity of RET at the crossroad of techno-scientific, legal and cultural change processes. Several other weaknesses of literature have been highlighted. First, most of social acceptance literature mostly relies on case studies of single technology projects and sources, focusing on the community or public acceptance level. Most notably, wind energy has been widely investigated representing a sort of “learning laboratory” for social acceptance research, with few studies

relying on the comparison of new energy technologies with more familiar ones in public perception (Leonoir-Improta et al., 2017; Fournis & Fortin, 2016). Moreover, few research (see e.g., Parkhill et al., 2013; Pidgeon et al., 2014) adopted a systemic perspective taking into account the energy system as a whole. Actually, considered that changes must occur in the entire energy system and infrastructure, involving different mixes of energy sources and technologies, plus their related infrastructure (e.g. HV powerlines, storage facilities), more research is needed on social acceptance and support for energy system change. This challenge also requires to consider different technologies, sources and infrastructures for energy generation, transmission and storage with the related energy policies, while considering the life cycle of energy technologies - from the design and siting, to raw supply materials/natural resources' use and the negative externalities such as the waste disposal or the area recovering - all conditions that are supposed to have a role in promoting the acceptance and support for energy system change by different publics.

Furthermore, studies using the concept of social acceptance are mostly cases addressing its inverse, namely unacceptability (Chataignier & Jobert 2003; Dermont et al., 2017). According to Devine-Wright and colleagues (2017), few studies have included more than one dimension of the three proposed by Wustenaghen and colleagues in their framework (2007). Therefore, studies combining market, socio-political and community aspects or triangulating/combining findings from different levels of analysis - such as the national and the local level (see Blake, 1999; Sarrica et al., 2018) – are relatively scarce. In fact, studies often rely and focus only on a single level or dimension of social acceptance, in particular, the community acceptance at the local level, or political and socio-economic acceptance at the national level. The consequence of focusing mostly on community acceptance has revealed how research neglected the role of multiple social groups distributed across different scales (Newig et al., 2007; Dermont et al., 2017), and particularly the role played by middle scale actors, namely those “with the agency and capacity to influence transitions by making change upstream (to top actors), downstream (to bottom actors) and sideways (to other middle actors)” (Devine-Wright et al., 2017, p. 28). This represents a great neglect on the role of incumbent actors and interests, and their role in shaping energy policy formulations, technological configuration and trajectories, and as a consequence, people responses to project proposals and energy policies.

1.3.3. Advancing the relational perspective of energy transition: introducing coalitions and power

As it may be clear at this point, is that a critical and relational perspective that considers the role of different distributed actors in the transformation of energy systems is highly required. While most of the research approaches energy transition from a bottom-up or top-down perspective, to better understand the contextual politics of societal change is necessary to adopt a research perspective dealing with intergroup dynamics and paying attention at the tensions between top-down and bottom-up change ambitions and projects (see Howarth et al., 2013). It appears essential in this context to examine how shared and competing representations may stimulate coalition, conflicts and collective identities, influence positioning and polarization in the given context, and how groups and coalitions differently equipped exert influence mobilising different forms of symbolic and material power. As highlighted by Geels (2014), group and coalitions may use different kinds of power and resistance: instrumental, discursive, material and institutional. Instrumental forms of power (authority positions, access to the media) can be used by actors in immediate interactions with others to reach their own goals and pursue their interests. Another form of power refers to discursive strategies, that is, how problems and solutions are constructed and represented through discourse by different actors in the sequence of diagnostic framing, prognostic framing and call to action (Benford & Snow, 2000). As Hajer stressed (1995; 2006), environmental discourse should be conceived as a constant struggle between various coalitions of social actors which perceiving an affinity of interests and opinions may create coalitions and act in networks to develop and convey particular discourses and promote a particular way of thinking and acting about environmental challenges. In these terms, a discourse analytical perspective is recognised fundamental to enlighten the social and cognitive basis of how problems and solutions are expressed, negotiated and contested through communication and how shared understanding of the reality are produced and transformed (Dryzek, 2005; Späth, 2012). Discursive strategies can become an effective form of power and resistance when dominant discourses emerge and start to influence not only the agenda, or what is discussed, but also how this is discussed. Material forms of power refer to the availability and use of technical capacities and economic resources to exert influence, while institutional forms of power are incorporated within political cultures, ideologies, institutions and governance structures. Introducing power, politics and agency in the MLP, Geels (2014) highlighted how the stability of fossil fuels' socio-technical system (i.e. the socio-technical regime stability also known as *carbon lock-in* – see Unruh, 2002) can be conceived as the result of active resistance from incumbent business actors. The main argument

supporting this assumption refers to the fact that firms, industries and governments often tend to form alliances because of a mutual dependence. Economic groups depend on regulation and governance structures prepared by governments, while the latter depend on industrial investments, for example, to ensure the security of energy supplies, jobs, economic development and so on. This mutual dependence has been recognised as conducting policy-makers to routinely consult, keep into consideration and even internalise the interests of economic incumbent actors in policy formulation (Newell & Paterson, 1998). As other scholars argued on the role of incumbent actors in energy decisions (Lund, 2014; Stirling, 2014), industries and economic influential stakeholders often overlook or tend to disregard radical technological alternatives that do not fit with their own institutional and organisational structure, and favour those technological configurations better fitting or adapting with their interests (e.g. energy sources or technologies, dimensions and power of energy plants, supply of raw materials and use of natural resources). A further element to consider for a relational and critical perspective refers to the role of experts and scientific expertise. Expertise is provided in the context of decision-making and as such is oriented to the problem, to opinion formation and action (Peters, 2008). Today more than ever expertise represents a strategic resource that actors can mobilise and use depending on available resources. To all interests and purposes, expert advice is a commodity that can be sold or bought (Maasen & Weingart, 2005) and that plays a key role in decision-making and knowledge production processes. The ability to produce and convey relevant knowledge recognised as credible represents a strategic asset, in particular when experts are called to dialogue with the public, inform them on the aspects of decisions or the technological solutions adopted aiming to limit or appease potential disputes and oppositions (Cable, Mix & Shriver, 2008) as well as inform and influence policy-makers and decision-making processes (Stirling, 2008). Far from being neutral, scientific expertise applied to environmental politics is often subject to constraints, having to answer to questions and priorities chosen by others and stemming from political needs rather than research problems (Pellizzoni, 2011). Looking at scientific experts in this way implies to consider them in light of their role of (policy) advisors or public communicators (cf. Jasanoff, 1990; Maasen e Weingart, 2005; Peters, 2013). Because of the practical implications of expert advice, scientists often find themselves intertwined with political and economic interests, representing the social complement of a client buying their advice. This kind of image of public experts involves that the degree of trust on them can be dependent on the kind of client they represent in the public sphere and to which they provide their expert advice (Peters, 2008). Actually, all the actors with sufficient resources attempt to govern the production and the use of techno-scientific expertise

(Stehr & Grundmann, 2005). Economic lobbies and stakeholders such as representative bodies are usually well equipped of the needed technical and financial resources to get access to expertise and use it functionally to their interests (Stirling, 2014). When local knowledge is not adequately recognised and valued in decision-making processes (e.g. lack or inadequate information disclosure, inclusion and dialogue with experts), citizens may find themselves with inadequate resources to access to and use scientific expertise to criticise and propose alternative solutions. Opposition to energy projects is often promoted and managed by ad-hoc citizens groups (the so-called ‘comitati’, ‘comitati locali’, ‘comitati del NO’) representing themselves as non-party and authentic representatives of the community. However, it is common that these citizens’ groups receive the support of environmental NGOs, political groups, or sympathetic experts (Bobbio, 2011). Nowadays, most of the environmental controversies are largely characterised by the recourse to techno-scientific expertise, with experts taking part in both sides of the dispute (Pellizzoni, 2011), and where environmental activism may take the form of a ‘scientific environmentalism’, with argumentation and mobilization strategies grounded on scientific evidence and certified competence (Yearley, 2005). The involvement of experts often represents an advocacy strategy, especially from environmental NGOs, which may develop research infrastructures or relational networks with experts providing a counter-expertise intended to criticise and dismantle the authority of scientific claims proposed by the counterpart and sustain their own argumentation and alternative proposals (Lund, 2014). Besides possible coalitions with experts, another crucial role often overlooked is played by media, particularly the traditional ones such as TV and newspapers. Although the growing relevance of social media and internet as a source of information, TV and newspapers represent nowadays the main source of environmental information, constituting relevant mediators of scientific expertise (Eurobarometer, 2017). In fact, the access to mass media and the way these define and provide particular representations of the environmental issue at stake, represent a further object and subject of analysis. At an individual level, media can be considered among the most important actors in influencing common knowledge about science and technologies (Bauer and Gaskell, 1999; 2008), providing a ‘building site’ for the elaboration of one’s own interpretations of reality (Mazzara, 2008). The media also provide to select, and privilege determined perspectives, orienting the attention of media users towards particular problems on the agenda, or particular aspects and not others (Bonnes & Sensales, 1998). In doing so, they can shape, transmit and legitimise a certain version of reality, which in turn can influence the political debates, the context and the decisions (Moscovici, 1976). Moreover, the media play a key role in environmental conflicts, representing both the context in which conflicts and controversies

could be reconstructed, more or less in a balanced way, and the context through which conflicts can be enacted (Carvalho, 2008; Castro et al., 2018; Bauer & Gaskell, 2008). Finally, as already mentioned, another potential coalition within conflicts on energy facility siting is represented by local politics and citizen groups. In this regard, the Italian context provides an emblematic example. As revealed by the NIMBY Forum observatory (2017), the energy sector represents the mostly contested sector with the 56,7% of surveyed environmental conflicts. The 75,4% of these conflicts is represented by renewable energy sources, with local politics seeming to play a central role. Indeed, from the press monitoring emerges that public authorities and local party movements are at the forefront of oppositions in the 50% of surveyed conflicts, while citizens' groups and environmental NGOs represent together a third of protesters. Far from being something new, as Dear (1992) wrote: “[m]any cynical observers .. note[d] the connection between citizens' movements and politicians' behaviour and coined the acronym of NIMTOO, for not in my term of office” (Dear, 1992, p. 289). NIMTOO refers to the supposed habit of elected officials for postponing or opposing projects that may be unpopular. While the intention of politicians' behaviour cannot be taken for granted, this kind of politicians' behaviour can stem from popular consensus motives conducing politicians to support (or co-opt) opposition for political reasons. Otherwise, the coalition between citizens, local authorities and politicians can represent the symptom of the legitimacy crisis, lack of coordination and institutional conflicts involving the Italian different levels of governance (Sarrica et al., 2018). Understand the reasons behind these coalitions and how they act, and influence socio-technical transition pathways represents a great question for social sciences.

1.4. Public engagement in energy decision-making and knowledge production

With the concept public participation, often used interchangeably with the term of public engagement, I refer to all those processes and activities that directly involve the public as non-experts in providing their input to agenda setting, decision-making and knowledge production (Wynne, 1996). To date, public engagement and community action have become a fundamental strand in climate change policy agenda, to which correspond a growing enthusiasm within academia, policy-makers, practitioner circles, and environmentalists (Mulugetta, Jackson, & van der Horst, 2010). As described by Walker (2011), the term of community is widely used in reference to carbon governance with different but interconnected meanings, all posing great expectations regarding its role.

Since the '92 Rio Earth Summit different treaties and European directives (see Aarhus Convention, Agenda 21, the Treaty of Lisbon on Sustainable Cities etc.) have established local participation as a key element of sustainability, stressing the need to incorporate the voice of citizens in decisions that affect the environment (Rydin and Pennington, 2000). Nowadays there is a requirement in government policies for participatory and deliberative practices that bring together experts, decision-makers and community members in environmental planning to serve the public interest and align intervention to the values and needs of the local communities (Fraser et al., 2006). As a consequence of different international treaties and supranational and national laws we are witnessing to a paradigm shift on environmental policies: from a pedagogical and informative model of participation and decision-making, with science 'speaking truths' informing politics, and where communication between experts³ and non-experts is unilateral aiming to inform citizens on decisions already taken (Kemp, 1992; Wolsink, 2010), to a more dialogical-deliberative model characterised by bilateral communication and partnership in decision-making (CEC, 2002), and where citizens as non-experts are actively involved to provide their input and voice in agenda definition, decision-making, policy formulation, and knowledge production (Callon, 1999; Rowe & Frewer, 2005). The issue of public engagement with science emerged with strength in the '90s concurrently with two main factors. On one hand, the climate of increasing distrust toward scientific knowledge, which applied to politics and environmental issues is characterised by the perception of non-neutrality and argued as an instrument for legitimising decisions and acceptable risks serving political and economic interests at the expense of citizens and the environment (Fischer, 2000). On the other hand, the crisis of the "deficit model of public understanding of science" (Wynne, 1991). The deficit model emphasised the public incapacity to fully understand and appreciate scientific discovery because of information gap, namely the scientific literacy. Therefore, it has been assumed that the public should be educated through greater expert communication (i.e. scientific divulgation) aiming to promote a positive attitude toward science and technology (Bucchi & Neresini, 2007).

To this, corresponds an increasing rediscovery and valorisation of lay or local knowledge, and of the necessity to include and address it in decision-making and knowledge production, to orient the planning of interventions and policies with normative assumptions, values and needs expressed by society (Ryding & Pennington, 2000). The increasing of public controversies about science and technology over the last decades revealed the necessity of different approaches to science-society relationship and dialogue, highlighting the fact that solutions to

³ With experts I refer to those having expertise on techno-scientific and legal-political matters

practical problems require diverse types of knowledge. Even where scientific evidence is relevant, the conditions and effects related to the specific case have to be recognised to take into account the conditions of interventions (Peters, 2008). For instance, knowledge on available resources, constraints on territorial and socio-economic conditions, as well as the institutional barriers to the implementation of technological solutions are all elements of knowledge necessary for an effective planning of changes (Lund, 2014). As Bauer (2014) noted, the field has moved from research on Public Understanding of Science to research on Public Engagement with Science. In this regard, scientific literature identifies three fundamental rationales for public participation: substantial, normative, and instrumental (Fiorino, 1989). The substantial rationale implies that participation is undertaken because it can enhance the quality of decisions and policy formulation, helping in recognising and incorporating a rich knowledge about the territory, the local dynamics, constraints and contingencies (Fischer, 2000; Haggett, 2011). The normative rationale involves a view of participation of the various parties interested and/or affected as the right thing to do in current democratic political systems (Dietz & Stern, 2008). The instrumental rationale implies that participation is enacted to reach a given objective, such as increasing the perceived legitimacy of and support for policies and interventions or restoring trust and credibility among actors (Devine-Wright, 2017). These rationales, which are often unspoken, hidden and implicit, can conduce to diverse participatory approaches and instruments, and produce tensions when these are supported and implemented by actors and organizations guided by diverse rationales (Stirling, 2008). Indeed, as it is well-known since the seminal work of Arnstein (1969), the participatory methods, tools and approaches are varied, and differentiated on the basis of the different meanings (and use) of participation, the communicative flow between parties, and its significance within the decision-making process (Rowe e Frewer, 2000).

An ideal type of participation should improve the quality of assessments and decisions, increasing their legitimacy and bringing to better understanding, knowledge and decision-making capacity (Fiorino, 1989). As suggested by Dietz and Stern (2008), the criteria of quality, legitimacy and capacity proposed by Fiorino can be used to evaluate public participation in environmental assessment and decision-making:

- 1) Quality: public concerns are addressed, all relevant and new information is considered, new ideas and knowledge are generated, the outcome reflect a wide range of point of view about the situation and conclusions reflect the best available evidence;
- 2) Legitimacy: distrust among participants is reduced, participants accept the decision and the process leading to that as fair also if they do not agree with the recommendation for action

3) Capacity: participants, including experts and policy-makers, are more informed about the issue at stake, and the perspective of others in this regard, organisers and participants develop capacities on inclusive and participatory decision-making.

Different authors agree in considering institutionalised participation as the best available solution (cf. Reed, 2008) as it can enhance the qualitative standards of participation, offering also to the public the possibility of exercising influence in decision-making and in the broader political sphere.

On the contrary, others sustain that institutionalised participation may suffocate spontaneous participation while offering the possibility of manipulating participants, the wider process and outcomes (cf. Haggett, 2011; Lewanski, 2016).

Indeed, institutionalised, or otherwise provoked, participation is characterised by the contradiction of being both an opportunity for citizens to express their viewpoint and make their voice to be heard, and on the other hand it represents a border and constraint of what and how this can be realised (Mannarini, 2014). In this regard, Rowe and Frewer (2000) distinguished three types of public engagement. At one pole we have a minimalist version of involvement, the communication or information provision. This kind of involvement involves a one-way communication, reflected in the DAD model of planning (Kemp, 1992), where people are informed about the decision and its aspects, but not in the discussion that precedes the decision (Wolsink, 2010). An alternative of involvement is represented by consultation, which recognises a more active role to the public. This involves a two-way information flow between parties, but information flows back without a substantial engagement (Rowe & Frewer, 2000). In public consultation processes, spaces allowed, and options presented may be limited, constituting a border to the participatory action, often characterised by an uncertainty on the use of input provided by the public from who has more power in decision-making (Pellizzoni, 2005; Mannarini, 2014). On the contrary, public participation – or also public deliberation - as an ideal type of participation, involves a two-way exchange of information with the possibility of change in opinions in both parties. Citizens are recognised as co-producers in policy formulation, decision-making and knowledge production, and therefore fully and actively involved in the development of strategies or project design and technology siting since the preliminary phases (Reed, 2008). The participatory deliberative approach appears particularly fitting with environmental issues, which are characterised by a high degree of conflicts, high relevance of cognitive and value aspects, high techno-scientific complexity and the requirement of keeping into account a multiplicity of interests, opinions and concerns (Lewanski, 2016). However, the result of legal innovations promoting deliberative participation in the

environmental domain is often described in terms of tensions between technocratic expertise and democratic governance (Fischer, 2000), as the path is characterised by social forces seeking to open-up or closing-down the debate on policy formulation and decision-making (Stirling, 2008).

As it is for other types of innovations, legal ones conveying for citizen involvement and deliberative institutional practices are not immune from various types of resistance, especially from those who had more power, recognition and legitimacy in the past (Castro, 2012; Lewanski, 2016). The institutional changes demanded to transform local practices and policies had, rhetorically at least, set out a reconfiguration of the relationship and encounter between expert knowledge (in terms of both legal-political and techno-scientific) and lay and local ones, threatening hierarchies and established power positions altering the forms of legitimization of knowledge systems (Batel e Castro, 2009). These considerations bring researchers to critically question the increasing rhetoric about the democratization of participation and started to analyse the ways in which decision-makers, technicians, and entrepreneurs perceive and conceive the public (or laypersons), citizen participation, and what expectations about that guide their behaviours (Bauer, 2014).

Social science research in the energy field has highlighted how implicit models and representations of the public to which policy-makers, industry actors, and scientific experts refer often have an effect on the type of communication and involvement approved by institutions and implemented by the diverse subjects, as well as in the real possibility for citizens to fully take part in the debate (Maranta et al., 2003; Burningham et al., 2007; Barnett et al., 2012; Brondi et al, 2016; Cotton e Devine-Wright, 2012). These researches revealed an extremely widespread reference model that see the public as a homogeneous group, lacking the awareness, knowledge and agency that are required to debate and being fully involved on techno-scientific issues and decisions (Barnett et al., 2012; Batel e Devine-Wright, 2015; Burningham et al. 2007; Sarrica et al., 2016).

The natural consequence of this kind of conceptualizations is that citizens should not be involved and that when involved they are guided by irrational beliefs and selfish reasons (McClymont and O'Hare, 2008; Roccato, Rovere & Bo, 2008). This anticipation about the public by experts and decision-makers is argued as limiting the perspective taking, and result in excluding, manipulating or persuade on the goodness of decisions or technological solutions the place inhabitants and those potentially interested in or affected by decisions, limiting their effective possibility of involvement and influence (Castro & Mouro, 2011). This approach has been widely criticised as it often ends in create or tighten up social conflicts, delays,

cancellations or refusal of relevant project proposals, however, it is found to be the most frequent used mean to involve citizens by political authorities and companies (Wolsink, 2010; Haggett, 2011).

CHAPTER 2 - THEORETICAL PSYCHOLOGICAL FRAMEWORK

2.1. Societal psychology: context, politics and change

As Doise and Staerklè noticed (2002), the boundaries between social and political psychology are often hard to draw since social psychology has always faced political issues and phenomena such as racism, prejudice, nationalism, gender, social justice and political behaviours to name a few. Social psychology, however, has typically engaged with these issues examining individual cognitive processes focusing on the way people make sense of the ‘social’ or the ‘political’ through concepts such as attitudes, perception or beliefs.

Several social psychologists, however, have claimed that adopting such an individualistic perspective, looking at cognitive processes alone or in abstract terms, de-contextualising them from their social context and experienced relations, reveals an unsatisfactory way of understanding and explaining political processes and behaviours (Aiello & Bonaiuto, 2003; Howarth et al., 2013).

For this reason, several scholars across time advocated the need for a more societal approach of social psychology, able to connect individual levels of analysis with the analysis of the relational and societal dynamics that shape and give meaning to political behaviour and phenomena.

Historically, the dissatisfaction with this more cognitive and individual-based social psychology and the absence of an alternative paradigm able to open the discipline towards a more ‘social’ social psychology has been at the basis of the well-known “crisis of social psychology” between the 70s and 80s (see *European Journal of Social Psychology*, 1989, vol. 19). Following these criticisms Doise (1980; Doise & Mapstone, 1986) identified four levels of analysis and explanation that characterised social psychological research until that moment:

1. The intrapersonal level, namely how individuals process information to perceive others or in attitude formation and change;
2. The interpersonal situational level, or how behaviours of others affect individuals’ one;
3. The positional or social level, or how group membership and social status influence individuals;
4. The ideological level, namely how belief systems, shared values and ideologies influence individual cognition and decision-making.

All these levels according to Doise (1980) have their own legitimacy as can make their own a contribution to better understand social psychological phenomena. However, since most of the

research in social psychology has been concerned with the intrapersonal level of explanation, it has been argued this research tradition constitutes a constraint for the scope and development of social psychological research (Bauer & Gaskell, 1999; Castro, 2006; Howarth, 2006; 2013). The requirement for social psychology to move towards a more societal approach has been widely recognised in the early 20th century (Doise, 2004; Farr, 1996). However, several distinguished scholars overtime made a commitment to establish a different approach and research tradition advancing a societal form of social psychology – among them Moscovici (1961/1976), Tajfel (1978), Gergen (1985), Harrè (1979/1993), Bruner (1991), Moghaddam (1987) and Reicher (2004).

As Wagner and Hayes (2005) recognised, the divide between the ‘social’ and the ‘individual’ is both ontological and epistemological, and thus requires different levels of explanations.

In this vein, the ‘societal psychology’ approach was introduced by Himmelweit and Gaskell (1990) in response to the dominant paradigm of social psychology, which focused on the study of cognition, behaviours, and individual differences favouring laboratory experimentations and following post-positivistic assumptions.

Differently from psychosocial research focusing on general psychological processes and removing the multiple influences of the context, societal psychology engages with this complexity considering thinking and meaning-making processes not as individual attributes but rather the product of the interaction between individuals and their social and cultural environment (Haste, 2012; Cole, 1996).

Thus, the approach focuses the attention away from isolated individuals to the social side of human functioning, with individuals acting in relation, interacting with their social and material world. Such a perspective is argued to have much in common with symbolic interactionism (Mead, 1934), with individuals thinking and acting in an intersubjective context.

This perspective attempts to overcome the increasing individualism of social psychology by taking into account the broader context where psychological processes take shape. The great attention toward the context is not new in psychology, since different disciplines such as community, cultural or environmental psychology have furthered an “ecological perspective” to the study of human cognition and behaviour, including both the physical (cf. Lewin, 1939; Vygotsky, 1987) and the social (the others) environments (Tajfel, 1974; Moscovici, 1961/1976).

The main foundational concern of societal psychology may be identified in explaining change and stability in social phenomena adopting a perspective that is sensitive to the context (Reicher & Haslam, 2013), exploring the contextual features that promotes or hinder social and societal

change, and may be considered a bridge between social and political psychology (Staerklé, Clémence, & Spini, 2011). Indeed, societal psychology is concerned with the examination of meanings and content in the political positioning of groups and individuals towards issues of political relevance that are debated within a given society (Doise & Staerklé, 2002). It examines how specific problems are grounded in everyday politics and social relations (Gillespie & Cornish, 2010), combining macro-level and micro-level analyses in the study of social phenomena (Lopes & Gaskell, 2015). In doing so, it emphasises what in mainstream psychosocial research is often taken for granted, the constructed nature of social reality and social change (Blackwood, Livingstone & Leach, 2013; Elcheroth et al., 2011).

Indeed, it is argued that to understand and instigate societal change, this should be considered within its own social and historical context, critically engaging with the politics of change, and revealing the multiplicity of factors and perspectives at stake in supporting or resisting change (Howarth et al., 2013). In this regard, the context can be considered as the immediate situation where individuals act, or the physical environment, but also the situation beyond the immediate, the social environment influencing individual cognition and behaviours, such as culture and ideology (Gillespie & Cornish, 2010). To put it clearly, as Howarth and colleagues (2013, p. 368) argued, “[c]ontexts are therefore very complex: they are made up of physical aspects; they are social, containing social norms and knowledge systems; they are historical in that they contain already-constructed representations and discourses; they are dynamic and open to change; and they are ideological, imposing certain constructions over others as well as allowing resistance and controversy.”

Unlike mainstream social psychology, societal psychology understands these changes as rooted social, historical and political conditions and focuses on both planned top-down and bottom-up emergent change, acknowledging the possible tensions between change ambitions and projects, the nonlinearity of change, and the different social forces acting to promote or resist change from different positions (Howarth et al., 2013).

As social change always involves competing interests and perspectives engaged in a constant ‘battle of ideas’, societal psychology is interested in the expression, negotiation and contestation of these multiple and diverse perspectives (Cornish & Gillespie, 2009; Jovchelovitch, 2007). It is through recognising this multiplicity of viewpoints in context and their related power differentials that societal psychology can establish what interests and perspectives are marginalised or dominant and examine social and psychological factors maintaining the status quo or seeking societal change (Jovchelovitch, 2007).

As many scholars have argued, different research traditions of social psychology may be considered particularly relevant for societal psychology and the study of societal change (see Wagner & Hayes, 2005). Among them, the theories of social representations, social change and minority influence developed by Moscovici (1961/76; 1976), theories of social identities and intergroup behaviours of Tajfel (1974; 1978), or discursive and rhetorical approaches of psychology (Billig, 1987; Potter and Wetherell, 1987). These are the most prominent examples of theoretical psychological approaches that tried to connect explanations on an individual level with analyses of social dynamics and processes. These theoretical perspectives, which are socio-constructivist in their nature, are at the basis of this thesis and will be discussed in the following paragraphs (and in the methodological chapter) explicitly underlining their potential in the study of participatory phenomena and environmental issues. In accordance with this reasoning, social representations, identity, discourse and power are recognised as the elective focus of societal psychological research.

2.2. Social Representations Theory: a dynamic approach to conflict, power and social change

Adopting a societal psychological perspective, the research relies on different psychological perspectives linked together: Social Representations approach, environmental and rhetorical-discursive psychology, social psychology on collective action and community participation.

The Social Representations approach (SRA, Moscovici 1961/1976) represents a crucial framework for this research. Social representations are conceived as sets of ideas, beliefs, values and practices that are socially elaborated and collectively shared (Moscovici, 1961/76; Jovchelovitch, 1996). They are a form of social knowledge that generates in an effort to make familiar the unfamiliar, emerging in conditions of debate or conflicts to face social change within a given social context (Moscovici, 1984; Jodelet, 1989). Indeed, social representations are conceived as having a twofold role: to make sense of external reality, allowing individuals to orient themselves and manage their own experienced world, and facilitate the communication between the members of the community, providing them with a code for define and classify their experience of the world, and their individual and collective history (Moscovici, 1961/1976). Thus, social representations serve “as symbolic tools which allow group members to make sense of their social world and their relationships to other groups” (Andreouli & Howarth, 2013, p.363).

The main aim of SRA is to understand how in today's public spheres, composed of a multitude of subjectivities and meanings, different knowledges are created, contested and transformed by and for individuals and social groups (Howarth, 2006; Jovchelovitch, 1996).

Using the words of Moscovici, "by focusing on everyday communication and thinking [...the theory of social representations] hopes to determine the link between human psychology and modern social and cultural trends" (Moscovici, 1988, p. 225).

2.2.1. Origins and rationales of Social Representations Theory

In his investigation on the reception of psychoanalysis in the French public sphere, Moscovici (1961/1976) argued that the need to give sense to an unfamiliar object or phenomena - in this case the psychoanalysis -, results in the creation of shared knowledge structures operating through processes of simplification and condensation, which transform abstract and conceptual ideas in more accessible images, metaphors and concrete objects (objectification process – e.g. the personification of psychoanalysis in the figure of Freud, the iceberg metaphor/image representing the relation between the conscious and unconscious), and processes connecting, filtering and anchoring this new knowledge with pre-existent one (anchoring process – e.g. new and unfamiliar objects are made familiar and signified according to previous knowledge and notions of the group or individual). The study described how different segments of the French society in 1950 (the urban-liberal, Catholic and communist social milieus) elaborated and responded to the new scientific object of psychoanalysis. As Bauer and Gaskell (1999) noticed, the conceptual richness of the theory derives from the combination and integration of different levels of analysis and methods (surveys, interviews and media analysis) Moscovici adopted to understand how different meanings of psychoanalysis emerged, were transformed and circulated in France. The study of Moscovici found that people making sense of psychoanalysis showed different modes of thinking or rationales about the psychoanalysis depending on the engagement with it, the communicative aims (persuasion, influence, represent facts) and the relationships individuals have with the given group or social milieu they belong. Moscovici (1961/1976) relied on the distinction of individual and collective representations of Durkheim (1924/1974) to develop its own reasoning. He identified the notion of social representations, rather than collective, as the most appropriate term to deal with the plurality of representations in current public spheres (Jovchelovitch, 2007). Moscovici distinguished between three types of social representations: hegemonic representations, similarly to collective representations of Durkheim they are shared by all the members of a structured group even if these representations

were not created by this group; emancipated representations, which are produced by and shared in subgroups creating their own version of reality; and polemical representations, denoted by controversy and contestation of competing versions of reality (Moscovici, 2008). Communication plays a crucial role in the production of new social representations and how they circulate in public sphere, and Moscovici (1961/1976) since the first conceptualization stressed the relevance of analysing both the structure of representations and their communicative functions and systems. According to the theory, communication develops across three levels. First, at a societal level where representations are diffused in media communication (Markova, 2003) and embedded and reproduced in institutions and cultural traditions (Farr, 1998). Second, at a social contextual level where individuals communicate and act with others present in the given situation and express, negotiate or contest their mutual perspective (Moscovici, 1984; Howarth, 2006). Last at the individual level, communication is considered an internal debate between different dialogical selves (Mead, 1934; Billig et al., 1988; Markova, 2008). In this regard, Moscovici (1961/1976) identified three communicative genres that reproduced the social representations of psychoanalysis according to the three French social milieus. Propaganda refers to an ideological and centralised communication process that reproduce a social reality as it is defined by a group. Propaganda was the type of communication used in the communist milieu, a group with identity strongly defined by party affiliation, and the communicative intention was to generate negative stereotypes towards psychoanalysis to provoke a rejection of its image in the communist milieu. Propagation is another type of communication defined by the beliefs of a group, in this case, the Catholic milieu (another highly structured group with an identity defined by group membership), which has been found aiming to maintain control of the reception of psychoanalysis within the milieu by shaping attitudes. The communicative genre of propagation made limited concessions for psychoanalysis to subgroups of the milieu while setting some limits to its acceptance and integration in the milieu, i.e. rejection of sexuality theory. This milieu is characterised by resistance to psychoanalysis. Diffusion is the type of communication of urban-liberal milieu, and its communicative genre and intention are to provide information on new opportunities, generating opinions without a particular implication for actions. This milieu is characterised by little resistance to psychoanalysis.

As previously mentioned, the findings of Moscovici stressed the co-existence of multiple and sometimes opposing rationalities living side by side in the same group and even in the same individual (Farr & Moscovici, 1984), a condition that gave the origins to the concept of cognitive polyphasia.

One of the key concepts of SRT is indeed the assumption that social change does not imply the substitution of old ideas and knowledge by new ones (Jovchelovitch, 1996). Rather, the push for change may conduce to develop a state of cognitive polyphasia, a state in which old and new ideas tend to co-exist and interact, allowing people to accommodate, adapt or resist to change (Castro & Lima, 2001). Social representations are conceived as molar concepts that are more inclusive than the notions of attitudes or beliefs (Doise, 1989; Castro, 2006). They are conceptualised as having a multifaceted nature, a representational field that some authors (Buijs et al., 2011; Fischer et al., 2012) conceptualised as comprising three main dimensions:

- cognitive dimension, relating to beliefs, meanings and conceptual boundaries about the object of representation (i.e. what is and what is not);
- expressive dimension, relating to the affective aspects or emotional responses (i.e. what people feel about a given social object/situation);
- normative dimension, consisting of value orientations, perceived responsibility and need for action (Fischer et al, 2012), (i.e. what 'should' be, and what is 'right' or 'wrong').

While public opinion studies assume individual having relatively stable and true attitudes and consider social desirability as a bias to get access to the real attitude of individuals, Social Representations Theory takes into account that people are exposed to and often aware of competing versions of reality and that particular circumstances influence and anchor interpretation of reality and behaviour.

Social Representations Theory brings within social psychology a new way of considering its own objects of inquiry. Attitudes, norms, emotions are conceived as organised parts of the same system. This implies for psychological research to study how beliefs – the content -, attitudes - the evaluative judgements – are organised forming a constellation, namely a social representation (Doise, Clemence, & Lorenzi-Cioldi, 1992; Castro, 2006; Brondi et al., 2012). Representations thus contain the possibility of different and alternative ways of thinking and knowing (Markova, 2008), and conflicts may emerge among different components of a representation (Jovhelovitch, 2007).

Recognising the creative ability of individuals and groups in transforming and conciliating different ideas adopting different rationales, the approach considers contradiction and ambivalence as the result of people drawing on different types of knowledge to make sense of the world. Social representations are in this way considered dynamic, and having the potential to accommodate contradictions, tensions and debate (Rose, Efrai, Joffe, Jovchelovitch & Morant, 1995). This may occur because of “contradictions between different beliefs at the cognitive level, due to the mismatch between strong norms and lack of corresponding beliefs

or feelings, or simply due to the moral and cognitive complexity of the decisions required” (Fischer et al., 2012, p.170).

~~Cognitively polyphasic systems are the results of a multi-voiced self, possessing different knowledge systems coming from different spheres, to which people can draw on in order to deal with and make sense of the complexity of social realities, depending on the particular circumstances they found themselves and on the particular interests they held in a given time and place (Jovchelovitch, 1997; Jovchelovitch & Priego Hernandez, 2015; Renedo, 2010).~~ Moscovici’s findings provided further evidence that cognition does not change in a linear way, and how it is sensitive to and influenced by the context, dependent on the communication and situation. Coherently with cultural psychology, this perspective conceives mind as profoundly bound with cultural and societal circumstances (Vygotsky, 1978).

In this view, meaning-making is not viewed as an individual affair, but always implies an other (generalised or not). Representations are developed in the triadic relation between the self, the object, and the other, which may be real and immediate in the given situation, or on the contrary distant, generalised and internalised. Several scholars agreed that Social Representations Theory brings a different perspective and response to the progressive individualization of mainstream social psychology examining constructs such as attitudes, values, opinions, perceptions, concern, beliefs as individual attributes (see Bauer & Gaskell, 1999; Castro, 2006 Doise, Clemence & Lorenzi-Cioldi, 1992; Howarth et al., 2013).

This perspective profoundly changed the study of knowledge, from knowledge as given result of intrapersonal information processing, to knowledge as the result of social encounters, dynamic and continuously developing (Bauer & Gaskell, 1999; Jovchelovitch, 2012).

2.2.2. Developments and research traditions of Social Representations approach

As Bauer and Gaskell, (1999) wrote, “[t]he master stroke of [..Moscovici] analysis is the comparative integration of four related characteristics of communication systems: the contents of communication [anchoring and objectification], the typified processes of communication [propaganda, propagation and diffusion], the consequences of communication [stereotypes, attitudes and opinions], and the segmentation of social groups [milieus]. The combination of these characteristics constitutes both a description and an operationalization of a social representation” (Bauer & Gaskell, 1999, p. 165).

In this vein, different scholars approached the study of social representations further developing the theory in different directions and research traditions. Among them, the structuralist

approach to social representations further developed with experimental studies the understanding of the structure of social representations and their dynamics of change and stability. Social representations are conceived as uni-dimensional constructs that comprise beliefs, values, attitudes, emotions and practices (Abric, 1996). The approach distinguishes central elements, the core or nucleus, representing elements shared by all in a group, and peripheral elements of social representations, which reveal individual differences of social representations. The core (Abric, 1976, 1993) is considered relatively stable and resistant to change and performs three structuring functions: meaning, organization and stabilization. It is made up of a limited number of consensual beliefs within a group determining the nature, meaning and organization of the social representation. It is marked by collective memory and norms of the group and manages the meanings associated with the object as shared and non-negotiable beliefs. The periphery is more flexible and susceptible to change. Even if it depends on the core elements it reflects the individual experience and differences in how the object is treated and incorporated. It allows individuals to incorporate in a flexible way new knowledge without transforming the nucleus and integrating potential contradictions making them more manageable (Abric, 1976; Flament, 1987). This explains why social representations are at the same time stable and unstable, consensual but also characterised by great interindividual differences (Abric, 1994). The socio-dynamic approach examines with quali-quantitative methods these differences in terms of the organising principles (objectification and anchoring) of social representations, that is how actors elaborate and organise their knowledge of reality (Doise et al., 1992, 2002). The socio-dynamic approach argues that social representations can be considered as organising principles of symbolic relations between individuals and the groups. Representations are elaborated within communicative systems that require a shared common reference to make sense and communicate about the object.

This shared common point of reference is fundamental for meaningful communication. However, this does not mean that all the members of the group share the same knowledge. While individuals of a group may share a social representation, they can differ for the intensity they adhere to different aspects of representations. Doise (1992) highlighted that differences in individual positioning may be explained by anchoring processes related to their membership (sociological anchoring) the symbolic experience of groups and the socio-psychological shared experiences of individuals (socio-psychological anchoring), and personal beliefs about the social reality (psychological anchoring).

Finally, the dialogical approach to social representations is interested in the dialectical and dialogical nature of social representations. In this perspective, representations take an active

stance in the way meanings are produced and transformed in the communicative encounter between the self and others (cf. Markova, 2003; Wagner & Hayes, 2005; Jovchelovitch, 2000, 2007). It is in this latter perspective that the present work finds its epistemological basis, considering the dialogical approach to social representations a real epistemology (Markova, 2003). Markova (2003) conceived dialogicality as the capacity of the human mind (the Ego) to think, create and communicate the social reality in terms of the Alter. The self and the other are thus inseparable, continuously taking into account and mutually influencing each other in constructing social realities. A fundamental feature of social representations is identified in their betweenness (Jovchelovitch, 2007), rooted in the symbolic interactionism from which derives the semantic triangle self-other-object (Markova, 2003) as the basic unit for the elaboration of meanings. This view assumes that the social shapes the content of the individual mind, as much as the social is the product of communication and interaction between individual minds (Gaskell et al., 2011). Individuals represent objects in dialogical encounters, in relation to the other, that is with other individuals, communities, groups, cultures that may be imagined or real, present or distant (Jovchelovitch, 1996; Marková, 2003), creating and transforming social representations through communication taking place at different levels and through different modes and mediums (Bauer and Gaskell, 1999).

2.2.3. Social Representations, social milieus and intergroup relations

As it may be clear at this point, the theory of Social Representations takes a societal or socio-cultural perspective to the study of human cognition and behaviour. It draws the attention to the fact that social, cultural and political conditions influence the way human beings interpret the events, understand the social and physical world in which they are embedded, and act in accordance to this understanding. It assumes the inherently social nature of the psychological activity as oriented to others in a systemic way (Sammut, Andreouli, Gaskell and Valsiner, 2015).

Social Representations approach can be assumed in this regard as a real epistemology (Markova, 2003) to understand the ways in which individuals and social groups make sense of the world around them, and how these understandings change, develop, interact and so on (Flick, Foster & Caillaud, 2015).

Social Representations Theory has always been devoted to understanding the appropriation and accommodation of scientific ideas and concepts within common sense understanding. Moscovici (2008, p. 29) argued that “the birth of a new common sense [...] cannot be understood

in terms of vulgarisation, diffusion or distortion of science". Moscovici (1981; 1984; 1988) formulated the notion of reified and consensual universes referring respectively to scientific knowledge and common sense of everyday knowledge. Moscovici argued that these universes are based on hierarchical relations with the reified one of science is culturally recognised as having more value and power (Moscovici, 1998).

In the consensual universe, society is assumed as governed by meaning and purpose, with no one members or groups are viewed as having the necessary competence that is required by circumstances. According to Moscovici, this kind of universes are characterised also by different way of thinking and communicate, with common sense calling for the recognition of the plurality and multiplicity of perspectives determining reality, and scientific knowledge for the assumption that only one answer and reality exists, and that it is scientific-based knowledge (Moscovici, 1984; 1988). These assumptions were questioned and criticised by different scholars, denoting a controversy within Social Representations approach, on the appropriateness of considering science a reified knowledge and common sense as a consensual one (Foster, 2003; Howarth, 2006). It was emphasised that scientific and common-sense universes are dynamic and composed by multiple forms of knowledge influencing each other (Markova, 2008; Wynne, 1996). Also, even if common sense and scientific knowledge may be considered different spheres of knowledge production, reification and consensualisation processes has been argued to play a role in both spheres (Bangerter, 1995). On the other hand, Batel and Castro (2009) argued that the reification and consensualisation may be seen as an ideal type of position and argument (reification or consensual-like communication), or oppositional ways of thinking and arguing that may be adopted in the encounter between lay and scientific spheres for imposing and claiming the superiority of one form of knowledge over other or the necessity of recognising and valuing the heterogeneity of knowledge.

Bauer and Gaskell (1999; 2008) furthered this perspective on science and society relation adopting social representation approach to study the assimilation and accommodation of new scientific objects within society: the biotechnologies, or the more well-known concept of Genetic Modified Organisms. Rather than rely on more acknowledged concepts and research traditions, such as risk perception or attitudes towards biotechnologies, Bauer and Gaskell (2008) found that social representations, as a theory dealing with the origins, structure and processes of common sense, presented the advantage of thinking at a higher level of abstraction so that risk and attitudes (as much as opinion, perception, values, stereotypes) may be considered different aspects and functions of social representations. In their research programme, they identified three defining characteristics of social representations with different

implications for the research area and theoretical development. First, social representations are cultivated in communication systems or social milieus. Second, they are structured contents serving different functions for the communication systems and its participants. Third, they are embodied in different modes and mediums of human activity. Social representations are conceived in this way as elaborated, circulated and received within social milieus intended as communication systems. This process is defined as symbolic cultivation. Then, social representations can be embodied in individual cognition, habitual behaviour, informal and/or formal communication.

Bauer and Gaskell (1999) introduced the time dimension to the triangle of mediation self-other-object and resulting in the well-known Toblerone Model (Figure 5).

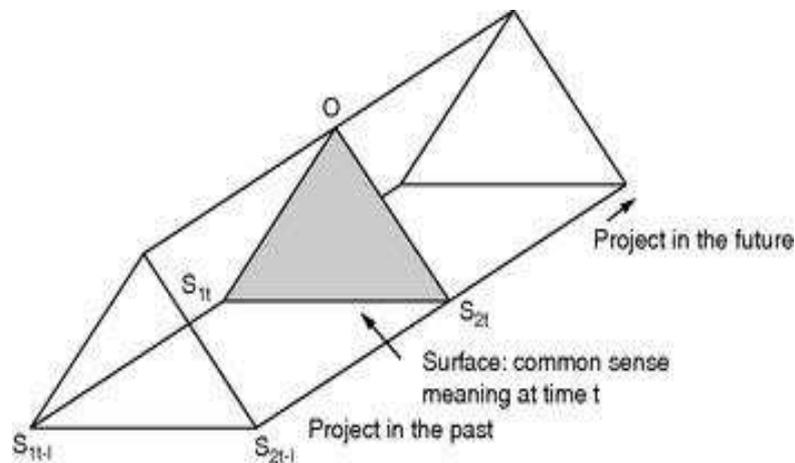


Figure 5. The Toblerone Model of Social Representations (Source: Bauer & Gaskell, 1999, p.171)

The time dimension capturing the past and the future of the dialogic triangle is represented by the ‘project’ (P) that links together the subjects through mutual objectives, interests, and activities around the Object. The elongation of the triangle thus refers to the past and future implied in the common project P (involving collective memory and history, expectations, projection and anticipation for the community) denoting the evolution of common sense in the group (Bauer & Gaskell, 1999, p. 171). The authors also stated that groups rather than being stable, are continuously developing becoming larger or dividing. Thus, over time diverse triangles of mediation, or slices of the Toblerone, can emerge and coexist, characterised at different times by conflicts, cooperation or indifference. This view of different triangles of mediation brings the focus on segmenting social milieus or groups formed around different projects. As suggested by Gillespie, Howarth and Cornish (2012), the research dealing with social representations needs to consider common projects and identities in a subtle manner, avoid imposing a structure on a representation, or segmenting groups on the basis of existing

assumptions and typifications. Indeed, within community can exist individuals and groups sharing a goal, a project and a common identity, and individuals and groups who may share a representation through some (but not all) aspects of a shared project (Bauer and Gaskell, 1999), The problem of differentiating social groups characterised by different representations and constituting the wider intergroup context, conduced Bauer and Gaskell (2008) to extend the Toblerone Model into the Wind Rose Model (Figure 6).

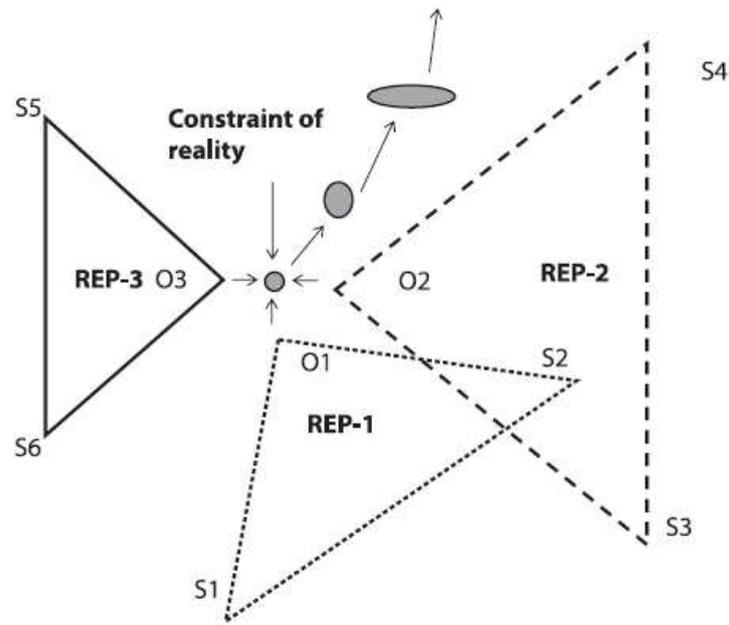


Figure 6. The Rose-Wind Model of Social Representations (Source: Bauer & Gaskell, 2008, p.346)

The triangle of mediation is multiplied, resulting in different representations, thus different triangles or milieus constituting the intergroup context. In this model, the petals are social milieus schematised as triangles of mediation of different sizes to indicate potential differences among groups (e.g. minority and majority, or competing minorities with unequal access to power), and overlapping to indicate that a neat separation of milieus and representations is idealistic and purely artificial.

In this way, Bauer and Gaskell (2008) suggest the techno-scientific progress is accompanied by an interlocking movement of several milieus. Communication systems thus play a crucial role in the production, circulation and transformation of social representations across time. Public opinion is revealed as a communicative process where issues are represented in groups depending on the way they are anchored and elaborated in relation to others and coming from the awareness of different projects of diverse social groups (Bauer & Gaskell, 1999; 2008). Duveen (2008) suggested in this regard that communicative strategies not only perpetuate a given social representation as it is elaborated in the group but also serve to reinforce ties between group members. This is the case of propaganda in developing solidarity, or propagation

in developing communion, because of shared representations marking and distinguishing group members from the others who do not share the same representations. At last, diffusion strategy aims and serves in developing sympathy.

Social representations have been recognised having a fundamental role in regulating the relationships that groups and communities have among themselves and with others (Moscovici, 2000), in creating cohesion (Breakwell, 1993), forming social identity (Moscovici & Hewstone, 1983), and contributing to its evolution and preservation (Breakwell, 2001). Moscovici stated that the process forming a social representation is always characterised by conflict and cooperation (1998). Cooperation, because social representations bring to actors a common code to discuss and constitute social realities (Moscovici, 1961/1976; Wagner et al., 2000), and on the other hand conflict because give actors an object to debating with different interests and power relations competing in a struggle of meanings.

In this way, representations can be strategically used for acting in the world and on others, positioning ourselves, claiming common identities and interests, defending or contesting a particular construction of reality (Howarth, 2006). The theory adds in this way the asymmetrical intergroup relations and influences in psychosocial theories of political behaviours (Stareklè et al., 2011).

2.2.4. Social Representations: participation, power and social change

Elcheroth, Doise and Reicher (2011) argued that Social Representations approach is of use for understanding some of the main issues of interest to political psychologists, “the nature of power and how it is related to political reasoning, to communication and social influence, to conformity and resistance, to collective harmony and group conflicts [...] the contribution of this approach lies in exploring the processes by which people come to a shared understanding of the social world and how this relates to their possibilities for action within the world” (Elcheroth et al., 2011, p. 730).

Social representations are conceived as both social and individual, as they are constructed in social interaction through communication and can be embedded in stable institutions, and in the same extent, they are individual because they shape individual cognition and thoughts (Farr, 1987; Moscovici, 1988). Knowledge rather than the outcome of individual information processing is considered as the outcome of self-other interaction which, in turn, is shaped by existing and experienced social relations and culture (Howarth et al., 2014). Furthermore, as enacted knowledge, namely ideas translated into social practices and embedded in social

structures, they not only provide us symbolic tools to understand and make sense of social and material realities, but they contribute in constructing these realities and support or contest existing social relations (Elcheroth et al., 2011). The same Moscovici (1988) puts it that social representations emerge in social practices, particularly on the way individuals give meaning to their actions and those of the others and act as a consequence.

Representations are located within particular histories and contexts, they form the normative expectations and societal common-ground, but they also evolve in a constant process of social re-presentation, namely the process of resignification through which knowledge is constantly re-interpreted, re-thought and re-presented (see Howarth, 2006; Valsiner, 2003). In this vein, some scholars proposed to distinguish between social representations, as the content of a representation, and social re-presentations, namely the process of contestation through which new meanings are proposed to change the content of given representations (Chrysside et al., 2009; see also Billig, 2008; and Gibson, 2015 on 'representing'). All types of innovation and new objects in society can be reinterpreted and re-signified, and it is through this process of re-interpretation and re-presentation that meanings become ambiguous, hybrid and/or contested and social representations and discourses can change and evolve (Billig, 1998; Castro, 2006; Castro & Batel, 2008; Howarth, 2006; Marková, 2008; Moscovici, 1981; Potter, 1996b).

In light of this dynamic approach, social change and stability are conceived as communicative processes of social influence between minorities and majorities engaged in a constant 'battle of ideas' for which Moscovici used the term of 'thinking society' (Moscovici, 1984). The theory sees social change as proceeding through argumentation and social controversy taking life in the public sphere (Billig, 1991; Moscovici, 1961/1976; Jovchelovitch, 1996; 2007; Castro, 2006). Social change is the results of the co-existence of multiple meanings and interests competing in a constant struggle of meanings (Castro & Lima, 2001; Spini & Doise, 1998; Wagner et al., 1999)

Therefore, the construction and conveying of social representations is never disinterested. Rather it can be defined a social and political project (Howarth, 2006), which is motivated and guided by the interests, goals and activities of groups that elaborate them within a given social arena (Bauer and Gaskell, 1999, 2008). Considered that not all the representations have the same recognition and legitimacy in public sphere, Jovchelovitch (2007) argued that is in the dialogue and confrontation between multiple representations within communities that we need to consider the power differentials.

Indeed, some social representations are more valid than others, because they may be more coherent with cultural traditions, or because they are held and supported by groups who are

abler to impose their interests, meanings and projects over those actors and groups with less material and symbolic power (Howarth, 2001). In fact, certain social groups have the material resources and symbolic recognition to define social reality participating more fully in the construction of social representations (Bauer & Gaskell, 2008). As such, the theory of social representations represents a theory of social change and power as much as a theory of social knowledge (Philogene, 2001; Wagner et al., 2000).

As Elcheroth and colleagues (2011) suggest, SRT is fundamentally a theory of social change and social conflict due to the fact that social conflict is embedded in cognitive conflict.

As we previously said a SR is composed of three dimensions, creating a ‘multifaceted field’, and which is not always in complete accord. A state of cognitive polyphasia can be generated by different dimensions of representational fields - contents, processes and emotions. The coexistence of contradictory contents, processes and emotions is now widely recognised in SRA as a feature of human cognition. Thinking is conceived as possible only through tension and contradiction (Billig, 1987; Moloney, Hall & Walker, 2005). In this vein, Markova (2000; 2003) stressed the role of oppositional themata, that is thinking in opposition or antinomies (such as clear/dirty; we/them, freedom/oppression; economy/environment) as a part of our cultural socialization and mutually interdependent in the genesis of social representations.

Some studies have shown that cognitive polyphasia allows people to incorporate and accommodate - through the process of re-presentation - new knowledge to existing one, in order to adapt to change (Jovchelovitch & Gervais, 1999) or resist it (Castro & Batel, 2008; Mouro & Castro, 2012).

A social psychological perspective of change recognises that this type of active resistance is contemporary a social and psychological possibility at the hearth of practices of re-presentation (Howarth, 2006). Markova (2003) has argued that “through ‘representing’ humans search for meanings and through ‘representing’ they also construct, maintain, and transform their reality” (Markova, 2003, p. 424).

This acknowledges that social realities are created, maintained, or transformed by collective practices that uphold shared systems of meaning and mutual expectations (Elcheroth et al., 2011). Social change implies a change in social representations, which in turn does not happen without representational conflicts both at the individual and interpersonal level (Castro, 2015). In this respect, the investigation of participatory phenomena provides the opportunity to investigate how different groups within the community can express, negotiate, and modify their shared worldviews about the same object, and how these differences may be related to local conflicts and negotiated through communication (Castro, 2015). In other words, we can

conceive participation as the power to construct and transmit particular representations over others, namely the symbolic power of constructing legitimate social knowledge, norms and identities (Howarth, Andreouli & Kessi, 2014). As Howarth, Andreouli and Kessi (2014) suggest, in connecting social representation and participation is fundamental to analyse the role of (mis)recognition, in shaping the dynamics and social relations, in constraining or promoting the participation of different actors and social groups, and their possibility for agency and resistance. Agency may be conceived as “the power to shape mutual expectations within a collective in such a manner to enable or impede coordinated actions directed toward a given purpose” (Elcheroth et al., 2011, p. 745). What matters in considering the meaning of participation is to ask who is recognised as a legitimate political actor, and as a result who or what determines who can be considered a responsible political actor. This implies not only to ask and investigate what people think (their representations) about a particular object but also the meta-representations, a form of meta-knowledge that comprises what they think that relevant others think, value and behave (Elcheroth, Doise and Reicher, 2011).

As Raudsepp (2005) pointed out, a social representation always includes knowledge of what other groups think about a particular object, a meta-cognitive knowledge regarding the limits and the validity of different social representations.

In other words, the SRA invites us to look not at the isolated individual, but rather to individual in relations, analysing the way in which the representations are dialogically constructed in the encounter with others, and shaped by mutual expectations and social dynamics across time (Elcheroth et al., 2011). This involves analysing the political nature of social representations, in the way they are elaborated, disseminated, negotiated and contested (Andreouli & Howarth, 2013).

In this respect, participatory phenomena may be intended as a space and practice allowing social representations to be expressed, negotiated, reinforced through knowledge alliances or re-defined in light of processes of confrontation and social influence among community members (Campbell & Jovchelovitch, 2000). However, what we do is profoundly shaped by the others in terms of social norms or influence, as much as by institutional possibilities and constraints (Subašić, Reynolds, Reicher, Klandermans, 2012).

Andreouli and Howarth (2012) argued in this regard that there is the need to connect political psychological approaches of state institutions and those concerned with social norms

However, the institutional side is often overlooked in socio-psychological research (Castro, 2012; 2015). As Castro argued making the case of environmental laws, many innovations originating in political or legal frameworks, that require changes of individual and collective

behaviours, can be formulated in generic terms and this fact becomes manifest when they are interpreted and translated into concrete, contextual and institutional practices (Castro, 2012). In this regard, as suggested by Castro and Mouro (2011), a social psychological perspective focusing on legal innovation can contribute to the understanding of “the meaning-making processes involved in: (1) the creation and elaboration of new laws and policy decisions; (2) the action of mediating systems ..; and (3) the reception of legal innovations by individuals, groups, and communities who are required to change everyday ideas and practices” (Castro & Mouro 2011, p.2).

This implies looking at the societal level, where objectives, arrangements and innovations for future society directions are generated, and also to the contextual/community level, where laws that originate in the societal level influence concrete inter-group encounters and attempt to direct and orient them in a normative manner (Tuffin and Frewin 2008).

Participatory processes provide the concrete possibility of an encounter between diverse systems of thinking and knowing, i.e. lay knowledge and scientific ones, which potentially have the capacity of transforming the struggle and differences between knowledge systems in a new cognitive product resulting from deliberation and mutual influence (Mannarini, 2009). This requires in-depth analysis of the dialogical encounter and of related cognitive and social outcomes taking into account the communicative processes, expectations and the power differentials shaping the dialogue between the diverse spheres (Batel & Castro, 2009; Jovchelovitch & Priego-Hernández; 2015 Voelklein & Howarth, 2005).

In this regard, coining the concept of “paradoxes of the deliberation”, Regonini (2005) recommended analysing both the actors involved in the process and the quality of their involvement, deepening the true role that citizens play in the general regional or local process and their effective involvement alongside other actors. In fact, a paradoxical aspect of institutionalised participation is that it demands actors to cooperate, no matter of their power, role, or interests. However, cooperation is not a condition that can be taken for granted, or something that can be achieved because of a normative prescription (Mannarini, 2014, p. 77). Public participation in environmental management is highly recommended as it can provide multiple benefits. However, if involvement is not well planned and managed, it can conduce to perverse effects, such as producing disempowerment or increase distrust, protest and conflict (Mannarini, 2009). The quality of decisions is dependent on the nature of the process leading to them and deficiencies in this process are commonly blamed for the failures that have led to disillusionment in participation, often arising from an excessive focus on the tools of participation, and less attention to the entire process within which those tools are used (Reed,

2008). Trust in involved parties and in decision-making processes are crucial aspects, and the perception of both fairness of outcomes and fairness of process is required for encouraging engagement, acceptance and support of policies and projects (Uslaner & Brown, 2005; Gross, 2007). Decisions that do not consider and include local appraisals, interests and values may be seen as questionable and unacceptable. On the other hand, if people feel that fair and just processes have led to an outcome, they are more likely to support the outcome, while where engagement is felt to be lacking, insufficient or ineffective and the process unfair this can directly lead to the opposition (Bell, Gray & Haggett, 2005). If participants don't trust each other, they don't perceive their view and voice recognised and valued, or they don't perceive common belonging, shared goals, meanings, and rationales for participation it is possible the participatory process conduce to undesired outcomes (Mannarini, 2011).

The success of public participation processes is strongly dependent on the overcoming of psychological barriers, and on psychosocial processes that shape the relations on the interpersonal, social and institutional level (Sunstein, 2000; 2002; Antonini et al., 2015).

In this vein, according to Jovchelovitch and Priego-Hernandez (2015), it is crucial to further investigate communicative dynamics and particularly how the knowledge of others is perceived and treated in knowledge encounters. Recognition and denial of others' knowledge are recognised as the fundamental criterion that shapes the cognitive outcome of knowledge encounters and as a consequence the varieties of cognitive polyphasia. Recognition is not only a matter of state and institutions but also of social relations and interaction (Andreouli & Howarth, 2013). In understanding how particular representations win out, we should look at the ways in which they are sedimented into collective practices and institutional facts and analyse the forms of communication and the discourses that are produced and circulate in the local public spheres. This implies to focus on channels of communication, places and contexts in which people meet, discuss, and argue, as well as the media through which they share ideas and information (Elcheroth et al., 2011; Flick, Foster & Caillaud, 2015).

In fact, looking at communicative processes in this way may reveal the impact these can have in the construction and evolution of representations, relations and mutual expectations across time (Walker et al., 2011; Andreouli & Howarth, 2013; Batel and Castro, 2009).

Careful consideration must be paid to specific argumentative styles and communicative genres, and how they can semantically promote or otherwise constitute a barrier to the symbolic recognition of others' knowledge (Gillespie, 2008). This is realised through 'alternative representations', which refers to the part of representations describing what the others who do not share the same representations are alike and doing so put in place symbolic barriers,

stigmatising the others and limiting the dialogue with members of the outgroup (Gillespie, 2008). Representations may work as hegemonic and coercive discourses imposing a perspective over another, or otherwise as consensual discourses that foster polyvocality (Markova, 2008; 2012) - and how certain discourses can express power relationships, sharpen the conflict, and mitigate the effects of innovations (Castro & Batel, 2008; Jovchelovitch & Priego-Henrández, 2015). The Social Representations approach offers a critical stance to analyse participation and social change. It invites us to improve our understanding of social change closely examining the relation between change and stability, analysing the dynamic process of re-presentations, the coexistence of contradictory meaning within groups/individuals and their related function, the coordination between ideas and practices occurring in dealing with innovation or change pertaining to different fields - legal, political, socio-cultural, techno-scientific and so on (Batel & Devine-Wright, 2015).

Social Representation Theory in this regard provides useful instruments for critically capturing the complexity of social realities, analysing the ways in which people make sense of and interact with social and material realms, and act in accordance with this understanding. Moreover, focusing on different planes of human functioning (intrapersonal, interpersonal, intergroup), and situating them within their specific context, history and cultural reality, SRT provides a unique perspective capable of interdisciplinary dialogue and engagement.

For instance, different authors have argued how Social Representations approach can dialogue with sociology, political sciences, geography and system theories committed with environmental change and science and technology in society (among them see: Batel et al., 2016; Devine-Wright et al., 2017; Upham et al., 2015; Sarrica et al., 2016). A fruitful example of this interdisciplinary contamination is provided by Upham and colleagues (2015; see Figure 7) that connected Social Representations Theory, and particular the dialogical approach and the Toblerone model (Bauer & Gaskell, 1999), with the MLP on socio-technical transition presented in chapter one (Geels & Schot, 2007).

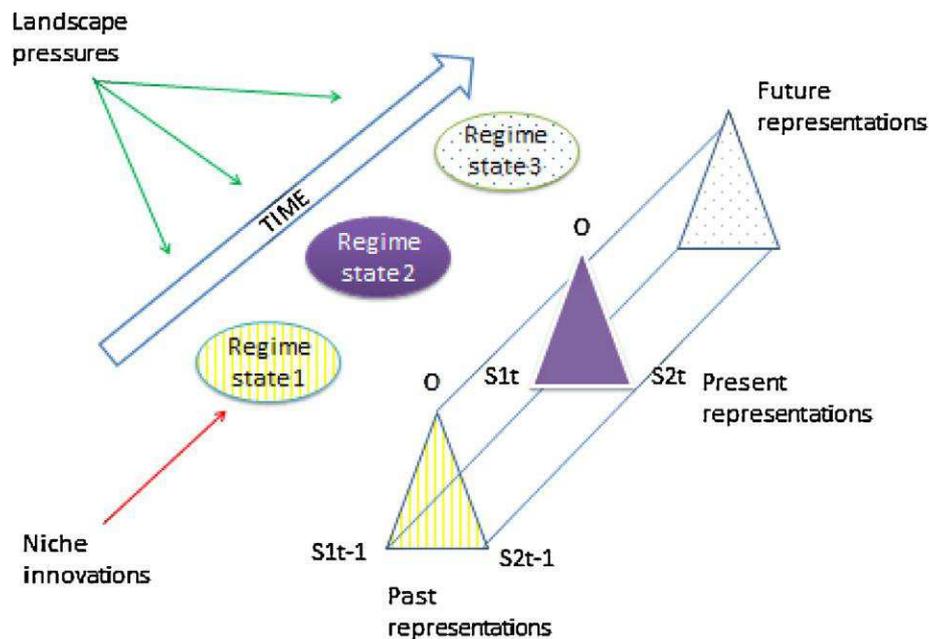


Figure 7. Integrating MLP and SRT (Source: Upham et al., 2015, p.125)

Upham and colleagues (2015) analysed the media representation of fracking-derived shale gas technologies in different countries and suggested that connecting processes of anchoring and objectification to socio-technical change processes may reveal a fruitful way to deal with agency influencing socio-technical transition pathways.

In the same direction moves the recent contribution of Devine-Wright and colleagues (2017) about the relevance of adopting SRT for research on social acceptance about energy system change (RETs and associated infrastructures) integrating policy, market and civil society actors' perspectives.

The authors suggest that “the belief systems or social representations (Batel and Devine-Wright, 2015; Gaskell et al., 2015) held by key actors working at different scales play a crucial role in fostering social acceptance of novel technologies” and that SRs approach “is suitable for research on social acceptance that integrates policy, market and civil society actors” (Devine-Wright et al., 2017, p.30-28).

This suggestion stresses a more nuanced polycentric perspective in understanding the role that multiple societal actors, operating at different scales, play in orienting or obstructing energy system change, by influencing and making change at multiple levels and shape policy formulation and choices on technological configurations and trajectories.

2.3. Identity processes and intergroup relations: the role of identification and agency in participatory processes

Howarth (2006, p. 78) argued that “[w]ithout an understanding of identity we could not explain why and how different people use representations to different ends – to legitimise, to contest, to negate, to transform”. Indeed, social representations always imply some sort of identity positioning of self and others and some form of representation of social categories. Social identity research is argued having much to contribute to understanding social representations and their relevance for political psychology, as much as social representations can contribute to understanding identity processes (Elcheroth et al., 2011).

The social identity approach (Tajfel, 1982; Tajfel & Turner, 1979) represents a fruitful framework developed within social psychology to explain group behaviours based on categorization and identification processes. Tajfel defined social identity as “the individual knowledge that he belongs to certain social groups together with some motivational and value significance to him of the group membership” (Tajfel, 1972, p. 31). The theory assumes that “individuals structure their perceptions of themselves and others by means of social categories, that they internalise such categories as aspects of their self-concept and that social-cognitive processes relating to these forms of self-conception produce group behaviour” (Tajfel, 1982, p. 16). Social categorization refers to the individual cognitive process that divides the social world into classes or categories (Tajfel, 1972). On the other hand, identification refers to the definition and positioning of self within a given social category or group, which in turn determines the way individuals think and behave on the basis of a comparison between the ingroup (we) and the outgroup (they). Indeed, the approach argues that a portion of self-concept derives from the perceived membership to social groups and categories and that this membership gives to individuals a certain level of self-esteem, and a positive image of self, which individuals tend to constantly maintain. These processes are assumed as the basis of favouritism for the ingroup (individuals treat differently those perceived to be in the same ingroup) and, in some cases, outgroup discrimination in seeking positive distinctiveness.

Social Identity approach represents a meso-level theory assuming that social behaviour can vary along a continuum between interpersonal and intergroup behaviours, in the same extent identity varies in a continuum between personal and social identity (Tajfel & Turner, 1979). Indeed, a given social categorization and identification should be psychologically salient in the given situation to determine intergroup behaviours. Tajfel and Turner state that: “At one extreme.. is the interaction between two or more individuals, which is fully determined by their interpersonal relationships and individual characteristics and not at all affected by various social

groups or categories to which they respectively belong. The other extreme consists of interactions between two or more individuals (or groups of individuals) which are fully determined by their respective memberships of various social groups or categories, and not at all affected by the interindividual personal relationships (Tajfel & Turner, 1979, p.34).

The fact that personal identity and social identity are the poles of the same continuum suggests a constant presence of the two, even in a different degree depending on the situation in which we are involved. In general, we can state that more salient is social identity, more the individual is de-personalised, tending to perceive and recognise in himself common traits of ingroup members and recognise the others according to stereotypical traits of the outgroup. It is assumed that more salient is social identity, and more personal identity and motives can be in the background, weakening self-interest, and favouring a collective orientation.

With regard to collective action and participation, Tajfel himself (1981) suggested that social movements can be understood on a psychological basis as the efforts shared by a large number of persons, which define themselves and are defined by others as a group, to solve a problem they perceive as shared and deriving from their relationship with other groups.

The question of why people take part in the collective action and engage in protest has been a long-standing question that occupied social psychologists in the last thirty years.

Within this research tradition, social identity approach has represented a fruitful framework to understand how socio-psychological processes influence the taking part in collective action, affiliate with a given social movement, engage in community organizations, as well as in influencing intergroup relations.

Different social psychological models have been proposed to explain participatory behaviours on the basis of psychological (e.g. personality and cognitive processes) and psychosocial factors and processes (value orientation, trust, perceived efficacy). However, given the aim of this thesis, here I will focus and discuss three main psychosocial perspectives on participation assuming a crucial role played by identification processes: the psycho-political model proposed by Klandermans about the social psychology of protest (1997; 2002), the psychosocial model of community participation proposed by Campbell & Jovchelovitch (2000), and the place identity framework in place-protective actions (Devine-Wright, 2009; Proshansky et al., 1983). The three frameworks with the main related psychosocial dimensions of participatory processes are presented and summarized in Table 1.

Psychosocial dimensions	Protest and collective action (Klandermans, 1997)	Community participation (Campbell & Jovchelovitch, 2000)	Place protective action (Devine-Wright, 2009)
Shared meanings and relation with alterity	Perception of common problems/sense of injustice	Shared/contested social representations	Threat/disruption/unwanted change of place
Identity, belonging and emotional bonds	Collective identification	Shared and negotiated social identities	Place or community-based identification and attachment
Instrumentality	Collective efficacy beliefs	Shared constraints to the access of symbolic and material power	Coping strategies and responses

Table 2. Meanings, identity and instrumentality in three different psychosocial frameworks of participatory behaviours

2.3.1. Injustice, identity and efficacy: a psycho-political approach to collective action and protest

Socio-psychological research on citizen participation widely recognises collective identity as a fundamental factor in predicting and explaining participatory behaviours of different forms. In their literature review on social psychological research on participatory behaviours, Kelly & Breinlinger (1996) distinguished two types of approach: one based on the individual, looking at personal psychological determinants, and the other based on the group and focused on the study of identification processes. These two paths assume that “when the personal identity is more salient, determinants of individual behaviours can be traced in the cost-benefit ratio, while when social identity is salient these can be determined by the group identification and the perception of disparity deriving from social comparison” (Mannarini, 2004, p. 53 own translation). Indeed, according to Simon and colleagues (1998), motives for participation can vary and follow two different pathways: when personal identity is salient, individual motives are grounded on the evaluation of personal costs and benefits connected with personal involvement. Personal dissatisfaction can be a very powerful determinant to take part in collective action. When individuals are forced to confront with frustrating or unsatisfactory situations they try to re-establish the cognitive balance engaging in collective action to change the state of things (Veenstra & Haslam, 2000). In the other case, when social identity is salient, identification with a group play a major role for the involvement in collective action, and more people identify with a group more they are motivated to protest on behalf of that group (Mummendey et al., 1999; Simon et al., 1998; Simon & Klandermans, 2001; Stürmer & Simon, 2004).

As previously stated, the level of self-categorization can be more or less inclusive. It is wider in case identification occurs with a broader social category (women, migrants), and more circumscribed in the case of a specific group, organization or movement. It is the latter that seems the more determinant in attract first and sustain later individual commitment in participation (Mannarini, 2009). In this regard Klandermans (1997) highlighted three types of incentives at the basis of collective action: (1) social incentives, represented by expected reaction (e.g. approval, support) of significant others; (2) reward's incentives, referring to the estimation of personal costs and benefits that implies participation, such as economic, time and energy investments; (3) collective incentives, which refers to the expectation of achieving the collective objectives. At the basis of this latter types of incentives, there is the perception that personal contribution increases the probability of reaching a shared and desired objective, and that others will behave in the same way as the objective can be reached only with large participation. Klandermans (1997) adds that these evaluations combine with the value that individuals attribute to the expected results, emphasising the role of values and norms in motivating people to take part in collective action.

Participating as a member of a group or a community depends on and helps to construct shared social identities. Klandermans (2000) introduced the concept of collective identity to differentiate it from social identity and avoid the misunderstanding that can exist an a-social identity, such as the personal one (Simon & Klandermans, 2001). While social identity is recognised as an individual attribute, implying the individuals' awareness of being a member of more groups, collective identity refers to a group characteristic (Klandermans, 2002). In the study of participatory processes, collective identity is preferred and used to describe the process of identification with a social group distinguishing different attributes (salience, political relevance, and strength) and components (affective and behavioural). Klandermans (2004) argued that most of the political collective action can be explained by the desire of modifying the circumstances (instrumentality), belong to a group (identity) and give meanings to personal life (meanings).

According to the psycho-political model proposed (Klandermans,1997; 2002), people affiliate themselves with a particular movement or take part in the collective action, when the perception of a common problematic situation generates a collective identity and the shared belief that the group can change the situation through collective mobilisation. Thus, Klandermans (1997) proposed the sense of injustice, collective identity, and efficacy (agency) as the key psychosocial elements of a collective action frame, composed by shared beliefs, attitudes and representations through which participation is socially created. The perception or the sense of

injustice represents a fundamental factor motivating people to participate in the protest. As Klandermans (1997) suggested, people can be motivated to participate in order to state their grievances deriving from relative deprivation, frustration or perceived injustices. Feelings of injustice may indeed derive from the perception of illegitimate inequalities, imposed grievances or the belief that some moral principle has been violated. These are often accompanied by affective responses such as group-based anger – the role of emotions attracted the attention of social psychologists only in the last years (Van Zomeren et al., 2004). The relative deprivation (Runciman, 1966), refers to the experience of individuals and group perceiving some form of deprivation that derives from a comparison of a personal a group situation with others taken as a standard. In this regard, the meta-analysis conducted by Van Zomeren and colleagues (2008) concluded that the cognitive component of relative deprivation seems to have less influence in predicting participation when compared with the affective component, which may be expressed by feelings such as indignation, discontent or dissatisfaction about the given situation.

Beyond relative deprivation, within social psychology scholars started to apply social justice theory (Tyler, 1994; Tyler & Smith, 1998) to understand protest behaviours on the basis of perceived distributive, procedural and recognition injustices⁴.

For what concerns the perceived efficacy of participation linked with collective identity, this has been confirmed in psychosocial literature as one of the most powerful aspects in predicting involvement in collective action (Van Zomeren, Postmes & Spears, 2008).

The concept of political efficacy or agency can be traced back to the psychological constructs of self-efficacy proposed by Bandura (1995), referring to the individual perceived capacity to manage and control the events, or the locus of control by Rotter (1966), referring to the subject generalised expectation of control on the events.

Efficacy theories refer to the subject expectation that is possible to modify the structural conditions or policies through collective action (Gamson, 1992). The group or collective efficacy described by Klandermans (2002), refers to the shared belief that the group can change the situation through unified efforts, which involves the beliefs and expectations of individuals towards other members of the group to take appropriate and effective action to reach the shared and predetermined objective. A concept similar to the group or collective efficacy described by Klandermans is the socio-political control, a dimension of psychological and community empowerment introduced by Zimmerman (2000). What is remarkable of the psycho-political approach is that all the three main psychosocial components are assumed as necessary to

⁴ Social justice theory is addressed and deepened in the paragraph on environmental and energy justice

determine individual willingness to protest and engage in collective action and overcome the free rider effect.

2.3.2. Representations, identities and power: a psychosocial model for community participation

Shifting from social movements, collective action and protest to community participation, Campbell and Jovchelovitch (2000) proposed a more ‘contextualised’ and socio-constructivist psychosocial model of community participation. With community participation, we can refer to the engagement of community as a collective actor (Mannarini, 2005), namely those forms of activation developed on a local basis that contribute to choices of collective interest (Mannarini, 2004).

Campbell and Jovchelovitch (2000) advanced a comprehensive conceptual framework for the investigation and understanding of community participation distinguishing three fundamental psychosocial dimensions: shared social representations, shared social identities, and shared conditions and constraints to the access of power. According to the authors, it is possible to conceive the presence of a group or a community only if individuals that belong to it share a set of social representations that contribute to shared beliefs, values, interpretations of reality and everyday practices.

Community participation can be defined as “the process by which a community states and negotiates social identities and representations, which are in turn shaped and constrained by the power relations” (Campbell & Jovchelovitch, 2000, p. 264).

With regard to the last conditions, the shared constraints to the access of power, Campbell and Jovchelovitch (2000) conceived power in terms of material resources and symbolic recognition. As a matter of fact, according to Campbell and Jovchelovitch (2000), it “is through participating that a group can develop awareness about its own resources and can engage with significant others in the public arena” (p. 264). Also, they argue that “it is not sufficient to say that grassroots participation is central [...] It is necessary to ask questions about the conditions under which participation is enacted” (p. 266).

Indeed, the power to act is argued to be limited not only by material inequalities but also by the recognition of significant others (e.g. members of the community, community leaders and decision-makers, institutions). Thus, the issue of power and agency refers not only to the conditions of unequal access to or lack of material resources, but also to the concrete possibility for individuals and groups being recognised as full members of the social and political community and get the opportunity to have a voice and to exercise some influence in the

community public and political sphere, and in doing so develop feelings of individual and collective effectiveness and participatory competencies, or on the contrary disempowerment and learned hopelessness (Mannarini et al., 2011; Cicognani & Zani, 2014).

Taking place within a community context – conceived within community psychology as an ecological system (Bronfenbrenner, 1979) – participation is determined and shaped by contingencies and needs emerging within the given context, including its culture, norms, values and institutions (Cicognani & Zani, 2014). The context has an influence in the level of categorization individuals adopt, and consequently, the type of interactions individuals develop with others. Therefore, the question of power requires the adoption of an ‘ecological perspective’ in the investigation of participatory processes (Perkins, Brown, & Taylor, 1996), focusing the attention on the contingencies of context in which active citizenship is enacted, and that define the space of possible action of actors attempting to exert their effects. Thus, it is assumed the relevance of examining what aspects of the social context or social relations may undermine or support the participation of different actors (Campbell & Cornish, 2010).

As it is possible to notice, the psychosocial models of citizen participation presented so far, although focusing on relatively different forms of participation and focusing the attention on individuals’ cognition and behaviours, or the broader context influencing cognitive and behavioural outcomes, all share the same action frame. Both the models suggest that shared beliefs, such as about a common problematic situation or injustice, shared social identities, and power or agency can be considered the crucial social psychological elements of participatory phenomena, that this refers to actions of mass protest, social movement activities or engagement in community organizational life.

2.3.3. Place and community-based identity processes in participatory behaviours

A further relevant perspective on the role of identification processes in participatory behaviours derives from the community and environmental psychology literature. Many authors (among them Breakwell, 1999; Proshansky, Fabian & Kaminoff, 1983; Twigger-Ross & Uzzell, 1996) have highlighted how the bonds individuals have with place can become a part of identity influencing individual cognition and action. The foundations of this reasoning can be found in the theories on place identity (Proshansky et al., 1983) and place attachment (Altman & Low, 1992). Proshansky and colleagues (1983) were the first to propose a model connecting identity processes and bonds with places, assigning a key role to the sense of place belonging.

Place attachment has been defined as both the process of personal emotional attachment to a place and the product of this process (Giuliani, 2002). Place identity instead refers to the ways the physical and symbolic aspects of given places contribute to and become part of the identity, becoming a social category that provides content to identity structures (Proshansky, Fabian & Kaminoff, 1983).

Following this first conceptualizations, different authors approached issues pertaining identification and attachment related to place from very diverse epistemological and methodological perspectives, drawing from social identity theory (Bonnes, Giuliani & Bonaiuto, 1995), identity process theory (Twigger-Ross & Uzzell, 2000), social cognition (Steadman, 2002), or discourse analysis (Dixon & Durheim, 2000), and using different spatial levels ranging from attachment to neighbourhood (Brown, Perkins & Brown, 2003), regions and nations (Massey, 1995) or even the entire globe (Devine-Wright, 2013).

Most of the environmental psychologists initially focusing on place identity have relied on an individualistic perspective, which attracted the criticisms of some scholars, particularly from discursive social psychology approaches (see Dixon and Durrheim, 2000), sustaining that place-based meanings, and more in general the relationship individuals have with places, should be framed and understood not as an individual static attribute, but rather as dynamic, socially constructed and collectively shared via communication activities. Some authors also proposed an integration between social identity theory and the construct of place identity (Twigger-Ross, Bonaiuto & Breakwell, 2004; Dixon & Durrheim, 2000). Among these, Breakwell (1999) proposes the Identity Process Theory as a dynamic account for identity processes, where places are considered a relevant symbolic source for identity. The place is indeed inserted in the network of interpersonal relations, group membership and intergroup relations. They are constantly invested of social meanings, memories, values that are constantly negotiated and socially constructed. What is remarkable from place identity and attachment literature is that different studies have shown that affective bonds, and identification with familiar places, can motivate people to participate in order to seek, stay in, protect, and improve places that are important to them (Manzo & Perkins, 2006). On the contrary, Manzo (2005) emphasised how the socio-political dimension of place can influence attachment in a negative way, as in the case attachment is understood as influenced by group level interests, leading to negative attachment and even the intention and desire to leave and escape from familiar places.

The territorial dimension can work as a trigger for the emergence of place-based identities and the condition that makes it possible is that place is or becomes subjectively salient. This may occur for different reasons and in different forms. According to the literature (Loomis, Dockett,

& Brodsky, 2004; Sonn & Fisher, 1998), the acquired salience of the place in the formation of identity can depend on the perception of external threats for the community.

As Joffe puts it, “people construct risks through lenses tinged with elements of group attachment and of the experiences of their in-groups and selves, in terms of both the contemporary imagery they are exposed to and past misfortunes. These elements do not distort a ‘real risk’. Rather, they are the ‘reality’ in the minds of those who look upon the risks” (Joffe, 2003, p.68).

In this regard, psychological empirical evidence suggests that a personal involvement, or place-based identification, with the threatened environment can influence risk perceptions in different ways. It may increase risk sensitivity and the readiness to adopt protective actions, or on the contrary, it can increase the tendency to deny the risk (Clayton et al., 2015).

Furthermore, some community psychologists (Obst, Smith, & Zinkiewicz, 2002) have found that ‘conscious identification with the community’ – the degree individuals identify with their community – is the most significant predictor of Sense of Community (McMillan & Chavis, 1986). Sense of Community refers to the individual experience of community life (Mannarini & Fedi, 2009) defined by four dimensions: the perceptions of a sense of belonging to the community, the existence of significant affective bonds, the opportunity to have influence, and the opportunity to meet their own needs (McMillan & Chavis, 1986). Community psychology has dedicated particular attention to the sense of community, found as a catalyst for involvement in community organizations and community participation (e.g., Brodsky, O’Campo, & Aronson, 1999; Chavis & Wandersman, 1990).

The social psychology of collective action has started only recently to move beyond instrumental variables, such as perceived efficacy or cost-benefits’ evaluation, and further consider the role of emotions, ideology and moral conviction (see van Stekelenburg, Klandermans, & van Dijk, 2009; van Zomeren, Postmes, & Spears, 2012). In the same extent, it has been argued that psychological research on participation in environmental issues should further investigate the role of positive affective components, such as the sense of community, in promoting and sustaining grassroots engagement in the so-called ‘new environmentalism’ (see Hershkowitz, 2002; Speth, 2008), i.e. local community-based engagement in sustainability activities (Mazzoni & Cicognani, 2013; Biddau et al., 2016).

More relevant for this thesis is the approach proposed by Devine-Wright (2009), to re-consider local opposition to the siting of renewable energy infrastructures as place-protective actions arising from concerns and perceived threats for the place with which residents identify and feel attached.

As Devine-Wright (2009) pointed out, the psychological impact of place change has interested many researchers that referred to ‘disruption’ or ‘threat’ to place attachment and identity (Bonaiuto, Breakwell & Cano, 1996; Brown & Perkins, 1992), to indicate how changes in familiar places are perceived and responded. This, highlights the role of the symbolic, affective and identity aspects and valence of places. Indeed, the siting and building of facilities may be perceived by residents as an “inappropriate development” (Devine-Wright & Howes, 2010) threatening the local place distinctiveness and coinciding with feelings of disruption to place attachment and threats to place identity, involving “negative emotional responses and forms of coping with changes” (Devine-Wright, 2009, p. 432). Devine-Wright (2009) argued that to investigate psychological responses to place change we should look at different stages over time, and examine how people make sense, evaluate, cope and take action in response to place change. To do this, is argued that Social Representations approach, theories of place and identity, and discursive approaches have the potential to illuminate how meanings are created, negotiated, communicated and contested between groups and individuals with different interests in the issue at stake (Batel & Devine-Wright, 2015; Devine-Wright, 2009; Dixon & Durrheim, 2004). Thus, the prospect of a new installation in the community can work as a trigger event for population arousal (Azar, 1990) increasing the salience of place and the community – both in territorial and relational terms - potentially bringing the perspective of disruptive change and allowing people with latent interests to take action (Mannarini & Roccato, 2016). How people feel attached and identify with the place are dynamic processes always evolving and having an influence in motivating people to take action and mobilise (Mannarini et al., 2009). How people represent place is important in the measure they are always the product of a social construction, they are charged with meanings, values and memories, but they are also continuously negotiated and subject to change. However, these are socially constructed only to a certain degree, as they differ on environmental, political, economic and social features (Steadman, 2003). This fact influences the symbolic dimension of the place and the type of responses to the given facility. So, we should look not only at how place and change involving it are represented but also at the contextual characteristics. As we attempt to maintain a personal distinctiveness deriving from our multiple group memberships, on the same extent when the place is part of our identity we can be motivated to maintain the place-related positive distinctiveness and continuity over time (Breakwell, 1999; Brittan, 2001). This is particularly relevant for the siting of energy infrastructures, which may be perceived as bringing unwanted place change and negative potential impacts of different types (e.g. impacts on the landscape, land use change, economic threats, intensive exploitation of natural resources,

industrialization of rural and uncontaminated areas). Proposed development may be interpreted in relation to the fit they have with place-related meanings and structural conditions (Devine-Wright, 2005; Stedman, 2002), and they can be interpreted as an ‘aggression’ from external actors to the community with proposals perceived as ‘alien’ or ‘contradictory’ to the place distinctiveness and related meanings and emotional aspects (Barry et al., 2008; Van der Horst, 2007). In this regard, some authors (Walker et al., 2011; Mannarini, 2014) suggested that, in order to understand public engagement processes, we have to look at the relations between actors and places, considering actors (project developers and owners, community members, facilitators, researchers, policy-makers, public officers, experts) as internal or external agents to the community, taking count of the different views, expectations about the place and the community, and how the project, the process of participation and the actors who promote them are perceived by local people. Place representations and personal involvement with it by different actors are crucial for understanding the related conflict of identities and representations in knowledge encounters regarding land use.

Place identity and attachment theories inform us about the psychological processes dealing with siting of new technologies and infrastructures. People interpret change on the basis of their representations, emotional bonds and identification related to the place object of change. Also, place change provides the condition for making salient the perspective of a shared problem and the emergence of place and community in identification processes. Thus, from a socio-psychological perspective, social conflicts can be analysed through an intergroup lens, based on social categorization and resulting in we-them categorization and positioning (Mannarini & Roccato, 2016).

2.4. The contribution of environmental and energy justice theories: adding the spatial perspective to the study of public responses to energy system transformations

The concept of environmental justice emerges for the first time in 1987 within the report “Toxic Wastes and Race in the United States”. In that occasion, the terms of environmental racism and environmental justice were used to underline how some communities were more exposed to risks deriving from the siting of dangerous and toxic infrastructures and wastes, and how this fact was linked with socio-economic and racial inequalities (Agyeman et al., 2016).

The first academic contribution on environmental justice focused therefore on the unequal distribution of environmental bads and risks as a further example of social injustice (Schlosberg,

2013). In substantial terms, the concept of environmental justice was expanded to include beyond environmental bads also the environmental benefits, such as the access to natural and green areas, quality and distribution of water and food supply, energy services and goods, transport and so on (Walker, 2009).

Across the years, the concept has been used by several social movements, extending its scope and meaning. In fact, environmental justice movements have always gone beyond the fair distribution of costs, benefits, and environmental responsibilities (Schlosberg, 2003).

Their claims have always included issues related to the fairness of procedures and regulation, inclusion in decision-making processes and access to environmental information (Hampton 1999; Hunold & Young 1998; Lake 1996). Starting from considering the differences among academics and activists in the way environmental justice was conceived, Schlosberg (2004) sustained the necessity of expanding the theory and concept of environmental justice to move forward and beyond the unfair distribution of environmental hazards and benefits, and include the dynamics producing and reproducing forms and experiences of distributive injustice, that is “address the processes that construct the maldistribution [and] focus on individual and social recognition as elements of attaining justice” (Schlosberg, 2009, p. 3). Basing on the work of Fraser (1997; 1998), Young (1990) and Honneth (1995; 2001), Schlosberg (2007) elaborated the environmental justice as determined by the intersection of distributive, procedural and recognition justice.

First, justice as recognition intends the mutual and intersubjective recognition and fair treatment as a further element at the basis of justice, as well as a fundamental psychological need to which individuals and communities rely to make sense and reflect on their own sense of integrity and dignity (Taylor 1994; Honneth, 1995, 2001). In this vein, Taylor (1994) distinguished between two different type of recognition: equal dignity for all, and the politics of difference, in which everyone is recognised for his/her own distinctiveness. Recognition of difference, in terms of privilege or oppression, results in a fundamental criterion to recognise and respond to injustices (Young, 1990).

In this regard, Fraser (1998) identified three main forms of misrecognition: cultural domination, non-recognition and lack of respect. Schlosberg (2003; 2007) conceived recognition injustice in terms of (lack of) social and political recognition, embedded in disrespect, degradation and devaluation of some individuals and groups, identities and place in respect to others. Recognition justice is in this regard at the basis of the unfair distribution of environmental bads and benefits, and of procedural injustice.

Procedural justice refers to the fairness of political procedures, or the way decisions are taken, and participation takes shape, such as the exclusion/inclusion of voices, representativeness and agency and influence characterising decision-making processes. In the political realm, Fraser (1998) was the first to draw the attention to the 'participatory parity' of all interested or affected parties as the procedural element that can potentially alleviate distributive and recognition injustices. She stressed also the importance of examining the factors that prevent or hinder the full recognition of groups and individuals as legitimated members of the moral and political community. Furthermore, the author adds that when practices of disrespect and disesteem are institutionalised, for example within laws, public education or practices constructing everyday interactions, these impede participatory parity as much as distributive injustice.

The relationship between recognition justice and distributive justice can be traced within procedural dynamics, as both forms of injustices hinder the possibility for individuals and groups to participate, conducting to a vicious circle where lack of recognition and exclusion from decision-making processes reinforce each other (Fraser, 1998). Claims for an authentic, enlarged and inclusive public participation are indeed often argued as a useful way to achieve political recognition and distributive fairness (Walker, 2009), while political procedures are often identified as the elective instrument to face distributive and recognition fairness, and with participation representing both the element of and condition for social justice (Young, 1990). Starting from a distributive understanding of justice, the framework of Environmental Justice step by step has gone to delineate itself around the three pillars of distribution, procedure and recognition

The theory had an exponential development, extending its geographical borders spanning from local to transnational and global issues, highlighting the spatial aspects of iniquity in the way impacts are distributed and decisions are taken, as well the asymmetries in power relations within and between societies (Bickerstaff, Walker & Bulkeley, 2013). Moreover, the theory has extended and applied more specifically to different themes and socio-technical systems, such as climate change, energy, waste, water, food, transport etc., deepening issue pertaining the role of scientific expertise and local knowledge, and the relation between environmental science and social justice (Schlosberg, 2013; Ottinger & Coen, 2011).

Following this line, the concept of energy justice has emerged in recent years within social scientific energy research as a fruitful tool with analytic and interpretative, evaluative and normative valence, and applicable to relevant social and political issues, as for example energy policies, the introduction and materialization of technologies for energy generation,

consumption and access to the energy market, activism and participation in energy decisions (Jenkins et al., 2016).

McCauley and colleagues (2013) highlighted that energy justice intrinsically represents an analytical spatial concept questioning how forms and experiences of injustice from distributive, to procedures and recognition intersect during the transformation of current energy systems. The alternate attention to the social/relational and spatial/territorial components clearly highlight the potential of the theory in recognising how injustices are reproduced during the energy systems' transformations.

According to Jenkins and colleagues (2016), energy justice provides a framework available for both researchers and decision-makers for analysing (and reflect on) how injustices emerge, who are affected and /or ignored, and what processes exist to remediate in order to make evident and reduce such injustices. In this regard, distributive justice draws the attention on how costs and benefits of change are distributed not only between individuals and social groups but also geographically (between territories) and temporally (e.g. intergenerational justice). Reflecting on the energy system as a whole has a lot of implications suggesting analysing how costs and benefits are distributed along the entire energy system and life-cycle - from production to transmission to waste management and recovery of the areas – and recognise who is affected. Procedural justice is conceived in terms of equity and fairness of procedures, focusing on factors such as the access to information, transparency, legitimacy, access, inclusivity and representativeness of different interests at stake in decision-making and the final outcome.

Procedural justice thus concerns the set-up of fair procedures involving all interested parties in a non-discriminatory way (Walker, 2009). This requires not only that all persons potentially interested can fully participate in the decision-making and that their voices are seriously considered, but also the adoption of adequate engagement mechanisms, access to expertise, disclosure and impartiality of information from both industries and governments (Lund, 2014; Sovacool et al., 2016). Finally, recognition justice refers to the (lack of) recognition or misrecognition of social groups and places, “the processes of disrespect, insult and degradation that devalue some people and some place identities in comparison to others” (Walker, 2009, p. 615). Lack of recognition can take various forms of political and cultural domination, manifesting in the overlooking of social groups and sectors of society affected by decisions, or in the misrecognition of individuals and groups, where distortion of their behaviour is associated with forms of non-recognition and devaluation of their knowledge, which in turn influence how procedures are implemented (if and how individuals are involved, treated and represented in the decision-making), and impacts and costs of energy system are distributed

(how the decisions reflect the recognition of concerns and opinions of diverse publics redistributing costs and benefits). Approaching the energy system change with a justice and ethical appraisal present different challenges as well as benefits for social science research. Also, combining justice theory in a psycho-social approach to public engagement and energy transition reveal the fundamental task of connecting and examine the connection between psychological processes and the political, geographical, and technological aspects of transformation that potentially may provide insights both for decision-makers and practitioners (see Table 2 summarising the link between dimensions of environmental justice, objects for the analysis and examples of elements of injustice).

Dimensions of justice	Objects of analysis	Elements of injustice
Recognition	Actors/groups and places/territories	Disrespect, non-recognition, cultural domination, degradation, devaluation, misrecognition
Distribution	Environmental and social costs and benefits	Access to environmental services and resources, unequal distribution/maldistribution of risks/ hazards/impacts, benefits/goods
Procedure	Decision-making processes	Exclusion of voices, scarce representativeness, manipulation, limited information, transparency and access to expertise, limited influence/agency

Table 2. Schematisation of the link between dimensions of environmental justice, objects for the analysis and examples of elements of injustice

CHAPTER 3 – THE CONTEXT OF THE RESEARCH

3.1. The National Context: an overview of the Italian energy policy scenario⁵

3.1.1. Decentralization of energy governance and distribution of competencies

The scenario and strategies for Italian energy policies are determined by the intersection between five distinct levels of governance for competence and hierarchy of the laws. The first level refers to EU directives, laws and regulations that are transposed and implemented at the national level. The national objectives and strategic choices on energy matter are set up respectively in the National Renewable Energy Action Plan and the National Energy Strategy (Italian acronyms: PAN and SEN). Then, these targets are distributed to the region (D.M. 15/3/2012 - Burden Sharing) who define their own Energy and Environmental Strategy or Plan (PEAR, SEAR). At the lower levels, in accordance with national guidelines and provisions coming from the regional energy strategies, provinces and municipalities define their own Provincial and Municipal Energy Plans (PEP, PEC), or the Sustainable Energy Action Plan (SEAP) if Municipalities are involved in the Covenant of Mayors⁶.

The development of renewable energies in Italy has been characterised by incoherent and discontinuous policies on energy, industry and technology that limited the development of the national renewable energy industry (Di Nucci, 2007). The EU's Climate and Energy Package, with the Directive 2009/28/EC, sets the overall policy framework and the binding objectives for the promotion of RES, while the Emission Trading System (ETS) and the Effort Sharing Decision (ESD) set the targets for emission reductions respectively in the energy-intensive sectors and the sectors of transport, buildings, agriculture and waste. Furthermore, the Directive 2012/27/EU on energy efficiency matter sets the targets for the reduction of energy consumption.

⁵ The literature review on the Italian energy policy scenario here presented is part of an article published in the *Energy Policy* journal in which the author of this thesis has widely contributed (cf. Sarrica, M., Biddau, F., Brondi, S., Cottone, P., & Mazzara, B. M. (2018). A multi-scale examination of public discourse on energy sustainability in Italy: Empirical evidence and policy implications. *Energy Policy*, 114, 444-454).

⁶ The Covenant of Mayors is the mainstream European movement involving local and regional authorities, voluntarily committing to increasing energy efficiency and the use of renewable energy sources on their territories. By their commitment, Covenant signatories aim to meet and exceed the European Union's objective to reduce CO₂ emissions by 20% by 2020 (<http://www.covenantofmayors.eu/>)

According to these supranational policies, Italy plans to achieve by 2020 the 17% of energy produced from RES of the final gross consumption (26.4 % in electricity consumption, 17.1 % in heat consumption, and 10.1 % in transport consumption), while the target negotiated under the ESD consists in a 13% of greenhouse gasses (GHG) reduction by 2020 with respect to 2005 level.

The recent EU Climate and Energy Package 2030 sets for Italy the targets of greenhouse gasses (GHG) reduction by 40% by 2030 with respect to the 1990, the 27% of energy from RES in the final gross consumption (48 – 50 % for electricity consumption, 28- 30% for heating and cooling, and 17 – 19 % for transport) and an increase of 27% in energy efficiency.

To achieve these targets, the Italian energy and climate policy foresees the cooperation between the National, Regional and Local Governments, providing to local institutions a key role. Indeed, the country showed an increasing trend towards decentralization of energy policy and planning that begun in 1991, when the national government with the Law 10/1991 required the development of Regional Energy Plans and local energy plans for the municipalities with more than 50.000 inhabitants, to assess the regional and local potential of energy-saving measures and renewable energy generation. Later, with the Legislative Decree 122/1998 and the introduction of Constitutional Law 3/2001 (Title V, artt. 117 and 118), in line with the principle of subsidiarity, the role of the Regions has been strengthened through a progressive decentralization of competencies on energy policies to Regions, Provinces and Municipalities. In this context, the State determines the fundamental principles, namely the guidelines and general principles, while Regions and Autonomous Provinces can legislate and regulate in compliance with national guidelines. Instead, Municipalities are often responsible for administrative functions.

In 2013 the Interministerial Committee for Economic Planning approved a resolution under the ESD providing the measures in Italy to achieve the 2020 targets, giving priority to energy use in public buildings⁷ and to private and public transportation. Furthermore, the national Law 13/09 allocated the EU targets regarding the production from RES among the twenty Italian regions. In this context, regions could authorise/reject investment projects and implement specific policies and incentive schemes for RET development (Corsatea, 2014). Indeed, Regions are responsible for: the regulatory, economic and legislative support for the development of renewable energy generation and energy saving; the activation, development and implementation of Ministerial and European programs; and finally, the elaboration and implementation of Regional Energy Plans.

⁷ In Italy, municipalities are owners and responsible for public buildings.

As a matter of fact, decentralising initiatives on energy sustainability, such as the Covenant of Mayors had a large success in the national context. With 4012 municipalities voluntarily involved in the covenant of mayors (*last access August 10th, 2018⁸*) - accounting for almost half of the European signatories - Italian local authorities aim to meet and exceed the EU 2020 targets (20% of CO2 reduction, 20% of energy from RES, and 20% of energy efficiency). An interesting aspect is that the Covenant of Mayors assumes that municipalities must define their own Sustainable Energy and Climate Action Plan through the active involvement and cooperation of local stakeholders.

Despite what seems an encouraging scenario, several limitations should be brought to the attention and emphasised.

First, Italy failed in complying effectively and timely with EU policies and institutional pressures, resulting in technical and political difficulties in the formulation of an effective national energy policy (Di Nucci & Russolillo, 2017). Second, a large part of the legislative reforms has been put in the hands of public administrations and their discretion. The absence for a long time of a far-sighted national energy strategy (until 2013), and the uncertain distribution of competencies between State and Regions in the same matter gave rise to strongly different energy policies (Corsatea, 2014) and fragmented regulatory frameworks (Feliziani, 2013). This has resulted in the inevitable and recurrent disputes between the State and the Regions, which were mostly represented by authorization procedures pertaining to RET projects and infrastructures, with several project proposals delayed or cancelled. More in-depth, these disputes often resulted from a lack of involvement of local citizens and authorities in the early phases of the projects' development and decisions (Fanetti, 2012). Authorization regimes for RETs were governed by the Legislative Decree 387/2003 and 28/2011. Small-size interventions and projects for RES production (e.g. PV system in the house roof; wind turbines with installed capacity < 60 kW) were subject to Communication or Simplified Authorization Procedure (SAP), which are of municipality competence. The projects exceeding the thresholds were subject to Single Authorization (SA), which was released at the end of a procedure in the 'Services Conference'⁹ and which competence depends on the regulation of each region (e.g. if administrative functions are delegated or not to provinces). The SA did not replace the Environmental Impact Assessment (EIA) where required by current legislation. Even in the case of the EIA, Regions had the legislative and administrative competences, with the

⁸ <https://www.pattodeisindaci.eu/about-it/1-iniziativa/il-patto-in-cifre.html>

⁹ An instrument provided by current legislation, aiming to acquire authorizations, licenses, permits, etc., through the convening of collegial meetings of all the authorities involved with the state Superintendence

possibility of delegating administrative functions to the Provinces. In this context, even the Constitutional Court, which is demanded to solve these conflicts, was not able to appropriately address this issue (Fanetti & Pozzo, 2014; Feliziani, 2013). Most of these conflicts have concerned large biomass facilities in northern agriculture-oriented lowland areas, and large wind farms and on-land solar PV plants¹⁰ in southern regions (Osti, 2012; Magnani, 2012; Sarrica, 2011; Sarrica & Mazzara, 2012), where renewable energy production is more concentrated. On the contrary, economic and technological capitals are more concentrated in the north of the country (Corsatea, 2014).

In the attempt to address the fragmentation of competences, the Italian government pushed in recent years for a re-centralization of the legislative and administrative competences on energy matter. This is the case of the so-called ‘Sblocca Italia’ (Unlock Italy), namely the national law 164/2014, which aimed to promote and unlock the development of infrastructure projects (considered) of national interest, such as high voltage transmission lines for electricity, gas pipelines, onshore and offshore activities for extracting oil and natural gas, and renewable energy technologies in general. Another relevant and recent political event was the attempt to change the title V of the constitution (i.e. the subsidiarity principle, art. 117-118) introducing a clause of supremacy for cases recognised of ‘strategic national interest’ in the field of energy production, transport and distribution, a change that however was dismissed by the referendum of December 2016. A further example is represented by the national law 104/2017 on Environmental Impact Assessment (EIA) which has been recently updated to centralise the legislative competence of the EIA on energy projects and infrastructures aiming to introduce across the national territory homogeneous rules and remodelling the Region’s regulatory competencies and the administrative tasks between State and Regions.

3.1.2. Market-based intervention for the development of RETs: incentives, feed-in tariffs and liberalization of the energy sector

Back in the 90s’, Italy saw a process of liberalization of the electricity sector, which started as a consequence of pressures to transpose EU directives, resulting in a process restructuring the sector and promoting the development of new market rules, market actors and institutions (Di

¹⁰ Growth of PV installations on the ground in 2017 was 16.000 units, with an installed power capacity of 75.000 MW, of which 70.000 corresponding to powerplants of more than 200 kW and resulting in 150 km² of agricultural soil occupied by PV systems (SEN, 2017)

Nucci & Russolillo, 2017). In fact, transposing the EU Directive 96/92/CE on the European electricity internal market, the Italian government started to liberalise the electricity market sector in 1999 with the Bersani Decree (D. Lgs. 79/1999). This coincided with the dismantlement of the public monopolistic electricity system (Enel – the state-owned electricity company) creating a new structure of the former monopoly through a corporate separation of energy activities (production, transport, distribution and sale). The reform implementation was accompanied by a partial and gradual privatization of Enel favouring a more competitive structure. However, while the productive and the commercial sectors were liberalised, transport and distribution activities remain mainly on the hands of the monopolistic public operator.

In fact, although citizens now can choose their own electricity operator as well as produce and sell electricity to the grid, as highlighted by Magnani and Osti (2016), PV energy cooperatives (i.e. community renewable energy initiatives) have to face several challenges due to the fact that the liberalization of the electricity market has not yet been fully accomplished. In fact, the electricity market is still dominated by few big companies, while the energy grid is closed and mostly owned by the historical electricity provider preventing socio-technical arrangements to produce, distribute and sell energy in the same time.

As a matter of fact, after these reforms, different difficulties remain in the organization of the new institutional arrangement and in the coordination of the different actors involved in the electricity sector (Prontera, 2009). With regard to the promotion of energy efficiency and renewable energy generation, the Italian government arranged a series of actions aimed to stimulate public and private investments. These actions were mostly motivated by strategic reasons. Notably, Italy had an earlier RE development through hydroelectric and geothermal sources that widely contributed to electricity supply until the 1960s. In recent years, however, Italy has been one of the EU biggest importers of energy from other countries (IEA, 2013). For this reason, investments in the renewable energy sector - above all after the abandonment of nuclear option as a consequence of the Referendum of 2011 - were aimed to reduce national energy dependency and raise the economic competitiveness (Brondi et al., 2014; IEA, 2016).

The governmental strategy combined a set of fiscal incentives, feed-in tariffs and Tradable Green Certificates that shaped the final renewable energy mix. The national subsidies of the 2000s' have mostly affected the growth of photovoltaic (PV) production and to a lesser extent other RES such as wind energy, biogas and hydroelectric (Bigerna et al., 2015). Moreover, electricity generation from RES is supported also by regions, provinces and local authorities. In 2005 the Italian Government introduced the 'Conto Energia', a generous feed-in tariff scheme providing incentives distributed along 20 years for electricity generation by PV solar

systems and plants connected to the national grid by the end of May 2013 (Di Nucci & Russolillo, 2017). Aiming to incentivise householders, companies and organizations, the government adopted between 2005 and 2013 five different Conto Energia schemes, each with different terms and tariff for producers. It is only in 2012 that Italy started to set up incentives pushing other RES beyond PV.

Because of these generous incentives, Italy dominated the EU PV industry after Germany, with electricity produced deriving from solar rapidly increasing from the 87 MW of 2007 to 18.450 MW in 2014 (Bigerna et al., 2015).

Nevertheless, since 2012 the Government realised that subsidies had been incorrectly set up; thus, the Government cut (also retroactively) the incentives, losing the investors' trust (Feliziani, 2013). Due to the economic crisis and the generalised cuts in RES incentives in all the EU member states, nowadays Italy is seeing a decline in the PV demand: 19.283,2 MW of installed capacity and 732053 installed power plants (90% consists of small-size power plants <20 kW) at the end of the year 2016 (GSE, 2017).

Regarding energy-saving measures, Italy provided financial incentives for activities such as restructuring buildings and changing products with higher efficiency standards and energy performance certificates. In the field of heating and cooling, with the Conto Termico scheme, since 2012 public administrations and private citizens can get access to incentives covering up to 65% of the investment. At the end of 2015, the Conto Termico scheme has resulted in 16.003 interventions with most of the incentives' request from private subjects (>96%) and mostly represented by solar-thermal and biomass heat generation, which are respectively more concentrated in the south and the north of Italy (production of 130.000 MWh/per year - GSE, 2016).

3.1.3. Public involvement and institutionalised participation in Italy

To better face the challenge of energy transition, especially in the Italian context, coordinating energy planning and policy at the national, regional and local level is highly required (Sarrica et al., 2018). Combining a centralised and decentralised approach means that decentralised energy planning should be integrated into the national planning process and vice versa (Brandoni & Polonara, 2012; Comodi et al., 2012). The Italian trend on energy governance, unfortunately, seems not to correspond so far to a coordination between policies and discourses taking place at different scales. The fragmentation and tension between these scales are visible in how supranational policies are translated in national and regional policies and discourses,

and in turn challenged by different discourses and representations emerging in the local contexts (Sarrica et al., 2018).

With regard to public engagement, compared with other developed nations, Italy has not traditionally been a leader in the implementation of public participation practices, where top-down participation is often a symbolic exercise ratifying decision already taken elsewhere, i.e. a form of persuasion or manipulation (Lewansky, 2013).

Only recently, the Italian Government adopted within its regulatory framework the general principles of participatory governance, introducing the principle of horizontal subsidiarity (art. 118 of the Title V of the Constitution). However, this change, which is still in the making, has to deal with the resistance from the Italian political class (Mannarini, 2014).

In the context of public participation in environmental assessment and decision-making, according to different authors (cf. De Montis, 2014; Bassi et al., 2012; Lamorgese & Geneletti, 2013; Grifoni, Guzzo & Ferri, 2014) one of the most critical aspects in Italy is recognised on the impact public participation has in energy decisions, and particularly in the institutionalised procedures of Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA).

These public involvement practices are mostly promoted and enacted in Italy by legal innovations aimed to adjust and align policy-making to EU directives. Indeed, these procedures were implemented in the Italian context in 2006 (Legislative Decree 152/2006), transposing EU Directives 85/337/CEE and 2001/42/CE, aimed to improve the information provided to the public and to promote public participation in the planning-programming processes.

However, in the context of energy decisions, EIA procedures on projects and infrastructures, are denoted so far by a prevailing technical, scientific and poorly participative approach. Few space is indeed left to the public for providing input, and participation often takes shape in a later phase that is characterised by scarce openness to changes induced or advocated by public concerns (Bassi et al., 2012). On the other side, SEA procedures on energy planning (i.e. strategies and plans) are mostly characterised by the focus on ensuring the rights of access to information and transparency, rather than truly involve all the relevant actors in the decision-making process and debate on different and alternative scenarios and related options and consequences (Lamorgese & Geneletti, 2013). Despite this, a step forward has been done in recent years. An example is the public consultation on the National Energy Strategy taking place in 2017. The elaboration of National Energy Strategy has involved a preliminary phase characterised by parliamentary auditions, a consultation with the Regions, workshops with experts in the field of environmental protection and health, as well as consultations with

representative bodies, industries, regulation authorities and national mainstream environmental NGOs. After this phase, the strategy draft document has been elaborated and subjected to a public consultation in the period June-September 2017. A further example is of 2016 when transposing the EU directives (2014/23/EU; 2014/24/EU; 2014/25/EU), the Italian Government approved a Legislative Decree (50/2016) disciplining public procurement and concession contracts, introducing a mandatory public debate – a public engagement practice inspired by the French *Débat Public* – for large infrastructure projects having relevant impact on the environment, on cities and on regional planning. Despite opening the debate on policy and planning, current institutional changes still suffer of constraining factors of participation: the timing and framing, i.e. at what stage of project/strategy design the involvement takes place, and what frames the participation process in terms of design, implementation and interpretation of participation (e.g. the policy question or the focus to which the public should provide input, the priorities of the process, the accredited expertise and the role recognised to the public, the institutional boundaries, the information provided and alternatives proposed, and so on – see Stirling, 2008). Indeed, the institutional changes presented so far (see also the law on EIA and Constitutional Reform) were all strongly contested and criticised by the main national environmental NGOs and civil society discourses, and recognised as anti-democratic, distorting the content of EU Directives, and centralising the decision-making. These are highly criticised in the way they do not provide adequate and complete information to the public, constraining rather than promoting a real and informed participation. In fact, “it remains ambiguous the measure in which public concerns, opinions and inputs of citizens and local authorities may be really addressed in the policy formulation and effective decisions, and at what stage of projects and strategies’ development” (Sarrica, et al., 2018, p.452)

As many authors recognise (see Grifoni, Guzzo & Ferri, 2014; Pellizzone et al, 2015), especially on environmental matter, the institutional action and its efficacy greatly depend on the institutional capacity to involve the various institutional and non-institutional actors in assessment and decision-making. In the Italian context, this requires a shift from reactive to active and far-sighted policies, taking place not during emergencies, but rather assuming the precautionary principle and truly involving the public in environmental management.

3.1.4. The national energy strategy 2017¹¹

To understand the national context in which this research has been conducted, to contextualise the discourse of participants, as well as to suggest policy implications for structuring the regional energy vision with the horizon of 2050, it is fundamental to briefly present the National Energy Strategy surrounding all these issues.

National energy strategy aims to a threefold aim: increase the competitiveness and reduce the energy price gap in line with other EU members; reach environmental targets in line with the Climate and Energy package 2030 and the Paris agreement by: promoting the development of RE generation and investing in energy efficiency measures; increase and improve the national energy security, i.e. the security of energy supply, and the flexibility of the energy system (i.e. security, adequateness and quality of gas and electricity transmission powerlines) integrating the increasing quantity of energy produced from RES, managing the flows and variable gas demand tips, diversifying the sources and routes of gas supply for geopolitical reasons.

More in detail, for electricity market the strategy aims to reduce the price of electricity through: a progressive convergence of the generative mix at the EU level, the reduction of energy expenditure by the effect of improvements and evolution in efficiency measures and technologies, implementing measures to protect the energy-intensive industrial sectors, reducing the average price of renewable energy, investing on the transmission network to overcome the current congestions, and liberalising completely the retail market.

For the gas market, on the same extent the strategy aims to reduce the natural gas price gap through: measures eliminating current distortions of price between the Italian market and that of EU northern members' states; increasing the liquidity and competitiveness in the offer of gas, related to the contraction in demand.

In the context of security of supplies, the SEN aims to reduce the energy dependency from the 76% of 2015, to the 64% expected by 2030. The budgeted investments are respectively 30 billion for transmission networks and infrastructures, 35 billion for generation from RES, 110 billion for energy efficiency. The strategy envisions the phase-out of coal expected for 2025 and the abandonment of fossil sources expected for 2050, with the consequent reduction of CO₂ emissions by 39% in 2030 and 80% in 2050. The strategy expects PV and wind energy as the main competitive technologies guiding energy transition. With regard to hydroelectric, the main intervention expected is the maintenance of power plants' current efficiency and the adding of

¹¹ <https://www.sviluppoeconomico.gov.it/index.php/it/198-notizie-stampa/2037347-strategia-energetica-nazionale-oggi-la-presentazione>

few little power plants. In the context of bioenergies, the strategy plans different uses of this source, promoting, for example, the biomethane in the transport sector, to optimise resources favouring little power plants, guided by the circular economy principles (i.e. using waste or residual material from agriculture, forest management, wood sectors etc.) and promoting the diffused self-consumption.

For what concerns the energy efficiency, the strategy aims to reduce final consumption by 3,7 Mtep in the residential sector, 2,6 in the transport sector, 2,3 in the agriculture and services' sector and 1,6 in the industry sector for a total of 10,2 Mtep. In the residential sector, it is expected the revision of the eco-bonus according to criteria of effectiveness of the expenditure flanked by a new fund of guarantee and tools for financing portability. In the tertiary sector are expected energy performance contracts for the redevelopment of buildings and facilities, and particularly in the public buildings. In the industry sector, the strategy expects to maintain, with some revisions, the system of white certificates, and also campaigns of energy diagnosis for SMEs. In the mobility sector, the strategy aims to reduce the mobility needs in promoting public and shared mobility and the use of more performing vehicles in terms of emissions and efficiency.

Aligning to EU regulation, the SEN introduces for the first time some innovative elements, such as the possibility for closed distribution systems, the setting-up of micro-markets and energy communities, the greater role of citizens as prosumers, or the promotion of measures to tackle energy poverty and vulnerability and implement an energy welfare. More important, the strategy recognises the cohesion between different levels of governance and with citizens as fundamental to design regulatory arrangements for the development of RES while keeping into account the territorial features and specificities, their RES potential and environmental constraints.

In this context, the national strategy is oriented to a progressive decentralization of energy generation at the local level, even finalised to self-consumption of companies and local communities (such as the Users' Efficiency System connecting directly the producer with the end user) and corresponding to a more fragmented energy offer but potentially capable of integration within the energy system, and with new technologies and infrastructures (e.g. smart meter and data management solutions, storage systems).

3.2. The Marche Regional Context

3.2.1. The regional territory

The Marche is a region of central Italy with a population of approximately 1,5 million inhabitants. From a geographical perspective, the region overlooks with the Adriatic Sea at east, at west the Umbrian-Marche Apennines mark the borders with Tuscany, Umbria and Lazio regions. At north, it borders with Emilia-Romagna region and the Republic of San Marino, and at the south with the Abruzzi region. The territory has an area of 9.694 km² and is mostly characterised by hills (68,8%) and mountains (31,2%), with the inhabited centres situated mostly on the hills' tops.

The territory is subjected to a medium-high earthquake risk in the entirety of the territory. All the rivers of the region (the Foglia, Metauro, Esino, Potenza, Aso and Tronto), except the Nera river, flow in the Adriatic Sea.



Figure 8. Rivers and watercourses

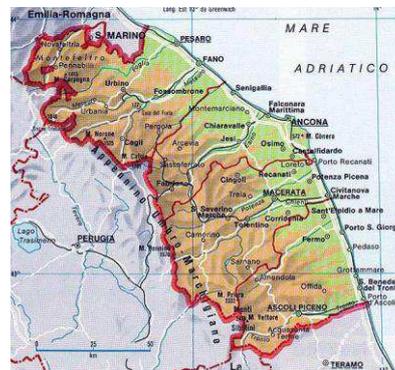


Figure 9. Morphological conformation of the Marche region

These are mostly under the torrential regime and characterised by quite short watercourses that descending from the mountains formed deep grooves perpendicular to the coast, in correspondence of which the valleys tend to widen, forming flat spaces (Ferretti, 1975). The so-called comb structure characterises the region, with the traffic docks configured according to the valleys' structure.

The protected areas occupy about the 9% of the regional territory. Among them, the bigger protected sites are the Sibillini Mountains' National Park and the Gran Sasso National Park at the borders with the Abruzzi region. On the coast, at the height of Ancona, is situated the

Regional Park of the Conero, while the Regional Park of Gola Rossa and Frasassi, still in the province of Ancona, represents a site of great speleological interest.

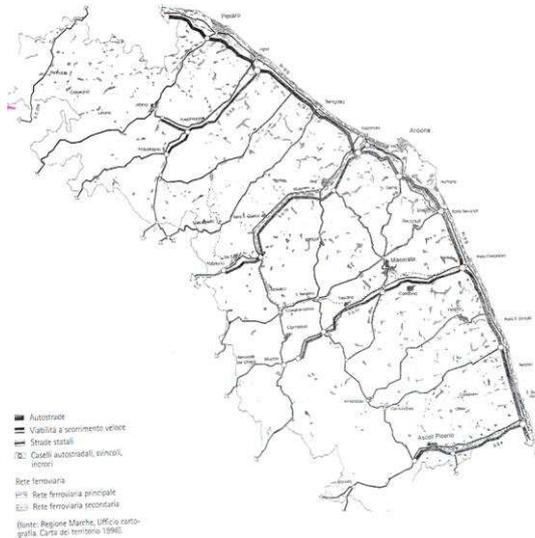


Figure 10. Comb structure of traffic docks

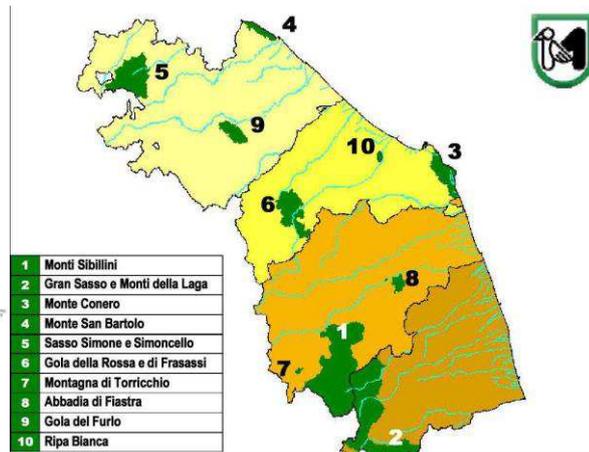


Figure 11. Regional Parks and Protected Natural sites

The regional population is mostly concentrated in the coastal area and particularly in the cities that had the most relevant economic activities such as Ancona and Pesaro. The population density of the region is lower than the Italian average and mostly because of two factors: the lack of large urban centres and the presence of reliefs which are increasingly depopulated.

The regional territory comprises 5 provinces: from north to the south Pesaro-Urbino, Ancona, Macerata, Fermo, and Ascoli Piceno (nevertheless, Fermo's Province has become operational only in 2009). Ancona is the regional capital and hosts one of the most important commercial and fishing ports in the Adriatic region, where are also present several shipyards. The Marche region is characterised by a vocation to plurality, as the same (Italian plural) name suggests. Indeed, the Marche are recognised as having a plurality of identities expressed also from a landscape perspective - from snowy mountains to hilly landscapes and beaches.



Figure 12. Landscape plurality of the Marche Region

This plurality derives also from the history of the regional areas. The same regional name of Marche derives from Marca, a term indicating in the feudal age the most extreme regions of the Carolingian empire, under the authority of a Marquis (Marchese) who ruled in the name and on behalf of the Emperor. Indeed, at the age of Carlo Magno, within the region there were the Marca Fermana (Fermo), Marca Ascolana (Ascoli Piceno) and that Anconitana (Ancona). As Prontera (2009) underlined, this marked plurality is also consistent in the sector of institutional policies.

3.2.2. The regional economy and demography: industrialization and urbanization processes

The economy of the Region has been characterised by a profound and prevalent agricultural vocation that resisted until the end of the 50s' (Balloni & Quaglia, 1995).

The industrialization process of the region is characterised by a territorial dispersion and the development of highly specialised regional areas in the manufacturing sector and with predominantly family-run industries (Paci, 1979).

Indeed, the region has seen an economic development with a widespread industrialization that Fuà (1983) defined 'without fractures', taking shape through the emergence and growth of small enterprises' systems that relied on the workforce coming from agriculture, valorising and conciliating the pre-existent economic, social and institutional structure.

This development of industries distributed extensively in the regional territory, also known as rural industrialization (Fuà, 1983), has been argued to emerge without breakage with the past and tradition, that is without massive movement of population and as a consequence of existing artisanal capacities grounded in the urban centres and the particular form of agricultural management present in the region: the Mezzadria. The characters of the Marche's peasant and artisan society of the 50s' are identified as the main pushing factors for the regional industrial development, namely the entrepreneurial capacity and workforce shaping economic development and flexibility (Paci, 1979; Fuà, 1983; Sori, 1999). The Marche region shifted from an economy based on agriculture to one based on handicraft and small industry, i.e. from an agricultural reality to a manufacturing one, whose economic success derived from the transformation of regional manufacturing's specialization of the pre-industrial period to industrial activities and export of goods, such as the manufacture of shoes, clothes, or furniture within specialised areas (Blim, 1990).

The Marche are one among the Italian regions with the greater diffusion of small enterprises with a productive feature of manufacturing and family vocation (Dini, 2013). In fact, the

manufacturing sector has a crucial role within the region, as it constituted the main sector of employment when compared to the rest of Italy, and mostly concentrated in four sectors: mechanics, footwear and leather goods, furniture and clothing textiles (Goffi, 2013).

The territorial dispersion of Marche's population, rather than constituting an obstacle to industrial development shaped profoundly the development of locally-developed industrial activities and specializations and a form of continuity and balance with the rural areas (Paci, 1979).

The history of regional human settlements has been described by Esposti and Sotte (2011) as a shift from 'urbanised countryside' (Becattini, 1985) to the 'diffused city' (Calafatti, 2007). The term diffused city has been introduced to describe the way cities grow and develop in a disharmonic way without any regulatory criterion, a model of the city not based on concentration but rather on a low density (Indovina, 1990). This has been explained as happening because of two main factors: the densification of rural areas and the de-densification of urban centres so that cities were influenced by profound economic transformations with the fragmentation of productive activities and the sedimentation of industrial districts in the region. During the 50s' started the movement from the urbanised countryside to the coastal larger cities as well as to inland areas, coinciding with agglomeration and centralization producing an imbalance between the coast and the inland area (Coderoni, 2007).

It is from the 60s' that some crucial features of the region stabilise and can be identified, such as the relative autonomy of the different valleys, the commuting of people in particular from the internal areas, the diffusion of small and medium-sized urban centers, the structuring role of the thick road network and the relative lack of connections (Coderoni, 2007).

During the 70s' the urban structure of the region starts to be characterised by the thick presence of medium and small-size cities along the coast and the fragmentation of inland population within small scattered villages. In the 80s' this settlement network of small distributed centres in internal areas and the increase of population and concentration of productive and residential sites in the coast intensified (Massimi, 1999).

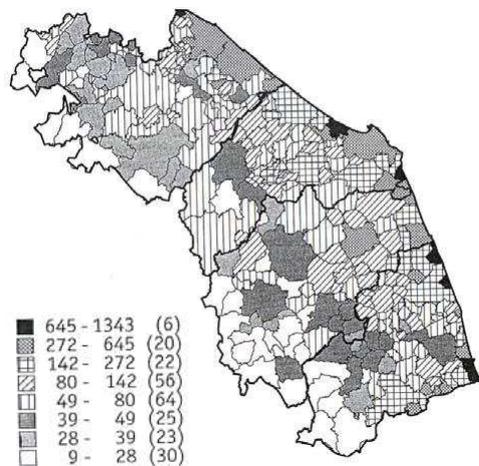


Figure 12. Pressures of housing stock (Massimi, 1999)

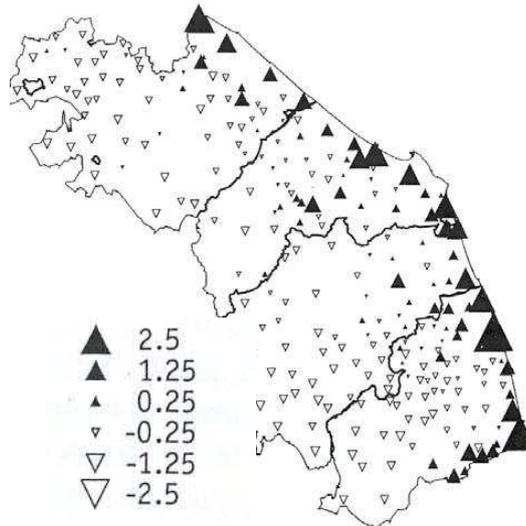


Figure 13. Soil consumption for municipality (Massimi 1999)

The Marche evolves as a widely urbanised region, rich of small centres relatively distributed and homogeneous, and characterised in the coast by the so-called diffused city, or the metaphor of ‘Adriatic city’ indicating the linear and continuous network of coastal cities (including also those of Emilia-Romagna and Abruzzi regions).

As previously reported, the Marche region is characterised by the presence of territorial areas connoted by industrial and manufacturing specialization, which evolved so far in the development of industrial districts, namely territorial agglomerations of small enterprises that are specialised in particular products or diverse phases of productive cycles and integrated through a complex network of economic and social interrelation (Becattini, 1998).

During the last decades of the 20th century, the Marche region has been characterised by the development of industrial districts constituting the 13,5% of total Italian districts (Istat, 2011). In fact, within the region, in 2011 the employees occupied in the furniture sector were 114.052, in the mechanic industry 10.256; jewellers and musical instruments 30.372; leather and footwear 150.337; textiles and clothing 105.630 (Istat, 2011). For what concerns the presence of these industrial districts in the region (see Figure 14), more specifically: the wood and furniture sector is present in the provinces of Pesaro and Macerata; the textile and clothing sector is present in the provinces of Pesaro Urbino, Ancona and Macerata; the leather and footwear sector in the provinces of Ascoli Piceno, Fermo and Ancona; the Rubber industry in the province of Macerata; mechanics and domestic appliances’ industry in the province of Ancona.

Nowadays, the Marche have an economy that is more diversified if compared to the 90s. However, the economic crisis and the crisis of competitiveness of the Made in Italy largely

affected the wider productive system of the region and the demand and exports of goods, resulting in the decline of industrial districts, the closure of many small and medium-sized enterprises with the consequent loss of jobs and economic wellbeing (Goffi, 2013).

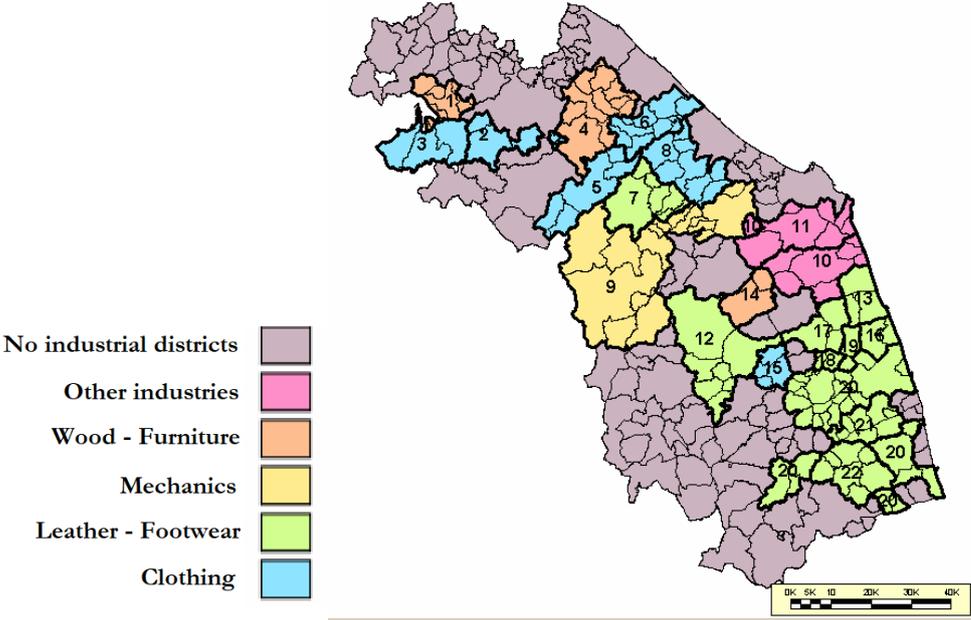


Figure 14. Regional industrial districts

3.2.3. Energy policy scenario and governance of renewable energy development in the Marche region

Following the constitutional reform of the title V of the constitution, which distributed the competencies for energy policies to the regions (artt. 117-118), the Marche Region started to legislate policies widely promoting renewable energies, and in particular with the Regional Energy and Environmental Plan of 2005. This year, and the related Regional Energy and Environmental Plan, represent the starting point of the research that is here presented.

In the context of energy demand (see Fig. 16), in 2002 the transport sector historically represented the most energy-intensive sector of the region (about the 40% of final energy consumption), followed by the civil sector (about 30%), the industry sector (about 25 %) and at last agriculture and fishing (representing together the 25%).

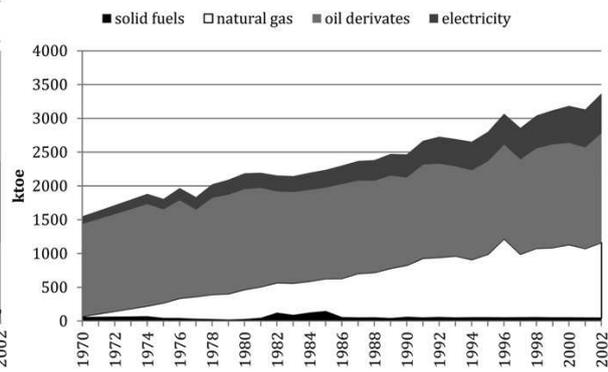
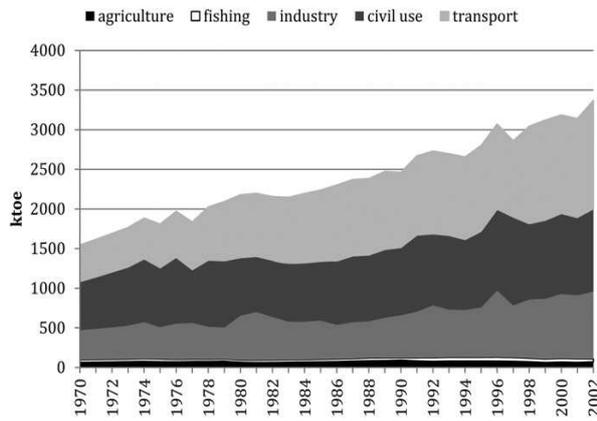


Figure 16. Regional electricity demand for sector Figure 17. Regional final gross consumptions for energy sources
(Source: Brandoni & Polonara, 2012, p.325)

Focusing on electricity demand (same year: 2002), the 50% came from civil sector, while industry sector, composed by SMEs distributed in a homogeneous way throughout the territory, represented the 44% of the demand (source: PEAR 2005¹²). The analysis of final consumptions for the type of energy reveals the predominance of fossil fuels, in particular, oil, covering more than the 40% of consumptions and the natural gas covering just under the 40% of consumptions (see Fig. 17).

Focusing on the context of energy generation/offer, the regional situation has been characterised by three main peculiarities:

1. A relevant production of natural gas, almost coming from off-shore wells, which guaranteed to the region for all the 90s a positive balance between energy production and consumption.
2. A significant flow of incoming crude oil, coming from the regional refinery sited in Falconara, in the province of Ancona, which determined a positive balance between production and consumption, and an equally significant flow (between the 49% and 57%) of oil products exported to the neighbouring regions during the 1991-2002 decade.
3. A considerable imbalance between electricity production and consumption, which is only partly filled from 2001 by two thermoelectric power plants: the Falconara IGCC plant (API) and the combined cycle power plant of Jesi (SADAM).

¹² <http://old.regione.marche.it/Energia/PEAR.aspx>

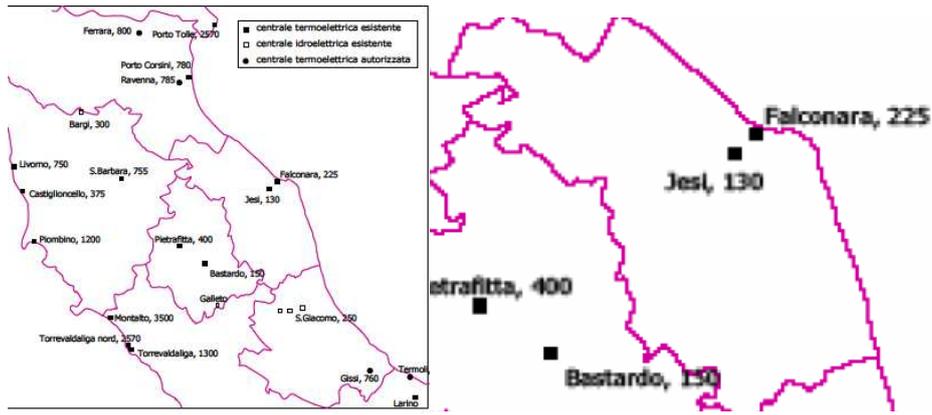


Figure 17. Sites hosting large thermoelectric power plants in central Italy and in the Marche Region (Source: PEAR 2005)

Thus, historically the region has been characterised by a strong energy dependence in the electricity sector, which in the early 2000s stood at around 80% and decreased in the subsequent years reaching around the 50% of electricity import (see Fig. 18). Also, before the advent of the global economic crisis of 2008, the Marche were among the Italian regions that have been subject to a strong increase in energy demand. In particular, the region has been marked by an increase in electricity demand/consumption with an annual rate of 3.5% up to 1990 and of about the 2% up to 2008 (Brandoni & Polonara, 2012; see Fig. 19), thus highlighting the critical condition of dependence of the region in electricity import.

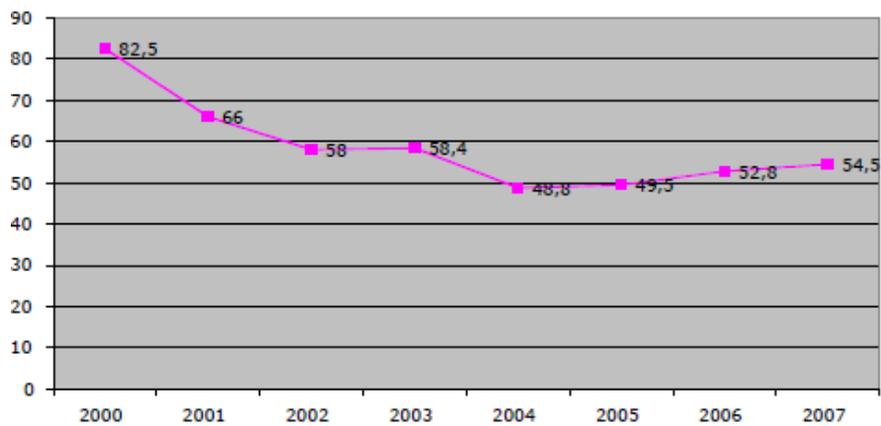


Figure 18. Deficit in the regional electricity demand (in %) from 2000 to 2007 (data source: Confindustria Marche, 2008)

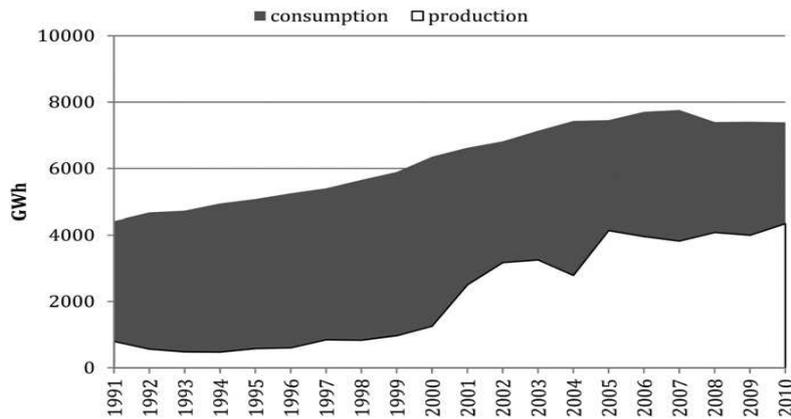


Figure 19. Regional electricity consumption and production (Source: Brandoni & Polonara, 2012, p.325)

Focusing on renewable energy generation, this covered in 2005 the 15% of energy generation, mostly represented by hydroelectric power plants covering approximately the 10% of electricity demand with a production in 2005 of 582,2 GWh, and a small contribution of biomasses with 45,8 GWh (see Table 3).

Region	Hydraulic	Wind	PV	Geotherm.	Biomass	Total	% total regional product
Emilia Romagna	787,9	2,2			908,8	1.698,9	6,8%
Toscana	456,1	3,0	0,1	5.324,5	290,4	6.074,1	33,9%
Umbria	1.543,5	2,6			130,2	1.676,3	27,3%
Marche	582,2				45,8	628,0	15,2%
Lazio	1.163,3	5,9			372,4	1.541,6	6,0%

Table 3. Development of hydroelectric in central Italy (Adapted from: ENEA, 2006)

The electricity production in the region increases from 2002 to 2007 approximately with a total of 866,2 MW divided in:

- ✓ 230 MW of hydroelectric electricity generation, of which 224,8 MW come from 98 power plants owned by energy companies, and 5,2 MW from 6 power plants owned by self-producers/private subjects;
- ✓ 623,1 MW of energy produced through thermoelectric power plants, of which 556,5 MW come from 14 producers, and 66,6 MW from self-producers;
- ✓ 13,1 MW from renewables, of which 2,6 MW are from 330 solar PV power plants and 10,5 MW from 9 biomasses' power plants (Confindustria Marche, 2008).

Starting from this context and situation, the Regional Energy and Environmental Plan of 2005 aimed to cover the electricity deficit with small-medium distributed generation plants and particularly through combined heat and power plants (CHP - i.e. co-generation of electricity

and heat). The rationale of ‘distributed generation’, namely the choice of relying on small or medium power plants distributed in the territory rather than on few large power plants, was motivated by and considered functional for the peculiar characteristic of the regional economic reality, that is the presence of industrial districts. The initiatives proposed in the plan were indeed tailored to fit this particular organizational form of the productive texture, explicitly aiming to promote a regional model in which entrepreneurs with institutions and local authorities can play a role as both energy producers and consumers (PEAR Marche, 2005).

In fact, the analysis/mapping conducted during the planning process revealed multiple energy-intensive consumption sites distributed in the territory, highlighting the presence of 11 energy-intensive zones among 26, and covering the 63% of the energy consumed within the region, territorially concentrated in 85 municipalities out of 240 (36%). This regional mapping was crucial to reveal the differences within the regional territory and identify the energy-intensive areas corresponding to the major cities and the industrial areas (see Fig. 21), and consequently programming both interventions in the field of energy production close to consumption sites and energy efficiency measures.

The idea of distributed generation through small and medium power plants was the natural consequence of this analysis, but also from various considerations about the critical issues pertaining the electricity transmission line, and the optimal exploitation of energy potential through cogeneration of electricity and thermal power.



Figure 21. 11 energy-intensive zones in the region (Confindustria Marche, 2008, p.21)

The main general objectives of and action forecasted in the PEAR 2005 with the horizon at 2015 were:

1. Energy saving: through actions diffused throughout the territory and in the various sectors of consumption, especially in the tertiary sector and in the residential area, by activating: awareness-raising and information campaigns; agile and significant incentive programs characterised by a bureaucratic simplicity as well as systematicity and continuity;
2. Renewable energy promotion: with particular reference to wind energy and biomasses of agro-forest origin also for the production of biofuels. Further, solar energy was considered strategic in this context for its potential systematic exploitation in the building sector;
3. Energy eco-efficiency: with particular reference to the district systems of companies, to a diffused action of technological innovation and management, to the distributed generation of electricity and thermal energy to large users' basins located in the valleys and the coastal areas of the region.

In the context of electricity generation from RES, the plan has mainly concentrated on wind and biomasses as the main promising sources to attenuate and/or eliminate the electricity deficit. Regarding the first source, the Region considered this type of interventions as self-sustaining because of the relative affordability of the technology itself and also the presence of national and/or EU incentives allowing its implementation regardless the potential economic support from the Region. Pertaining the biomasses, the Region recognised the need for supporting the costs for the implementation and development of biomasses power plants, in consideration of the high potential of developing supply territorial chains coming from dedicated crops and agro-forest residues.

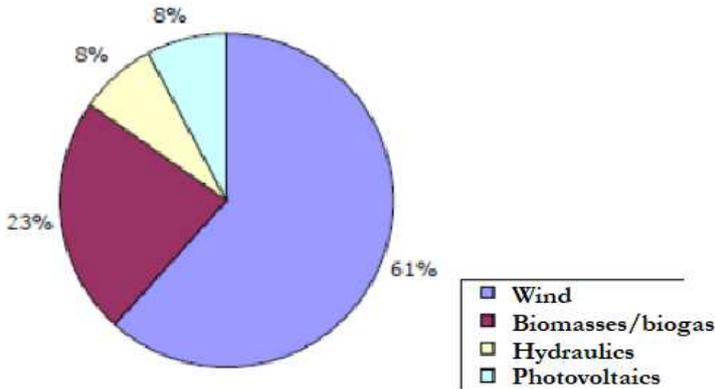


Figure 22. Quotas of energy produced from RES as forecasted in the PEAR 2020

Biomasses were considered a concrete option actively contributing to the revival of agricultural, forestry and livestock activities, representing within the region a crucial element for both the local economy and the conservation of the territory. This rationale is quite self-evident also in the regional agricultural policies, and particularly in the Rural Development Plan 2007-2013, aimed to sustain the coordination of diverse stakeholders in the development of local supply

chains, promoting also the multifunctionality of farming activities and the reconversion of existing activities in the territory, such as sugar factories (Prontera, 2008).

With regard to energy-saving measures, most of the programmed interventions fall in the civil sector, in particular, the household one, where the Regional Government has more power to act regulating the building sector by introducing higher energy efficiency standards in the regional building code and as a consequence in the provincial and municipality ones. In this field, the main measures planned were the thermal insulation and the efficiency improvement of heating systems in light of the housing stock's conditions.

For what concerns the results of this plan over the years, few available studies after 4 years of its approval are available. Particularly, a study commissioned by Confindustria Marche (a representative body of industry sector) and those realised by Prontera (2008; 2009) that concern the transposition and implementation of the PEAR by the Marche's provinces.

In this part of the thesis, the main findings of the studies are presented to get an overview of the energy policies results in 2008. It is from this point of departure that the present research will highlight the results of regional energy policies in terms of pragmatic factual results in renewable energy development, as well as of its 'social side'.

The study commissioned by Confindustria Marche ("Study on the energy dependence of the Marche", 2008) analysed the real advancement of the plan's objectives in the context of renewable energy production and distributed co-generation. This analysis revealed the state of the art at the end of 2008 comparing the forecasts and actual results in terms of projects presented and approved in the Region (see Table 4).

TYPE OF PLANTS	PEAR		STATE OF THE ART - PRESENTED		STATE OF THE ART - APPROVED		STUDY	
	MW	GWh/a	MW	GWh/a	MW	GWh/a	MW	GWh/a
RENEWABLE SOURCES								
Wind	160,00	400,0	206,75	493,7	25,00	50,0	160,00	320,0
Solar/Photovoltaics	20,00	27,0	9,00	11	9,00	11,0	50,00	60,0
Hydraulics	20,00	40,0	28,00	80,8	6,68	19,8	22,00	30,0
Biomass/Biogas	60,00	198,0	20,72	154,8	9,48	75,2	40,00	180,0
TOTAL	260,00	665,0	264,47	740,3	50,16	156	272,00	590,0
DISTRIBUTED GENERATION IN CO-GENERATION								
Self-production (< 3MW)							150,00	700,0
Consortium groups (3-20MW)	460,00	1850,0	26,20	117,9	6,60	44,5	100,00	500,0
TOTAL	460,00	1850,0	26,20	117,9	6,60	44,5	250,00	1200,0
TOTAL	720,00	2515,0	290,67	858,2	56,76	200,5	522,00	1790,0
HIGH EFFICIENCY COMBINED CYCLE PLANTS							750,00	4500,0
ELECTRIC DEFICIT			981,33	5431,8	1215,24	6089,5	0,0	0,0

Table 4. Comparison between forecasts and actual results of the PEAR 2005 (adapted from Confindustria Marche, 2008)

As it is possible to notice, with regard to distributed co-generation, which should ideally improve the production-consumption balance within energy-intensive areas and the industrial districts, few advancements were made in the period (project presented for 26,2 MW and approved 6,60 MW out of 460 MW forecasted). In the context of renewable energy generation as well it is possible to notice that differently from the expectations and forecasting of the plan, both for wind and hydroelectric were presented more projects for authorization, while on biomass-biogas and PV were presented fewer projects.

For what concerns the effects of the PEAR at the local level, Prontera (2008; 2009) analysed and compared how the four provinces¹³ of the Marche region transposed it by elaborating and implementing their energy policies. He found that the different Provinces have opted for different models of energy governance, basing on which he elaborated in a bottom-up way (i.e. starting from available data) three distinct typologies of energy governance: directive, integrative, and participatory. These typologies differ among them for some features of policy-making such as the prevalent actors involved, the instruments adopted, the pursued objectives and the criteria guiding the choices of policy-makers.

The directive form of governance is identified in some of the activities undertaken in the province of Macerata and partially Ancona.

This type of governance is characterised by the involvement of local governments and institutional actors in creating and/or managing ad-hoc companies of public property, taking advantage of the opportunities of decentralised energy governance and market opening, directly managing local resources for local development.

The integrative type of governance is identified in the actions undertaken by the Ascoli Piceno province. In this type of governance, the actors involved are both institutional and non-institutional. The main rationale of local government, in this case, is the promotion of partnerships between private or public-private actors in energy production, such as integrating energy and agricultural policies for developing agro-energetic supply chains through program agreements. The aim is creating synergies between institutional and non-institutional actors through concertation processes.

The participatory type of governance is identified in the activities of Pesaro-Urbino province, particularly in the elaboration of the energy plan, and partially in the local action plan of Ancona Province. This type of governance is characterised by the involvement of multiple institutional and non-institutional actors in deliberative settings (e.g. thematic workshops, roundtables, discussion forums). These processes are marked by inclusive decision-making processes in

¹³ The province of Fermo became operative in 2009

policy formulation and aim to promote the participation and inclusion of various actors and perspectives to minimise the potential of conflicts.

Energy governance	Actors	Instruments	Guiding Criterion	Goals
Directive	Institutional	Public companies	Dirigisme	Direct management of local resources
Integrative	Institutional/non-Institutional	Program agreements, agreement protocols	Concertation/consultation	Guarantee synergies at local level
Participative	Institutional/non-Institutional	Deliberative roundtables/forums	Participation	Minimise conflicts

Table 3. Energy governance and characteristics of policy-making in the Marche region (Adapted from Prontera, 2008, p.510)

The most recent PEAR 2020¹⁴ (Regional Energy and Environmental plan 2020) constitutes a crucial object of analysis in this research, in particular with regard to the public engagement processes involved in its elaboration, as well as the social acceptability of the strategy itself for energy system change. For this reason, in this part of the thesis, the main relevant aspects of the strategy and of the pre-conditions for its implementation are briefly reported.

The updated regional energy balance to 2013 (see Fig. 23) reveals that differently from the estimates of precedent years the most energy-intensive sector nowadays is the civil one (44%). On the other hand, the industry sector reaches the 36% of final consumption, showing a considerable decrease (17%) in the period 2008-2013 as a consequence of the economic crisis corresponding to the closing of several companies in the region, while the agriculture has a marginal role (3%).

In the context of final consumption rates divided for energy sources, most of them refer to oil products (37%), followed by natural gas (29%), electricity produced from non-renewable sources (17%) and last electricity from RES (16%). Pertaining the latter, it is worth noting that in 2014 have been produced a total of 2.535 GWh that mostly derived from solar PV, which is responsible of about the half of electricity produced from RES in the region (49%), A quota of 31% of electricity is produced from other RES, and specifically from hydroelectric power plants (24%), biomass power plants (7%) and wind with a marginal role (0,07%). Globally, the

¹⁴ <http://www.regione.marche.it/Regione-Utile/Energia/Piano-Energetico-Ambientale-Regionale>

renewable sources contribute to the 80% of the electricity produced in the region, while the remaining 20% is derived from the thermoelectric power plants.

However, this result does not depend only on the RES development (e.g. the PV production has doubled from 658 GWh in 2011 to 1137 GWh in 2012) but also coincides with the stop of the large thermoelectric power plants in the province of Ancona (SADDAM in Jesi and API in Falconara) and the sharp decline in generation, which rose from 2,654.3 GWh to 479.6 GWh (see Fig.).

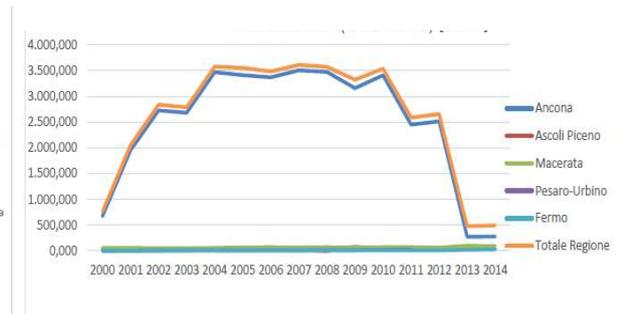
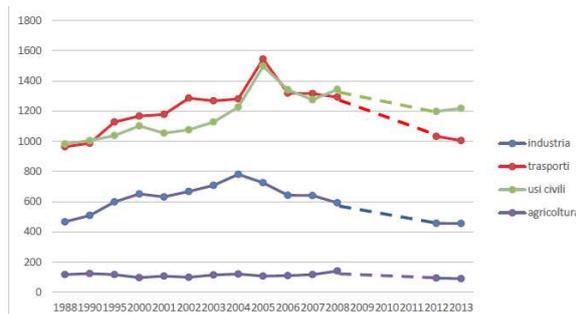


Figure 23. Final consumption per sector (PEAR 2020, p.49) Figure 24. Electricity production from fossil sources per province (ibid., p.59)

About the electricity produced through RES, it should be underlined that after the approval of the PEAR 2005 different events shaped its implementation. So, although the Region reached the targets of energy produced from RES, this accomplishment has been made possible with a mix of RES that is quite different from the plan expectations and forecasts.

The hydroelectric has historically represented the main RES exploited in the region - as well as in the entire national territory – with the presence of relevant power plants on almost all the main water bodies present in the Region. Despite the increase of functioning power plants, from 94 of 2005 to 156 in 2014, hydroelectric production saw a decline in the measure of 14%. This, however, is in line with the expectations of the PEAR 2005, which indicated the potential of hydroelectric constrained to a marginal development based on small and residual power plants. In that regard, climatic change affected energy generation because of the availability of the primary resource, i.e. the rainfalls.

The electricity produced from PV represented in this context the most surprising data, contrary to the forecasts and objectives of the previous plan, as well as the data of 2009, which underlined PV energy representing in that year only the 1% of the entire electricity produced in the region and the 5% of electricity from RES. The number of power plants indeed passed from 330 of 2007 to 5769 in 2010 and 23053 in 2014 with an installed power capacity of 1044 MW (see

Fig. 25). This extraordinary and not predictable development (at least in the elaboration of the PEAR 2005) has occurred in an exponential manner concentrating across the years 2009-2012 and declining starting from 2013 as a consequence of the end of the Conto Energia incentive scheme. Indeed, in 2009 the installed power capacity attested in 62 MW distributed in 5769 power plants, while in 2011 the installed power capacity was of 786 MW with 12048 power plants. Another relevant factor refers to the size of these power plants, which passed from an average size of 20 kW of 2009 to the 65 kW of 2011, and decreasing in 2012 to 57 kW as a consequence of a regional law approved during 2010, the LR 12/2010, forbidding the installation of the panels on the ground (this however affected the power plants approved from that date but not those already authorised).

The production of electricity from biomasses in 2014 has attested in 186,5 GWh, increasing constantly over the year especially in the period 2010-2014 passing from 8 power plants of 2005 to the 66 of 2014 with an installed power capacity of 40,5 MW and an average size of 600 kW for powerplant (see Fig. 26). In particular, 2012 has been a year of great expansion of biomasses across Italy because of an advantageous incentive system sustaining mostly the diffusion of biogas power plants from anaerobic digestion (i.e. a process of fermentation of biomasses not involving their combustion). The development of biomasses was considered an asset for the region and a landmark of the PEAR 2005 presenting a double aim: producing energy from RES using local resources and sustain agricultural activities in the region, offering them a supplement to income and multifunctionality of farms. However, the Marche saw the emergence of several contestations and difficulties in the development and diffusion of these technologies after the decision of the Constitutional Court n.93/2013 declaring unconstitutional a Regional Law for RES development (LR 3/2012) - coinciding with appeals and annullments in court – as well as for legal trails on irregularities and illegal behaviours on authorization procedures, which questioned the implementation and/or the exercise of these power plants. This issue will be deepened in the following empirical chapters.

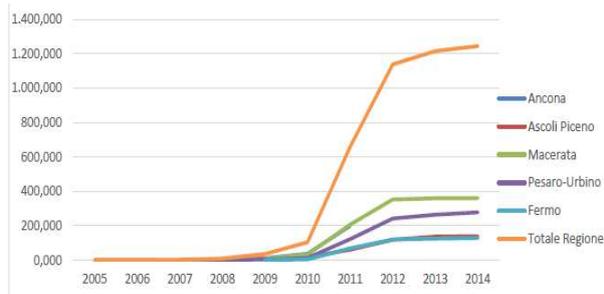


Figure 25. Electricity production from PV per province (PEAR 2020, p.64)

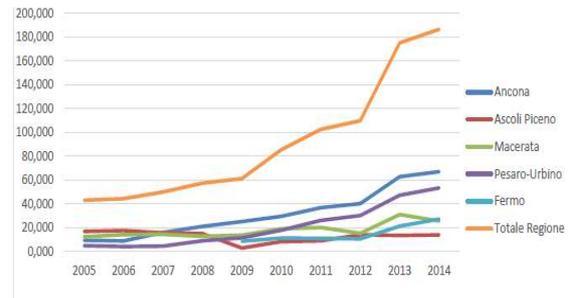


Figure 26. Electricity production from biomasses per province (PEAR 2020, p.66)

On the contrary, the wind power source on which the PEAR 2005 largely aimed and relied represents a very small quota of the electricity totally produced, with three small wind farms in 2010 and 35 in 2014, which represent however only 1,8 GWh of the power produced (See Fig 27). This is motivated by the regional administration (PEAR 2020) because of diverse reasons, first of all, the strong opposition of environmentalist organizations and local residents living in the areas potentially interested by these type of intervention, i.e. areas suitable for installation because characterised by sufficient windiness.

The data on distributed generation in co-generation or trigeneration highlight a small development especially in particular types of users such as the hospitals, which present an optimal condition for this type of technology implementation. On the contrary, in the industry and tertiary sectors, or in shopping centres, which in most of the cases present the same adequate conditions for introducing co-generation units (i.e. places that constantly require and use the thermal energy produced), there were few applications. In that regard, the implementation of co-generation for the industry has been affected by economic crisis limiting the possibilities for investments.

For what concern the condition of electricity deficit that the Region aimed to eliminate, or at least attenuate opting towards wind and biomasses development, this showed a negative trend that coincided with the closing of thermoelectric facilities. Despite the great increase of PV energy production and the contribution of hydroelectric actually, the electricity deficit remains stable to the 50% (see Fig. 28)

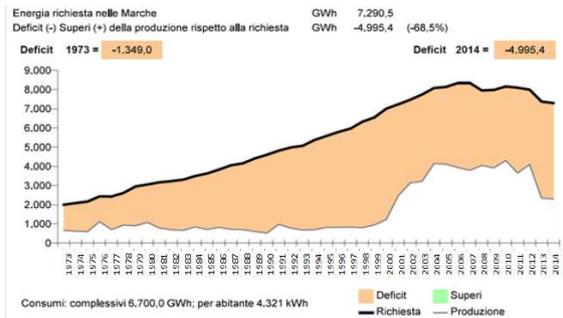
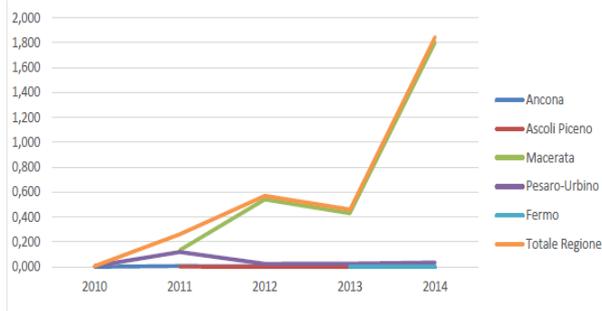


Figure 27. Electricity generation from wind per province (source: PEAR 2020, p.68)- Figure 28. Regional energy demand (source: PEAR 2020, p.71)

In this context, and to adequate the regional energy strategy to the mutated climatic, economic and normative context, as well as to the Burden Sharing Ministerial Decree (DM 15/3/2012) distributing the national target to Italian regions, the Marche Region started in 2015 to elaborate the Regional Energy and Environmental Plan for the 2020 (PEAR 2020) and providing also guidelines with horizon to 2030.

In this context three scenarios of reference were elaborated: the Business As Usual scenario (BAU), representing a scenario in which no further measures and actions are adopted for energy efficiency and renewable energy generation; the Energy Efficiency Scenario (SEE), which considers the adoption of available measures for energy efficiency and renewable energy generation (See Figure 29), and an Alternative Energy Efficiency Scenario (SEEA). The SEE was evaluated the most promising scenario and for this reason adopted in the final strategy.

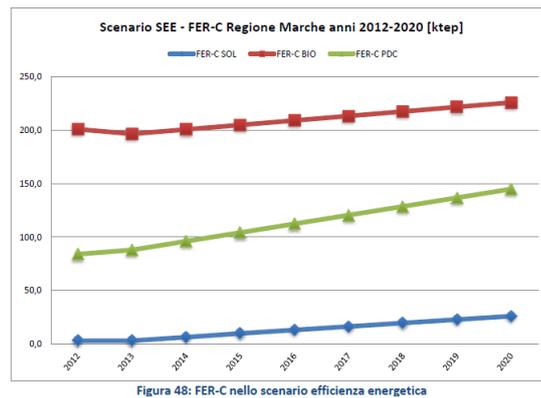
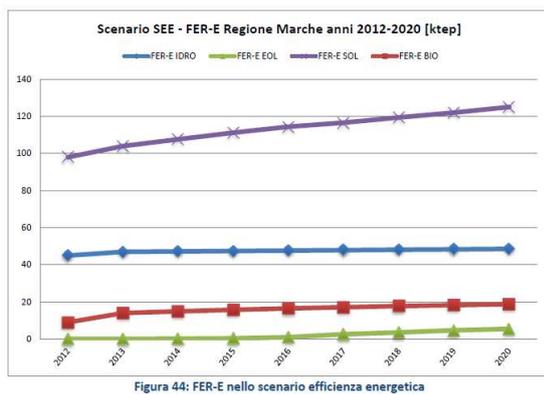


Figure 29. Energy Efficiency Scenario and forecasting of electricity and heat generation per source and technology (Source: PEAR 2020, p.125;133)

To summarise, the approved PEAR 2020 aims by 2020 to: cover the 25,3% of gross final consumption with energy produced from RES¹⁵ compared to the baseline year of 2012; a 20% reduction of gross final consumption of energy compared to the projection of the Business as Usual Scenario, and a 13% of GHG emissions' reduction compared to 2005.

This regional energy strategy fundamentally re-presented the same three pillars proposed by the PEAR 2005 and adjusting them in light of the profoundly changed scenario and critical issues encountered in the PEAR 2005 implementation (i.e. economic crisis, unexpected development of PV, different and new incentive schemes, scarce social acceptability, change in land use and availability of natural resources). Therefore, the strategy identifies in energy efficiency, distributed generation, and co-generation the technological configurations through which achieve in the long-term: the balance between supply and demand in the electricity sector; the efficient use of fossil sources; the reduction of GHG emissions; competitive prices of energy for the productive system; a minor dependence on the (deficient) transmission network; and a greater guarantee of service reliability.

In doing so, the strategy aims to build an energy system that is decentralised, allowing to produce energy where there is the demand; flexible, allowing to use energy when is needed thanks to storage solutions; integrated, allowing to integrate renewable energy into distribution systems.

About the first pillar, the energy saving and efficiency, the strategy prioritises the sector of energy consumption in the civil sector, and particularly focusing on the energy efficiency measures for the most energy-intensive buildings (i.e. public buildings such as gyms and hospitals, or condos), and public illumination. The actions through which achieve these objectives mostly rely on regulatory building codes (e.g. promoting higher energy efficiency standards or the realization of near-zero energy buildings (NZEB) in the cases of renovation or new constructions and making more efficient the public illumination system inspired by the smart grid and smart city principles. In the sectors of transport, agriculture and industry the strategy aims to make more efficient the productive processes and the grid with actions accompanying and sustaining firms towards technological innovation and modernization.

The second and third pillars concern the development of renewable energies and the distributed generation in co-generation. The balanced diversifying of energy sources and the sustainability of the strategy are based on three main principles: *the substitution of fossil fuels*, incentivising

¹⁵ The target assigned to the region by 2020 according to the Burden Sharing is the 17% of final gross consumption of energy produced from RES. This refers to the ratio between energy (electrical and thermal) produced by renewables (numerator) and the gross final consumption of energy (denominator).

activities and technologies supplied from RES and reducing or replacing the use of fossil sources (e.g. mobility based on biomethane); *the self-production and self-consumption*, primarily incentivising RES power plants that are properly sized to the energy needs of the user - or users in the case of network contracts – as for example serving agricultural or industrial activities; and last *the recovery and valorisation of waste or residual material*, that is incentivising power plants that are supplied mainly by residual materials/waste coming from the companies' productive cycles in compliance with the principles of the circular economy (e.g. biomass from waste of agricultural and animal farms or from forest management).

In this respect, the strategy aims mostly to the generation of thermal energy rather than electricity, assuming that this kind of generation from RES has a great potential - so far unexpressed - especially with regard to solar-thermal, biomethane and biomass. Besides, the plan aims to replace biomasses imported from outside the region with local biomass sustaining a short wood-energy chain and so doing also guaranteeing the sustainable management of forest resources.

Pertaining the solar source and PV technology, the strategy expects a moderate development - compared with previous years - through regional incentives and norms favouring its integration into the 'already built', as for example in buildings, car parking, streets and highways in shelters and sound-absorbing barriers. With regard to the siting and size of power plants, the strategy focuses mainly on small power plants suited for trigeneration of electricity, heat and cold for hospitals, shopping and directional centres, and medium co-generation power plants up to few tens of MW for industrial districts. This also considering the deficiency of the transmission network and the overcapacity of the Italian electricity system that would not be able to bear the adding of new medium-large power plants. On the other hand, according to the strategy, the siting of power plants in rural and mountain areas should be realised after in-depth analyses of territorial potentials to satisfy the energy demand of local communities and enhancing the competitiveness of firms in that areas. All these interventions are expected to take shape in those territories where renewable energy can bring environmental, occupational, and economic advantages for both communities and enterprises, providing reliable technical information to the population, and applying the best available technologies.

A further relevant element of the strategy about the production of electricity from RES concerns the so-called Efficient Systems of Users' (SEU) configuration, that is systems where power plants are at the direct service of electricity users, without passing through the grid and thus favouring self-consumption or the possible direct sale of energy. In fact, the SEU has the advantage of putting in direct communication producer and consumer significantly reducing

the costs of energy for the consumer who has not to pay the costs of transmission and distribution, nor the general system charges¹⁶.

¹⁶ It is worthy to notice that the SEU, as a socio-technical configuration promoting the active role of users as both consumers and producers (i.e. the prosumer), has been recently introduced in the Italian normative framework (Resolution of Energy Authority 578/2013) as well as in the National Energy Strategy approved in 2017.

CHAPTER 4 – METHODOLOGICAL APPROACH, RESEARCH AIMS AND MATERIALS

4.1. The qualitative research

The epistemological and methodological battle between qualitative and quantitative methods has a long history in social sciences. Indeed, since their foundation, social sciences have been engaged in a constant debate over the epistemological value of different research methods, often questioning the choice between qualitative and quantitative methods, between adopting a more 'positivist' or a more 'constructivist' perspective.

Traditionally, psychology and social sciences have taken the natural sciences and their approach to scientific discovery as a standard, focusing on developing quantitative and standardised model attempting to test hypotheses, isolate causes and effects, operationalise theoretical relations, measure and quantify phenomena, create research designs for generalization of results and the formulation of general laws (Flick, 2009, p.13)

This aspiration towards natural science methods coincided to the fact that often within university training 'methodology' has come to mean statistics in several fields of social sciences (Bauer, Gaskell & Allum, 2000). It could be said that this aspiration conduced to an obsession for measurement and a fetishism for rigorous procedures and instruments, with researchers advocating the superiority of 'hard' over 'soft' research and vice versa. As Bauer, Gaskell and Allum (2000, p.8-9) underlined, the measurement of social facts implies work on categories, which cannot exclude qualitative distinctions between social categories, that said every quantification cannot take shape without a form of qualification through the researchers' interpretative activity. Further, the data do not speak for themselves, and all the models and statistical analyses are always to some degree interpreted.

The limitations of quantitative research were taken as a starting point to advocate the use and strength of qualitative research. In fact, qualitative methods are often considered an expression of a - more or less - radical opposition to the prevailing version of science, namely the post-positivist one based on the adoption of rigorous procedures of empirical verification aiming to the "truth" of facts, the discovery of definite, certain and stable laws that govern the world. With qualitative methods, researchers do not look for or aspire to a presumed objectivity in interpreting the world. Instead, they recognise the constitutive role of researchers' interpretation, and the role of social and cultural dynamics, language and communication in the production of scientific knowledge (Woolgar, 1996). The relevance of qualitative methods in

psychology has been historically claimed by the criticisms moved by relativist and constructionist perspectives to the epistemological and methodological paradigm consolidated in experimental psychology, recognising that personal and social forms of subjectivity are always present within research (Mazzara, 2002; Mecacci, 2004). The constructivist paradigm moves from the relativist assumption according to which exist multiple realities and not only one (De Grada & Bonaiuto, 2002). According to some scholars, qualitative methods are such because they do not resort to any form of data quantification, that is non-numerical research (Bauer, Gaskell & Allum, 2000). According to others, because they treat materials that we can define as textual, or because they do not aim at verifying hypotheses seeking the formulation of general laws, but rather their purpose is to describe, interpret and understand issues and phenomena that are socially constructed and historically and contextually grounded (Mazzara, 2002).

While within mainstream view of science the researcher subjectivity sometimes is considered a bias and disturbing factor to access the truth, and therefore is often excluded or ignored within the research process, in constructivist perspectives the fact that researcher cannot be separated or distinct from what he or she studies is transformed from limit to added value. The observer is indeed considered an integral part of the situation, the context and culture that tries to capture, understand and describe. Thus, the scientific research report is no longer claimed to be objective but is explicitly recognised as the expression of a particular viewpoint that is constructed and open to further re-construction (Altheide & Johnson, 1994; Gergen & Gergen, 1991). At the epistemological level, research based on the constructivist paradigm not only denies the independence and separation between the object of study and the observer but comes to sustain that this interaction – e.g. between research participants and the researcher - is such that the research findings are jointly produced during this interaction (Mannetti, 1998).

The relationship between qualitative and quantitative methods has been widely debated in social sciences, with some scholars advocating the two as compatible and even complementary (Flick, 2009), and others denying every form of integration between methods conceived as alternative, incompatible and opposing (Denzin & Lincoln, 2005).

Indeed, the debate on the methods inevitably evoke the theories and conceptualizations of knowledge, the nature of social reality and the ability to grasp in a satisfactory way the social and psychological reality (Brewer, 2000).

The methodological debate has historically taken the form of a comparison, sometimes harsh, between realism and antirealism/relativism (Pagnini, 1995), and between minimalist and maximalist conceptions (Bryman, 1988; Henwood, 1996). For maximalists, the choice

inevitably implies a contrast between interpretative paradigms expressing different and sometimes incompatible ways of considering the nature of knowledge (Hammersley, 1996). According to minimalist conception, the choice between quality and quantity is only a problem of method or technique for data elicitation and analysis, and secondarily of research design and interests of knowledge (Bauer, Gaskell & Allum, 2000). Researchers may thus use different methods, even in combination, depending on research purpose, time and available resources (Charmaz, 2006). In this light, methods and research traditions are conceived as complementary rather than competing approaches. The adequate awareness of different methods, the appreciation of their strengths and weaknesses, and a full understanding of their appropriateness for different situations, kinds of data and research problems become over time the main focus of the debate on the value of methods (Bauer, Gaskell & Allum, 2000; Flick, 2009). This value is indeed recognised depending on the methods' ability to address socially relevant issues within a defined theoretical framework coherent with the research object and aims. Many psychological perspectives have emphasised the necessity of developing research that is more culturally and historically situated to understand a social world increasingly ever-changing, interconnected and differentiated, things that very often make implausible generalizations (Mantovani, 2003). Among them, the theory of situated action stressed how human cognition should be intended as the product of human plastic capacity to adapt to the circumstances through action (Suchman, 1987). Thus, the action is not the execution of prefixed plans, but rather a creative activity through which people test different strategies to interact with their environment, taking advantage of the opportunities it provides instead of imposing their own rationalization. The idea that mind is socially and culturally constructed and dependent has been further developed by cultural psychology, emphasising how cultural factors should be studied not as external data or force embedded in the social and material world, but as a constitutive part of the human mind (Clark, 1997). In this vein, Cole (1996) suggested that cognitive activities are mediated by the instruments provided by the given culture to which people belong. The mind and its cognitive characteristics, therefore, are seen emerging through participation in social contexts of action and communication and do not exist before and independently from it (Zuccheromaglio, Alby, Fatigante & Saglietti, 2013). According to these epistemological underpinnings, the object of study of social sciences cannot be disconnected from the situations and the contexts in which this is located, as social facts cannot be understood in isolation from the context where they emerge and take form. The different methodological approaches can thus be classified for the choice they make on diverse dimensions (numerical vs non-numerical, structured vs non-structured, natural vs artificial). Traditional research (i.e. quantitative

experimental research) has developed three main fundamental criteria to evaluate and ensure the quality of research: reliability, which requires that the tools used provide reliable measures over time and in different situations; validity, which requires that what is measured is precisely what is intended to be measured; replicability, which requires that the followed procedures in a research can be reproduced from different researchers to control the congruence of obtained results. In qualitative research, however, often is not possible to satisfy and meet these criteria, as the aim of the situated research is to understand what is specific and ever-changing in the situation, where the use of standardised tools and rigorous procedures such as those of laboratory experiments are often impracticable (Mantovani, 2003). In order to meet methodological standards, also qualitative researchers tried to guarantee the reliability and validity of the procedures adopted, albeit recognising that every knowledge is constructed, and that data and findings are not 'collected' or 'discovered' in the world, rather they are constructed, filtered, and interpreted by the researcher (Hammersley, 1990). This has a lot of implications for social research. Particularly, it requires researchers to be aware of the features of the instruments used, of the context in which is situated and that influences the understanding of the social world, of the viewpoints assumed, and the questions research tries to answer (Mantovani, 2008). Guba and Lincoln (2005) asked what makes qualitative research good and able to produce findings that researchers (and participants) trust in a way they can act on their basis and implications. Scholars offered in this vein important insights about 'best practices' for qualitative research, sometimes opposing to the development of standards for qualitative research, arguing the problematic nature and fruitlessness of universal criteria (Guba & Lincoln, 2005). Several distinguished qualitative scholars agree that criteria for the goodness of qualitative research should be related to given theories, paradigms and research communities (Creswell, 2007; Denzin, 2008)

Well-known and common criteria for goodness of qualitative research mainly refer to: *situativity*, which links the methods, results and research interpretations to the specific context in which research takes place; the *contingency*, which assigns a located value to the research results, that refer to that particular community, situation and moment; *reflexivity*, which requires that the researcher is aware of the non-neutrality of his or her positions, both for the interests of knowledge that for the methodological choices, and that assumes the responsibility towards the construction of the object of investigation (Taylor, 2010, pp. 318-319). Not always qualitative researchers adopt this responsible and reflective attitude in their research or encounter with the community they intend to study (Mantovani, 2008), and as highlighted by Mecacci (2004, p. 53 – own translation) "a research perspective in the human sciences declaring

itself neutral and impartial compared to its object of investigation is actually deeply imbued with social and political choices ". Reflexivity is considered a crucial aspect of qualitative research, with researchers bringing to light their subjectivity, providing a clear and complete account of the entire research process and practices (i.e. their choice at different stages of the research process: research questions, design and choice of methods, construction of research instruments for data elicitation, participants' recruitment or materials selection, analytical procedures and reasoning, researchers' positions, interpretations, and assumptions).

A further validity criterion for qualitative research was proposed by Lincoln and Guba (1985) advocating for *member validation*, namely asking to research participants, members of the studied community an evaluation on the final report or of particular aspects of the study, such as the fidelity of transcripts and interpretations of participants discourses, as the basis for evaluating the research and its findings. Although we cannot consider this criterion as a proxy of research validity, it is of great relevance for what concerns the ethical dimension, and the social and political responsibility of social research. Denzin (1978; 1989) proposed *triangulation* as a further criterion for the validity of qualitative research, claiming for the joint use of different research methods, from multiple theoretical perspectives and with multiple researchers to produce richer and thick descriptions and interpretations of the research object. Denzin distinguished four types of triangulation corresponding to different perspectives under which a given phenomenon may be deepened: *data triangulation*, requiring the use of different types of data about the issue under examination, from different moments (time), settings (space) and participants (persons); *researchers' triangulation*, which requires the co-presence in the field of different researchers, or multiple scholars working on the same data set, discussing and comparing their research practices and assumptions; *theoretical triangulation*, that requires researchers testing different theories and hypotheses; last, the *methodological triangulation*, that stresses the use of different methods, both within qualitative methods (e.g. integrating ethnographic observations, focus groups or interviews in a single study) that between qualitative and quantitative methods (e.g. using media analysis and surveys in the same study) to produce a deeper understanding (Flick, 2009). At the start, triangulation has been advocated as a strategy for ensuring the validity of research procedures and results, with the four triangulation typologies conceived as a way to multiply the sources of validation of converging findings. Over time, however, triangulation has been adopted and emerged as an alternative itself to validity (Denzin & Lincoln, 2005; Flick, 1992). In a similar way of the methodological triangulation proposed by Denzin, the so-called *multi-method approach* favours the joint and contemporary adoption of multiple methods (i.e. different qualitative methods, or the

combination of qualitative and quantitative methods) in the beliefs that each of them possesses complementary elements of strengths and weaknesses, allowing a sort of crossed validation (Brewer & Hunter, 1989; Flick, 1992). More recently, Tracy (2010) proposed a more comprehensive account of criteria of quality in qualitative research, arguing that qualitative methodological research should be marked by eight criteria (see Table 5): “(a) worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence” (Tracy, 2010, p. 839).

Criteria for quality (end goal)	Various means, practices, and methods through which to achieve
Worthy topic	The topic of the research is <ul style="list-style-type: none"> • Relevant • Timely • Significant • Interesting
Rich rigor	The study uses sufficient, abundant, appropriate, and complex <ul style="list-style-type: none"> • Theoretical constructs • Data and time in the field • Sample(s) • Context(s) • Data collection and analysis processes
Sincerity	The study is characterized by <ul style="list-style-type: none"> • Self-reflexivity about subjective values, biases, and inclinations of the researcher(s) • Transparency about the methods and challenges
Credibility	The research is marked by <ul style="list-style-type: none"> • Thick description, concrete detail, explication of tacit (nontextual) knowledge, and showing rather than telling • Triangulation or crystallization • Multivocality • Member reflections
Resonance	The research influences, affects, or moves particular readers or a variety of audiences through <ul style="list-style-type: none"> • Aesthetic, evocative representation • Naturalistic generalizations • Transferable findings
Significant contribution	The research provides a significant contribution <ul style="list-style-type: none"> • Conceptually/theoretically • Practically • Morally • Methodologically • Heuristically
Ethical	The research considers <ul style="list-style-type: none"> • Procedural ethics (such as human subjects) • Situational and culturally specific ethics • Relational ethics • Exiting ethics (leaving the scene and sharing the research)
Meaningful coherence	The study <ul style="list-style-type: none"> • Achieves what it purports to be about • Uses methods and procedures that fit its stated goals • Meaningfully interconnects literature, research questions/foci, findings, and interpretations with each other

Table 5. Eight Big Tent Criteria for quality in qualitative research (source: Tracy, 2010)

Regarding the *topic of research*, this should be relevant, timely, interesting and significant for the discipline and related priorities, or from societal and contextual problems and priorities. Contrary to quantitative research, qualitative research is often marked by abundance and complexity of data sources, constructs, and variables (Weick, 2007). This requires researchers to be adequately equipped to deal with this complexity with a *rich rigor*, namely carefully

considering if the time spent on the field, the data collected/constructed, the participants involved, the procedures for data elicitation and analysis are sufficient and appropriate for providing and supporting meaningful and significant claims (Tracy, 2010). The third criterion, the *sincerity* raises a significant point connected with the principle of self-reflexivity in terms of self-awareness and self-exposure of the researcher. This refers to the researchers' honesty and transparency about their own assumptions, biases, goals, motivations and how these had a role in the research process and decisions. *Credibility* is the fourth criterion proposed by Tracy (2010), which underscores that interpretative analysis coming from qualitative research should be plausible and persuasive (Tracy, 1995). The credibility of qualitative research is argued to be achievable with the thick description, triangulation and crystallization, multivocality and member reflections. Thick description means that research report presents in-depth culturally situated meanings (Geertz, 1973) and abundant details (Ellis & Bochner, 2000) sustaining the researchers' knowledge claims. Triangulation has been already presented a few rows above. However, triangulation is accused of taking a realist stance assuming the existence of a single reality that can be captured only triangulating sources and types of data, methods, theoretical frameworks and researchers' perspectives allowing different facets of the problems to be studied (Tracy, 2010). Following this reasoning Tracy added the crystallization as a mean encouraging researchers to gather different types of data employing different methods, researchers and various theoretical frameworks, while on the same time assuming that the main aim is not to provide a valid and unique truth, but rather a more complex and in-depth still partial understanding of the issue at stake. In this regard, multivocality is closely linked with crystallization, assuming the inclusion of various heterogeneous voices in the qualitative report and analysis. In addition to triangulation, crystallization and multivocality, the criterion of research credibility involves member reflections. Like member validation, member reflections refer to seeking the input of research participants during the analytical process and the writing of research report. This is suggested by Tracy (2010) as a meaningful way of engaging research participants in sharing and dialogue about the research findings, providing them the opportunity for questions, feedback, critique, and even collaboration, determining whether participants recognise the findings as accurate (Lindlof & Taylor, 2002), as well as meaningful and accessible to them. This provides the researchers with additional data and reflections that represent added knowledge and value for the interpretative claims. The criterion of *resonance* introduced by Tracy (2010, p. 844) refers to the researchers' capacity of "reverberate and affect an audience", through aesthetic merit and evocative writing, as well as generalization and transferability of the study findings, theoretically or practically, beyond the case under study

(Charmaz, 2005). *Significance* is another criterion proposed that means the research provides a significant contribution extending previous knowledge on a given phenomenon (Theoretical significance; Tracy, 1995), providing new questions and critical insights stimulating curiosity and further studies (Heuristic significance; Abbott, 2004), improving and advancing practices, enabling space for transformation or directly empowering participants (Practical significance). *Ethics* represents the seventh criterion for quality in qualitative research, involving ethical commitment and appraisal of the research(er) about the rightness or wrongness of researchers' practices in relation to the participants of the study, the institutions on behalf of which he or she is conducting the research, as well as the colleagues of the wider research community (Miles & Huberman, 1994). Finally, *meaningful coherence* is the last criterion proposed by Tracy (2010), which to put it simply implies that the purposes of the research, the methods used, the theories and paradigms adopted fit well together, and are significantly coherent and interconnected. The research that will be presented in the following chapters largely took into account and paid attention to all the above-mentioned criteria both in the research design and the research practice/process, for ensuring 'quality in qualitative research'.

4.2. Content and Thematic analysis

Content analysis is perhaps the most well-known and accepted technique for the analysis of qualitative data in the social sciences. Early proponents of content analysis conceptualised it as "a research technique for the objective, systematic and quantitative description of the manifest content of communication" (Berelson, 1952, p. 18). Content analysis has been conceived as a technique involving a process of coding qualitative data with the use of categories (often derived from the literature) to summarise a more complex entity and then proceeding to count the frequencies of the occurrences in these categories often using the statistical treatment of textual units. This analytic process was argued to respond to be objective and systematic procedures, which should be explicit and replicable. Across time, several scholars proposed and offered different and pluralistic accounts for content analysis (see Bauer, 2000 for a review of the diverse types of research designs using classical content analysis). Smith (2000) defined content analysis as a technique extracting information from a corpus, systematically identifying through explicitly defined analytic procedures the main features of the materials to produce unbiased results that can be replicated by other researchers. Here, the main aim of content analysis may be considered in the reduction of a large corpus of qualitative data in more interpretable and manageable schemes, conducting to a synthesis of the material, while ensuring

the reliability and validity of the method. This reduction involves the abstraction from the data complexity of those features that are of interest for the research purpose (Dey, 1993).

Traditionally, content analysis has to deal with written texts but can be also applied to other kinds of 'texts', such as images or sounds (Bauer, Gaskell & Allum, 2000). In the case of written texts, these can be of two types: those produced by the researcher during the research process, such as transcripts of interviews and focus groups, and those already produced for other purposes not involving the researcher's presence and activity, such as newspaper articles, policy documents, online blogs and forums and so on.

Usually content analysis is realised following formalised steps, starting from formulating research questions, hypotheses and problem's definition that derive from theory or circumstances suggesting the selection and analysis of texts; proceeding with the sampling or selection/production of the text units defining the data corpus (i.e. texts produced or not by the researchers such as interviews or policy documents), the definition of the unit of analysis (i.e. the word, the sentence, or an entire textual unit such as a newspaper article); the construction of a coding scheme; the testing on the reliability of the codes and revision of the coding frame if necessary; the coding of the units of analysis within categories (and macro-categories); the set-up of a data file for sequent statistical treatment; and last the results' interpretation (Bauer, 2000). The coding frame is an essential part of content analysis which sets up the potential for a systematic comparison between the sets of texts.

It should be taken in mind that the coding process can be realised manually (classical content analysis) or automatically with the use of specific software for the analysis of textual data (quantitative linguistic, lexical-textual etc.). The manual coding represents the more classical content analysis, with researchers reading the texts and operating an abstraction of concepts in more general categories. The strength of classical content analysis represents a paradox. Indeed, the researcher agency and subjectivity in the coding process is recognised as a strength as well as its more visible limit. This activity is entirely of human competence, but also for this task there are many softwares assisting the researcher in the texts' exploration, facilitating the coding and organization of materials while providing instruments for the information retrieval (Bauer, 2000). On the other side, automatic or semi-automatic coding is realised with software assigning codes to the elementary textual units. The choice of coding method is of crucial importance because the two approaches answer to different purposes and focus on distinct and complementary elements (Tuzzi, 2003).

From a methodological perspective, the creation of the conceptual grid for the categorization of data (the coding frame or book) may be structured ex-ante, deriving categories from

theoretical frameworks and concepts or to answer specific research questions (e.g. in case of explorative studies). In other cases, it is constructed ex-post, after the reading of the texts, allowing space to the researcher's interpretative activity of texts and the choice of interesting features of the material responding to research purpose. Alternatively, the structuration of the coding frame may follow both pathways, ex-post and ex-ante. Offering a model for the systematic analysis of qualitative data (texts, videos, images or sounds) and by following clear procedures to ensure the reliability and validity of the analysis, content analysis represents an appealing method for social scientists (Joffe & Yardley, 2004).

The strengths of content analysis are without doubt manifold; however, several weaknesses of the method should be underlined. First, content analysis usually involves the adoption of mutually excluding categories/codes, forcing the researcher to develop clearly defined and demarcated categories. This is because it is not possible to calculate relationships between codes if they are not independent (e.g. they should not overlap). Separating the units of analysis, however, introduces inaccuracies in interpretative activities as in this way categorization loses the sequential nature of language and the con-text of use where meanings are grounded and through which they can be interpreted (Kracauer, 1952). The sacrifice of this information is the essence of content analysis where new synthetic information is generated through processes of data reduction and synthesis. The problem is that a word or a coding category may occur frequently for different reasons and so reflecting different motives, which cannot be inferred relying only on quantitative outcomes or isolated elements. Moreover, messages do not have a single meaning to be captured, and for these reasons, content analysis is sometimes accused of removing the meaning from its own context (Joffe & Yardley, 2004). Further, content analysis is argued to be biased towards the presence of codes or categories, tending to focus on the measurement of frequencies often neglecting what is absent or not frequent, which actually may provide crucial information (Bauer, 2000). Joffe and Yardley (2004, p. 63) stressed that "numbers do not tell the whole story - that the number of times a category appears does not necessarily indicate the extent to which it is relevant to interviewees. A point that is only mentioned once, by one person, can still have great empirical relevance and conceptual importance".

Far from consider content analysis, both manual and automatic, an unfruitful technique that should be abandoned for a more constructivist epistemology and methodology to approach qualitative data, here the point is to underscore that content analysis has different points of strength and limits that should be considered in relation to research questions and theoretical frameworks guiding the research.

As Denzin and Lincoln (2005, p.4) pointed out, qualitative research is often devoted to ‘polyvocality’, to promote the emergence and comparison of different voices, viewpoints and contexts, so the researcher may be seen as “a bricoleur [...] a person who assembles images” privileging the reconstruction to the analytical decomposition, the enhancement of differences rather than the exclusion of deviant cases.

Qualitative data analysis is argued by different scholars (see Holloway & Jefferson, 2000; Bauer, 2000; Flick, 2009) as a subtle, intuitive and interpretative human enterprise, and despite the greater advancement of computerised automatic and semi-automatic coding in the recent years, these are far from replacing the researcher interpretative activity. In qualitative research, theoretical development is widely argued as produced starting from the data rather than from applying a particular theory to empirical verification. This view has been at the hearth of Grounded Theory approach (Glaser & Strauss, 1967), which privileges the moment of discovery or ‘serendipity’ in respect to that of hypotheses’ verification. Grounded Theory, as the same name suggests, sees theoretical development as something that should be grounded with, adherent at, and emergent from the data, rather than from pre-existent theories and hypotheses. Contrary to quantitative research, qualitative research is seen proceeding in an iterative and circular process, with researcher continuously reflecting through data navigation on the different research phases, the decisions made and the entire interpretative activity about the studied phenomena (Flick, 2009). In the first and more extreme conceptualizations, Grounded Theory suggested that the reading of the literature on the topic investigated should be postponed after the analysis so that researcher can free himself from knowledge influencing his own interpretations and use of categories. However, researchers cannot free themselves from previous knowledge or theoretical and epistemological positions, so coding cannot occur in a vacuum (Pidgeon & Henwood, 1997; Charmaz, 1995). Across time different conceptualizations of Grounded Theory have been proposed (see Henwood & Pidgeon, 1992; Charmaz, 2006; Strauss & Corbin, 1998) suggesting that researcher should start from previous theoretical framework but remaining adherent to the data and approaching them without trying to test previous hypotheses, but rather remaining open to new interpretations and conceptualizations emerging from them. Charmaz (2006) in particular sustained that Grounded Theory should be viewed as a flexible set of procedural indications, with researchers constantly aware of their role as co-constructors during the research process, recognising that forms of subjectivity are constantly present, and thus paying adequate consideration about their choices in every research phase.

With reference to the criticisms and weaknesses of quantitative content analysis, thematic analysis emerges in social sciences and psychology as a technique offering some systematic features of content analysis while allowing the researcher to analyse meanings in context. The thematic analysis could be conceived as a form of qualitative content analysis (Joffe, 2012). Indeed, thematic analysis shares different principles and procedure of content analysis but differentiates from it for the greater attention to qualitative aspects and interpretative claims of the material analysed (Joffe & Yardley, 2004). Thematic analysis is a method aimed to identify, analyse and report patterns or themes within data (Braun & Clarke, 2006). It foresees the organization and description of the data set with rich details and often goes beyond this to interpret various aspects about the research object (Boyatzis, 1998). Thematic analysis involves the generation of codes and themes from qualitative data, providing to researchers a theoretically flexible instrument for qualitative analysis of texts. Researcher's subjectivity is clearly at the basis of this analytical process. Indeed, themes are not discovered or emergent in the data, rather they are identified, selected, coded, and organised by the researcher according to his or her interests and research questions, stemming from previous assumptions or the theoretical frameworks adopted (Taylor & Ussher, 2001). Themes or patterns are the product of researcher's interpretative activity reflecting on the data, their meanings and mutual relations. However, thematic analysis is often unproblematised in research reports, with scholars often omitting how they did their analyses and not making explicit their assumptions (Holloway & Todres, 2003). What is relevant is that epistemological and theoretical positions implicitly guide the analytical process in identifying (or not) themes and that for this reason research positioning and the decisions made during data analysis should be reported and made explicit. Such in content analysis, themes can be identified with an inductive bottom-up approach that departs from the data, in a theoretical, deductive, and top-down approach departing from theoretical frameworks or previous empirical evidence, or even both.

Inductive analysis refers to coding the data without attempting to force them within a coding frame or grid, or researcher preconceived ideas. Thus, inductive coding refers to a data-driven analysis. On the contrary, a deductive thematic analysis is usually theory-driven and intended not to provide a rich description of the data corpus but rather focuses on specific aspects on which develop a more fine-grained analysis.

As Braun and Clarke argue (2006), thematic analysis can be a very flexible technique that can take the form of an essentialist/realist method, reporting narratives, experiences, meanings and the reality as perceived and produced by actors, or on the contrary it can be a more constructionist and critical method, i.e. examining how experiences, events and meanings are

the product of a set of discourses produced and circulating in society. While experiential approaches view language as a reflection of inner categories of understanding, assuming that is possible to capture inner experience from language use, constructionist approaches view language use as a real action that is constitutive of social and psychological realms, rather than reflective (Reicher, 2000).

Thus, “thematic analysis can be a method that works both to reflect reality and to unpick or unravel the surface of ‘reality’” (Braun & Clarke, 2006, p. 81).

Indeed, beyond the decision about what kind of coding approach use (data-driven, theory-driven, or both), researchers may choose to look at, identify and code explicit or implicit themes. Explicit themes are contents that are semantically identifiable, while implicit or latent themes, require a more interpretative work that goes beyond the mere content and explores underlying meanings, ideologies and assumptions since preliminary coding phases (Boyatzis, 1998).

The use of codes in thematic analysis can follow the path of classical content analysis, i.e. quantifying the presence of features of interest in the text - basing on how coding has been realised, i.e. mutually exclusive - using statistical treatments such as correlations, cluster analysis, multiple regressions and so on. On the other side, codes may be used for a pure qualitative examination, capturing, reporting and interpreting textual patterns within the data set. According to Joffe and Yardley (2004), the most appropriate way of conducting thematic analysis is in the middle of these two paths. So-conceived, thematic analysis is also argued to fit well with researches that are guided by Social Representations approach, where themes that are frequent and shared within collectives are used to reveal aspects of social representations of different groups (Joffe & Haarhoff, 2002). Thematic analysis can be used to illustrate the essence of a given group conceptualization about the object of the study as well as reveal the differences among groups’ representations (Joffe, 2012; Batel & Castro, 2018). While content analysis has well-established steps to be followed in conducting the analysis, thematic analysis has been for a long time a method widely used, although slightly problematised, with few published materials on how to conduct analysis, a fact that attracted the so-called “anything goes in qualitative research” criticism (Antaki et al., 2002). With reference to these criticisms, Braun & Clarke (2006) provided a useful contribution including a six-steps guide and indications for ensuring quality and systematicity in thematic analysis (see Table 6).

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Table 6. Six steps/phases of Thematic Analysis (source: Braun & Clarke, 2006, p.87)

According to the authors, thematic analysis involves a recursive process of moving back and forth throughout the research phases in the data set, the coded text portions and the report of the analysis. The first phase is described as the familiarization with data, that is the immersion of researcher in the textual data through repeated reading and active reading looking for meanings and patterns. This phase, which is really time-consuming, should be characterised by taking notes and writing initial ideas for coding. The initial generation of codes represents the second phase proposed by the authors, which involves the production of codes identifying (explicit or implicit) features of the data that seem of interest for the analyst in relation to the research purpose. In this phase, Braun and Clarke (2006) suggest that the generation of codes should: involves the entire data set paying equal attention to each of data items; be inclusive, for example coding extracts including a portion of data surrounding if it is relevant (i.e. including the argumentative context that is useful to reveal and understand the meaning of the utterance, see Billig, 1987; Bryman, 2001). Once all data have been coded, the third phase is represented by the search for themes within the list of codes. In this phase, the researcher should sort the diverse codes produced into potential themes, collate the coded extracts within the themes that have been identified.

The fourth phase involves reviewing themes. At this stage, the researcher should read and check in details extracts, codes and themes. After this task, it should become evident how some of the extracts could not fit well themes or even codes assigned, how some candidate themes may be not themes and then collapse, or how themes may be merged or spliced in two or more themes. This stage is essential for verifying the validity of singular themes, which should accurately reflect the meanings underlying the codes and extracts.

The fifth phase, defining and naming themes, began once realised the thematic map of the data. At this point themes are defined and further refined, identifying the main essence of what each

theme is and is not. This phase represents a moment of analysis itself, where for every theme is identified their content, meaning, and the story they are telling.

The sixth phase coincides with the production of the report, providing a “concise, coherent, logical, non-repetitive and interesting account for the story the data tell – within and across themes” (Braun & Clarke, 2006, p.93). The written report should provide adequate evidence of the themes and use vivid extracts that capture the essence of the interpretative claim made by the researcher (but avoiding selecting text segments supporting the arguments one wants to make - Silverman, 1993), which should be grounded in, and at the same time go beyond the semantic level.

To conclude, thematic analysis has been recognised only recently as a method in its own right (Clarke & Brown, 2014; Joffe, 2012), illustrating the themes that are more important in describing a given studied phenomenon (Daly et al., 1997) and highlighting the most salient sets of meanings that are present in the data set. Thematic analysis represents in this regard a useful method for investigating the content of discourses, or what themes are privileged in the discursive practices analysed (Batel & Castro, 2018). Furthermore, as it can illuminate the nature of the group’s experience and conceptualization on the topic of research capturing latent symbolic meanings while remaining systematically performed, it is recognised as well suited if applied in combination with different epistemological and theoretical approaches such as Social Representations Theory, phenomenology or discourse analysis (Batel & Castro, 2018; Braun & Clarke, 2012; Joffe, 2012; Joffe & Yardley, 2004; Lavie & Willig, 2005; Taylor & Ussher, 2001). In this regard, adopting a post-structuralist framework Taylor and Ussher (2001) proposed thematic discourse analysis as a mean to examine the constructive role of language and of multiple meanings underlying a given object (in their case sadomasochism), while paying attention to the ‘shared patterns of meaning’ or ‘discourses’ in the data set. In this perspective, coding is argued as a method for data reduction, systematization and interpretation capturing both explicit and implicit meanings (Clarke & Braun, 2014), with shared, consensual or conflicting themes and discourses representing underlying systems of meaning (Taylor & Ussher, 2001).

4.3. Discourse analysis and Social Representations Theory: integrating structure and agency in the study of environmental conflicts and policy-making

This paragraph is intended to provide a literature overview about discourse analysis and rhetorical approaches in social psychology, and the potential integration between Social Representations approach and discursive-rhetorical psychology for the study of environmental issues, and particular of environmental conflicts and policy-making. This literature review is not intended to be comprehensive but aims to provide the reader with the reasoning behind the methodological (and epistemological) approach adopted in the research.

First, the paragraph will introduce the origins and the shared assumptions underlying the development of discourse analysis within social sciences – the so-called discursive or linguistic turn. Then it proceeds introducing how discourse analysis has developed from and contributed to social psychological research. After, the paragraph will introduce the critical debate and the potential for integration between rhetorical and discursive social psychology and the SRs approach. Finally, the paragraph will discuss the potential of discourse analysis for the investigation of environmental issues, particularly of conflicts, policy-making and politics. Therefore, unless explicitly indicated, this first part will refer mainly to discourse analysis as it developed within social psychology.

Historically, most of the experimental stimulus and data that social psychologists adopt in their work are essentially verbal. As argued by Potter (1996a), within social psychological discipline language has been conceived through the metaphor of the mirror and the construction yard. In the first, language is considered a mirror reflecting external and internal reality, a medium through which people represent the external world and express inner cognition and emotions. Language reflects how things are described, represented and accounted. In this perspective, to language has been recognised the status of a transparent and neutral medium to which get access, in more or less direct and non-problematic ways, to the underlying psychological processes, that is how people perceive and experience their world. The second metaphor, the construction yard, considers language as constitutive of both human mind and reality, the process through which people build their world, and that in turn influence and shape society and individuals as well.

The role of discourse and communication in constructing social and psychological realms has been at the heart of the so-called ‘linguistic’ or ‘discursive turn’ in social sciences and humanities. This reflected the critiques moved to positivist science coming from structuralist and post-structuralist ideas and the emergent social constructionist and postmodern movement in social sciences (e.g. Burr, 1995; Harré, 2001; Harré & Gillet,1994; Parker, 1992; Potter,

1996a). Discourse analysis represents in this regard not simply an alternative method, or a movement from generalised, abstracted and quantitative approaches towards more particularised, qualitative and detailed approaches. It comprises a set of assumptions that are epistemologically radical (Wood & Kroger, 2000). Discourse analysis is a label and umbrella term including a variety of approaches oriented to the analysis of discourse, and that developed from different theoretical traditions and disciplinary perspectives. Indeed, discourse analysis is multidisciplinary in its essence, developing from a number of (insights from) disciplines such as philosophy, linguistics, sociology, psychology, or media and communication studies. For this reason, we should bear in mind that within this multidisciplinary approach exist different ‘types’ of discourse analysis, with the consequence that their object is defined and treated in different ways.

Here, the term discourse is intended in the most inclusive way, to refer to all forms of talk and texts, such as interview material, written texts of all kinds, naturally occurring conversation and so on (Gilbert & Mulkay, 1987; Potter & Wetherell, 1987). Nevertheless, every discourse analysis’ formulation considers his object of study an *action*, a specific practice devoted to the social construction of meaning and social reality. In fact, a basic assumption of discourse analysis, that derives from speech acts’ theory and ethnomethodology, lies in the view of language as action (Potter & Wetherell, 1987). This represents a central concern for discourse analysis. Considering the discourse as action-oriented means analysing discourse in light of its use for realising some social functions (e.g. question, justify, accuse, make a request, present the self in a positive light).

Indeed, people use language to do things, and it represents the real essence of social and personal life. In this context, discourse is examined as *action-oriented* or *function-oriented*. As argued by Potter and Wetherell (1987), discursive approaches suggest that language may be used to perform different functions and its use has different consequences.

Another assumption of discourse analysis is that language can be seen as both *constructed and constructive*. Language is constructed as it is based on pre-existing linguistic and cultural resources, but on the same extent is constructive as people use language to construct different versions of reality based on the function they are trying to perform. Adopting a point of view, select an expression between different alternatives occur in all forms of communication, and describe the way people interact with the world representing it (Billig, 1987). To put it clearly, language is considered a means for constructing rather than reflecting reality, a social action in its own right that has pragmatic consequences on the reality. Far from considering the everyday

language use as always rational and intentional, discourse analysis pointed out several shortcomings of social psychological understanding of human cognition.

Besides *function* and *construction*, a further assumption of discourse analysis lies in the language *variability* or *variation*. As Potter and Wetherell (1987, p.33) argued if talk is conceived “as oriented to many different functions [...] any examination of language over time reveals considerable variation. A person’s account will vary according to its function. That is, it will vary according to the purpose of the talk”. In other words, it is argued that the same phenomenon can be represented in different ways even by the same person and that this variation depends on the context and situation (see Potter & Wetherell, 1987). This highlights how different versions (constructions) of reality can be proposed in a flexible way to accomplish different actions and functions. This personal variability in accounts and formulations – i.e. different and even contradictory or inconsistent versions – is assumed as a function of the context of use. This explains why people express different versions of reality in different contexts and situations they are embedded (Edwards & Potter, 1992; Wetherell, 1998).

The assumption of language variability - as it is for the cognitive polyphasia proposed within the SRs approach - emphasised how discourse and cognition are not so linear and unambiguous as some social (cognitivist) psychological traditions have assumed (e.g. attitude research). This poses a problem on the consistency or stability of constructs such as attitudes and beliefs in social psychological research, where consistency is often assumed and considered an indicator for descriptive validity. The problem for social psychology is that in both experimental and qualitative research this variability is often suppressed or marginalised, assumed as a form of bias or outlier that do not fit with the story researcher is telling rather than the essence of human cognition interpreting and adapting to different circumstances (see Potter and Wetherell, 1987). The abovementioned assumptions represent the basis of discourse analysis development in social psychology (see, Edwards & Potter, 1992; Potter, 1998; Billig, 1991).

This kind of discourse analysis focuses on how language is used to perform different functions actively constructing meanings and positionings, proposing different versions of reality and psychological phenomena (Harré & Gillet, 1994; Potter & Wetherell, 1987; Edwards, 1997). Thus, psychological discourse analysis studies the language in action, focusing on the discursive objects people construct in talk and text and their use in achieving certain aims, i.e. framing a problem, prioritising a perspective, attributing responsibility (Potter & Edwards, 1999).

It should be pointed out at this point that in discourse analysis there is not ‘a method’, and everything depends on what we want to know, why and the theory of reference we adopt (Potter

& Wetherell, 1987). In this context, also van Dijk (1998) suggested a 'contextual relevance' of discourse analysis, where the choice on what properties of discourse analysis depends on the research question.

For some authors (see Potter, 1998), rather than the compliance to a rigorous method, discourse analysis requires good analytical and interpretative abilities, a good culture and knowledge on the topics covered by the speakers, as well as a good knowledge of the rules of sequential organization of discourse and the availability to iterative reading of texts to identify linguistic evidence able to support specific interpretations. In fact, different proprieties of discourse can be examined: intonation, word order, structure and meaning of sentences, the topics mentioned, the arguments used, the lexical style, the metaphors, metonymies and so on. A great variety of rhetorical analyses can be identified in the literature offering a wide range of concepts and analytical categories. In this regard, Billig (1987) argued that modern psychology has neglected the examination of argumentation, and advocated for social psychology a novel psychological approach focused on the study of rhetoric and relying on ancient theorists such as Aristotle, and his distinction of *ethos* (argument aiming to prove in appearance the credibility of the speaker), *pathos* (argument aiming to rouse the emotions in the audience) and *logos* (argument aiming to build factual versions of reality and provide apparent proofs for building the case). It is in this vein that many of the analytical categories proposed over time by discourse analysts, usually fall within these three broader families, referring to rhetorical devices to build the case (*logos*), the credibility of the speaker (*ethos*), and rousing emotions (*pathos*).

To cite some of the rhetorical devices (see for a systematization: Potter, 1996a), we can refer to the disclaimer (see Hewitt & Stokes, 1975), extreme case formulation (see Pomerantz, 1986), particularization and categorization (see Billig, 1985), three-part lists (see Jefferson, 1990) positionings of self and other or we-them categorization (see Harrè, 1993; Van Dijk, 1997), concession (see Antaki & Wetherell, 1999), consensus (see Potter & Edwards, 1990), rhetorical questions (see Frank, 1990), gerrymandering (see Woolgar & Palwuch, 1985), and many more. Discursive-rhetorical psychology perspective has provided relevant insights for social psychological research, with the aim of shifting the attention from cognition to action (Edwards & Potter, 1992) and re-orient the discipline toward a focus on the study of language and interaction (Billig, 2009). In this context indeed, it is argued that through the language it is possible to examine many things psychologists are interested about, and that previously were believed occurring only in the heads of participants (Billig, 1987).

Inspired by the work of Harrè (1980), who argued that psychologists should adapt their analytical model on the "image of man as a rhetorician" (Harrè, 1980, p. 205), Billig advocated

a movement in psychological research from individual cognition to action in relation, taking rhetoric as the research object of a renewed social psychology, meaning the practice through which actors try to persuade the other to see reality as the orator sustains. Billig (1987) stressed the relevance of rhetoric and argumentation suggesting that different cognitive phenomena are profoundly shaped in rhetorical argumentation. He also criticised the focus of cognitive social psychology on categorization as the primary cognitive process to make sense of social reality, as it assumes the inevitability of prejudice while overlooking the issue of tolerance (Billig, 1985). In this regard, he stressed the role of the complementary mechanism, the *particularization* (isolating an element from the category) and how categorization-particularization processes can be rhetorically and flexibly used by individuals according to the action they are realising in the given context.

In this context, it is argued that most of socio-psychological research objects (e.g. attitudes, beliefs, social representations,) may be approached as rhetorical actions performed to achieve interpersonal or ideological goals, to support or contrast different versions of reality, to justify or criticise points of view, and to position self and other within a wider argumentative context (Aiello & Bonaiuto, 2003).

However, also within social psychology may be distinguished at least two styles of discourse analysis (cf. Antaki, 1994; Burman & Parker, 1993; Widdicombe & Woffitt, 1995), one more affiliated with ethnomethodology and conversation analysis traditions, and the other more affiliated with post-structuralist and Foucault traditions (Wetherell, 1998). According to Widdicombe and Woffitt (1995) the first is more concerned with the detailed analysis of action orientation of talk in interaction (e.g. Edwards & Potter, 1992), while the other is more concerned with power and discourse, critically examining rhetoric and argumentative patterns with the socio-political causes, content and functions these involve (e.g. Billig, 1991; Fairclough, 1989; 1992a; Hollway, 1984; Van Dijk, 1997; 1998). In this regard, it may be assumed that the first orientation pays greater attention to the situated and concrete nature of social (micro)interactions, where meanings and action are socially constructed and interpreted depending on their context of use. According to this perspective, language cannot be separated or isolated from the context in which it is produced, meaning by the term context the set of aims, expectations and regulations surrounding the communicative exchanges (Potter & Wetherell, 1987). At the basis of communication is, therefore, the choice of a particular point of view, an expression, that is thought coherent with the context.

The other orientation instead pays greater attention to the macro factors involved in discourse, such as socio-cultural meanings, ideologies, and the reproduction of power relations adopting

a post-structuralist perspective on discourse and signification and conceiving society as a “vast argumentative texture through which people construct their reality” (Laclau, 1993, p.341). In this perspective, discourse analysis is more concerned with the issue of power. This operation is not limited to a description and interpretation of how a text works, but question also who has the interest that text functions in that way, assuming that a particular type of power is that of representing reality in a particular way that makes one's representation not as one between the many others, but as the ‘real one’: the natural, obvious, neutral version of reality (Fairclough, 1989). This means the power of construct and convey knowledge that is socially recognized and legitimated. This critical version of discourse analysis is often identified with the critical discourse analysis orientation (CDA), which adopting an interpersonal and intergroup perspective is interested in the relations of power, domination and inequality and the way social actors and groups reproduce or resist such relationships through discourse and communication (Van Dijk, 1999). In this way, discourse analysis is interested in how language is used to alter or preserve the distribution of power in a given social context (Weiss & Wodak, 2003), and focuses on public discourse and texts having great social and political relevance. CDA represents another heterogeneous orientation in discourse analysis. In CDA can be identified three main strands of the so-called critical approach to discourse analysis, inspired by the work of Foucault and Marx (cf. Fairclough, 1989; 1992a; 1995), Austin and Moscovici (cf. Van Dijk, 1997; 1998), or drawing from the school of Frankfurt, and the work of Habermas, Benhabib and Halliday (cf. Wodak, 1989). The approach of Fairclough, or the socio-cultural approach of the London School, has been interested in topics such as mass media, new labor, democracy, and cultural change and its object of study is identified in the relationship between the communicative acts of social actors and the wider social structures and organizations. It stresses the relevance of positioning, or how different actors see and represent events in different ways, constituting communicative genres, ways of interacting and being in defining one’s own identity. According to this model, every discourse may be analysed on three dimensions: (a) the text of the discursive event, analysing the linguistic content, structure and meaning of utterances, such as the use of metaphors, metonymies and various rhetorical devices; (b) the discursive practice, namely the process of production, circulation and consumption of a text, focusing on issues such as who produced the text, who was the audience or target of communication, to what purpose, and so on; (c) the social practice, namely asking what are the socio-cultural bases or the consequences of the given text in that context. This perspective, and particularly the last point, introduces a further relevant assumption for discourse analysis, the *intertextuality of texts*. Utterances - or texts- are inherently intertextual and constituted by

elements of other texts from which they emerge and interact with (Fairclough, 1992b). Intertextuality involves “the insertion of history (society) into the text, and of this text into history” (Kristeva, 1986, p.39, quoted in Fairclough, 1992b). Thus, a text is always inserted in a network of already existing and circulating texts constituting the history (the socio-cultural), and it is argued to absorb as well as respond to other texts, reconstructing or reproducing the vast argumentative texture of society.

The Fairclough model is thus concerned with the micro, meso and macro levels of discourse analysis; an analysis that is not limited to the semantic and manifest level of the text but comprises, or better privileges, the implicit content and sense which are determined by the relationship between text and con-text, identifying the significant elements acting in and on the context. This has been stressed also by Billig (1987, p.91) when he pointed out that: “[t]o understand the meaning of a sentence or whole discourse in an argumentative context, one should not examine merely the words within that discourse or the images in the speaker's mind at the moment of utterance. One should also consider the positions which are being criticised, or against which a justification is being mounted. Without knowing these counter-positions, the argumentative meaning will be lost.”

The Fairclough model emphasizes that discourse analysis should take in serious consideration the role of the immediate context in which discourses take shape, and meanings and positionings are grounded, but also that discourse analysis should go beyond the immediate situation and reveal how the text is connected with other texts or discourses circulating in society, and in what relations they stand together (e.g. negotiation, sharing, contestation etc.). The concept of intertextuality requires an analysis of “how texts can transform prior texts and restructure existing conventions (genres, discourses) to generate new ones [...] and so it needs to be combined with a theory of power relations and how they shape (and are shaped by) social structures and practices” (Fairclough, 1992b, p.270).

Besides the model of Fairclough, the second strand of CDA is represented by the socio-cognitive approach or the school of Amsterdam of van Dijk, which has been mainly interested in the discourses of élite (mass-media, politicians, managers and so on) and that of racism and prejudice. This approach assigns a central role to the concept of intentionality and the theory of speech acts and argues that in every discourse can be reflected the mental models of individuals, the attitudes and ideologies of the group or culture to which they belong. The main assumption is that every discourse is permeated by ideology, conceived as the structure of values and interests that shape our own representation of reality. According to van Dijk (1998), since the first socialization, through the language, books and mass-media individuals acquire the mental

models, social knowledge, attitudes and ideologies that influence their actions and discourse as members of that culture and sector of society. Thus, the aim of discourse analysis is to capture in discourse the linguistic accounts underlying individual interpretative repertoires, shared ideologies and beliefs that play a role in (re)producing groups' dominance and inequality.

The third approach of CDA, the discursive-historical one, or the school of Wien of Wodak, has been more concerned with issues of identity and belonging, focusing on topics such as racism, antisemitism, xenophobia, populism, sexism, and all the 'rhetoric of exclusion'. It relies on the analysis of the affective aspects of interaction, such as identity and gender issues, on the discursive construction of collective subjects (e.g. image of the foreigner, the ethnicity, or nation). The object of this analysis is the discursive construction of group identity (e.g. the inclusive and exclusive use of 'we and them', strategies for the positive valorization of ingroup etc.) and related argumentation strategies (attributing or avoiding responsibilities, bring out the contrasts etc.).

Despite the differences in the CDA approaches, all these versions of discourse analysis share the same careful and close reading of discourse moving between the text and the broader context (i.e. the micro-interactional aspects of texts and the macro-cultural context of text) investigating the social and material consequences of discourses and revealing how they contribute to maintaining or contesting the status quo and (re)produce the social reality.

Coming back to discourse analysis as developed within social psychology, while it has been argued the existence of two main styles of discourse analysis, one more affiliated with ethnomethodology and conversation analysis, and the other affiliated with post-structuralist traditions, Wetherell (1998) critiqued this divide advocating for a more synthetic and eclectic approach in social psychology combining these two traditions. This claim is realised revisiting the post-structuralist perspective to the discourse of Laclau and Mouffe (1985; 1987; 1992; 1993 cited in Wetherell, 1998). According to these scholars, social agents and objects, social institutions and structures are configured in everchanging relational patterns. In this view, signification is conceived as an infinite play of differences, where meanings can never be fixed. Instead, they are always fluid, not stable, and precarious. On the other hand, social agents are conceived as both active and passive meaning-makers (meaning that they are actively engaged in the meaning-making process, while at the same time they are not 'the authors' of their discursive activity nor the origin point of the discourse), constituted by an ensemble of subject positions never fixed, but rather in a constant movement of over-determination and displacement. The identity of these multiple and contradictory subjects is argued to be contingent and temporarily fixed to the situation. So, we are not in front of a social agent as a

homogeneous entity. Instead, it is argued that we should approach the social agent as a plurality that depends on the various positions of the subject within the various discursive formations of interests that are socially constructed, mobilised and made available through discourse (Mouffe, 1992). Throughout this reading of Laclau and Mouffe, Wetherell (1998) argued for an integration of post-structuralist versions of discourse analysis with those more affiliated with conversation analysis and ethnomethodology, which can provide a better ‘grounding’ for analysis. Using the words of Wetherell (1998, p.402) “[i]f the problem with post-structuralist analysts is that they rarely focus on actual social interaction, then the problem with conversational analysts is that they rarely raise their eyes from the next turn in the conversation”.

Following this reasoning she suggested that focusing on participants’ orientation in talk in interaction is crucial for reveal the formation of multiple subject positions at play (cf. *Aaron’s positions* in Wetherell, 1998), while at the same time adopting a more critical perspective that illuminate the socio-cultural origins and consequences of argumentative patterns and the nature of participants’ sense-making in the wider socio-cultural context (e.g. *Aaron’s interpretative repertoires on male sexuality, ethics of sexuality etc.*). Also, she argued that drawing on analytical concepts already available from discursive social psychology - such as the variability of accounts and subject positionings (Potter & Wetherell, 1987), ideological dilemmas¹⁷ (see Billig, 1987) and interpretative repertoires¹⁸ (see Potter & Wetherell, 1987; Wetherell & Potter, 1988) – social psychology is well equipped to provide a more synthetic, fruitful yet eclectic approach if compared with the distinct contribution the two traditions can provide on their own.

4.3.1. Social Representations Theory and discursive-rhetorical psychology: from mutual critique to potential integration?

The proposal of Wetherell (1998) is fascinating and with no doubt provides further reasons for preferring a more eclectic (and critical) approach integrating post-structuralist and ethnomethodological traditions of discourse analysis. However, some scholars of social representations are very critical towards the analytical concepts proposed (cf. Gibson, 2015; Voelklein & Howarth, 2005). The concept of interpretative repertoires (cf. Potter & Wetherell, 1987; Wetherell & Potter, 1988) is recognised as too vague and not adequately - culturally –

¹⁷ For Billig (1987), thought is necessarily dialectic and involves dilemmas and disputes to remain alive

'grounded' for a detailed analysis of interaction (Voelklein & Howarth, 2005; Gibson, 2015) creating a problem for discursive-rhetorical psychology in understanding the processes of cultural re-production and sedimentation, that is the "longer-term process of construction that furnish interaction with the basic building blocks from which social objects are constructed in each separate social encounter" (Gibson, 2015, p.212). As Voelklein and Howarth (2005) underlined, the concept of interpretative - or linguistic - repertoires (cf. Potter & Wetherell, 1987; Potter & Litton, 1985) proposed as an alternative to social representations, underemphasises the inherently social origin of talk and text while overemphasises the content and the immediate context of the interaction. However, as Elcheroth, Doise and Reicher wrote (2011, p. 755) for understanding how particular representations win out we should closely examine the ways in which these "are sedimented into collective practices and institutional facts. Looking at survey responses is not enough, nor is looking at natural documents". In this context, they suggest that to avoid such an immanent view, ethnographic descriptions of collective rituals or routine practices may allow the researcher to widen "the interpretative context for 'speech acts'".

While SRs approach has been widely discussed in the previous chapter, this part of the paragraph is useful to briefly reconstruct the mutual debate, engagement and critiques that characterised the relationship of Social Representations Theory and discursive-rhetorical psychology. In this regard, I aim to provide an overview of the debate so far and to point out the potential for integrating the two approaches (see Batel & Castro, 2018; Gibson, 2015). This debate has a long history of critical engagement between the theories, mostly represented by discourse analysis' critiques on the theory of social representations from the mid of the '80s until now (see Billig 1988; Litton & Potter, 1985; Potter, 1996a; 1996b; Potter & Litton, 1985; Potter & Edwards, 1999; Potter & Wetherell, 1987).

I want to start this brief review recognising that this mutual critical engagement has clearly provided the terrain for constructive criticisms, allowing and inspiring further refinement and theoretical advancement of Social Representations Theory. In their review paper, Voelklein and Howarth (2005) summarised, examined and responded to the main theoretical controversies about Social Representations Theory as highlighted by discursive-rhetorical psychologists (see also Howarth, 2006; Jovchelovitch, 1996; Wagner et al., 1999). The criticisms mainly concerned: 1. the ambiguities and vagueness in defining 'social representations'; 2. Social determinism; 3. Cognitive reductionism; 4. And finally the lack of a critical agenda. To summarise, the most frequent criticism refers to Social Representations Theory as too vague and broad, a 'catch-all term' that is fragmented and incoherent in the definitions proposed –

this is argued mostly on the reading of various of Moscovici's first writings (cf. Potter & Wetherell, 1987; McKinlay & Potter, 1987; Litton & Potter, 1985; Billig, 1988).

The second criticism refers to an assumed social determinism of Social Representations Theory, which is accused of overemphasising 'social influence' of 'social representations' (i.e. "individual minds are conditioned by representations which are forced upon us" Mckinlay & Potter, 1987, p.475) and presume individuals as passive agents (Parker, 1987; Jahoda, 1988). Billig (1988; 1993) in this regard argued that the focus of SRs' theory on the 'shared', 'consensual' or 'common' features of cognition present the risk of neglecting the dialogic and conflicting feature of the human mind (e.g. the variability of accounts and the ideological dilemmas at play). These criticisms, however, "reduce Social Representations Theory to one of its elements [...] the influence of society on the individual [or] the impact of culture on cognition" (Voelklein & Howarth, 2005, p. 439). On the contrary, further criticism refers exactly to the opposite. SRs theory is accused of cognitive reductionism in the way representations are conceived as a cognitive phenomenon – e.g. the focus on anchoring and objectification processes (Parker, 1987; Billig, 1993; Potter & Billig, 1992).

As Aiello and Bonaiuto (2003) argued, discursive or rhetorical psychology is anti-cognitivist but not anticognitive, and in fact does not negate cognitive activities but redefine and treat them as discursive practices.

In this regard, discursive psychologists have often treated social representations as cognitive schemas, structures and grids for understanding the reality, so that even acknowledged the presence of 'social representations' these should influence action but not being themselves part of the action (Potter, 1996b; Potter & Wetherell, 1987; Potter & Edwards, 1999). Finally, Social Representations Theory is accused of being not critical and of failing mostly on addressing issues of power and ideology (Jahoda, 1988). The critique draws on the ideology conceptualization of Moscovici (1984), which is related to the distinction between the reified and consensual universes and sees ideology as a mediator between them. These assumptions and the same definitions of scientific knowledge and common sense as reified and consensual universes have been criticised arguing that in this way scientific knowledge risks to remain untroubled and considered as an 'asocial knowledge' (Mckinlay & Potter, 1987; Potter & Billig, 1992) preventing in this way the critical self-reflexivity of researchers on their own representations in the research process (Potter & Edwards, 1992). However, as indicated in chapter 2, the distinction between them has been widely debated also from SRs' scholars, arguing that reification and consensualisation have a role in both science and common sense. As a whole, these criticisms have been widely addressed by social representations scholars over

time, and while some of them are recognised as coming from a one-sided reading and/or misunderstanding of Social Representations Theory in its broader essence (Castro, 2003), others were recognised as serious and constructive issues, which required to extend and refine the theoretical framework (see Howarth, 2006). Indeed, as many scholars diagnosed (Batel & Castro, 2018; Howarth, 2006; Voelklein & Howarth, 2005), some of the criticisms moved to SRs theory may stem from an incomplete/partial reading and understanding of the theory in the first phases of its emergence and development. Indeed, SRs theory – as it was for discursive psychology - has developed and differentiated in various research traditions, such as among them the structural approach of Abric, which stands at one extreme of the theory and that is more concerned with the cognitive structure and content of ‘social representations’, or the dialogical approach of Markova, which stands on the other extreme and is concerned with the self-other-object triadic relation in the construction of social knowledge. These different strands, while sharing the same theoretical perspective, clearly assume different accounts and weights of the ‘individual’ (cognition) and the ‘social’ (knowledge and communication) in their focus of analysis. The mistake of discursive psychology is to isolate the different parts of the theory and research practices, presupposing them as incoherent, and so characterising action and cognition as oppositional aspects. Assuming anchoring and objectification as pure cognitive processes represents a misunderstanding of their own conceptualization (e.g. the individual agency and creativity in accommodating new knowledge to pre-existent one) which actually assumes culture and cognition as existing in a symbiotic relationship and where cognition is inherently and inevitably socially and culturally constructed (Voelklein & Howarth, 2005). Also, social representations do not simply reflect or inform individuals, they become a reality that is socially negotiated and inter-subjectively agreed, going to take shape in actions of self and others, being developed through and contained within them (Moscovici, 1988). This reading stresses that representations are in the same extent embedded in and developed through action, resulting in enacted knowledge that influence what forms of actions (or discourses) are thought as coherent within the situation and consequently performed (Elcheroth et al., 2011).

The accusations of social and cognitive determinism fall if we assume social representations as not static cognitive schemes or phenomena influencing action but not being part of them (Jodelet, 1984; Howarth, 2006; Philogène & Deaux, 2001). Rather, they should be “seen as alive and dynamic - existing only in the relational encounter, in the between space we create in dialogue and negotiation with other” (Howarth, 2006, p.68). Social representations exist as much in the individual mind as much in the social and material world, in talk, action, contexts,

institutions, material artefacts and so on. However, some of Billig's writings (1988; 1993; 2008; 2011) have been interpreted as a constructive warning to social representations scholars to not be trapped in individual-based and cognitive explanations, neglecting the potential of discourse and communication for a new tradition in social psychology. He emphasised how SRT main focus on the noun *representation* (e.g. anchoring and objectification, content and structure of representations) coincided with a relative neglect of the more active stance in the verbal form of *representing* (e.g. their function and consequences), namely why particular representations are constructed and used in a given context to perform a particular action. As Voelklein and Howarth (2005) recognised SRT should seriously consider these criticisms stressing that "conflict and argumentation were still under-theorised within Social Representations Theory" so that it needs to "examine what social representations do in social and political relations (Voelklein and Howarth, 2005; p.441/448). In this regard, we can say that social representations can be mobilised within the context, embedded in discourse they can be 'used' to defend, sustain, contest or resist particular versions/constructions of reality (Gibson, 2015; Howarth, 2006). Focusing on active *representing* (Billig, 2008; Gibson, 2015) or also *re-presenting* (i.e. the process by which representations are constantly re-interpreted, re-signified and re-presented - see Howarth, 2006) as discursive practices, SRs theory has the potential to construct a more critical version of the theory and engage with power issues and relations, examining how and why representations are constructed and used by and for individuals and groups (Voelkelin & Howarth, 2005). According to some scholars (Batel & Castro, 2018; Gibson, 2015) is in this context that some form of integration and mutual contamination between SRT and discursive-rhetorical psychology starts to be not only advocated and supposed as possible but also widely practised. At least this is recognised between strands of SRs adopting a critical, dialogical and constructionist perspective, concerned with communication and self-other relation in examining meaning-making process at a cultural and social level, and those forms of discursive-rhetorical psychology adopting a critical historical and ideological level of analysis. Indeed, adopting a functional or action-oriented stance, focusing only on what functions discourse accomplishes in the given argumentative context is not enough, and also discursive psychology is argued risking to let individualism "enter in through the back door" (Jovchelovitch, 1995, p. 83). As Gibson wrote (2015, p.222) "[i]f social representations theorists are confronted with problems concerning the appropriate incorporation of the discursive realm into their analytic schemas, then discursive-rhetorical psychologists are faced with the problem of explaining the provenance of cultural-discursive resources used by speakers/writers in any concrete settings".

In this vein, the recent paper of Batel and Castro (2018) clearly addresses this issue proposing analytical strategies and tools for integrating SRT and discursive-rhetorical psychology. The authors suggest the joint adoption of thematic analysis and a form of ‘pragmatic discourse analysis’ inspired by Billig (2009). With ‘pragmatic discourse analysis’ the authors (Batel & Castro, 2018, p.13) refer to an umbrella term for pragmatic approaches to discourse and communication examining what language users are doing in particular contexts -the intended and actual effects of various discourses – and in self-other relations by presenting and re-presenting social objects according to interests, identity and political projects. Moreover, pragmatic discourse analysis pays adequate consideration of power and asymmetries in these relations and in the representations that are used, questioning how these are constrained by institutional, cultural and ideological conditions. This implies for SR's scholars to approach discourse and communication not only focusing on the shared set of meanings defining a given representations and segment of society, but also considering: what functions are serving discourses and representations constructed and conveyed in a given context, what interests are being pursued, how re-presenting is used to resist or re-produce existing relations of power and related representations. Moreover, according to discursive psychologists (Potter, 2018; see also Potter & Hepburn, 2005; Potter & Shaw, 2017) this requires social representations scholars a methodological shift from familiar techniques of data elicitation (focus groups, interviews, questionnaires), and building the research considering interactional settings and using naturalistic materials to understand how representations are built and what these do in real life. On the other side, discursive-rhetorical psychology could benefit from insights of SRT on how meaning-making is socially and culturally constructed, maintained, or transformed in the context of self-other relation (Batel & Castro, 2018).

4.3.2. Discourse analysis and environmental management and politics

Environmental management, and particularly the management of natural resources allocated for human activities has always been at the centre of interests, conflicts and negotiations between individuals and social groups (Aiello & Bonaiuto, 2003). In the last decades, the ecological cause has gained increasing attention both in the public and political sphere. As a consequence of its institutionalization through international treaties, laws and policies (e.g. promoting sustainability and public participation in the environmental matter), the cognitive

and discursive dynamics - or how people think and talk about the environment and nature - has received a great interest from the social sciences research community.

Within the psychological discipline, the topic has been mostly addressed within environmental psychology and to a second degree from the community and political psychology. It can be argued that both a 'spatial' and a 'discursive turn' have recently influenced the development of this psychological field of study. In spatial terms, psychological discipline have explored people-place relationship (e.g. Bonaiuto, Breakwell & Cano, 1996), underlining how meanings people assign to material environments are psychologically constructed through interaction, communication and representations (Bonaiuto & Bonnes, 2000; Castro, 2006; Devine-Wright, 2009; Di Masso & Dixon, 2015), which are linked with collective processes of belonging, identification, and memory (Bonaiuto, Breakwell & Cano, 1996; Dixon & Durrheim, 2000). On the other hand, the study of environmental discourse, in which human-environment relationship is conceived as a part of a wider system of opinions, values, beliefs and practices (Hajer, 1995; Harré et al., 1999), has prompted a further epistemological shift in environmental psychology (see Dixon & Durrheim, 2000; Bonnes & Bonaiuto, 2002).

Dixon, Reicher and Poster (1997) underlined that the spatial or physical features of a place can be incorporated by discursive constructions and framing, so that people-environment relationship and psychosocial correlates (e.g. place identification, place attachment, place disruption) can be conceptualised as rhetorical actions (see also Dixon & Durrheim, 2000).

As Aiello and Bonaiuto (2003) wrote, the research on the environmental discourse focused on two main research areas: the study of the communicative strategies and practices with which representations of the environment are constructed and framed (e.g. in mass-media, political sphere), and the study of the reactions of various actors to diverse discursive environmental constructions and frames (e.g. different conceptualizations of nature or specific places such as the countryside, or of environmental sciences and risks).

This kind of epistemological orientation in environmental psychology advocated a shift from individualistic cognition (i.e. perception, attitude, beliefs, concern, feelings) towards a more socio-cultural and discursive approach in the study of people-environment or people-place relationships (Castro, 2006; Di Masso, Dixon & Durrheim, 2014).

In this vein, it has often been advocated for social psychology a deeper engagement with the political, cultural, institutional and communicative dimensions of environmental discourse and representations (see Castro, 2015). In the field of environmental politics, which represents a central concern of this work, discourse analysis has provided a contribution in four different ways (for a review see Hajer and Versteeg, 2005).

The first contribution of discourse analysis lies in examining the discourse of nature recognised as a contested and essentially negotiated notion. Discourses on nature and natural resources may fall in the three R's of resources, recreation and risk (Luke, 1999), and the major contribution to environmental politics of this discourse analysis reveals how these discourses emerge, develop and start to institutionalise (see also Castro, 2012).

The second contribution refers to the study of environmentalist discourse, or also eco/green-speak and nature as rhetoric (see Harrè et al., 1999; Myerson & Rydin, 1996), that is the analysis of the language of environmentalism, consisting of various and quite often divergent positions, strands and views, but that are based upon a conceptualization of a rightness about the way human life and society should fit with nature (Harrè et al., 1999). Studies have stressed how environmental policy-making can be dominated by particular discourses framing the policy problems and solutions and how particular discourses and themes can shift the wider public discourse. In this regard, Hajer & Versteeg (2005) underlined how concepts such as 'precautionary principle' are not and cannot simply be imposed top-down but are continuously contested and negotiated in a struggle about their meaning interpretation and implementation in context.

The third strand refers to studies analysing discourse as cultural politics, or also what conception, judgement and dispute provide the cultural basis for debate. This is the case of concepts such as sustainable development, which tries to conciliate economic growth with environmental sustainability (Dryzek, 1997; see also Biddau, Armenti & Cottone, 2016; Castro, 2012; 2015). Indeed, the entire idea of sustainable development may be considered a rhetorical device concealing a strategy for sustaining economic development rather than address the cause of environmental challenges (Fischer & Hajer, 1999). In this way discourse analysis can help in revealing how society and environmental politics are shaped by and through discursive interaction, revealing how some discourses or topics first emerge and how meanings, which are never totally fixed, evolve through processes of contestation and negotiation. Investigating discourse should allow research to enlighten the plurality of actors that try to shape the definition of the problem and possible solutions, positioning themselves and opponents through discourse.

The fourth contribution of discourse analysis to environmental politics lies in adopting the Foucault perspective on governmentality, attempting to trace the discursive power struggles at the basis of environmental politics, that is the revision of rules, enactment of laws or creation of an institution by means of the creation, refinement or discarding of meanings (Hajer & Versteeg, 2005).

In this context, the approach developed by Hajer (1995), greatly influenced the design of this research. Hajer attempted to integrate post-structuralist and discursive psychology approaches in the study of environmental politics, relying on the work of Foucault (1968; 1971; 1976), Giddens (1979) and of social psychologists like Billig (1989; Billig et al., 1988) and Harrè (1993; Davies & Harrè, 1990).

In particular, he relied on the rhetorical approach developed by Billig and the positioning theory developed by Harrè. The immanentist view of language and discourse as constructed through a sequence of speech situations and subject positionings (Davies & Harrè, 1990), and the view about rules and conventions constantly reproduced in actual discursive practices, influenced the theoretical and methodological development of Hajer's Argumentative Discourse Analysis (ADA), persuading him on the possibility of studying the power structures of society through discourse.

ADA aims to understand how and why a particular discourse or understanding about environmental problems in a given context become at a given point dominant and legitimated, while others are discredited (Hajer, 1995).

Focusing on the political side of environmental discourse, Hajer argued that ecological crisis and the related environmental conflicts should be approached as struggling discursive constructions and representations. He took a constructivist approach to policy-making, which is conceived as an interpretative activity in which different and often contradictory claims are at stake in 'defining' policy problems and solutions. Environmental politics is seen as "an argumentative struggle in which actors not only try to make others see the problem according to their views but also seek to position other actors in a specific way" (Hajer, 1995; p.53). This implies that the definition of a problem and the identification of related solutions cannot be taken for granted. Environmental politics is not considered as the product of a linear, progressive and value-free process, but rather a struggle between different political coalitions – composed of various actors such as politicians, activists, scientists, entrepreneurs, or organizations representing such actors – developing and sustaining a particular discourse/representation, that is way of talking and thinking about environmental politics (Hajer, 1995; p.12-13; see also Hajer, 2006). In these terms, a discourse analytical framework is relevant to illuminate the socio-political and cognitive basis through which problems and solutions are intersubjectively constructed, and common understandings are produced and can transform (Dryzek, 2005; Späth, 2012).

To put it simply, environmental politics may be seen as a ‘conflict of interpretation’, and illuminating discourses allows for better understand environmental controversies, meaning that analysis can reveal the different argumentative rationalities people bring and use in discussion. The ADA developed by Hajer (1995) is built around three main key concepts: *discourses, story-lines and discourse coalitions*. According to Hajer (1995) *discourse* is: “an ensemble of ideas, concepts and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices” (Hajer, 1995, p.44). The concept of *story-lines* is a key element of ADA. Story-lines may be conceived as a generative sort of narratives allowing actors to draw upon various discursive categories to give meaning to some phenomena. They are condensed statements that combine together various discourses, in a more or less coherent way, and that are used and (re)produced by actors as a shorthand in talk and text. Story-lines provide actors with the symbolic references for a ‘common understanding’ and play a crucial role in the positioning of actors and the creation of political coalitions marked by a discursive affinity – i.e. arguments may differ at their origins but still have a similar manner of conceptualising the world or the reference object.

In this regard, *discourse coalitions* refer to groups of actors who in a given context share the use of a particular set of story-lines and form coalitions based upon them. Nevertheless, Hajer is aware that people can utter contradictory statements, and even if the existence of a ‘common understanding’ seems at play this cannot be taken for granted. Instead, he recognises that policy-making and environmental discourse should be approached as inherently contradictory and ambivalent. Discourse affinity provides individual and groups the appearance of mutual understanding and interests that are intersubjectively constructed, becoming functional in the creation of coalitions that using particular story-lines try to impose their view on others. This argumentative force is determined by three factors: credibility, acceptability and trust. The task for the analysts is to expose how story-lines and discursive affinities play a role in coalitions’ formation, discursive hegemony and policy-making. According to Hajer, such argumentative approach strongly requires adopting an inter-discursive - or intertextual – perspective recognising that the “understanding of the phenomena necessarily requires the combination of different knowledge claims that are the product of distinct discourses” (Hajer, 1995, p.61).

Linking discourses to power and dominance, Hajer (1995) proposed the analytical concepts of *discourse structuration and discourse institutionalization* as key elements of his argumentative discourse analysis. *Discourse structuration* occurs when a particular discourse starts to dominate the manner a given social unit conceives the world, namely a particular discourse acquires a disciplinary force positioning and expecting other actors to align and ground to that

discourse when expressing their view and positioning. This assumes that actors are forced to accept the rhetorical power of a given discourse and that they are expected to position themselves within that specific discursive frame. On the other hand, when a discourse sediments in particular institutional arrangements and organizational practices we have the *discourse institutionalization*. When both the criteria are satisfied we can say that a particular discourse has become dominant (Hajer, 2006). In this way, ADA should reveal how discursive orders are maintained or transformed through argumentation and social influence in policy-making. Furthermore, Hajer (2006, p. 73-74) proposed methodological guidelines for Argumentative Discourse Analysis composed of a ten-steps checklist. The ten steps, partially followed in the design of the research are:

- I. Desk Research: a survey of public documents and positions in the field (e.g. policy documents, newspaper articles). Desk research is used to make the first chronology of events and get preliminary ideas about salient events, actors and positions in the field;
- II. Helicopter interviews: interviews with few key informants chosen because having an overview of the field from different positions (e.g. a journalist well informed on environmental issues, a local historian, an expert policy-makers; a representative of an environmental NGO);
- III. Document analysis: it is used for structuring initial concepts, ideas and categorizations, looking for the employment of story-lines, metaphors etc., and get a preliminary understanding of discursive dynamics and structures as well as events and sites of discussion;
- IV. Interviews with key players: these interviews are conducted with actors that are central in the political process. Interviews may be used to get more information and reconstruct local dynamics, contingencies and events, as well as the meanings that interviewees assign to them. In this way, interviews should become a form of ‘focused interview’ (Flick, 1998) about the different interpretations at stake and their effects in the political processes;
- V. Sites of argumentation: a data searching not only to reconstruct and examine the arguments but also paying attention to the argumentative exchange (e.g. political debates, presentations of evidence/observations and counter-observations, minutes of inquiry, talk shows);
- VI. Analysis of positioning effects: actors may be able to force others to take a particular role or position. When actors are forced to that position they may try to refuse some assumption on their discourse and position, for example negating that the meaning of their discourse is the same as understood and positioned by the listener (e.g. “no, I did not meant that” or “actually, I don’t think so”, “I agree with..but...”);

VII. Identification of key incidents: at this point should be identified key facts essential to understanding the discursive dynamics within the context under examination and their political effects;

VIII. Analysis of practices in particular cases of argumentation: at this point, rather than assuming coherence of actors the analysis should go back to the data and examine if the meaning of what was said can be related to the practices in which it was said (e.g. an effect of the argumentative context);

IX. Interpretation: analyst should have in this phase some form of discursive structure governing the particular environmental domain in that period of time. Ideally, this structure is interpreted explaining the course of events.

X. Second visit to key actors: since discourses are interpreted by the researcher, in this phase participants may be confronted with the findings. In a similar way of member validation, in confronting with the research findings the respondents should at least recognise some of the hidden structures of language and discursive patterns.

The approach proposed by Hajer clearly developed in line with the various assumptions and the concepts developed within discursive psychology (e.g. the view of discourse as action-oriented, situated, constructed and constructive, and some concepts such as subject positioning, variability, categorization and particularization among others). Also, the argumentative approach of Hajer presents some point of contact with SRT, offering a stance from which engage with socio-political contexts. First, the conceptualization of story-lines as a form of common (linguistic) interpretative narratives and understanding is quite close to interpretative repertoires and social representations¹⁹ basing upon individuals and groups come together because of an (assumed) shared worldview or project.

Second, discourse coalitions may be approached as the social milieus²⁰ proposed by SRT (see Bauer & Gaskell, 1999; 2008), as societal groups that in light of common conceptualizations and interests about a given object (i.e. the project), try to promote and sustain their particular view.

¹⁹ SRs as a set of images, metaphors, narratives that are socially elaborated and collectively shared allowing individuals/group members to make sense, communicate and positioning about the given object.

²⁰ Social Milieus: group contexts in which localized systems of meaning are produced and used by members to make sense of their social world and their position within the world (i.e. the symbolic cultivation). Groups will draw upon familiar images and metaphors based on their historical, cultural and educational status.

Third, discourse structuration and institutionalization, or how a given conceptualization becomes widely shared, dominant, and powerful, have a parallel in SRT's concepts of hegemonic, emancipated and polemic representations. In this respect, however, SRT provides further elements and insights about the role of communication and discourse within the battle of ideas between the Ego and the Alter. Indeed, SRT presupposes that representations and discourse conveyed by the diverse parts in a dispute are not equally valid. Some representations may be hegemonic in a culture (Moscovici, 1988), reified, objectified as facts and deeply sedimented - for example, they can be embedded in legislation (Elcheroth et al., 2011; Castro, 2012), in education programmes (Howarth, 2006) and wider institutions – or on the contrary they can be polemic, constituting the view endorsed by specific (and often minority) groups (Wagner, 1995).

In this context, arguments based on valued and legitimated representations (i.e. hegemonic) are used by actors to legitimate their claims and so doing win the battle for legitimacy (Mouro & Castro, 2012). Furthermore, SRT assumes that individuals elaborate and convey their discourse and representation in light of meta-representations, that is the awareness of what the other knows, thinks, values and intends to do (Elcheroth et al., 2011). Thus, arguments used within conflicts by a group may largely 'reflect' the arguments used by the 'other' group(s) involved in the dispute. Indeed, as Potter argued (1996 p. 107), arguments used by actors within disputes may have two rhetorical orientations: an offensive orientation and defensive orientation. Offensive rhetoric is used to undermine the counterpart's arguments, as "it may be constructed precisely to rework, damage or reframe an alternative description". On the other hand, defensive rhetoric is concerned in resisting arguments used by others for discounting or undermining one's own position. To understand the discourse structuration of Hajer, or the way representations become emancipated or hegemonic, this emphasises the "value of taking a double analytic focus [...] looking both at the procedures through which factual versions are built up, and the ones by which they are undermined [...] things that are closely related" (Potter, 1996a, p.107).

4.4. An overview of the research aims, process and materials

The general purpose of this research was to analyse, with a multi-level and longitudinal approach, the socio-political dimension of energy technologies and policies in an Italian Regional case study – the Marche Region – namely examining the social acceptability and

public engagement about policy formulation and technological trajectories for energy system change. Many authors emphasize that social acceptance, conflicts and participation are complex and dynamic social processes, so that rather than static methods (e.g. survey) their dynamic nature stresses the point for more longitudinal data, as for instance involving narrative and longitudinal discourse analysis (Cuppen, 2018; Wolsink, 2018a; Wustenhagen et al., 2007).

The general research questions guiding the research were:

- How the views, interests and concerns of different actors are considered and managed in energy decisions and what effects they have in the governance of energy system's change? What factors may explain opposition or support for energy policies and technologies, as well as conflict, cooperation and intergroup dynamics?
- How political authorities engage different actors in the planning and decision-making process (the question embodies to deepen also who is considered a stakeholder or also a competent and legitimated political actor to involve)? what is the influence of stakeholders in the planning of energy strategies? Are the involvement process and the outcomes of deliberation between actors recognised by participants as transparent and effective, responding to democratic, justice and sustainability principles (this question recalls the attention to issues pertaining democratic legitimacy and environmental justice concerns)?
- How the coordination and integration between different levels of governance (i.e. national, regional, municipal) and nested policy sectors (i.e. energy, agriculture, land use, landscape and so on) are taken into account and managed? how the planning procedures within governmental institutions are organised to manage horizontal and vertical inputs and pressures and what kind of approach is privileged and guide them (e.g. top-down, business as usual, technocratic, exclusive or inclusive, community-oriented, dialogical and participative)?

To address the abovementioned general aims, the research is composed by three qualitative studies, triangulating data, methods and theoretical frameworks in a research design that attempts to reach a thick description and deep understanding of 'social acceptability' and 'public participation' about energy system change in the regional context taken as case of study (Yin, 2011). The research has been realized by adopting a discourse analytical approach to capture, de-construct and interpret the vast argumentative texture through which people construct their reality and that compose (in this case the regional) society (Laclau & Mouffe, 1993). The research adopts a societal psychology perspective and tries in this regard to integrate social representations, identity, justice theories and discourse analysis in examining public engagement and social acceptability of energy system change in the regional context. The research adopts a perspective focusing on the discursive social objects and facts people

construct in talk and text and their use in achieving certain aims, i.e. framing a problem, prioritising a perspective, attributing responsibility (Potter & Edwards, 1999). To understand the meaning-making process involved, the research examines not only the mere content of the utterance per se, but also its inter-textuality, the interaction with elements of other texts from which it emerges and interacts with (Fairclough, 1992). In this way the research connects meanings in their context of use, considering the positions criticised or against which given versions of reality are created, and acknowledging the counter-positions in the analysis (Billig, 1987). Social representing (Billig, 2008; Gibson, 2015) and subject positioning (Wetherell, 1998) are here conceived as discursive practices to analyse how re-presentations and identities (Howarth, 2006) are constructed by and for individuals/groups and what these do in social and political relations (Volkelein & Howarth, 2005). The construction, analysis, and triangulation of different textual data has been a major objective of this research, to investigate and better understand public engagement (communicative) processes and activities in their making in the real world, and the acceptability of energy system change between diverse publics as a process that is sensitive to experienced (power and institutional) relations and pre-existent knowledge, as well as historically, culturally, institutionally and territorially grounded. In these terms, a discourse analytical framework is used to illuminate the social and cognitive basis of the way energy problems and solutions are constructed, and common understandings are produced and transformed (Späth, 2012; Dryzek, 2005). By looking at the way these discourses and underlying meanings operate in the public and political sphere, stimulating conflicts and cooperation/coalition between actors, the research looks at the way discourse structuration is enacted in effective planning and policy-making (Hajer, 1995), revealing the way political influence and change is achieved, with emancipated representations becoming institutionalised, and how institutional change in turn is translated and re-presented by competent subjects adapting or resisting effective change in institutional practice and norms (Castro, 2012).

In so doing, the research has explored and navigated different textual materials providing empirical evidence about the vast argumentative texture (regional society inter-textuality) of discourses (meanings) and positionings (identities) at stake in the regional energy transition.

-The first study refers to a longitudinal analysis of public, political and media debate on renewable energy development taking place across the years 2011 and 2017 in the Marche region.

The study aimed to investigate the historicity of RETs in the regional context, examining the introduction and territorialisation of renewable energy technologies and the related public responses and discourses accompanying energy system change. To do this, the study adopts

naturalistic data from ‘interactional settings’ and natural documents as primary data source, such as articles of provincial online newspapers, regional TV news’ and talk shows, as well as moments of public and political debate on the topic of renewable energies and associated infrastructures (i.e. conferences, public meetings and assemblies, forums, public protests, political consultations). The rationale for the choice of this materials lies in providing discursive evidence concerning the interaction between public debate and institutions during the phase of implementation of energy policies and territorialisation of RETs, considering social conflict as the arena where new meanings, values, interests and understanding can emerge. In this regard, the tensions between top-down planned, and bottom-up emergent change ambitions and projects are enlightened in conflict reconstruction and enactment (Castro et al., 2018). Conflict is thus recognized as a form of self-organized participation, site of knowledge production, coinciding with the identification of diverse normative appraisals and assessment of new technologies and policies (Cuppen, 2018).

Thus, the study aims to enlighten the often-overlooked link between and role of institutional practices for public engagement in environmental assessment and decision-making – such as EIA or SEA – and participation and controversies taking place outside institutionalized arenas (Castro, 2015; Cuppen, 2018; Larsen et al., 2018).

All the materials have been verbatim transcribed and analysed by means of thematic discourse analysis (Taylor & Ussher, 2001) to reveal the kind of arguments and identities strategically constructed and used by different actors in the regional public sphere to oppose or promote RETs development and related policies. The study aimed to answer to the following research questions:

1. How laws, policies and institutional practices (e.g. on land use, public involvement) governing RETs development are perceived and represented by different publics engaged in the battle of ideas?
2. How RETs are perceived and represented in terms of costs-benefits’ distribution (e.g. impacts, risks, benefits, and advantages), or fit with the place (e.g. with place structural conditions, values, symbolic meanings)? What arguments about the particular project/technology and place-related factors are at the foundations of opposition to RETs?
3. How actors promoting or opposing RETs are perceived and represented? What arguments are strategically used to legitimise or delegitimise the perspective of self and others? What effects they have and how conflictual and consensual representations shape subject positioning in alliances?

In this way the analysis has focused on the three main dimensions of recognition (the relational/social side), procedural fairness (the legal-political/institutional) and distributional equity (the socio-technical configuration) involved in the regional energy transition. These dimensions are taken as a coding framework to shed light on the techno-scientific, territorial, legal-political, and socio-cultural aspects of energy system change by adopting a relational and spatial perspective.

With the social side or recognition of actors/agents, their actions and their motives, I refer to the discursive representation of self and others, the we-them subject positioning dynamics, and the use of offensive and defensive rhetoric to legitimise or delegitimise perspectives. The procedural aspects concerned how law, policies, plans, programmes and more in general the institutional practices were re-presented referring to procedures involved in RETs deployment. The socio-technical side involves distributional fairness aspects embedded in factors related to the technology/project itself, and related perceived impacts, place-related concerns, symbolic meanings and material constraints, as well as the perceived cost-benefit ratio.

To fully investigate the socio-political dimension of energy system change and understand how discourses and underlying meanings operate, as well as how interactions between actors developed over time, I relied on the triangulation of two studies: a document analysis of public consultations' materials for the regional energy plan (Bowen, 2009) and an interview study with key informants (Flick, Foster & Caillaud, 2015; Flick, 2009). Public engagement and social acceptability of RETs and related policies by different publics are approached as expression and product of communicative and interactive processes that are grounded with (unequal) power and institutional relations and practices, as well as historically, culturally and territorially influenced by pre-existent knowledge and experience. Public engagement and social acceptance are conceived as social facts, and approached in their processual/temporal dimension, that is, as social objects continuously produced in a constant struggle over meanings and positionings that actors strategically construct and use to get influence and recognition in the public and political sphere, and so doing fully participate in the definition of the regional energy project. By adopting a social psychological intergroup perspective on social acceptance and public participation (communication, cooperation and conflict in intergroup behaviours), the research has mainly focused on psychosocial factors and processes such as trust, shared and/or contested meanings and interests, common identities and belongings, representation and positioning of self and other, recognition and misrecognition of others' knowledge and position, perceived procedural and distribution injustices, as well as expectations of results, perception of collective efficacy, or socio-political control, to put it simply: agency. Being informed by psycho-social

literature on these issues, the research has looked at: a) individual in relations - rather than isolated subjects abstracted from their context - keeping into account the effects of meta-knowledge in interpersonal and intergroup relations (Elcheroth, Doise & Reicher, 2011; Raudsepp, 2005); (b) The ways in which technological, legal, political and public sphere innovations are received and re-presented allowing diverse actors to adapt or resist change (Batel & Devine-Wright, 2015; Castro, 2012); (c) the representation of and personal involvement with places by different actors (Walker et al., 2011; Devine-Wright, 2009); (d) the interplay between representations, identities and communication (Batel & Castro, 2009; Jovchelovitch, 2007; Howarth, 2006); (e) the ways in which knowledge of other is perceived and treated in knowledge encounters (Jovchelovitch & Priego-Hernandez, 2015).

Connecting individual level of analysis with the analysis of the relational and societal dynamics that shape and give meaningful essence to political behaviour and phenomena, the research has looked at:

1. The spatial, place and territorial aspects at play in regional energy transition (Adil & Ko, 2014; Bagliani et al., 2010; Bridge et al., 2013; Calvert, 2016; Coenen, Bennewroth, & Truffer, 2012; Devine-Wright, 2009);
2. The interaction between (innovations in) the legal-political, public, and techno-scientific spheres (Batel & Devine-Wright, 2015; Castro, 2012; Seyfang & Smith, 2007);
3. The temporal dimension, or historical account of events, and of the social and relational dynamics at play in interactions and expectations among actors over time (Batel, 2018; Walker et al., 2011);
4. The coordination and interaction between multiple scales of action and governance (Bulkeley & Moser, 2007; Goldthau, 2014; Sarrica et al., 2018; Wilbanks, 2007) and the potential tensions between top-down and bottom-up change ambitions and projects (Howarth et al., 2013; Sarrica et al., 2018);
5. The role of multiple actors and coalitions, operating at different scales, in driving or obstructing system change by influencing and shaping energy policies' formulation, technological configurations and trajectories (Devine-Wright et al., 2017; Geels, 2014; Smith et al., 2010; Späth & Rohracher, 2010; Wolsink, 2007);
6. All the three dimensions of acceptance – socio-political, public/community and market acceptance - corresponding to the broader acceptance of RETs' deployment and diffusion, that is about socio-technical and politically-related changes, such as in policies, plans, programmes, or regulatory and institutional arrangements, e.g. in land use, siting,

participation, and cost-benefits distribution (Devine-Wright et al., 2017; Szarka, 2007; Wolsink, 2018a)

7. Energy system change as a whole, rather than the single part, namely the implementation and siting of single RETs (Jenkins, 2016; Parkhill et al., 2013; Pidgeon et al., 2014). This means look at the: choice on the mix and targets of RES and RETs and the (regulatory and institutional) conditions for their deployment and territorialisation, the associated energy infrastructure for transmission and storage, the multiple externalities of the energy life-cycle (from supply to waste disposal) and technologies' life-time (from siting and construction to place restoration) of RETs.

With reference to public engagement, the study shed light on the psychosocial factors at stake in different participatory behaviours and practices, namely bottom-up participation, taking shape in the diverse forms of community participation, collective action and protest, and top-down institutionalised participation in the context of energy projects, policy-making and planning processes. Institutionalised participation is treated and examined in light of its own paradoxical nature. Thus, the research has analysed the ways in which different actors (decision-makers, technicians, scientists, entrepreneurs, civil society) conceptualise participation, mutually conceive the other, and what expectations about that guide their behaviours (Bauer, 2014). In this regard, institutionalised practices of public engagement are examined in their real world making in the region across time, capturing how institutional practices and change are receipted by different key actors (Castro, 2015). Public participation in environmental assessment, planning and decision-making is analysed according to the three criteria of quality, legitimacy and capacity (Dietz & Stern, 2008; Fiorino, 1990).

By triangulating public consultation documents and narrative episodic interviews with key informants, the study provides an in-depth understanding and deconstruction of the regional transition pathway, the diverse components implicated in public engagement and social acceptability about energy system change, as well as shared and contested meanings struggling in the definition of the regional energy project. In particular:

-The second study refers to a document analysis (see Bowen, 2009; Flick, 2009). Document analysis was used at first in the research project to conduct a background analysis and reconstruction of the social context, identifying and mapping actors, networks, projects, salient events and the sites of discursive construction. Document analysis was used to identify and analyse the multiplicity of discourses and representations that characterise the different positionings within the field.

In chapter 6 is presented a thematic analysis of public documents that pertain the regional energy planning process. Indeed, within the natural documents collected (i.e. documents not produced by the researcher), a very rich set of data was that regarding the regional energy and environmental planning process (PEAR 2020 - Piano Energetico e Ambientale Regionale 2020).

In the elaboration of the regional energy and environmental plan were organised two moments of public participation: a listening campaign, preliminary to the elaboration of the plan, and the public consultations required by the Strategic Environmental Assessment law. The corpus of data analysed consists of 277 pages containing more than 300 observations coming from 59 actors at the different stages of the planning process, counterarguments to observations and technical and non-technical reports (most of the observations in the listening campaign and the consultations came from collective actors (N=57) while few come from individual citizens/professionals (N=2)). Document analysis allowed to identify relevant actors and analyse the discursive construction of a wide range of positions (i.e. environmental NGOs, professional orders, citizens' committees, firms, political parties and local authorities, representative bodies for industry, agriculture, small and medium enterprises (SME), trade unions, environmental and health authorities participating at the consultations), making a first chronology and come up with a first reading of events across the years. Also, it provided a deeper understanding of factors for conditional acceptance of RET and related policies from different publics (i.e. the different energy technologies and the conditions for their deployment, the targets, aims and scenarios of the regional strategy, use of land and natural resources, and so on). This material also constituted the knowledge basis for participants recruitment to the interview study.

-The third study consists of a thematic and discourse analysis of episodic interviews with key informants (see Flick, 1996; 2000). Twenty-two episodic interviews have been realised with regional key informants (both local and middle-scale actors) to deepen and understand the actors' perspectives about public involvement practices, energy policies and technologies within the context. Following Hajer methodological guidelines (2006) I first realised episodic interviews with key actors having an overview of the field from different positions (i.e. two regional public officers for the energy and environment sector, a well-informed regional policy-makers and member of the regional environment commission, a representative of a well-known environmental NGO with 40 years of experience/historical memory and spokesperson of a regional alliance of environmental associations). The other interviews were realised with key informants belonging to different groups, i.e. 'environmentalists', 'economic stakeholders', 'political actors' and 'techno-scientific experts'.

I should underline that participants' sampling was guided by polyvocality and heterogeneity, that is, I involved heterogeneous participants belonging to the four abovementioned typologies of groups. For example, the environmentalist group is composed by representatives of diverse environmental NGOs or forums/networks of environmental associations, as well as representatives of citizens' committees opposing to the siting of different energy technologies (i.e. biomass, wind, solar PV), while the group of economic stakeholders is composed by referents of representative bodies and trade associations for different sectors (i.e. industry, small and medium enterprise, manufacture, building, agriculture, work, energy generation and efficiency).

The episodic interviews were realised stimulating a personal narrative from the participants' own experience and/or role in energy technologies and policies, to:

- a) stimulate a narrative on regional energy scenario comprising past key events, present and future scenario on regional energy system change;
- b) eliciting an interpersonal and intergroup perspective (for example asking with who they work, cooperate, involve, interact or not and on the consequences of these interactions), and stimulate the positioning and perspective of participants in light of the perspective and positioning of 'others', shedding light on aspects such as asymmetry, expectations, and recognition of different actors and groups (to illuminate the meta-representations or meta-knowledge, namely what they think that others know, think, value and intend to do – Raudsepp, 2005; Elcheroth et al., 2011; Andreouli et al., 2014);
- c) deepen the role of shared or conflicting discourses in stimulating coalitions, conflicts and engagement in the public and political sphere.

Indeed, the interview's protocol has been designed to be linked with particular episodes or historical moments summarised in Fig. 29 and 30, which provide also an overview of how data collection and analysis capture and reconstruct these events, their scale and effects and consequences in the region.

Year	Laws, policies and salient events	Particularities/effects	Scale
2005	Regional Energy and Environmental Strategy	-Lack of public involvement (SEA) -Strategy based on technical aspects of RES and RET	Regional
2005	1 st Conto Energia scheme (Incentives and feed-in tariffs)	-Lack of guidelines and regulation -Generous incentives for PV	National
2009	National law 13/2009	-Allocation of RES targets to Regions, able to authorize/reject investments	National/Regional
2010	National guidelines for authorization of RET (DM 2010)	-Guidelines and regulation on authorizations of RET	National
2010	Regional Guidelines	- Municipalities responsible for PV authorizations and identification of suitable areas - Region responsible for authorizations of other RET	Regional/municipal
2012	Regional Law 3/2012 Receiving National DM 2010	- Biomass cogeneration under the threshold of 1 MW excluded from the EIA and subjected to simplified authorization	Regional
2015	Regional elections	-Public participation processes activated for the Regional Energy Strategy and the Regional Law for territorial government	Regional
2016	Regional Energy and Environmental Strategy 2020	- PV: siting on roofs and industrial areas - Bioenergies: authorizations and incentives only for agricultural waste in self-consumption or from forest management (?) - Wind and hydroelectric limited to mini and micro generation	Regional

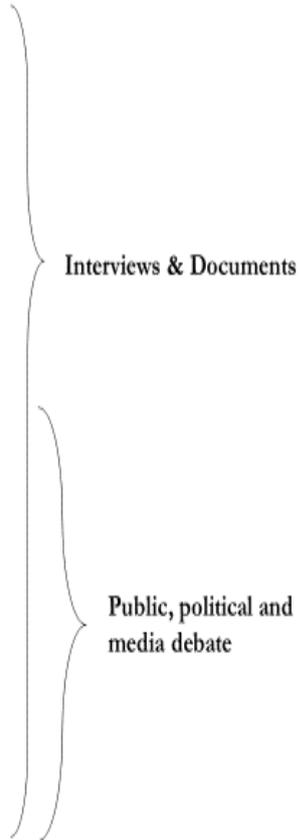


Figure 29. Reconstruction and connection of the historical timeline of events with research data sets

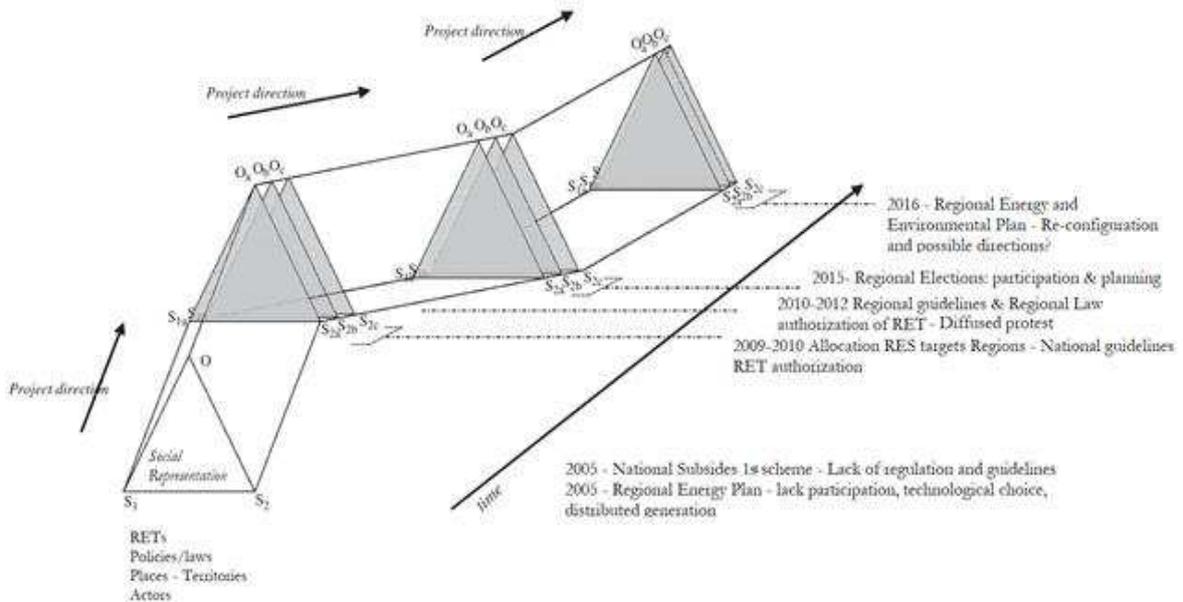


Figure 30. Schematisation of the Regional Energy Project (representations of RETs, policies, places - territories and actors) across turning points (Adapted from: Brondi et al., 2012, p. 286; see also Bauer & Gaskell, 1999)

First, the interview deepened the perspective of respondents on past energy policies, their rationale and effects (i.e. the past regional energy plan of 2005, which introduced the concept of distributed generation or decentralization of renewable energy production), or specific energy projects (i.e. the siting of energy technologies in the regional territory). Then, the interview proceeded to deepen the critical events or factors mentioned by the interviewee. After, the interview proceeded focusing on the public involvement about energy projects and policies, with particular reference to the regional energy plan and the same energy scenario as defined by the PEAR 2020 while focusing also on anticipations and expectation about the future scenario.

All these three studies are accompanied and supported also by ethnographic observations and a research diary realised in the period between March 2017 and April 2018. Starting from March 2017, thanks to a collaboration agreement activated with the Regional Development Agency of the Marche Region (SVIM - Sviluppo Marche s.r.l.) I began to participate as observer to several events on the topic of ‘energy sustainability’, e.g. meetings of the Local Energy Boards of the Region (monthly organised working roundtables involving project managers, politicians and public officers of the regional and municipality administrations) and related events (conferences, forums, workshops, capacity building sessions) organised in the context of the EMPOWERING Horizon 2020 project²¹ (Empowering local public authorities to build integrated sustainable energy policies - grant agreement N. 695944) and the Covenant of Mayors. The Empowering project, coordinated by the Regional Development Agency, involves public officers and politicians of the regional administration and of 31 municipalities adhering to the Covenant of Mayors (at the start of the project). Participant observation was used to analyse the meaning-making process involved in the elaboration of institutional cooperation and practices, and the ways in which specific representations are discursively constructed and sedimented into collective practices and institutional facts. Indeed, the participant observation allowed to broaden the interpretative context for speech acts and to understand shared and contested meanings between and within governmental organizations about energy strategies (e.g. who is recognised as a stakeholder to involve, the polarization of positions).

Finally, thanks to a PhD internship within EMPOWERING project, promoted and funded by the H2020 SHAPE Energy project (Social Sciences and Humanities for Advancing Policy in European Energy – grant agreement N. 731264²²), my positioning within the field changed from peripheral to an active member. SHAPE Energy is a two-year platform funded under the

²¹ <http://www.empowering-project.eu/en/sample-page/>

²² <https://shapeenergy.eu/>

EU's Horizon 2020 energy work programme. It represents a €2m investment to strengthen and promote Europe's energy-related Social Science and Humanities (energy-SSH) capabilities²³.

Within SHAPE ENERGY, an Early-Stage Researcher (ESR2) internship programme was designed to both offer H2020 projects new energy-SSH research expertise and enable participating ESRs to:

- meet a new work team and adapt to a new work environment;
- learn about a H2020 energy/transport project;
- carry out specific tasks in a short period of time to meet concrete needs;
- acquire new skills in a multidisciplinary work environment;
- acquire new (sometimes technical) knowledge in the field of energy.

Indeed, this internship aimed to bring social sciences and humanities into H2020 energy projects, which provides social sciences and humanities' expertise on energy issues within EU Horizon 2020 projects.

The PhD internship and particularly the shift of my own position to 'active membership' has been motivated by different rationales, and mostly instrumental. For instance, the internship gave me the opportunity to deeply engage with the context of key actors, getting greater access and legitimacy. In fact, the access to the field and participants' recruitment has been quite problematic as the regional context has been characterised by several conflicts pertaining renewable energy technologies, coinciding with a great politicization of energy issues and with several actors (mostly economic stakeholders and political actors) refusing and/or ignoring the multiple contacts and interview requests. The context is characterised by legal disputes and a widespread conflict into the region involving citizens' committees, environmental NGOs, policy-makers and firms pertaining energy policies and the authorization and siting of several RET projects (wind, biogas, on-land PV). This contextual contingency affected several times my work, as it coincided with a generalised distrust toward methods of data collection (i.e. interviews eliciting personal viewpoints and narratives of the events) and a prejudice on my own work and position (because of prejudice about the potential use and instrumentalization of their words as already occurred with journalists and media).

The internship gave me in this regard the opportunity to cultivate the relationship with the Regional Development Agency, which in some cases acted as a gatekeeper and mediator.

²³ For further information see: Ortar, N., Burguet, D., & Robison, R. (2018). *Bringing Social Sciences & Humanities into H2020 energy projects: Early-Stage Researcher internship diaries*. Cambridge: SHAPE ENERGY.

Another rationale for active involvement was determined by understanding reasons. Assuming a more active role during the last part of my field study provided the opportunity to actively discuss and provide social sciences' input within the context allowing the emergence of (accommodating or resisting) related meanings.

At last, another instrumental rationale was connected to the idea of developing a participatory-research action. In fact, the internship provided me with the opportunity to link my research to institutional practices and provide insights on the 'social side' of energy policies. Indeed, within the Empowering project, I had the opportunity to contribute to the Capacity Building programme (Working Package 4) intended to policy-makers and public officers of the Region and Municipalities. In this context I realised a training session on "Governance, communication and involvement of citizens and stakeholders in the context of the Covenant of Mayors"²⁴. This training session has been characterised by the presentation and discussion, through a storytelling of researches on sustainable energy communities (SEC) in the Italian context (see Biddau et al., 2016; Sarrica et al., 2018; Sarrica & Brondi, 2018) in which I contributed in the context of the ACCESI project ²⁵. In particular, I underlined the factors we identified as promoting or hindering the development of sustainable energy communities and creating the conditions for conflict or cooperation among local actors. My aim was raising the awareness of local authorities for planning and monitoring energy strategies and projects by considering the voices, interests and concerns of different social groups; aspiring to reach public support and cooperation (rather than 'acceptance'); developing mutual learning and capacities; highlighting barriers and opportunities of renewable energy and energy efficiency development; and enhance assessment, decision-making and implementation of energy strategies. This represented a great opportunity to make accessible and usable research findings and input from social sciences to policy-makers and experts committed to developing integrated sustainable strategies at regional and municipality levels, while also engage the research participants and 'stakeholders' in dialogue and debate on the research findings. Finally, research findings will be presented and discussed with research participants during the final event of the Capacity Building Programme.

Thus, the PhD internship has changed the expectations regarding the potential influence of my own research in the political and organizational field, as often in my opinion research outputs

²⁴ The workshop presentation (in Italian) can be found at the link:
<https://www.slideshare.net/EmpoweringProject/workshop-formativoil-patto-dei-sindacigovernancebiddau>

²⁵ FIRB 2010 - Analisi socio-Costruttivista delle Comunità per l'Energia Sostenibile Italiane
<https://web.uniroma1.it/accesi/>

remain limited to the access and use of academics and do not have a significant effect in contextual realities.

This kind of intervention in the field was motivated by the relative increasing attention by policy-makers, stakeholders and public officers about the ‘social side’ of energy policies and technologies, and particular on ‘social acceptability’ perceived as a barrier to overcome, and a relative lack of capacity to unpack the reasons behind that. On the other hand, social sciences could and should provide an answer and insight to improve dialogue and policy-making. This personal belief strongly derives from my own commitment in the field (i.e. analysis of policy discourses and participant observation). To provide an example of the reason behind my active involvement, i.e. what I perceived as needed in terms of awareness, knowledge and capacity to be built, I briefly propose and analyse an extract from the PEAR 2020 reporting the main critical issues about the implementation of the PEAR 2005, and that better provide evidence of my point.

*"A very delicate aspect of "distributed generation" model is its social acceptability. **Although this model has always been a 'landmark' [cavallo di battaglia] for environmental associations,** which have seen in it useful way to reduce the environmental impact of energy installations and necessary for the introduction of renewable energy, **when it gets close to its implementation arise unexpected obstacles, for the rejection by citizenship to host close to their homes any facility that presents itself as an "energy plant"**". The scarce social acceptability has greatly **penalised the distributed generation model** initially forecasted. In fact, since 2005, the increase in the number of energy facilities saw the multiplication of oppositions and complaints." (PEAR 2020, p. 146)²⁶*

²⁶ Here I report the extract in Italian. Moreover, this provides me with the opportunity to highlight that all the materials were analyzed in Italian language and then translated into English language after analyses. In this translation of extracts, I tried the best I could to keep the 'original meanings' of words and language use. Although this great attention, translating some parts of discourse without losing the meaning as intended by its producer may be very difficult and strange to grasp in a different language, e.g. the idiom here presented about the 'cavallo di battaglia'. On the contrary, in cases such as 'questa è la ciccia' o 'questo è il succo' the translation in 'this is the point' does not affect the original meaning and is not relevant for the analysis. For this reason, I provide in some relevant cases the words used also in Italian language within braces.

"Un aspetto decisamente delicato del modello di "generazione distribuita" è la sua accettabilità sociale. Anche se questo modello è sempre stato un cavallo di battaglia per le associazioni ambientaliste, che lo hanno visto come strumento utile per abbattere l'impatto ambientale delle installazioni energetiche e necessario alla introduzione delle energie rinnovabili, quando si arriva vicini alla sua implementazione sorgono inaspettati ostacoli per il rigetto della cittadinanza ad ospitare nelle vicinanze delle proprie abitazioni un qualsiasi impianto che si presenti come "centrale energetica". La scarsa accettabilità sociale ha penalizzato enormemente il modello di generazione distribuita inizialmente previsto. Dal 2005, infatti, all'incremento del numero degli impianti di produzione di energia si è affiancato il moltiplicarsi delle opposizioni e delle contestazioni." (PEAR 2020, p. 146)

About this extract several implications can be underlined (in this regard the parts in bond or underlined are here considered in the analysis) First, the view by planners that social acceptability and opposition concern the ‘model of distributed generation’ rather than other possible and multiple aspects of renewable energies’ development. These aspects are not recognised or at least they are not mentioned in this statement on social acceptability. Instead, social acceptability and opposition to RETs and the distributed generation paradigm are represented as coinciding to one single dimension: their proximity (*it gets close to implementation, rejection by citizenship to host close to their homes*), which greatly emphasises the NIMBY explanation and underlying assumptions (i.e. opposition is considered an obstacle penalising implementation of renewables, triggered by the proximity, and so by selfish behaviours). Also, the use of extreme case formulation (i.e. *rejection to host any facility presenting itself as an energy plant*) reflects this view of local residents opposing to any kind of development that pertains to energy without distinction. This emphasises the relative inability to recognise, unpack and understand oppositions and their underlying motives beyond the NIMBY explanation (i.e. an irrational and emotive response). Another relevant aspect of this short extract can be found in the assumed ambivalence of ‘environmentalisms’, assuming a distinction between environmentalists and local communities (protesters, citizens’ committees), perceived as having different (or ambivalent) perspectives about the issue at stake. This is clearly shown in the first part, stating that *although* the ‘good motives’ for supporting distributed generation as generally advocated by environmentalists, *when coming close to its implementation unexpected obstacles arise*. This kind of discursive construction is very similar to the use of a disclaimer, meaning the rhetorical device enlightening the variability, ambivalence and/or contrast between two versions of reality by using discursive construction involving the use of *but, however, although, despite this etc.*, as illustrated by discursive psychology. This assumed perspective of others by planners reveals a view and particularization of the ‘public’ or ‘civil society’ as NIMBYs. This particularization is accomplished by distinguishing between *environmentalist organizations*, who recognise the value of distributed generation, and *citizenship* who act on the basis of selfish, irrational and emotive reasons.

CHAPTER 5 - RENEWABLE ENERGY TECHNOLOGIES (RETs) AND POLICIES IN THE PUBLIC SPHERE: A LONGITUDINAL ANALYSIS OF PUBLIC, MEDIA AND POLITICAL DISCOURSES IN THE MARCHE REGION FROM 2011 TO 2017

5.1. Research aims, methods and materials

The study here presented is an analysis of public discourse about renewable energy in the public sphere. More in-depth, the study adopts thematic discourse analysis (Taylor & Ussher, 2001) to analyse the public, media and political debates about RETs and related policies in the regional context across the years of the 2011-2017 period.

In this regard, the study aimed to investigate and reconstruct the historicity of and people responses to RETs territorialisation and diffusion in the region.

The research adopts a psychosocial perspective informed by Social Representations approach, the psychosocial literature on public participation, Environmental Justice theory and Discursive Social Psychology.

From the psychosocial literature on participatory processes, the study assumes that people take part in collective action or affiliate with a particular movement or group when a shared problematic situation generates a collective identity and the shared beliefs that the group can change the situation through collective mobilization (Klandermans, 1997). While this simplified model highlights the pre-conditions or predictors of protest and collective action, adopting a community and more socio-constructivist, relational and intergroup perspective, implies to consider participation as the power to construct and convey particular representations over others, that is the symbolic power to construct legitimated social knowledge, norms and identities (Howarth, Andreouli & Kessi, 2014). In this regard, as suggested by Campbell and Jovchelovitch (2000), it means to analyse three main socio-psychological phenomena: shared social representations, shared social identities and constraints to the access of power in terms of material and symbolic recognition.

From a socio-psychological perspective, the analysis is grounded on some important insights from research about public participation and social acceptance. First, the importance of looking at the ways legal, technological, and policy innovations are receipted and re-presented allowing people to adapt or resist change (Batel & Devine-Wright, 2015; Castro, 2012), looking not at isolated individuals but instead at individuals in relations, examining the effects of meta-representations in interpersonal and intergroup relations (Elcherath, Doise & Reicher, 2011;

Raudsepp, 2005). This highlights the relevance of analysing the interplay between representations, identities and communication (Batel & Castro, 2009; Jovchelovitch, 2007; Howarth, 2006), investigating the ways knowledge of other is perceived and treated in knowledge encounters (Jovchelovitch & Priego-Hernandez, 2015), as well as the representations of and personal involvement with place of different actors (Walker et al., 2011; Devine-Wright, 2009). Further elements of reflection for the analysis concern the environmental justice dimensions to understand controversies and conflicts around energy issues and environmental politics. The fairness and equity of procedures, the fairness on how benefits and costs of change are distributed among social actors/groups and geographical areas, as well as forms of misrecognition and (lack of) recognition of actors/groups and territories, represent sensitising concepts (Blumer, 1952) for the analysis.

By focusing on the discursive objects people construct in talk and text and their use in achieving certain aims, the analysis considers social re-presenting (Billig, 2008; Gibson, 2015) and subject positioning (Wetherell, 1998) as discursive practices to analyse how re-presentations and identities (Howarth, 2006) are constructed by and for individuals/groups and what these do in social and political relations (Volkelein & Howarth, 2005). Moreover, it tries to capture and understand the meanings of discourses by paying attention at intertextuality of discourses and counter-positions in the field.

The general research question guiding the study was: what kind of arguments (representations) and identities (positioning) accompany RET development?

More specifically, the research questions are derived from the cited literature strands and refer to the legal-political, technological and social dimension of RET development.

These are:

1. How laws, policies and institutional practices (e.g. on land use, public involvement) governing RET development are perceived and re-presented by different publics (individuals and groups) engaged in the argumentative battle?
2. How RETs are perceived and re-presented by these publics in terms of “cost-benefits” distribution (e.g. impacts, risks, benefits, advantage) and “fit with the place” (place conditions, values, symbolic meanings)? What arguments about the given project/technology and place-related factors are at the basis of opposition or contestation to the territorialisation and implementation of RETs?
3. How actors promoting or opposing RETs are perceived and re-presented? What kind of arguments and identities are strategically used to legitimise the perspective of self and delegitimise the perspective of others? What effects they have and how ‘conflictual’ and

‘consensual representations shape subject positionings, influencing alliances and coalitions of individuals and groups?

The materials collected for this study were divided into two data sets: the public and political debate on RETs (involving the years between 2012 and 2015), and the media debate (involving the years between 2011 and 2017). The choice of dividing into two data sets the collected materials is motivated by different reasons. First, to analyse the role of the media in conflict reconstruction and conflict enactment, second because of the differences in the ‘emergence of viewpoints’ in public debate.

The material pertaining the public and political debate concerns seven video/audio-recorded public meetings involving several actors. These meetings (see Table 7) were fully transcribed and analysed and refer to events organised by the Regional Administration, such as the first and the last two concerning policies and strategies for RET development and territorial government. The other events were mostly organised by environmental (networks of) NGOs and citizens’ committees, such as public protest, assemblies, forums and debate on energy technologies and infrastructures, especially about biogas and biomasses, and territorial government. In Table 7 are also reported the actors taking part in these debates.

The material pertaining the media debate on RET is composed by 24 regional TV news’ services, 26 articles from online provincial newspapers (e.g. Cronache Maceratesi, Ancona Today, Pesaro-Urbino Notizie, Ascoli Notizie) and 4 TV talk shows and debates (see Tables 8 and 9). The material has been collected using the keywords *energ** and/or the name of renewable energy sources (e.g. biomass, wind, solar) and/or technologies and type of energy produced (e.g. biodigestor, photovoltaic, biogas) searching within the databases of local TVs and online newspapers.

The criteria for choosing the materials was the focus on RET and a direct link with the territory, that is news from the territory including direct voice/quotations of local actors. In this regard, at first, all the articles and TV news were collected in a logbook comprising hundreds of articles and TV news services. Then a selection of the most representative and extended articles has been realised. Indeed, considering the contextual relevance of issues such as those pertaining to the biogas or wind energy, with protests and trials, has prompted the increase of news often repetitive in their content. Thus, to avoid the repetition of news caused by click-baiting practices of online newspapers I selected the most representative and extended articles summarising in some cases several other articles reporting the different moments and phases of RET development (e.g. investigations and trials, institutional arrangements, siting of RETs) or voices of local actors about the issue at stake (i.e. reporting the context or intertextuality of discourses).

As it is possible to notice, the rationale for materials' collection has been guided by polyvocality and heterogeneity of media sources and perspectives.

Event	Year	Actors	Organisers	Topic
Public Meeting 'Facilities for renewable energy generation. Power and responsibility of public administrators'	2012	Regional Administration representatives, citizens' committees, environmentalist organizations, citizens, local politicians	Regional administration	Renewable energy policies
Public Assembly 'No biomasses and biogas'	2012	Experts, Citizens, Citizens' committees	Network 1 Local opposition groups	Biomasses and biogas
Regional public protest 'NO biogas'	2012	Citizens' committees, local politicians	Local opposition groups of the region	Biogas projects
Public Event 'Hands off the Marche'	2013	Citizens' committees, local politicians, agriculture representatives, Lawyers	Network 2 opposition groups	Energy technologies & infrastructures
Public event 'Marche Landscape Forum towards the regional law'	2013	Citizens committees, Environmental organizations, Regional politicians	Network 3 opposition groups & environmentalist organizations	Law for the territorial government
Public debate on the 'Law for territorial government'	2015	Regional Administration representatives, experts, local politicians, spokespersons citizens committees & networks	Regional administration	Regional law territorial government
Listening campaign of environmental organizations for the Regional Energy and Environmental Plan	2015	Regional Administration representatives, Regional Politicians, Environmental organizations, citizens committees	Regional administration	Regional Energy & Environmental Plan 2020

Table 7. Public and political debates on renewable energies (2012-2015)

Data Source	Selected N	Characteristics
Regional TV news services & interviews	24	Presentation of different voices at the regional level
Provincial online newspapers' articles (Ancona, Pesaro-Urbino, Macerata, Ascoli-Piceno)	26	Extensive and representative articles providing the direct voice of different local actors (non-repetition) about relevant events/episodes for the territory (e.g. technology siting, energy policies)
TV talk shows & debates (See below)	4	Interaction settings with key actors at the regional level

Table 8. Media materials on renewable energies (2011-2017)

Title	year	Actors
«Biogas: viewpoints from the Marche» (Talk show)	2012	Opposition groups, Regional politicians, journalist
«Normative for landscape and territorial protection» (TV debate)	2013	Opposition groups, journalist
«Comparisons: biogas» (TV talk show)	2013	Opposition groups, Local politicians, journalist
«Let's continue to talk about biogas» (TV debate)	2014	Opposition groups, entrepreneurs, journalists, regional & local politicians

Table 8. Media talk shows on renewable energies (2012-2014)

For what concerns the coding procedure, themes/arguments were identified through an iterative inductive and deductive approach. This means that arguments are identified through sensitising concepts derived from theory but without a pre-defined coding framework. The coding takes shape without forcing the discourse to pre-defined categories or categories in pre-defined themes. The coding framework was constructed ex-post after a preliminary reading and re-reading of the material. Therefore, the codes are generated in a bottom-up way, remaining

adherent to the data (e.g. the name of codes derives from the words used or by summarising the main content of the utterance),

The coding process was undertaken by paying attention to both semantic and implicit themes and to shared and contested patterns of meanings. The coding has been characterised by inclusivity, meaning that selection of extracts included a portion of data surrounding the coded utterance, i.e. including the argumentative context to reveal and understand the meaning of the utterance (Billig, 1987; Bryman, 2001). For this reason, codes are not mutually exclusive, as in the same unit of analysis (the sentence and its contextual meaning) may occur and overlap more themes. Despite this, a form of quantification of codes and themes is used to highlight the recurrent and shared patterns of meanings in the data set.

After the preliminary generation of codes, I started the search for themes within the list of codes and collating coded extracts within candidate themes. Then, themes were reviewed by looking in details at (the mutual fit of) codes, extracts and candidate themes. The main themes identified concern three macro-dimensions:

- a) Recognition: of actors/agents, their actions and their motives. This dimension refers to the discursive representation of self and others, the we-them subject positioning, and the use of offensive and defensive rhetoric to legitimise or delegitimise perspectives;
- b) Procedures: how laws, policies and institutional practices are re-presented through discourse. This dimension refers to procedural aspects of RET development, that is the legal-political aspects of RET development such as authorization procedures, involvement practices, land use policies, regulation and guidelines;
- c) Distribution of costs and benefits of change: involves factors related to technology/project impacts, place-related values, symbolic meanings and material constraints, and perceived cost-benefit ratio.

The following paragraphs report a preliminary analysis of actors' voice, main discourses/arguments and intertextuality, and then a more detailed analysis of themes/discourses as patterns of meanings found in the data set.

Although the study is concerned with energy system change, namely the transformation of the socio-technical system towards low-carbon configuration, and thus paying attention to different energy sources, technologies and infrastructures (e.g. PV, biomass, wind, hydroelectric, transmission lines, gas pipeline or storage, or oil extraction and refinery activities), it should be noticed that most of the debate on these issues is affected by two interrelated phenomena (according to the analysis here presented): the development and siting of PV and biogas

technologies in the region. In this regard, I report here two Figures mapping these developments and that brought to widespread conflicts and contestation within the regional context.



Figure 31. Biogas plants' diffusion in the region Source: our own research media materials (2013).



Figure 32. PV diffusion and impacts on landscapes. Source: Marcheggiani et al (2013)

5.2. Analyses of voice, main themes and discourses' intertextuality

A preliminary analysis of voice, namely of direct quotations, conversational turns or speech acts between the two corpora of data reveals a predominance of protesters/citizens' committees that had more space and voice both in the public and political debates and in media debate. The analysis reveals also that media gave space and voice to the main conflictual positions: opposition groups and local politicians versus regional politicians and RET entrepreneurs, while other actors had significantly less voice. Regarding the public debate, although this reveals a more heterogeneous situation, a predominance of protesters' voice can be noticed, followed by local authorities, experts and environmental NGOs, regional politicians, public officers etc. It is remarkable that none of RET entrepreneurs or firms had a voice in this corpus if we exclude the presence of agricultural representatives.

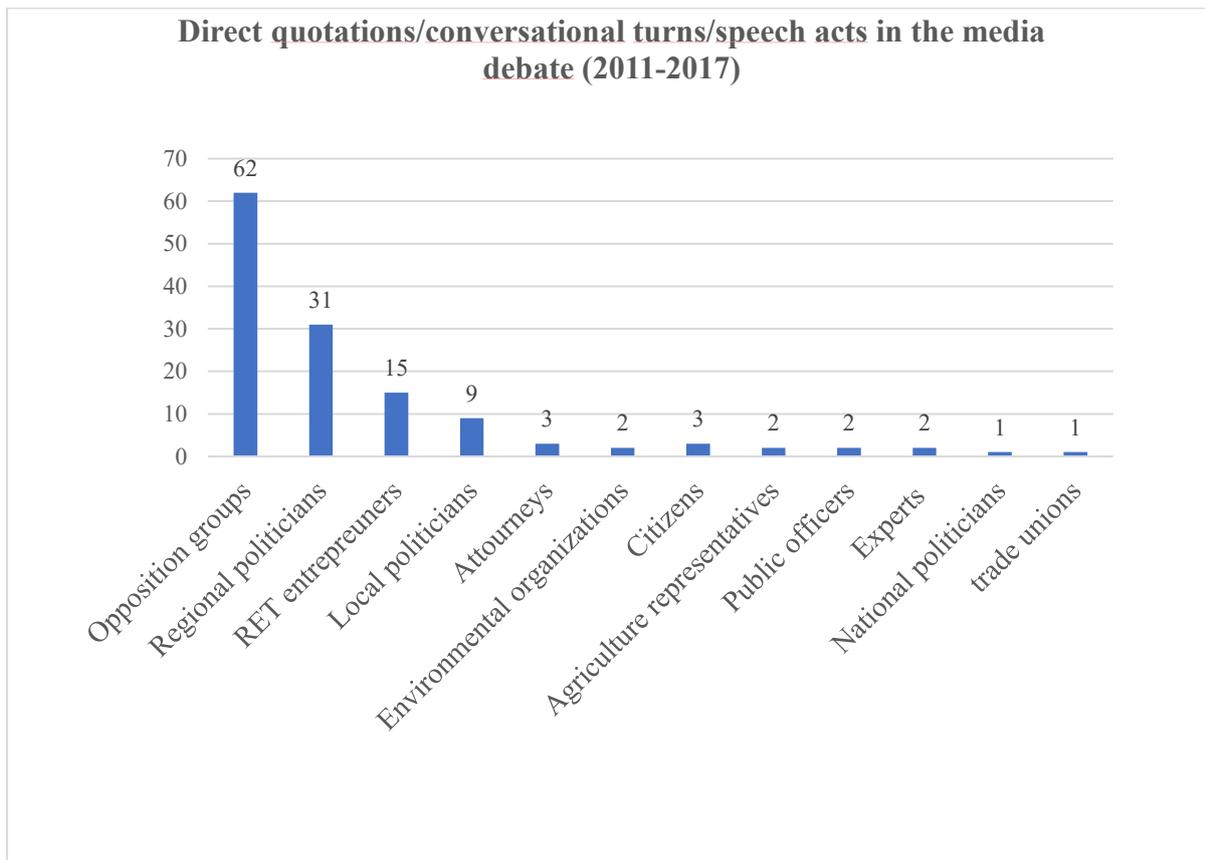


Figure 33. Analysis of voice in the media debate

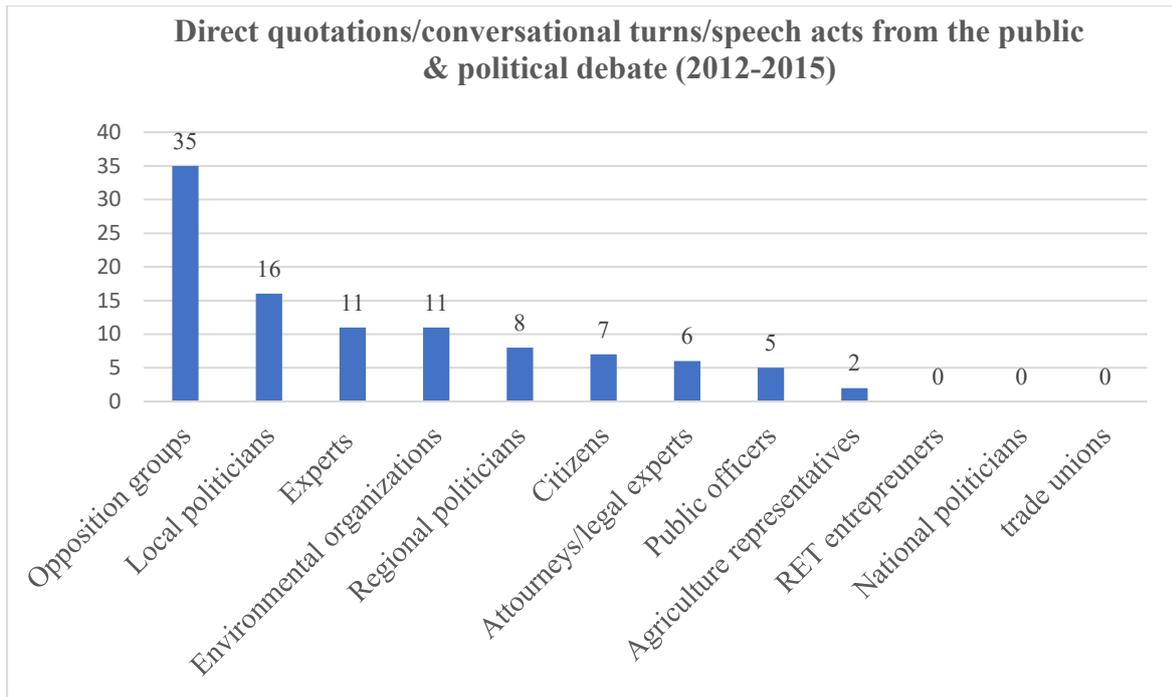


Figure 34. Analysis of voice in the public and political debate

For what concerns the main arguments emerging in the public sphere the following figures show the main differences in the two data sets on procedural and distributive justice aspects.

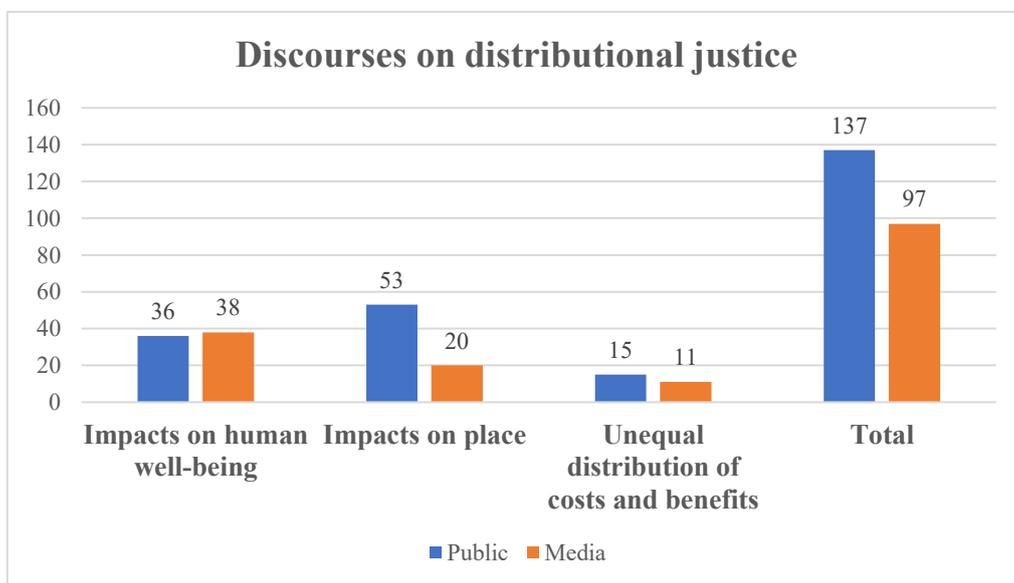


Figure 35. Discourses on distributive justice in media and public/political debate

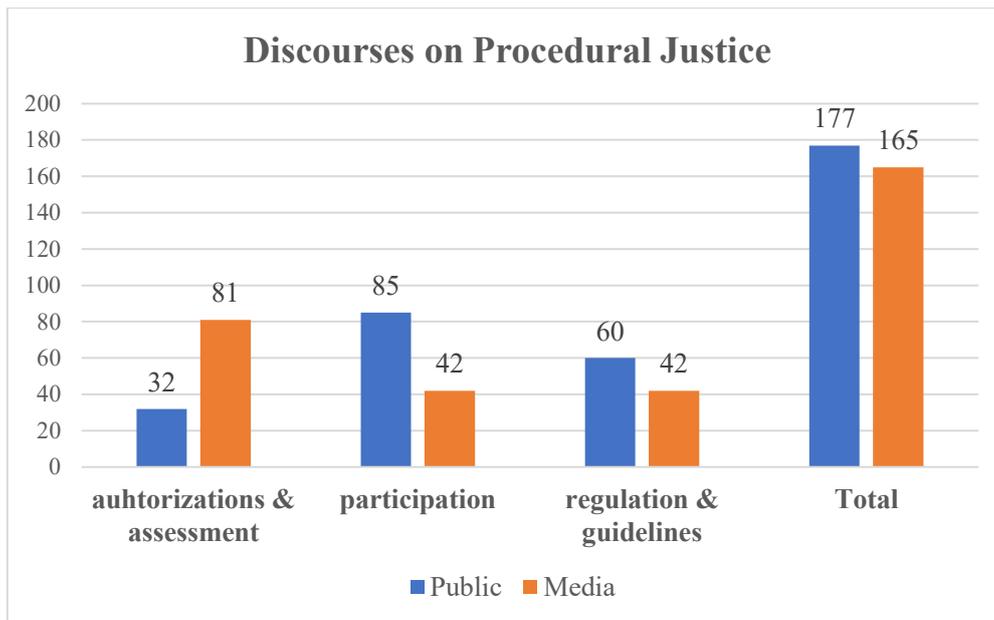


Figure 36. Discourses on procedural justice in media and public/political debate

The analysis of frequencies of procedural and distributional justice arguments reveal some differences in the corpora. First, with regard to distributional justice, impacts of RET on the place (landscape, land use, use of natural resources) were more present in the public debates. For what concerns procedural justice, the media debate presents more arguments on procedures of authorizations and assessment on RET, highlighting the high relevance of this controversial issue, while arguments pertaining participation, regulation and guidelines were more present in the public debate.

First, distributive justice arguments are more frequent in public and political debates, while procedural justice arguments have more or less the same significance in media and public and political debates.

Regarding distributive justice, arguments about the impacts on human health and well-being (e.g. noises, emissions, pollutant activities) and about the unequal distribution of costs and benefits were present in the same extent in the two data sets. On the contrary, it should be highlighted that place-related impacts about RETs (e.g. landscape, land use, use of natural resources) were more present and significant in public and political debates.

These findings are not surprising, if we consider that a good part of materials of the public debate analysed refers to political consultations or debate between governmental actors and concerned citizens, environmental NGOs or citizens' committees, thus overemphasising the requests and critical issues reported by these actors (i.e. participation, regulation and guidelines for RET development, place-related impacts). Even in the case of media debate, the findings reveal that authorizations and impact assessment issues were highly problematised,

corresponding to polemical representations putting more in the background other arguments and reasons for opposing RETs and proposing regulatory and institutional arrangements. While this analysis is here used to show the bigger and simplified picture of public discourse and arguments about RET development, or at least the main arguments used and discourses shared by collectives, the following part of the chapter will deepen these themes and the argumentative context in which utterances were produced and their effects. In fact, an aspect that is fundamental for this analysis lies in revealing the consequentiality and intertextuality of communicative practices and subject positionings, highlighting the different arguments and contrasting positions within the field. In the following Figure is presented an example of a network view (from the software used: Atlas.ti 7.5.) showing the links between the main codes/arguments, which highlights the intertextuality of arguments and dimensions of distributional justice.

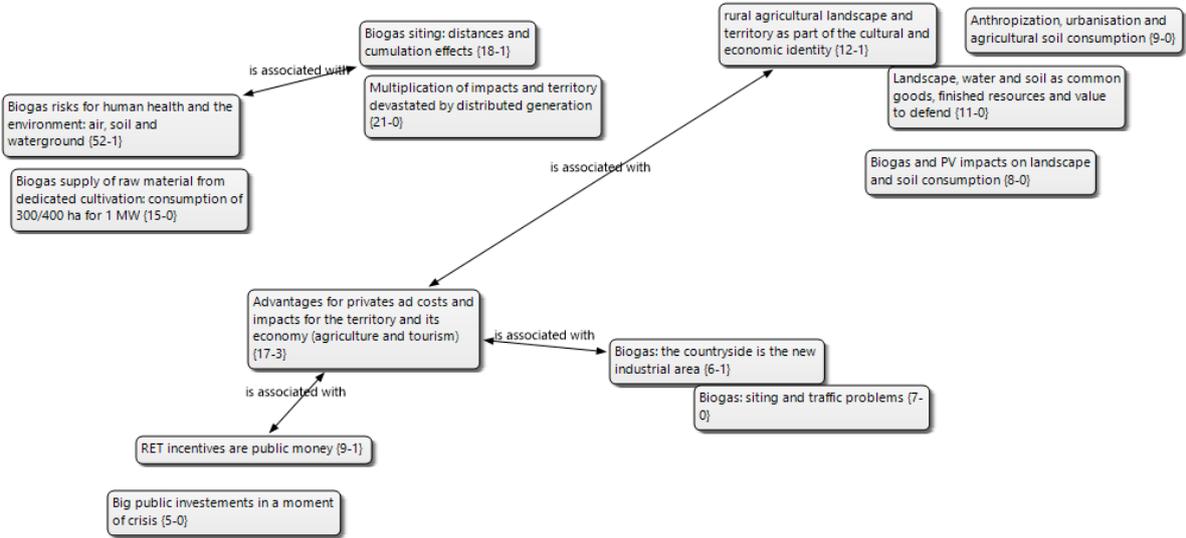


Figure 38. Network view representing the intertextuality between codes/arguments on distributional justice

5.3. Representing distributional injustices of RET development

With regard to distributional justice in the following chart are reported the main arguments in public and media debate about RET development.

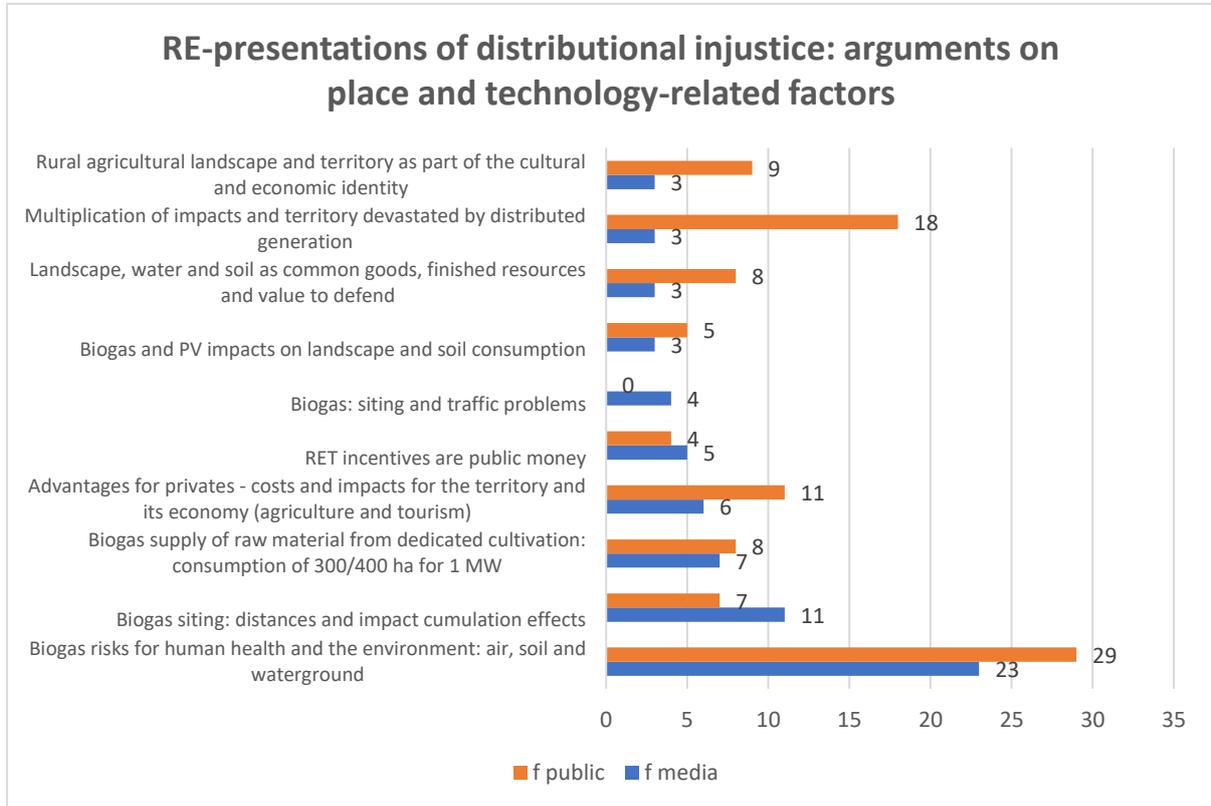


Figure 39. Representations of distributional injustice: arguments on place and technology-related factors

Arguments about RET impacts on human health and well-being are present more or less in the same extent in media and public debate, referring to biogas impacts on air (emissions produced by biogas plants as well as deriving from the traffic of vehicles supplying the facility), soil and water ground quality (impacts derived from the shedding of the digestate - through fertirrigation - produced by the plant following anaerobic digestion of biomasses), and mentioning also the distance from human settlements and the territorial cumulation of impacts. On the other hand, arguments pertaining the way RETs affect places and common natural resources, interpreted as a consequence of distributed generation multiplying the territorial impacts, such as impacts on the rural agricultural landscape and territory, and the consumption of soil – in particular the fertile one - were more present in public debate. The unfair distribution of costs and benefits was clearly represented by making reference to the fact that incentives for energy generation from RES are public money, coming from taxes, and going to the benefit of

private actors with costs and impact manifesting and remaining on the territory and its local economy. This view was supported mostly by protesters, environmental NGOs and local authorities.

5.3.1. Impacts on human health and well-being

This paragraph will present and analyse some extracts pertaining arguments of distributional justice involving the impacts and risks of RETs represented in public discourse. In this regard, most of these arguments concern biomass and biogas power plants:

“We have several national and international studies and of regional health authorities, which certify that there is some risk, such as in the spread of digestate, or emissions. They tell us that these plants do not pollute but this is a colossal lie [...] As Patrizia Gentilini, a famous oncologist, tells us[...] “the limits of the law are a compromise between scientific knowledge and economic interest”. And this tells us everything, we are in a valley that is considered an area with a high risk of environmental crisis”

Opposition group – media 2013– code: biogas risks for human health

“I’m surprised that the municipal technicians have not read the reports [...] they would have immediately understood that any spill due to a malfunction would have ended up in the Fiastra river, just as it happened”

Opposition group and politician - media debate 2014 – code: biogas risks

In the extract just presented different aspects emerge as relevant. First the use of scientific evidence and discourse to make evident and convince the audience about the presence of risks of biogas production for human health. This is realised by revealing the presence of several studies (without citing the particulars) at both international and national level, as well as from health authorities, certifying the potential risks coming from digestate shedding and emissions from the plants’ functioning, while also putting in light the contrast between these ‘legitimated truth’ and the word and reassurances of politicians (*they tell us that these plants do not pollute*). Also, the limits determined by the law (on which is implicit that policy-makers and planners take decisions and act) are delegitimated by referring to the words of a well-known oncologist stating that these limits are a ‘*compromise between scientific knowledge and economic interests*’ in a way that reveals how scientific evidence (and the precautionary principle) can be bent by economic -and political- interests and needs. This kind of arguments is then reinforced (*this tells us everything*) by making evident and overemphasise the critical condition of the area where these power plants are sited and function (Jesi – Media Vallesina, where was sited a thermoelectric powerplant), an “*area considered at high risk of environmental crisis*”. This reinforces the previous utterances by providing sufficient arguments for considering the

(perceived) risks of these impacts unacceptable for the population living in that disadvantaged area.

Further, the second extract reveals further motives for protesters' concern about the risks of these power plants: the risk of malfunction and bad management of the facilities. Indeed, in the period of the TV debate where this utterance was produced an accident happened and a spill from the biodigester ended up in the river close where the facility was sited. This episode gave further reason and legitimacy to protesters' concern and voice. Moreover, the extract reveals a distrust on public officers about their competences on assessment and management of these facilities as well as questioning the ethical aspect of siting a plant close to a river.

The following extracts, instead refer to the risks of biogas and biomasses' power plants supplied from dedicated cultivations for the local agriculture and economy.

“ All these impacts, the health risks, the air, the ground, the water, in the end, are compensated only by an advantage for private individuals [...] Beyond these impacts and risks we must also consider the disadvantages and losses of value in the territory [...] the situations where these plants are to be made, we must think of a series of economic activities that can be damaged, starting from agriculture, because the costs of renting land are growing in the Italian provinces where [...] around the 20% of agricultural land is used for biogas generation and here the rents have doubled, the cost of corn for fodder, so there is a big damage to the agricultural economy”

Opposition group/expert –Public debate 2012– codes: advantages for privates.. & supply from dedicated cultivation

“Actually, the opposition of citizens and Municipalities is not against the technology itself. It is against this type of plants that are completely disconnected from agriculture because this technology was born as a support for agricultural companies, providing a short supply chain, plants around 250 kW serving almost exclusively the agricultural activity. This would have enabled energy savings, an intelligent waste policy [...] They [entrepreneurs] are the ones who bypassed the same philosophy of biogas plants, born and used in other countries on these logics, have focused on plants of 1 MW, which are destructive plants for agriculture.[...] Because a plant of this type assumes 300 hectares of corn cultivation, means that it is not cultivated for human food or animals but is cultivated to feed these plants, these 300 hectares presuppose a huge consumption of water, fuel for the cultivation and distribution, a continuous coming and going of trucks and related CO2 emissions”

Opposition group - media debate 2014 – code: Supply from dedicated cultivation & Siting and traffic problems

The first extract just presented refers to the arguments used by a spokesperson of a network of citizens committees and environmentalists opposing to biomass plants across Italy. The orator, in this case, is not a 'local' and is hosted by the local citizens' committees organising the public event (i.e. an event for informing and debate about the siting of biogas plants in the valley). The orator refers to the experience of other northern Italian regions and provinces (Cuneo in Piedmont, and Cremona in Lombardy) where the biomass plants have first spread exponentially and uncontrollably, by affirming that beyond (and in addition to) the health impacts other issues must be considered, in particular he mentions several times the critical issues and negative consequences (*losses of values for the territory; economic activities damaged; cost of land*

renting doubled, cost of fodder; damage on the agricultural economy) of 'land grabbing' for energy purpose (i.e. taking land for supplying power plants with agricultural products) . These critical issues are made factual rather than taking the form of the hypothesis by making reference to how in other areas the proliferation of these power plants has strongly influenced the prices of land rents or products for fodder.

The second extract refers to the argument used by a protester during a TV debate. This argument highlights that the *opposition of local authorities and citizens is not against the technology*, but rather against the particular configuration: the size (1 MW), the supply system (dedicated cultivation, 300 hectares of corn for supplying that size) and the fact that the facility does not serve or is connected to pre-existent productive activities (local agricultural and animal farms). Thus, this kind of arguments emphasise that the configuration proposed by the region and entrepreneurs *is totally disconnected to and destructive for agriculture*, not respecting the same 'philosophy of biogas' as it emerges in other contexts (i.e. *a support for agriculture and a circular economy maximising energy efficiency and producing energy from waste*) contrary to the contingent regional situation characterised by dedicated cultivation and plants disconnected from agricultural activities.

A further element that emerges both in public and media debate refers to the unfair distribution of costs and benefits, with costs remaining in the territory and affecting local populations, while the *advantages are only for private individuals*. These arguments and positions are also stressed by agriculture representatives.

“They go throughout our campaigns to offer something like 3 or 4 times as much rents of agricultural land, in some cases in the Marche have arrived even at 1000 euros per hectare [...]The economic danger is there, that is, that *the farmers produce corn for the biomass plant and not for the stables and for animal and human nutrition*, in some cases also of quality products, it is clear, but this is a knot that must dissolve politics and that must understand what wants from the Marche agriculture [...]”

Agriculture representative – media debate 2012 – code: biogas supply of raw materials from dedicated cultivation: consumption of 300/400 ha for 1 MW

The argument of the agricultural representative highlights and support the point stressed by protesters, that is the existence of potential distortion for agricultural activity and market in the region by the introduction of biogas plants supplied with dedicated cultivation and the presence of entrepreneurs not caring about the conditions of agriculture. This distortion is represented by two main problems: the *increase of land rents*, the *abandonment of food production (or selling products for human and animal nutrition) in favour of cultivations for supplying biogas plants*, a problem that is underlined as something that politics should solve while clearly understanding and stating what it expects from regional agriculture.

The arguments pertaining the risks and impacts of biogas power plants in terms of human health and well-being, as well as the problems derived from locally supplying the power plants from dedicated cultivation, are also emphasised in media debate as the following extract demonstrates.

*“in addition to **bad smells, noises and harmful emissions**, the power plants **would subtract fertile agricultural land for food production**”*
journalist – media debate 2013 – code: biogas risks & soil consumption

In the extract just presented a journalist clearly highlights the presence of impacts for human health and well-being by referring to specific effects of power plants’ functioning (*bad smells, noises and harmful emissions*) taken as a fact and so doing objectified (*in addition to*). On the other hand, the argument reveals the possibility that power plants *subtract fertile land* that may be or is used for *producing food*.

5.3.2. Place-related impacts and fit with the place of RETs

For what concern the impact perceived on places, an argument widely present in the public debate refers to the multiplication of impacts associated with the distributed generation and the consequent perceived devastation of the territory.

*“for the **two biomass power plants**, it was contested that **we have almost 6 MW of PV in that area that arrived in a year**, so the population has been faced with a change and **further increased impact on the territory, it was the last drop** makes the cup run over”*
Mayor – public debate 2015 – code: multiplication of impacts & territory devastated

“in a piece of land of one kilometre two municipalities, three energy plants: a photovoltaic plant behind me, a biogas plant under construction, immediately after another biogas plant already functioning”
Journalist – media debate 2012 – code: multiplication of impacts and territory devastated

*“in [our municipality] there is an Enel power plant that for decades has polluted, there are livestock farms, we are inside an area with high environmental risk [...] where the limit of fine dust has been exceeded [...] we also had a livestock breeding that for decades has polluted the land and even the same river, because the slurry drops downstream, and when it came the first authorization of a 250 kW plant, small, at the service of the livestock breeding we did not say anything, because we knew that it could solve a long-standing serious environmental problem [...] but then **along the valley that descends from the hill we found a livestock breeding, a biogas plant, another plant in construction and for not missing anything a 1 MW photovoltaic system on the ground**”*
Opposition group – public debate 2012 – code: multiplication of impacts and territory devastated by distributed generation

The first two extracts presented refers to the arguments used by a Mayor and a journalist in denouncing how the RET development is affecting exponentially the territories (*almost 6 MW of PV .. arrived in a year; in a piece of land of one kilometre two municipalities, three energy plants*) and how local communities are faced with this exponential place changes and the change in land use. As this extract shows, the siting of the widespread PV throughout the region and that of biogas facilities following the PV period are often associated in discourses about distributional justice by protesters and local authorities in terms of *multiplication of impacts and devastation of territory*, which in the same extent contributed to the multiplication of contestations. In this regard, the biogas development is recognised as the *last drop making the cup run over*, a trigger of the diffused mobilization of communities affected by RET development. The last extract presented highlights the relevance of pre-existent critical environmental conditions in which these power plants are sited and aggravating the environmental problems of that area (*an Enel power plant that for decades has polluted; we are inside an area with high environmental risk [...] where the limit of fine dust has been exceeded; a livestock breeding that for decades has polluted the land and even the same river*). In this context, the introduction of PV and biogas plants are perceived as a further lack of recognition of the critical conditions of the territories at stake. In this extract the orator also emphasises that opposition and resistance is not against the biogas per se, and that when another *small* biogas plant *at the service of the livestock breeding* was constructed no opposition has been made, because bringing more benefits than costs for the place (*we did not say anything, because we knew it could solve a long-standing serious problem*). The orator concludes by remarking how RET development has brought in that territorial valley a concentration of impacting activities and their unevaluated cumulation effect, which represented the trigger for community oppositions in that territory.

This multiplication of impacts, of course, does not refer only to environmental and health risks, but also on the way common local resources/goods (land, landscape, water) are used for energy generation. Indeed, the frequent reference to the ‘commons’ greatly supports this interpretation.

The landscape is like water, it belongs to everyone. The land is not a commodity to be exploited, it is a value to be defended.

Environmental NGO – public debate 2013 – code: landscape, water and soil common goods, finished resources and value to defend

The landscape is a common good, we must begin to think in these terms, the landscape is not something that can be sold off, it is not something that can be fragmented and sold.

Opposition group – public debate 2013 - code: landscape, water and soil common goods, finished resources and value to defend

Is the territory a mean or is it an end? In my opinion, the territory is an end like air, water, and should not be used for what are the needs at the time of our society.

Expert – public debate 2015 - code: landscape, water and soil common goods, finished resources and value to defend

Although the end is noble: to produce green energy, it is not right to do it at the expense of the territory and the hills that are priceless

Journalist – media debate 2011 - code: landscape, water and soil common goods, finished resources and value to defend

The extracts just presented highlight different aspects. First, different actors use arguments highlighting how the ‘more abstract’ common, the landscape, should be considered, valued and treated in the same measure of water and land (i.e. goods at the basis of human life and basic needs), and that it should not be *used, exploited, fragmented and sold*. Second, in this view, the territory in its different components belongs to everyone and rather than a *commodity* or a *mean* through which produce energy should be considered an *end* per se, something to be preserved, *priceless* and with high value.

In this regard, it should be brought to the attention the ways renewables such as wind, PV and biogas are often described in both public and media debate by protesters as well as local authorities, experts and journalists, using a language that highlights a representation of RET deployment as physical aggression, something that *eviscerates, tears, disfigures, massacre and devastate* the territory. This perspective, while is widely shared by different actors reveals itself to be a dangerous argument, containing the potential to be labelled and treated as NIMBY or NIMTOO, that is motivated by futile and selfish motives. However, as other scholars suggested (e.g. Burningham, 2000) citizens are often aware of the risk of being labelled as NIMBY and delegitimated, and thus use arguments mobilising hegemonic and/or valued discourses/representations. In this regard, protesters re-presenting the fit of RET with place strategically used this kind of discourses both in the media and public debate, as the following extracts demonstrate.

“Journalist: the photovoltaic systems on the ground, expanses of blue panels that spoil the landscape of the beautiful hills of the Marche, those used by Leopardi who took refuge in the ermo colle [...]”

Citizen: Fundamentally the great richness we have is not just museums, but the richness of our cultural heritage is above all our landscape, the identity that marks our landscape”

Journalist & protester – media debate 2011 –code landscape part of the cultural and economic identity

“From always a symbol of Sefro, the waterfall of the river Scarsito is in danger of disappearing. Its destiny is in fact linked to that of the disused hydroelectric power plant of the 70s that could come back into operation. [...] The project envisages a hydraulic work that, by diverting the river, increases its flow and sacrifice the waterfall. An eventuality badly digested by the village of Macerata that in that whirlwind of the water finds its collective identity.” *Journalist – media debate 2017 – code: landscape part of the cultural and economic identity*

*“[the opposition] **doesn’t come only from an aesthetic need, as sometimes someone tried to say, from people who love beauty with a full stomach** and do not think about economic needs. It stems from the fact that **quality economies existing on those territories, the organic farming, the farmhouses, and so on, have been put in crisis by these interventions**”* Opposition group –media debate – 2013– code landscape part of the cultural and economic identity

*“these **marvellous vineyards** [represented in the slide below* stating that “agricultural soil is a priority resource and rural landscape represents the regional identity”], also **represent our identity, our memory, but naturally and above all our economy**”* Opposition group – public debate 2013 - code landscape part of the cultural and economic identity



* Marche’s hills and vineyards characterising the landscape of rural areas. Source: public debate material (2012)

*“Municipalities of Castignano, Appignano and Offida are located in an area with a particularly **beautiful landscape, loved by the inhabitants and appreciated by tourists** because is rich in natural and historical attractions. **The territory is our most precious resource and must be protected with all our strength.** We do not allow our land to be exploited by those who only want the incentives taken from our bills, without bringing new wealth or jobs. Ask with us to not authorise the construction of wind farms”* " Opposition group – media debate 2016 – code wind impacts on landscape and territory

*“the **territorial brand** is the new income challenge for the agricultural enterprise” [citing an article from the national’economy & finance newspaper Il Sole 24 ore] , the **farm of the future operates in a crossroads of interests**, impacts with health, impacts with biodiversity, with the landscape, with the territory, and we are convinced that **this landscape [with the PV] is certainly in contradiction with the expensive marketing policy that is doing [the Region ..]** We have a beautiful territory, the Region said that we have a world in a region, 5 different provinces [...] **where we go we have different landscapes, we have different cultures and strong traditions, and with these speculations they ruin not only the territory but also all the people who live that territory and all traditions that have been carried out until now.** Agriculture representative – public debate 2013 – code: landscape part of the cultural and economic identity*

As it is possible to notice in the extracts presented, referring to the fit of RET with the place the arguments used by protesters - or journalists reporting their voice - represented the landscape in different ways that have a particular function: anchor the motives for the protest to culturally

shared and valued discourses. For instance, in the first the landscape is represented as the *richness and cultural heritage marking the regional identity*, with a high symbolic and cultural value, also drawing back to the history of the region and relying on illustrious personalities that recognised this value in their literary works (*Leopardi..l'ermo colle*). In the same way, the second extract reveals how landscape and natural resources, such as the river and its waterfall object of the TV news, constitute the place distinctiveness and source of place identity to be preserved (*a territorial symbol and source of collective identity*). This kind of arguments clearly draws on the regional and local cultural aspects in representing the motives for the opposition. On the other side, the extracts that follow clearly show how protesters are aware of the risks of being accused of mobilising on the basis of *aesthetic needs* revealing also the awareness about what others may think and behave for delegitimising the protest (*doesn't come only from an aesthetic need, as sometimes someone tried to say*). Reflecting this meta-knowledge protesters represent the rural and agricultural landscape, and more in general the territory, not only as *something beauty, part of regional identity and memory*, but also as *the most precious resource, and constitutive of regional economy*: the quality economies connected to agriculture and tourism (*quality economies existing on those territories, the organic farming, the farmhouses, and so on, have been put in crisis by these interventions; beautiful landscape, loved by the inhabitants and appreciated by tourists*). Moreover, these arguments are clearly marked by distributional injustices in the way the costs of transformations fall only on the shoulders of local populations and local economy by do not providing any kind of benefit while exploiting the territory and its local resources (*We do not allow our land to be exploited by those who only want the incentives taken from our bills, without bringing new wealth or jobs*).

In this vein, also representatives of the agriculture sector stress this view of the territory as an asset for the region and for agricultural economy itself (*territorial brand*) while clearly criticising the work and ambivalence of the Regional Administration about land and landscape protection (i.e. *allowing the spread of PV on the ground and the ruin of rural landscape while implementing an expensive marketing policy for tourism*). The work of the Region is further criticised by directly reporting the motto of the regional marketing policy (*a world in a region; five provinces with different landscapes, culture and traditions*), and how contrary to this policy-makers allow *speculation ruining the territory, the people living that territory and providing the disruption of place traditions*.

A further element that is relevant both in terms of environmental impacts and impacts on the rural and agricultural landscape concerns the perceived industrialization of the countryside both by biogas plants and PV panels, which sometimes highlighted a potential conflict between

urban and rural areas. The distributed presence of biogas projects already built or authorised brings several concerns to the affected communities on the siting of these facilities and the consequences for the countryside.

*“We should talk about the **thousands of trips that make trucks to supply these power stations, and that go to use a network of streets devastating the countryside**”* Opposition group – public debate 2013– codes: countryside industrialised & traffic problems

*“in fact, the **countryside is turning into industrial areas**”* Opposition group –public debate 2012– code: the countryside is the new industrial area

*“[W]ithout rules, **the whole countryside will become a gas chamber**”*public debate 2012- public mobilization 2012– code: the countryside is the new industrial area

The extracts presented highlighted the concern on the siting of these facilities for the perceived impacts they can bring in the countryside. Indeed, the siting of these facilities in the countryside - disconnected from agricultural fields - is a source of concern for the traffic of trucks supplying the biogas plants (*thousands of trips*), coinciding to the *devastation of the countryside and its street network*. In this vein, several times protesters’ arguments reflect the concern about the *industrialization of the countryside* perceived not only as something that does not fit with the rural landscape but also as a source of CO₂ emissions and of fine dust - *PM 2,5; PM 10; NOX* – (*the whole countryside will become a gas chamber*).

Moreover, protesters emphasise and question what in their opinion was a further critical issue about the supply from dedicated cultivation and violating the ‘philosophy of biogas’(i.e. producing energy from waste): the energy returned on energy invested.

*“In our opinion, these energy plants bring more costs than benefits from an energy point of view. Considering that **it will never be possible to have all the biomass in a very narrow radius of origin, given the high size of these plants it is clear that it requires a lot of energy to grow the biomass, irrigate it, fertilise the soil, carry it, then transport it to the plant**”* Opposition group – Media debate 2013 – code: supply from dedicated cultivation

In the extract presented, the protester questions from an energy perspective about the effectiveness of the biogas plants’ configuration, highlighting how the number, size and supply configuration of biogas plants in the region would not be so efficient if considered the energy required for cultivation and transport to supply them. Following the consideration about the unbalance between costs and benefits of biogas plants under consideration, the list - of activity - proposed (*grow, irrigate, fertilise, carry it, transport*) clearly had the scope of stressing the irrationality of such technological configuration and policies in the region (*it will never be possible to have all the biomass in a very narrow radius of origin; it is clear it requires a lot of energy*).

5.4. Representing procedural (in)justice in RET development: authorizations, assessment, participation, regulation and guidelines

Arguments of procedural fairness or justice represent a large part of concern in RET development. As it was shown in the first part of this chapter these types of arguments are extremely relevant counting 342 occurrences versus the 234 of distributive justice. The theme of procedural justice is composed of three main sub-themes: authorization and assessment of RETs, participation, and regulation and guidelines. In this context, I will provide the results of the thematic discourse analysis of these three sub-themes.

5.4.1. Authorizations and assessment

With regard to authorizations and assessment, as it is possible to see in the chart presented, most of the arguments derive from the media debate, where the issue about authorizations of RETs has been widely taken as an object of debate in local media.

The arguments reveal that the local media have greatly given space to this theme, by providing a reconstruction of the conflict in its different phases, from the emergence of oppositions to legal disputes and attempts to solve the situation. This is revealed by the main arguments characterising the media debate.

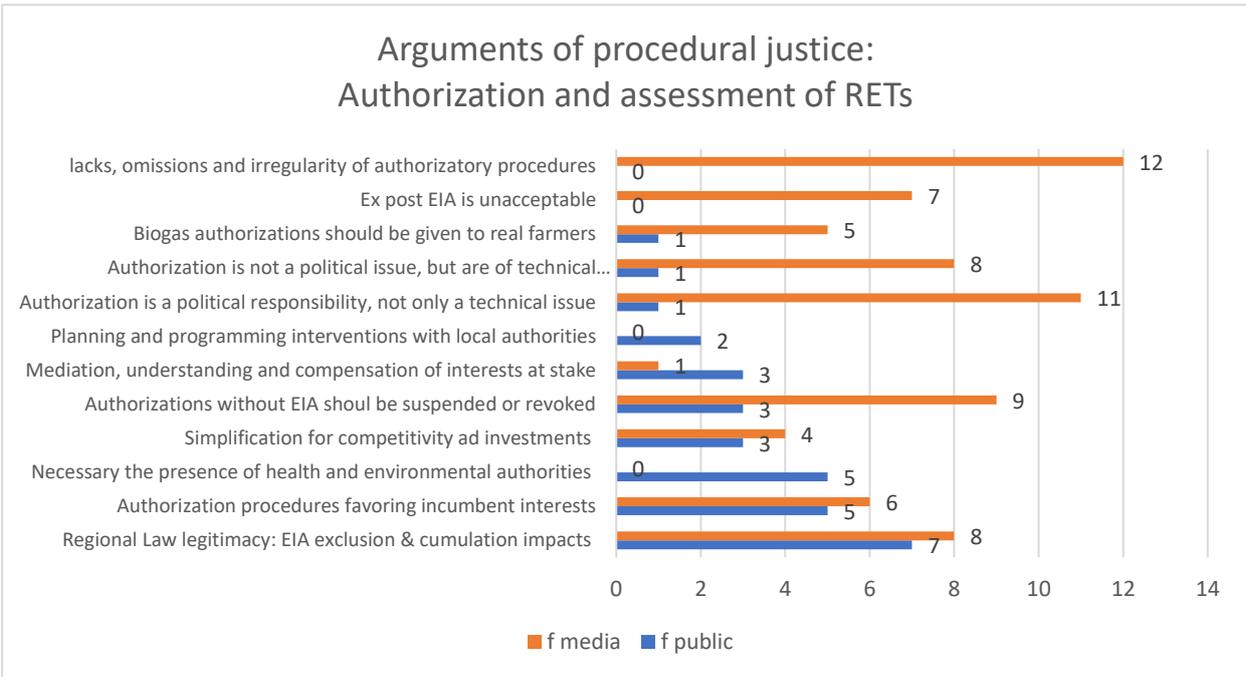


Figure 40. Representations of procedural injustice: arguments on authorizations and assessment

First, the emergence of opposition is characterised by the perception of procedural injustice based upon the perceived illegitimacy of the Regional Law 3/2012. To summarise, in order to promote RETs development and transpose a Ministerial Decree of 2011, the Regional Law excluded all the RETs under the threshold of 1 MW from the Environmental Impact Assessment (EIA) procedure and so doing also excluding the participation of local communities required by the law. This issue had a great relevance in media and public debate, as the following extracts demonstrate.

“the mother of all the problems is the regional law excluding these power plants from the environmental impact assessment (EIA). Not only the EIA, but also one of the fundamental prerequisites of the EIA, the cumulative effect.” Journalist – media debate 2013 code EIA exclusion and cumulative impacts

“..and all this [authorization, siting and construction] happened with the same absurd procedures that others before me have told, without any evaluation of the environmental impact of the plant and especially of the cumulus, there are already polluted layers, the wells of the aqueducts, the houses, nothing has been taken into consideration” Protester – media debate 2012 – code EIA exclusion and cumulative impacts

As the presented extracts show, the opposition to RETs in general, and biogas in particular across the period 2012-2014 is motivated by concerns about the impacts of these plants linked with the cumulative effects. Indeed, the Regional Law excluding EIA is defined as the *mother of all the problems*, that is the main cause of regional conflicts about RET development. The exclusion of EIA operated by the Regional Law implies that any evaluation about the projects' impacts as well as about the pre-existence of other territorial environmental impacts has not been undertaken (*cumulative effect; the cumulus*). Most importantly, excluding EIA implies that information and participation of public did not take shape, as the EIA represents a crucial procedure to increase the transparency, information, environmental justice and the participation of local communities.

The second extract highlights another relevant aspect. Indeed, the lack of assessment is strongly linked with the concerns and perception about the territory devastation through the distributed generation of RETs. Indeed, the protester arguments of the second extract describe the *procedures of authorization as absurd*. The orator emphasises that what happened in his case is a 'photocopy' of what was happening in many other different contexts of the region, without considering the 'environmental peculiarities and contingencies' (*polluted layers, wells of aqueducts, the distance from houses*) and local knowledge about these places (*nothing has been taken into account*).

These arguments are connected to polemical representations about *authorization procedures favouring incumbent interests* and the denounces from local authorities, protesters and journalists of *lacks, omissions and irregularities of regional authorization procedures*.

“to our citizens, we ask 40 permits to move a window, and maybe we say no. These realise a powerplant with a SAP [Simplified Authorization Procedure], a 30-day process that if you're not even able to say two words you find that powerplant authorised behind the house” Local politician – public debate 2013 - code: *procedures serving incumbent interests*

The extract just presented refers to the argument of a local mayor, which during a public debate emphasises the contradiction of the law and its consequences: a disparity of treatment favouring the interests of powerful incumbent interests. This is realised by making the comparison with how authorizations, licenses and permits are given to citizens and entrepreneurs. While citizens have to face with several bureaucratic procedures and difficulties (*to our citizens we ask 40 permits*) even in the case of little interventions (*move a window*), entrepreneurs can rely on simplified bureaucratic procedures (*SAP*), an authorization process characterised by a very small time range (*30 days*) limiting the possibility even for local authorities to have a voice and agency in the procedures (*if you are not even able to say two words you find that powerplant authorised behind the house*).

The Regional Law represented, in this case, a crucial trigger for the development of widespread opposition and that conducted to appeals from several local authorities, citizens committees and environmental NGOs to the Regional Administrative Court (TAR) and Constitutional Court about the regularity of authorizations' procedures and the Regional Law.

The lack of impact assessment and public involvement (information, transparency and participation) at first emerged as the main arguments used in opposing to the law, by denouncing the disrespect of supranational normative frameworks such as the EU EIA Directive and the Aarhus convention. This conducted to the sentence of the Constitutional Court declaring unconstitutional the law for the violation of EIA directive.

In fact, this law gave competence about the authorization of RETs to the regional public office without sufficient control about the consequences of this institutional arrangement. This regional lack of control coincided with a great power in the hands of public officers and gave the opportunity to the emergence of illegal behaviours from public officers and entrepreneurs connected to authorization procedures. Following this denounces from local authorities and citizens, it started an investigation conducted by the financial police collaborating with the attorney of Ancona.

*“12 the suspects, among them three officials of the regional office. **Office abuse** is the hypothesised crime even if the investigation also involves the hypothesis of environmental crimes. **Under accusation there would be a part of the 23 authorizations granted by the Region** since the beginning of the year for the siting of the plants in the regional territory and in particular the **assignment procedures** that according to what hypothesised by the attorney **favoured some entrepreneurs**”* Journalist – media debate 2013 – code: lacks, omissions and irregularities



Helicopter view of a biogas plant under investigation close to PV systems on the ground. Source: Media material (2013)

The protest diffused throughout the region, the legal disputes and sentences represented relevant issues to which local media had a great interest across the years and coincided to a strong politicization of energy issues and conflicts among different levels and sectors of regional energy governance. Indeed, as previously showed, the conflict developed involving local authorities and communities confronting with the Regional Administration and the entrepreneurs. Moreover, this conflict is also characterised by other sectors of governance such as authorities responsible for environmental protection.

*In the belief that the objectives of reducing "greenhouse gas" can be achieved mainly through a serious policy of saving and self-production and without sacrificing the uncontaminated corners of the Apennines, **we appeal to the Marche Region to immediately remedy the highest environmental risks of wild wind power, first of all through loyal recognition and respect for the role of other authoritative institutions, such as the Superintendencies, responsible for the protection of fundamental common goods, such as the landscape and the environment**”* Environmental NGOs Alliance- Media debate 2015 – lack, omissions and irregularities

The extract presented refers to a press release of the regional alliance of environmental NGOs asking and appealing the Region to recognise the environmental impact of an authorised wind farm and remedy to the lack of control and evaluations (*wild wind power*). Also, the extract highlights two other important aspects. First, the view of environmentalists about the current regional energy policy, which is represented as not serious, far-sighted and strategic (*targets*

can be achieved through a serious policy of saving and self-production) as well as environmentally sustainable as its implementation sacrifices the *natural and uncontaminated mountain areas* to reach the objectives of GHG reduction. Second, the argument reveals the disputes between institutions, i.e. the regional office responsible for authorization and the authorities responsible for environmental protection (*the Superintendencies*) asking for and underlining the principle of *loyal recognition and respect of the institutional role and position of these authorities*.

The arguments pertaining to this institutional conflict and/or the necessity of coordination and respect for the role of different institutions in authorization procedures are also underlined within public debate. In this context, several times local authorities asked and underlined as *necessary the presence of environmental and health authorities within authorization procedures (i.e. the conference of services)* emphasising the role of these procedures in finding acceptable and better solutions by *mediating, understanding and compensating the interests at stake*, and the relevance of *planning and programming the interventions with local authorities* rather than imposing them in a top-down manner.

“So, beyond the guidelines, which are the principal element, **we ask safety and protection, thus the presence of ASUR and ARPAM in the conference of services** for the siting and construction of these power plants” Local politician – public debate 2013 – code: presence of environmental and health authorities

“..and then I will also repeat the request I made at the services conference, that is: **before any kind of authorization is released the project is controlled by the ASUR and the ARPAM**” Local politician – media debate 2013 – code: presence of environmental and health authorities

“through the services conference, **we must reach that very difficult goal of understanding and compensating the different interests at stake**” Local politician – public debate 2012 – code: mediation and compensation of interests at stake

“**the invitation is to plan together with the provinces and municipalities that are not always against, but in some cases, especially when there are the interests of citizens with houses close to the plants we want to have information and security.**” Local politician – public debate 2012 – code: planning and programming with local authorities

The extracts just presented clearly describe the positioning of local authorities in respect to the work of the Region by explicitly requesting the presence of the Regional Environmental Protection Agency (ARPAM) and the Health Regional Agency (ASUR) during the services' conferences to release authorization (*extracts 1 and 2*). In this regard, local politicians represent in a normative way the authorization procedures as a way to *ensuring information disclosure, institutional control and guarantees of safety and protection*, something that is possible only with *the participation of all interested parties planning together (fourth extract)* and the

political willingness to mediate and understand the different positions at stake for finding better and collectively constructed and shared solutions (*third extract*). In this regard, it is relevant the argument used by the Mayor in the fourth extract, which highlights that local authorities (*provinces and municipalities*) are opposing to RET development because of *a lack of recognition of their role and interest*.

For what concern the differences between the media and the public debate, it should be noticed how arguments about authorizations follow in the media debate the legal and political path of the Regional Law and the authorizations of biogas plants. Indeed, the arguments about the request of *suspending or revoking the authorizations of projects not subjected to EIA* followed the emergence of the different political and legal issues, namely the sentence of the constitutional court and the investigation and trials on illegal behaviours of public officers and entrepreneurs.

On the other hand, arguments pertaining the *unacceptability of ex-post EIA* derived from the law proposal of the Regional Administration - and discussed in the Italian Parliament – to undertake an ex-post EIA of 18 biogas plants already authorised (already functioning or in construction phase).

“it is absolutely unacceptable, because instead of annulling the authorizations released violating the law, without the EIA screening [...] the regional council proposes a rather strange even creative concept [ex-post EIA], that however in our opinion, both from a procedural and normative perspective but also from common sense, makes all this imposition of these facilities in the territory even more unacceptable” Protester – media debate 2014 – code: *Ex-post EIA is not acceptable & suspend or revoke authorizations*

“The Mayors of the Marche were almost unanimous: still no to the posthumous EIA, remembering in their speeches the motives prompting them to oppose since the beginning to the Regional Law and biogas plants” Journalist – media debate 2014 - *Ex-post EIA is not acceptable*

The extracts presented show the view of local authorities and citizens' committees about the proposal. In the first extract, it is relevant to notice that the protester represents the Regional proposal of law as something unacceptable and absurd (*rather strange even creative*) to the eyes of citizens, not only with regard the procedural-legal aspects but also the *common sense*, thus emphasising how anyone should interpret this attempt to solve the situation as illegitimate because anchored on violations of law that aims to regulate (*instead of annulling the authorization released violating the law*). A further element emphasised in this argument refers to the representing of regional actions as directive/dirigiste, unfair, dropped from the above to the territory (*imposition of these facilities*), and for this reason not tolerable by local communities.

On the other hand, the second extract presented reveals the *unanimous positioning of the Mayors with regard to the posthumous EIA*, a positioning that is the product of a long-path of opposition based on multiple motives against the legal and institutional behaviour of the Regional Administration.

Further themes that characterise the media debate on authorization refer to the already discussed (distributive) injustice of biogas, not in favour of agriculture. In this case, however, the arguments focused more on the procedural aspect (the authorizations), and the request of controlling and verifying the agricultural status of companies as a requirement to obtain the authorization.

Finally, two themes that are profoundly interconnected refer to the politicization and scientisation of authorization procedures and energy policies. Politicization refers to the way scientific and technical issues are constrained by political choice, interests and needs, and susceptible to the influence of economic stakeholders and powerful socio-political actors (Pellizzoni, 2011; Stirling, 2008). On the contrary, scientization refers to the way expertise is used to affirm the primacy of science and technical features over the political agency. Such a process involves policy-makers evading their responsibility claiming that political choices are scientifically-grounded, that is entirely determined by techno-scientific knowledge (Roy et al., 2007). This kind of approach refers to a shift from democratic deliberation to technocratic governance.

These two different processes are widely present in media debate, representing conflictual positionings within the Regional Council as the following extracts vividly show.

“[T]hese [authorizations] are purely technical procedures [...] that concern of course the directions given by the regional council but technically they have a very complex process, we cannot escape from approving power plants that have the technical characteristics necessary and which do not impact”
Regional politician – media debate 2012 – code: authorization is of technical competence, not political

“[A]uthorizations are given by the region. It's a technical opinion, yes, but the technicians work according to the laws and we are legislators, so if the laws do not go well, the laws change –
Regional politician - media debate 2012 – code: authorization is a political responsibility

The first extract clearly highlights the attempt of a Regional Councillor to evade and exclude any political responsibility for authorization procedures of RET. This kind of arguments reveals a variability of language that recognise the role of politics (*concern of course the directions given by the regional council*) while using a disclaimer (*but*) essentialising *the purely technical nature of authorizations*, thus attributing the responsibility to the Regional Offices and claiming the marginal role and influence of politics, which *cannot escape from approving projects having*

the characteristics required and that do not impact. This argument clearly had an effect in the public debate, with politicians recognising the *technical nature of authorization but* claiming the responsibility of regional politics in providing the *legislative framework according to which the technicians work*, and stressing the requirement of a political action to change the law (*we are legislators, so if the laws do not go well the laws change*).

5.4.2. Regulation and guidelines for RET promotion and deployment

Proceeding in reporting and analysing the main themes of procedural justice, arguments on regulation and guidelines for RET development were more present in public and political debates.

The argument about *the need to stop land consumption* and proposing to *act on the already built and not in the rural countryside*, as well as the criticisms on *regulation and guidelines for RET development coming always late and after impacts already occurred* were expressed by almost all the actors (experts, opposition groups, NGOs, local authorities, journalists). The same occurred for arguments on *the need for far-sighted policies*, which however were more present in the media debate, and denoting a polemical re-presentation of national and regional *policies as short-sighted and emergency management oriented*. On the contrary, arguments stating that *raining/windfall incentives allow speculation* and that *precautionary and social utility principles should guide RET development* were mostly expressed by local authorities, opposition groups and environmental NGOs. Last, arguments on the *need to promote investments and use available fundings* by regional politicians both in the media and public debate, reveal a common trend of policy-making, the rush, identified in some cases as the main cause of problems in lacking attention or involvement.

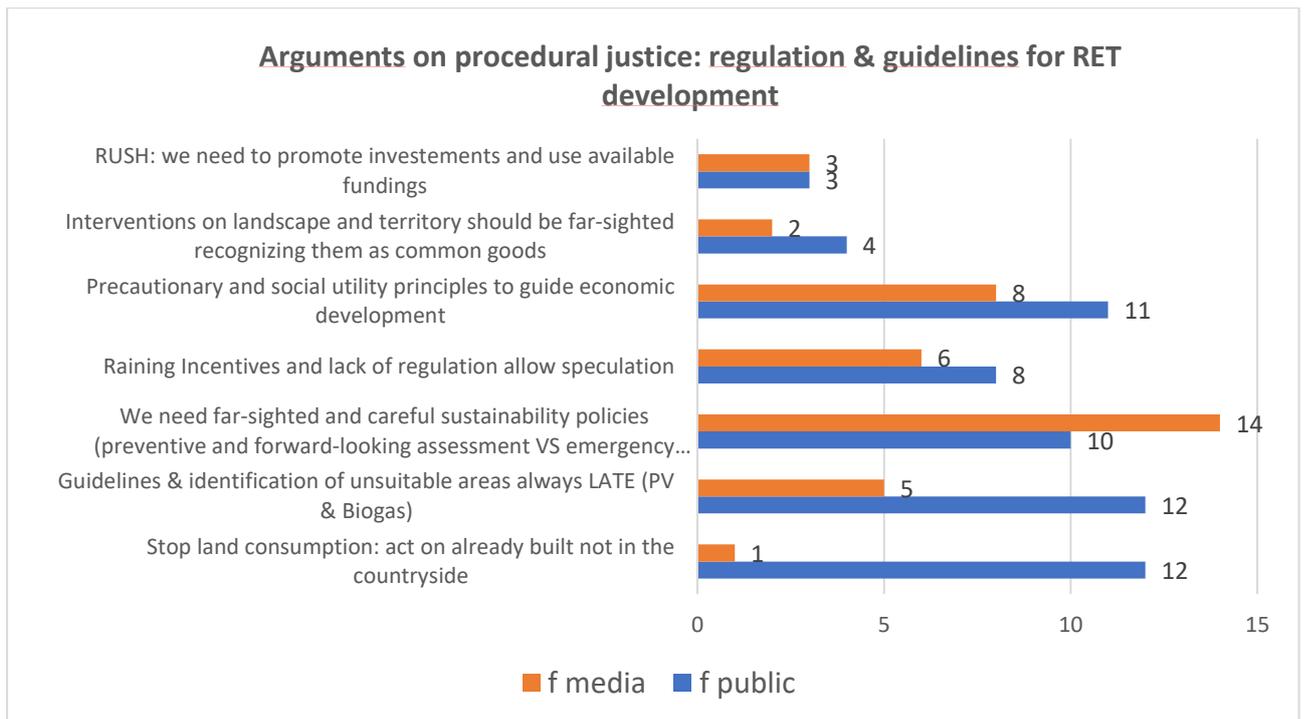


Figure 41. Arguments on procedural justice: regulation and guidelines for RETs deployment

After delineating the ‘bigger picture’ of public discourse and positionings in public and media debate, about regulation and guidelines now let me provide little evidence about this interpretation.

The arguments about *the necessity to stop consuming land*, and particularly the fertile soil, is widely shared by almost actors (citizens’ committees, environmental NGOs, experts, local and regional politicians) recognising the urgency and size of land consumption problem. Most of these arguments emerged during public consultations on the PEAR 2020 and the Regional Law for the territorial government, and in moments of public debate on renewable energy. Only one argument indeed emerged in the media debate from a spokesperson of a network of citizens’ committees.

*“You should consider that the residents of the Marche have increased around the main 11 urban centres in the last fifty years of the 39 % and the cemented soil has increased by 400%, so there are **a loss and sterilization of the fertile soil, of landscape and artistic beauty that is definitive and irreparable, irreversible. Why does this happen? to respond to real needs or for a speculative purpose?** that is, for an economy that even when it is cementing, it looks very much like finance, it is purely abstract. **We would like to bring the economic choices back to the real needs of the places**” –Network of opposition groups - Media debate 2013 – code: stop land consumption*

*“**this is a landscape that deserves a redevelopment** [slide with the image of an industrial area with large sheds, see below*], **a reuse, a restructuring, and here there is so much to work. We are increasingly hearing construction companies, engineers, architects and so on who talk about stopping this destruction of the territory and enhancing the built. We build on the built, because that's where***

our businesses will find work, it's madness to continue building in the countryside.” Environmental NGO Public debate 2013 – code: stop land consumption, act on already built



**Slide presenting an industrial abandoned area and stating “for a sustainable human-landscape relationship. Real/everyday landscape: rehabilitation, redevelopment, and correct reuse”. Source: public debate material (2013)*

“we no longer have to consume soil, rather we should use abandoned areas, perhaps managing one of the many abandoned industrial sites to make a power plant above there” Environmental NGO Organization – public debate 2015 – code: stop land consumption, act on already built

*“we need to **take the total count of the agricultural territory remained, and say consumption 0, further consumption 10**, we can discuss it, but we set a quantitatively verifiable objective and then indicate its evaluative instrument, binding, prescriptive, normative - call it as damn it seems to you - that impose that goal” - Local politician, public debate 2015 - code: stop land consumption, act on already built*

The extracts presented report the argument used across years by the ‘environmentalists’. The first extract refers to the arguments used by a spokesperson of citizens’ committees, who during a media debate reported the data of urbanization/overbuilding in the region and demographic changes in the main urban centres (39 % of increase of residents, 400% of increase in cementified soil) and linking these place changes, or also change in land use, using a three-part list (*definitive and irreparable irreversible*) to highlight the severity of the several losses the region is facing (*fertile soil, landscape, and architectural and artistic heritage*). Furthermore, the spokesperson questioned rhetorically the reasons of this changes and explicitly attributed the reason to *speculation activities not responding to the real needs of the territories*.

The second and third extract instead raise the attention to another aspect of this territorial situation, which is argued as having a large consensus within the regional community (*We are increasingly hearing construction companies, engineers, architects and so on*): the need to act on the already built by redeveloping, reusing and restructuring where needed all the abandoned building stock and industrial areas to satisfy the ‘needs of development’.

Indeed, these arguments aim to shed light on how the already built constitutes both a problem with a long-standing tradition which should be stopped (*we have no longer to consume soil; it's a madness to continue to build in the countryside*), that an economic opportunity and resource for the region (i.e. *using these areas for powerplant siting; or providing work opportunities for several economic sectors*).

The last extract instead refers to the arguments used by a Mayor who reporting the problem of soil consumption and loss of agricultural territory firmly demanded the setting up of a quantitatively verifiable objective and providing normative instruments to 'impose' the decided goal. This discourse has the function to emphasise the desperate need (*call it as damn it seems to you*) for the region of defining targets, laws and institutional arrangements giving an answer to the land consumption problem and in a path that is clearly defined and where rules are truly applied and respected (*indicate its evaluative, binding, prescriptive, normative instrument imposing that goal*).

Further discourses about regulation and guidelines involve the criticisms on the timing of guidelines for RET development and the identification of unsuitable areas. These are represented as occurring always late and when the damages and losses caused by RET development already occur as it happened in the region with the PV and biogas.

"both for biogas and PV, any planning and regulation have been completely missed. We made the zoning of the PV after the expansion of PV in our hills, the regulation on biomasses and biogas has been made after all these events [protests and trials], do you think is the way to behave? this is unacceptable" Local politician - media debate 2013 - code: guidelines and regulation always late

As the extract shows, the setting up of regulation and the identification of unsuitable areas for RET development (*planning, regulation, zoning*) are perceived as missing and emerging only when the problems and the critical situations are evident to everyone (*after the expansion of PV in our hills; made after all these events*). This reflects the representation of a slow and lacking political action and awareness, a sort of 'mess up first and solve it later' which according to the orator, a local politician, is *unacceptable and not the right way*.

This discourse is strongly linked, in terms of inter-textuality, with several other discourses identified, such as the *rush of promoting investments and use available fundings* as affirmed or recognised different times by regional politicians and public officers.

"everything was motivated by this criterion, we must do it quickly, because there are big and small entrepreneurs who have to invest, simplification, we eliminate the infamous bureaucracy, which I sincerely agree with, so this of the threshold" Regional politician – media debate 2014 – code: Rush, we need to promote investments and use available findings

“In the last legislature we have made a mistake of underestimation, the desire to do led us to neglect the dialogue with the [civil society] associations, with the citizens, with the mayors, because we had to do, and then the rush at times is bad councillor” – Regional politician – media debate 2015 - code: Rush, we need to promote investments and use available findings

*“The **Regional officials** said they were pushed to close the service conferences as soon as possible [...] they needed to go fast because **otherwise, the time for incentives expired**” – Journalist – media debate 2014 - Rush, we need to promote investments and use available findings*

“the regional energy plan must be approved by 30 June 2016, because we have to be able to use the European resources that are available” [...] “the timing is June 30th, we have no time to waste because otherwise, we lose resources and we cannot make the public tenders”- Regional politician & regional public officer - public debate 2015 - code: Rush, we need to promote investments and use available findings

As the first two extracts underline, the issue of timing is recognised by regional politicians as the main problem surrounding the Regional lack of/missed regulation and the (excessive) simplification of bureaucracy about RET development (*everything was motivated by this criterion; we had to do, and then the rush at times is a bad councillor*). This argument is sometimes accompanied by the use of a defensive rhetoric, such as the second extract reveals, minimising the responsibilities and lack of the Region by representing it as a *mistake of underestimation* that has been made in good faith (*the desire to do*). On the other side, as the journalist underlines in the third extract, the regional officials were pushed to *release the authorizations as soon as possible* so that investments get *access to national incentives*.

Furthermore, as the last extracts shows, despite the recognition of this critical issue this rationale still guided and shaped the later planning of the regional energy strategy (*we have to be able to use European resources; otherwise we lose resources and we cannot make public tenders*)

However, and more important, this discourse about the way the Region governed RET development is strongly linked with discourses associating the lack of the Region with the actions and policies of the National Government.

*An energy policy cannot be done this way, and not only for the Marche. Because **this is an all-Italian problem, that is we cannot do an energy policy in which we incentivise everything and we make sure that everyone does what they want on the territory**” Opposition group –media debate 2014 – code: raining incentives and lack of regulation allow speculation*

In the extract presented is reported a widely shared representation that concerns *the rain of (national) incentives*, meaning their distribution without a criterion (*we incentivise everything*), and *the lack of regulation both at national and regional level (this is an all-Italian problem)*, as the main cause of speculation activities in the entire national territory (*everyone does what they want on the territory*).

Linked with the main arguments presented so far about regulation and guidelines, several of the discourses that are reported and analysed in this part can be considered their direct consequence, corresponding to the demand by different actors for better and fair environmental and energy policies.

*“we have to imagine what the future will be like, because we start from the idea of the smart city because **even if the planning is for ten years, it must put the conditions for a longer transformation.** The plan must imagine the future, so a future that is not ten years but thirty”*

Environmental NGO - Public debate 2015 – code: far-sighted and careful sustainability policies

*We are not [those] of the no to say no, but we want that these transformations, necessary for the evolution of our society, to respond to the always different and new needs of our society, **are always coherent and compatible and above all sustainable** [...] **that is they do not definitively compromise the resources on which these transformations go to work.** So, **we talk about active protection and sustainable development** [...] **term that we have heard too often used without giving it a clear, precise, profound and rigorous meaning.** We have spent weeks on this term [...] and **for us, the sustainable development of the territories is the overall, widespread and harmonious well-being of a community.** And every word is very heavy, **so let's understand what sustainable development is and then we will move forward.** Spokesperson network of citizens' committees - Public debate 2013 – code: far-sighted and careful sustainability policies & Precautionary and social utility principles guiding economic development*

*“I do not like too much to distinguish ourselves from **politics that is a mirror of our society, but if we do not find a point of convergence of pacification on common values and ideas, we will hardly succeed in doing something good.** We, because we believe in these ideas and our politicians because they should guarantee a truly democratic government” Spokesperson citizen committee – public debate 2013*

The extracts presented refer to the widely shared discourse on the *necessity of far-sighted and careful sustainability policies*, namely policies not emergency management-oriented but rather forward-looking and strategically oriented in the long-term. This kind of far-sighted strategy for RET development is clearly argued should be guided by few criteria: *the precautionary and social utility principles*, and the *recognition of natural resources as common goods*. Public discourses about natural resources as common goods are key reading, connected with discourses about far-sighted and careful sustainability policies, and with the principles that are recognised as a guide for a ‘sustainable development’: the social utility and precautionary principles.

In the first extract this necessity is clearly stressed by emphasising the relevance and requirement for planning and policy-making of ‘envisioning the future of local communities’, i.e. the elaboration of an anticipated scenario about how cities should transform in the long-term (*smart city*), according to which orient the planning and decision-making in order to lay the foundations for this transformation.

This representation about the ‘Project’ for the regional community (cf. Bauer & Gaskell, 1999; 2008) was stressed in the public and media debate by almost all groups of actors (i.e. experts, local and regional authorities, environmentalists, and media). However, it should be noticed that this perspective has been most advanced and problematised by ‘environmentalists’ adopting a specific ‘environmentalist discourse’ that emphasises and reflects the ‘group conceptualizations’ of ‘sustainability’, ‘sustainable development’, and ‘precautionary’ principles. These arguments clearly shed light on the presence of different meanings associated to the abovementioned principles, which stressed the constitutive role of the environmental and social dimensions of sustainability often overlooked, neglected or purposefully re-conceptualised in ways that favour the economic one. These arguments reveal the presence of polemic representations embedded in the environment-economy, people-economy and people-environment (themata and) balance.

As the second extract underlines, ‘environmentalists’ perceive and represent themselves as not moved by ‘Nimby assumption’²⁷ (*those of the no to say no*). Instead, as reported by the spokesperson, they refuse, reject and oppose this assumption delegitimizing it with arguments emphasising the awareness about the *necessity of transformations for society evolution and respond to its always changing needs*. Furthermore, the orator advances in this regard a legitimate and fair request: that these *transformations are realised ensuring their compatibility, coherence and sustainability by do not compromising the natural and common resources*. This kind of principle is argued should be characterised by *active protection and sustainable development*. However, emphasising that sustainable development has been used as an umbrella term comprising different meanings, or a ‘container’ emptying these meanings. In that regard, the orator highlights the necessity of co-constructing a shared (*clear, precise, profound and rigorous*) *meaning about sustainable development* to find a common ground on which it could be possible to communicate and co-operate (*so let's understand what sustainable development is and then we will move forward*). In the same extent, in the extract that follows and deriving from the same public debate, this requirement of finding a common ground is further stressed. What is relevant is that the orator positions politics not far away and distant from citizens. Rather, she emphasises how politics is a *mirror of society*, reflecting its socio-cultural dimension. In this way, the we-them distinction and opposition are abandoned to stress the need

²⁷ the citizens committees are often defined as the ‘committees of the NO’ (Comitati del NO) or as the NO + word referring to the particular project (e.g. ‘NO TAV’ – Torino-Lione high speed railway, NO TAP – Trans Adriatic [gas] Pipeline) or type/nature of intervention (e.g. ‘NO biomasses’, ‘NO wild wind’, ‘NO incinerators’)

of finding a sense of collective purpose, a *point of convergence (and pacification) on common values*, a common ground on which base the dialogue and co-construct adequate strategies and laws for the democratic government of the territory.

While in some parts of this thesis is used the term ‘environmentalists’ to refer to a ‘single wider group’ comprising both environmental NGOs and citizens’ committees, the data collection and analysis of public, political and media debates allowed the identification of at least *four different environmentalist social milieus or coalitions*. This is reported also in Table 7 about the collected materials referring to three Networks of citizens committees and environmental NGOs as organisers of some public events as well as fully participating and having a voice in media and political debates.

a) A first network is represented by a Regional alliance of environmentalist associations that comprises relevant and well-known NGOs in the national or regional context (i.e. regional sections of national environmentalist NGOs, and/or regional associations that are distributed in the local territories). This coalition is characterised by open borders, and flexibility, determined by the degree of consensus about the environmental issue at stake object of protest and advocacy actions (e.g. press releases, conferences, debates, and so on). As it will be shown in the next chapters, one of the few fractures in this social milieu is represented mostly by the wind energy issue, with few environmental NGOs more concerned of promoting RET development in general and wind energy in particular. Beyond wind farms, this milieu is compact and share most of the environmental discursive or representational project for the regional community.

b) Another network is represented by a forum involving more than 100 groups between citizens’ committees, as well as local and regional environmental associations. This network is widely distributed in the Region and has a strong relationship with regional environmental NGOs as it takes often part to the activities of the regional alliance of environmental association. The discourse of this network is more concerned with environmental protection and justice issues, that is the preservation of natural resources and the local environment, direct democracy, a truly green and social economy, and the respect for the rights of the places and local communities. In this network are present different recent ‘waves’ of environmentalism in the region (e.g. the period of the PV expansion, the Italian referendum on water and nuclear, the soil consumption, but also groups opposing to biogas, wind, transmission lines). This network has several experts inside, as well as relationships with recognised experts in the regional and national context on both legal-political and techno-scientific aspects. Remarkable is that this network has elaborated and submitted a proposal for a popular law on territorial government by

collecting more than 8500 signatures and relying on the different expertise and experiences in the regional network. This network shows a positioning that tries to influence politics by ‘denouncing and fighting’ injustices but also opening to the ‘collaboration’ with politics to solve them. This is relevant as these networks/milieus differ not only for the arguments used but also for their communicative formats and function. While the next two social milieus are more concerned with denouncing and fighting injustices, vehiculating polemical representations, the other two networks are equally concerned on denouncing and fighting the injustices through advocacy - also with legal actions and presence in the media – and on promoting a cultural and socio-political change, aiming to the *institutionalization of environmentalist discourses and public engagement mechanisms* (e.g. preservation of common goods, sustainability, social and circular economy, direct and deliberative democracy).

c) The third network, a coalition of citizens’ committees has been constituted in 2006 and is characterised by a diffused presence in a province with citizens’ committees engaged in the battles to large-scale projects such as gas storage and pipelines, thermoelectric plants, drilling oil activities, but also biogas and other environmental and energy problems. These issues are addressed both at the local and regional level. Their discourse is more concerned with the respect of the laws and citizens’ rights. In this regard, they make more use of legal and political expertise (having relationships with legal experts), in their mobilization activities being legal actions or public meetings such as debates and protests.

d) The fourth network* is characterised by a local basis and specific focus as it mainly represents the instances of a wider area (e.g. the citizens’ committees of some provincial area greatly interested by RET development) but is also interconnected to a wider national network. The foundation of this milieu is the (opposition to) biogas development in the Italian territory. The emergence of this network is connected to the biogas issue in the region. This social milieu is characterised by a discourse stressing mostly the health/environmental risks of biogas.



*Public protest in Ancona with widespread citizens' committees opposing biogas in the Marche region. Source: public debate materials (2012).

This concern seems connected to the historical presence of several polluting activities in an area that is considered at high risk of environmental crisis, and to the risks of changes in land use (industrialization of countryside, agricultural effects) and the unfair distribution of costs (of any citizen from the bills, or for the territories affected) and the benefits of change (money coming from incentives to both local and international economic actors exploiting and polluting). To the same extent, their discourse is concerned with the procedural fairness of biogas authorizations and siting. However, while for obvious reasons this procedural concern is widely shared by all the environmentalist social milieus, the discourse of this milieu - similarly to the last network that I just presented – is more concerned with the respect of the laws and citizens' rights.

This is not to say that the different milieus do not interact or share the different elements emphasised as characterising their discourse. On the contrary, they all share the elements presented so far, but put respectively more emphasis on different aspects and versions of reality, and use communicative formats having different rationales or functions. The emergence of this milieus or coalitions seems the product of different contextual contingencies such as the local territoriality or the kind of leadership and collaboration emerging in that context. For instance, it is relevant to underline that half of these grassroots networks of citizens' committees have as spokesperson or coordinator some politicians or ex-politicians belonging to different well-

known parties devoted to reprimand legality. In other cases, this ‘activism leadership’ is more diffused and refers to a more heterogeneous situation matching environmentalists, scientific environmentalists (i.e. professional using their expertise in public mobilization and advocacy activities), active citizens, political activists.

Political activism and leadership seem to play a major role in the expression and coordination of different territorial instances, in the creation of coalitions and the symbolic cultivation of representations about RET development.

Combining thematic and discourse analysis in such dataset had the advantage of revealing shared patterns of meaning or group conceptualization about the given social objects. Looking at the content and function of communication and discourse revealed the extent to which a given representational project is condensed in communicative formats and shared by different actors and groups. This is to say that the different arguments reported and analysed so far were all shared by these different milieus, although they reveal some differences in the way they overemphasise or underemphasise some aspects in their representational project.

To conclude this point, the discourses about the principles guiding RET development reveal these differences. The kind of conceptualization of (sustainable) development represented by the different milieus shows the main differences in their communicative formats and the functions they serve.

*It is true that **you have the right to invest** and earn money [...] **but your money is always after the protection of the environment and cultural heritage**, this is the current legislation 92/2011, on the EIA, which is said in the premises that the politics of the union, in the field of the environment, is founded on the precautionary principle. I am not the one who must prove that the powerplant hurts and so I do not want it on the territory, it's **you that must guarantee me that it does not hurt**, this is the principle in a nutshell.*

Spokesperson network citizens committees - public debate 2012

***Instead of developing the research and capacity** to deal with these issues that are central, it is usual to **develop another ability**, typically Italian, of the so-called **public relations**, entering the offices to **explain the entrepreneurs' needs, but never the needs of the citizen**, so what happens? all this is divided into three issues, which are the precautionary principle. among other things, there is an Italian law of 1934 ensuring this before EU, in which **the mayor must protect the right to health of citizens**. Where is it respected this way? The principle of concertation means that when you make an impactful intervention, you must inform the citizens. Did this the Marche region? Did someone else do it? No, [the Region] has done the simplified procedures, and is now in this mess. **Third question, the principle of celerity**, which does not mean to do soon. No, it means doing it in due time, which is 180 plus a maximum of 60 days”*
Spokesperson – media debate 2014

“Our future is not just a future of economic development, we have to get out of this misunderstanding [...] We are fighting to ensure that there are no foreign elements that impose top-down decisions and that decisions about the transformations required the administration will have to make [...] can truly approach the concrete needs of that community, and this does not damage the economy, we are convinced of the opposite. In the moment in which there is a community that grows around a shared

project, from that community the real opportunities of economic growth arise, but for the wellbeing of the whole community and not the usual few, this is the substantial difference.

Journalist: This is the idea of the [law] proposal, a compromise between the needs of growth and protection of our environment

Spokesperson: rather than compromise it is the 'responsible research of solutions' responding to the real needs of people and places" Spokesperson forum – media debate 2013

In the three extracts presented, the environmentalist discourse about the principles that should guide RET development according to the spokespersons of the three milieus identified.

As it is possible to notice, in the first two extracts the arguments used mostly refer to the legal dimension of sustainable development, the respect of the laws and of citizens' rights, including environmental protection, as prior to the rights and needs of entrepreneurs and economic development. For instance, the first extract reveals the relevance of both the protection of the environment and cultural heritage by applying the precautionary principle in guiding sustainable development as stated by the EU members policy. On the other hand, it highlights the rights of citizens and the duties of entrepreneurs in having and providing guarantees that the principle of precaution is respected. In the same way, the second extract emphasises the relevance of the rights and duties of citizens, firms and politics for ensuring a sustainable energy development by respecting the principles of precaution, concertation (participation) and celerity of bureaucratic procedure (respect of a fair time of procedures). By highlighting these principles, the orator emphasised how they were not respected by firms nor by the Region, accusing them of illegitimate and/or illegal behaviours respectively about all the three principles: the lack of careful evaluation of impacts to guarantee their mitigation ensuring health and environmental protection; the lack of participation of local communities (information disclosure, consultation, and possibility of having space and influence in decision-making); the oversimplification of bureaucratic authorization procedures responding the needs of incumbent economic actors but not respecting the laws and the due time necessary to the assessment – and mitigation - of impacts and the consultation with different interested publics (i.e. EIA).

On the contrary, the third extract reflects the arguments used by a (further) spokesperson of the regional network of citizens' committees and environmental associations during a TV interview. This discourse stresses to the same extent the economy-environment themata and the relevance of procedural aspects of sustainable development. However, while denouncing the status quo on the way decisions of development are imposed on local communities, the discourse reveals a more radical and transformation-oriented function. This is emphasised by re-presenting sustainable development far from the overlapping with economic growth or development, bringing evidence of how this is a misunderstanding, and how it is fundamental to find a common understanding of the term, which in the opinion of this milieu, and as

previously stated in another extract (from a second spokesperson), should respond to the concrete needs of the communities, meaning the place and its inhabitants, co-constructing a shared project so that economic and community development (*real opportunities of economic growth arise but for the wellbeing of the whole community and not the usual few*), and environmental protection can be guaranteed (*a responsible research of solutions responding to the needs to the real needs of people and places*).

5.4.3. Participation in environmental and energy assessment, decision-making and planning

Concluding the analysis of discourses pertaining to procedural justice, the last theme refers to the main discourses on participation.

As it is shown in the figure, this theme is mostly addressed in moments of public debate corresponding to criticisms and demands for better policies, institutional arrangements and practices of public engagement.

These themes may be seen as mutually interconnected, representing an intertextual network. Indeed, it can be argued that the arguments referring to *the right of information and participation of local communities denied* representing the basis of the reasoning underlying the other arguments used.

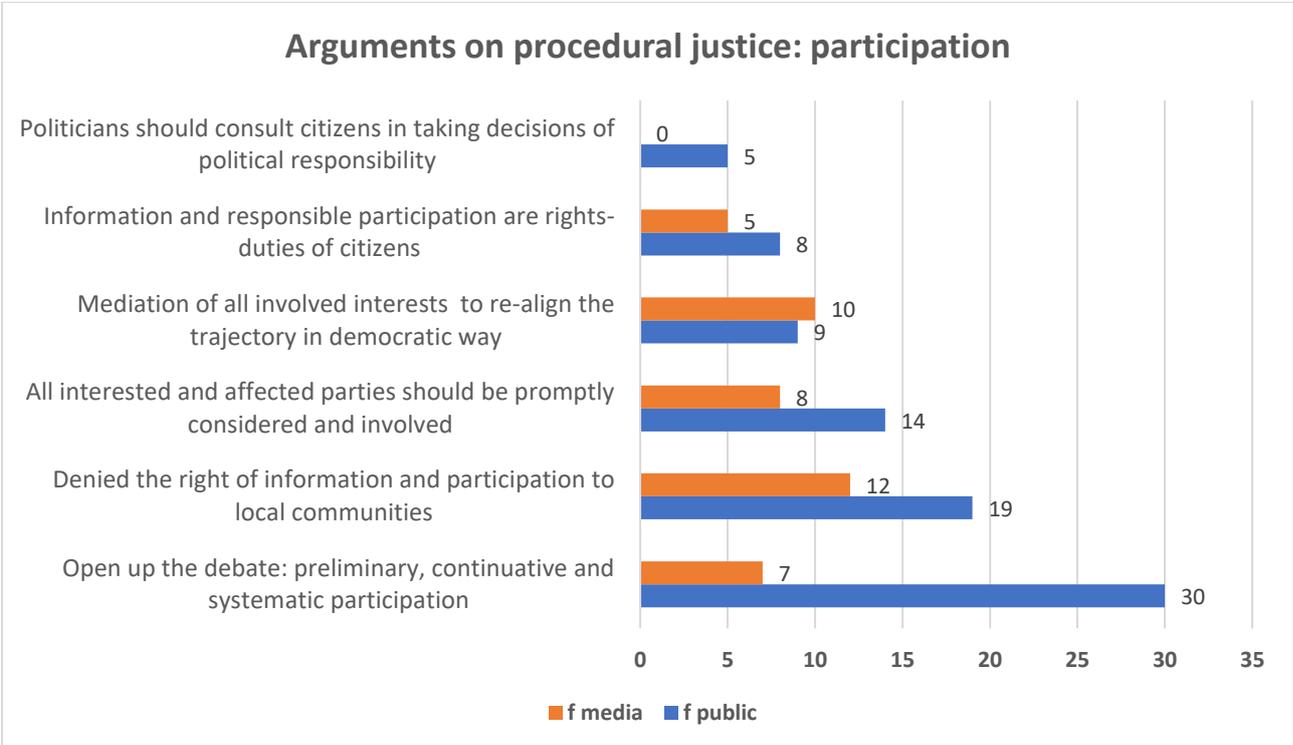


Figure 42. Arguments on procedural justice: participation

The discourse about the lack of information and participation represents a common narrative in public debate, with different citizens' committees, local authorities and experts distributed in the region sharing their own experience or in the case of media debate denouncing this situation. The following extracts provide a clear picture of this interpretation.

*"This **law violates the European directive of the Aarhus Convention**, in practice, **citizens often realise that they are making an energy plant when they begin to see the bulldozers**, this is not only unworthy and incomprehensible, but **even unconstitutional**" Local opposition group –public debate 2012 - code: denied the right of information and participation*

*I take this opportunity **to thank the organisers for calling us to bear a concrete testimony** of what it means the **lack of concertation and democratic participation** in decisions of considerable importance and impact on the territory.
Spokesperson citizen committee - public debate 2013 - code: denied the right of information and participation*

***we all share the 99% of the same elements, procedures that have gone ahead in total disregard of citizens' opinion, who often did not even know what was happening** - spokesperson citizen committee - public debate 2012 - code: denied the right of information and participation*

*all these paths were closed without any weighted assessment, **without any real involvement not only of citizens but even more seriously of municipal administrations that almost always found themselves on the other side of the barricade** - Mayor - media debate 2012 - code: denied the right of information and participation*

***we came to know [about the project] when the region has called us in the services conference, 5 days before** - Mayor - public debate 2012 - code: denied the right of information and participation*

These extracts report the arguments of local authorities and citizens about the lack of information and participation. The arguments reveal the sharing of experiences (*we all share the 99% of the same elements, thank the organisers for calling us to bear a concrete testimony, all these paths*), which seem having a major role in promoting the perception of a common problem and consensus about RET development within the wider political arena, contributing to the positioning of actors and the development of coalitions between citizens' committees and local authorities (as well as with environmental NGOs and other relevant groups such as agriculture representatives or experts). This shared experience of lack of recognition and misrecognition by the Region is clearly stated in all the arguments (*citizens often realise .. when they see the bulldozers; disregard of citizens opinion; any involvement of citizens and most seriously of municipal administrations; we came to know 5 days before*), provided a common ground for the development of coalitions (*Municipal Administrators almost always found themselves on the other side of the barricade*).

Starting from sharing and denouncing this situation in public, political and media debates all the other themes are the direct consequence of the debate provoked in this regard: *claiming information and responsible participation as a right-duty of citizens*, demanding decision-makers *mediating the interests to re-align the path in a democratic way* ensuring inclusive decision-making processes where *all relevant actors are promptly involved and considered*.

All these elements are mostly elicited in the discourse of ‘environmentalists’, local authorities, experts and then recognised, addressed and re-presented by regional politicians and public officers (e.g. *mediation of all involved interests, consultation of citizens for taking decisions of political responsibility*).

In this part, these arguments are presented and analysed emphasising the intertextuality of discourse used by different actors.

***“We request that the participation is informed and aware so that it can be considered responsible, because if it is not informed and is not aware it cannot be responsible
[..]***

*in recent times, citizens have begun to inform themselves, but they do a tremendous effort to do this, even municipal councillors are struggling to have the acts for the council that are given 24 hours before it. This is not possible. So, **we want an observatory/laboratory of the territory**, not the usual observatory managed by an institution, putting the data considered relevant. No, an **observatory in the open sense**”*
Spokespersons of citizens’ committee and Network of committees- public debate 2013

“[K]nowledge in this region is there, but as we have repeated and underlined it is time to make it available to anyone [che sia alla merce di tutti] because often participation is not based on this solid knowledge basis, and then we ask to the Region, we repeat it, the territorial information systems, a monitored view of the territory, which brings the element of knowledge back to the community and collectivity, as well as to the technicians” Expert – public debate – 2015

The extracts presented refers to the arguments used by respectively two spokespersons of a citizens’ committee and of the network of committees during a public debate, and an expert (architect/planner) during a political debate/consultation.

Both these arguments clearly stress and demand *information disclosure, open data and transparency* as a strategic resource for building the necessary capacities for transformations in different publics, enabling in this way informed and responsible participation, mutual learning and the co-production of knowledge and policies.

Indeed, they clearly highlight the presence in the region of relevant expertise in different sectors of society (politicians, civil society, experts), and the factors hindering the use of this knowledge.

They argue, repeat and underline in different ways how *it is time to make knowledge available to anyone* and how the lack of institutional arrangements for information disclosure and engagement (*acts given to the council - observatory/laboratory of the territory; territorial*

information systems) is limiting the potential of participation and the construction of awareness, knowledge and capacities in the entire regional community (*if it is not informed it cannot be responsible; often participation is not based on this solid knowledge basis; knowledge back to the community as well as to technicians*).

Furthermore, discourses on participation clearly stressed the requirement of *decision-making processes oriented to be inclusive, involving all actors* that may be interested and affected by decisions and actively listening and *mediating the different interest at stake* to find solutions collectively constructed and shared and re-align the regional path in a democratic manner.

*“if **a roadmap on agro-energy** is to be set, this **can only be done in partnership with those who pay, that is each of us, with the citizen, consumer, taxpayer and with those living in the territory and on the territory**” - Agriculture representative - Public debate 2012 – Code: Mediation of all the involved interests to re-align the trajectory*

*“[s]o **the participation must involve from the beginning to involve all the actors on the territory**” Spokesperson citizen committee - public debate 2013 – code: all the interested and affected parties should be promptly involved*

*“At first we launched this great project: the PEAR. Then **the region has not been able to dialogue with the new categories, with the municipalities, then the committees came later**” Regional politician - media debate 2014 - Code: all interested and affected parties should be promptly involved*

*“I'm very angry just because I believe in politics, and I want to continue to believe, but I'm angry because **the Region is an institution that I respect, and that must be the synthesis of local communities, must take into account what the mayors of the local communities say, it cannot pass over us like a steamroller**” Mayor – public debate 2013 – code: Mediation interests at stake*

*“the **Region should have been closer to the territory and even previously putting on the table with all the mayors of the territory, if he had in mind to make a serious energy policy, go to evaluate with all the mayors about the most suitable sites**” Mayor - media debate 2014 – code: all interested and affected parties should be promptly involved*

All these discourses permeating the public, political and mediatic debates underline the criticisms on regional environmental and energy policies stressing the requirement of inclusive decision-making and of deliberation between actors to mediate among them.

The first extract, from an agricultural representative, emphasises that the development of biomass RES (*agro-energy*) should be planned in a careful way (*road-map*) through inclusion in decision-making of all the actors (*each of us; citizen, consumer, taxpayer*) potentially interested because living in territories that may be affected or those who live and work thanks to that territory, such as the farmers (*with those living in the territory and on the territory*). Furthermore, the extract highlights that this inclusion in decision-making and implementation

of energy strategies should be characterised by mediation, cooperation and partnership (*partnership – ‘partenariato’²⁸*).

The second extract presented instead refers to a spokesperson of a network of citizens, committees stressing the importance of a territorially inclusive and preliminary involvement in decision-making (*from the beginning to involve all the actors on the territory*). In the third extract, the orator is a Regional Councillor and member of a Regional commission of inquiry about biogas authorization, who summarised during a media debate the mistakes made by the Region in governing RET development (*this great project: the PEAR*) and criticising the Regional inability to a dialogue with ‘new actors’ introducing in this market and with the local authorities. The utterance underlines one relevant aspect: the Region has left this development uncontrolled and ungoverned, leaving local authorities alone to face this change, and determining local disputes between firms, citizens and local authorities, and between these actors and the Regional Administration. Also, it emphasises that the spread of citizens’ committees in the region is a direct consequence of this lack of dialogue, recognition, coordination and cooperation between levels of governance (Region and Municipalities) that undermined the legitimacy and quality of decisions triggering opposition. This is also emphasised in the last two extracts of two Mayors during a public and a TV debate, who stressed the lack of recognition and misrecognition of local communities and authorities, imposing top-down decisions without considering local voices and concerns (*pass over us like a steamroller, previously putting on the table and evaluating with the mayors*). This is argued as contradictory to the institutional role and duty of the regional institution (*a synthesis of local communities, close to the territory*) as well as in regard to what a serious energy policy should be, that is carefully evaluating, deciding and planning the interventions with the territory.

The extracts just presented have delineated the main discourses on participation (and recognition) as a mean of procedural (in)justice, involving relevant issues such as preliminary involvement, information disclosure, inclusive decision-making, mediation between interests. All these discourses/representations had a great effect in the regional context, clearly showing a path of ‘discourse structuration’ or rendering hegemonic representations, influencing and forcing different actors to take these arguments as a shorthand concept and starting point in their own discourse. The discourses on participation presented so far, indeed, have been finally merged in condensed statements emphasising or responding to these dimensions, and that were mostly reported in the last years during public and political debates. These short-hand

²⁸ Partenariato: Relationship of collaboration established between two or more actors (partners), in the commercial, political or industrial fields

statements refer to the need and demand of *opening up the debate with preliminary, systematic and continuous participation in co-production of policies and knowledge*.

“The participation of citizen [..], constitutes a right-duty, must be structured and continuous, and must be guaranteed throughout the decision-making process starting from early stages” spokesperson forum of environmental NGOs and citizens’ committees –public debate 2013 – code: Open up the debate: preliminary, systematic and continuous participation

“participation is not just a pass, but an instrument of knowledge and planning, the participation must be preliminary to the strategies, so we must be able to discuss, and compare ourselves with all the people interested. This is the cultural effort to be implemented.” Expert territorial planning - public debate 2015 – code: Open up the debate: preliminary, systematic and continuous participation & all the interested parties.

“it is necessary to create concrete situations where technicians, let’s call them scientists or experts meet, population, farmers, artisans, that is those who live that territory, and therefore they are the ones who can, together with the most technical skills, express those aspirations, those criticalities, also analyse those problems and monitor the state of things” Expert territorial planning –public debate 2015 – code: Open up the debate: preliminary, systematic and continuous participation

The first extract reports the argument used in public debate presenting the proposal of a regional law for the territorial government elaborated in the regional Forum of environmental associations and citizens’ committees. The argument stresses the essence of participation as a right-duty of citizens and adopting normative arguments and a democratic rationale about participation (i.e. how participation should be undertaken in a democratic system) arguing for a *preliminary, structured, and continuous* participation throughout all the decision-making phases, rather than through isolated, ineffective and not structured moments of participation/deliberation. The other extracts refer to the arguments used by experts (territorial planners) during a public debate on the regional law for territorial government. Their discourse adopts epistemic arguments and substantive rationales about participation (see Castro et al., 2018; Stirling, 2008). Participation is indeed represented as not a simple way to overcome obstacles (*not just a pass*), namely citizens (i.e. the contrary of the instrumental rationale of participation as a way to get acceptance). Rather it is represented as a great and necessary *instrument of knowledge and planning*, emphasising the *needs of concrete situations* where experts can/should engage and discuss with all the interested actors - since the preliminary phases – deliberating and analysing territorial needs (aspirations), constraints (criticalities), and problems to make decisions and monitor their effects. These arguments both reveal a substantive rationale of participation, which should be undertaken to improve the quality of decisions and policy design, with both experts and non-experts recognising their respective knowledge as relevant for knowledge production and decision-making for the local area. This

is clearly represented as a *cultural effort to be implemented*, meaning it requires the effort of all the actors to exit their comfort zone and *be able to discuss and confront each other*, fairly recognising and treating knowledge of others.

Following the demands embedded in the ‘participation discourses’ analysed so far, Regional politicians and public officers were forced in public and political debates to take and express a positioning about the issue and recognising all the requests and claims as fair and legitimate. Nevertheless, while agreeing with these discourses, they clearly reveal resistances embedded in their language variability and the use of disclaimers to state and (re)affirm their -and that of regional politics- role, agency and power in decision-making.

“[W]e have the task, the honour and the burden of representing their voice [of citizens], of mediating them naturally because then we have political positions, we have values, we have some knowledge, we study, we have a head. Then everything must be mediated, but together”

Regional politician – public debate 2013 – code: politicians should consult citizens, but decisions are of political responsibility

*“we come from a negative experience, **then we must recover a path and a dialogue** [...] later, **to be clear, we will make choices**. However, we would like that choice of the plan take into account indications, proposals”*

Regional politician, public debate 2015, code: politicians should consult citizens, but decisions are of political responsibility

*“I thank [the orator spokesperson of citizens’ committee’s network] who gave us another piece of the recipe for making the law. Now we put all the pieces together and we hope that a good dish will come out. **I’m obviously joking, it’s something that will decide the vice president and the regional council**”*

Regional public officer – public debate 2015 - code: politicians should consult citizens, but decisions are of political responsibility

All the extracts presented vividly show how politicians and public officers recognise the *need of recovering a dialogue with citizens*, the duty of *representing their voice* and elaborating decisions together (*put all the pieces together*). However, all these discourses share the same argumentative pattern introducing a ‘but’ in their argumentation.

In the first extract, the political orator found himself in a public debate where several local politicians and spokespersons of citizens’ committees tell and retrace their experiences of injustice and mobilization. Moreover, the public debate was aimed to present to the wider public (composed also by regional politicians members of the environmental commission) the citizen proposal of a regional law for territorial government. In this occasion, the orator welcomes the invitation and the requests of the citizens’ committees to act as spokespersons for their requests within the regional council, while clearly revealing that, however, these will be *naturally mediated*. This kind of argument has the clear scope to reaffirm and *naturalise* the power and agency of policy-makers, as ‘representatives’ having the institutional role and knowledge to

represent the voice of citizens and mediating (in SRs terms re-present) them according to *their role, political position, values, knowledge*.

In the second extract is presented the argument of a regional politician introducing a public consultation. This extract reveals the same argumentative structure and function of the previous one. While recognising the critical past experience and mistakes of the Region, as well as the necessity of *recovering a dialogue and reconstruct a path*, the orator reveals the ‘frame’ of the participatory process that should conduce to the elaboration of the regional energy plan, namely an engagement practice of *listening and consultation (take into account indications, proposals)* while explicitly clarifying that the real choice and power remain in the hand of regional policy-makers (*later, to be clear, we will make the choices*).

Finally, the third extract refers to the discourse of a Regional public officer during a public debate/consultation about the law for territorial government. Also in this case, the argumentative pattern show that the institutionalised engagement practices are characterised by a prevailing ‘listening and consult’ approach to decision-making, revealing the limited power and agency of participants and the uncertainty of input use and of the effectiveness of participation (*I’m obviously joking, it’s something that will decide the vice president and the regional council*).

All these extracts are reported to highlight how participation is treated and conceptualised by Regional representatives in participative moments and knowledge encounters, revealing resistances of policy-makers through argumentative patterns that preserve and maintain power and control. This finding is similar to that of Brondi et al. (2016), which revealed the presence of “argumentative short-circuits” of national politicians in parliamentary debates and stakeholder consultations about energy sustainability, further underlining the role of political resistance in opening the debate on policy-making and planning and sharing the power and responsibility of decisions (Mannarini, 2014; Sarrica et al., 2018).

However, these considerations should not be seen as the exclusive result of empirical research in the Italian context. Instead, these results should be seen as grounded on the experience of researchers, practitioners and citizens about Italian participatory governance and policy-making. Indeed, as the following extract demonstrates, citizens are often aware of the multiple positionings, the ambivalence and resistance of policy-makers.

*“we are accustomed to **this way of understanding politics**, that is, **one thing is what I say and the way in which I self-represent myself** when I do the election campaign, I go to talk to the citizens, with the citizens’ committees, and another is what I decide when I am inside the logic of power [...] **we expect that from this moment** when we are going to discuss with the environmental commission and within the*

regional council ***there is the honesty of being consistent with the contents and not with the [political] parties*** [applause for a minute]

Moderator: from the applause, I would say that **the audience agrees** (the camera frames a full hall with more than a hundred people) ***and of course we are.***

Spokesperson of the network of citizens' committees & moderator of the debate – public debate 2013 – code: salience of identity positionings

The extract presented is a direct consequence of the extract from the public debate of 2013 just presented, i.e. politicians should represent citizens' voice but mediating them because of their political position, personal values and knowledge. This argument has clearly provided an effect in the situation that is well visible and embedded in the discourse of the orator. Indeed, she clearly takes the perspective of the politician recurring to the use of the first person to underline what is a *diffused way of understanding (and doing) politics*: being ambivalent and adopt multiple positionings and different behaviours depending on the social context (*election campaigns, discussion with citizens; logic of power and political parties*). The function of the argument is self-evident in shedding light and unveiling the ambivalence and contradiction of political discourses and actions, introducing an anticipation and expectation shared by the audience (clearly highlighted by the applause and the comment of the moderator) about being loyal and coherent with the personal agreement expressed on the contents discussed in that particular occasion and not with the political parties when inside the logic and palaces of power.

5.5. Justice as recognition: a discursive approach to the use of social categories representing and positioning self and others

After analysing and discussing the arguments pertaining to distributional and procedural aspects of justice, this part will focus on the subject positioning and the discursive construction and use of social categories to provide an account of 'mutual recognition of actors' at play.

This paragraph aims to deepen how actors engaged in the battle of ideas re-presenting and positioning themselves and others.

The research questions guiding this analysis were: How actors promoting or opposing RETs are perceived and re-presented? What kind of arguments and identities are strategically used to persuade legitimising the perspective of self and delegitimising the perspective of others? What effects they have and how 'conflictual' and 'consensual representations shape subject positionings, influencing alliances and coalitions of individuals and groups?

In this vein, to examine how knowledge of self and others is perceived and treated in knowledge encounters the analysis focus on the discursive construction of social categories (e.g. entrepreneurs, politicians, experts/technicians, citizens) and their use to achieve certain functions such as legitimise, or on the contrary undermine, a certain version of reality.

Several studies have focused on the representations or image of actors, such as that of the public, of experts, or firms, in environmental and energy issues. However, few researchers have focused on the strategic use of these representations (see Barry et al., 2008) and their effects in the wider public and political arena.

In this regard, the analysis is explicitly focused on the we-them discursive positioning and the use of defensive and offensive rhetoric (Potter, 1996a), adopting an intergroup perspective deepening how each ‘group of actors’ represent themselves and are represented by others.

5.5.1. Representing RET entrepreneurs and firms

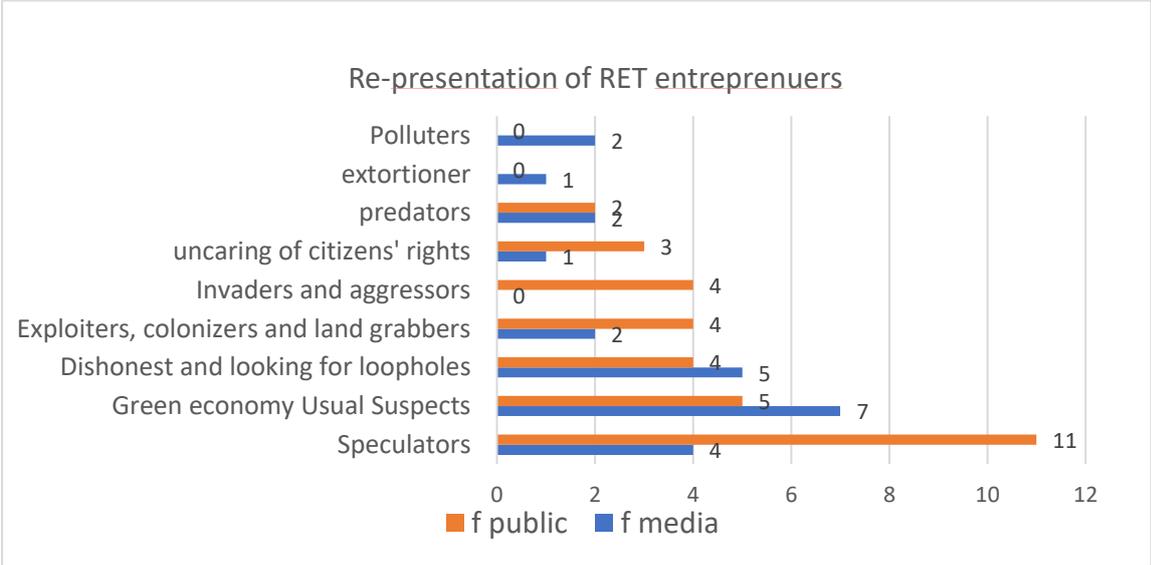


Figure 43. Representations of other: RET entrepreneurs/companies

With regard to the representation of RET entrepreneurs and firms, as expressed by other actors (e.g. citizens, local authorities, journalists), RET entrepreneurs are represented mostly as *speculators*, *dishonest and looking for loopholes* and as the *usual suspects of green economy* from various actors. The representations of entrepreneurs as speculators emerge mostly during public debates, in the discourses of environmental NGOs, citizens committees and local

authorities and politicians sharing their experiences. On the other side, this representation is also strengthened by media, who reported several times how the development of RET and the wider green economy and energy industry are often guided by the investments of the usual suspects.

“for purely economic and speculative ends of some well-identified subjects, we pass over the head of entire communities, which according to some should only passively undergo what others decide for them” Local politician - public debate 2012 – code: speculators & uncaring of citizens’ rights

“This is a contradiction so strong against the principles of the common good, for the benefits to very few people through speculation” Citizen committee - public debate 2012 – code: speculators

the biogas affair now exploded for several months, is not an isolated case of hoarding public resources in the name of the Marche green economy. Actually, the renewable energies of biogas, photovoltaics, wind power and hydroelectric power plants [...] are all part of a unitary package, extremely rewarding for the huge consistency of public contributions

Journalist - media debate 2013 – code: Speculators & Green economy usual suspects

“These companies have been set up specifically to go and collect the incentives” Journalist - media debate 2015 – code: speculators

“of those 40 power plants [biogas] there are two or three strands of proposing companies [...] are well-known names, but not for being farmers” Citizen committee – public debate 2012- codes: Green economy usual suspects”

We understood that behind the problems of energy there are the same entrepreneurs who once had built what is called the "Marche model", I speak of the widespread industries because there are all of them [these entrepreneurs]. Local politician - public debate 2012 - code: Green economy usual suspects

The first two extracts presented highlight one major point: entrepreneurs of RET development are accused of *having speculative ends, acting in contradiction of the common good, and passing over the head of local communities*, who should, according to their view, remain passive and accept what others decide and impose to them. This view is largely shared by different actors. Moreover, concerns of procedural and distributional justice about RET development are associated with the behaviour and the benefits of a few subjects attracted and driven by the generous national subsidies over the years. This is clearly shown in the following two extracts. The third extract refers to the affirmations made by a journalist arguing that the biogas issue *is not an isolated phenomenon* of speculation (hoarding of public resources) but rather *it involved all the renewable energies*, from the PV panel expansions to the more recent investments in wind farms and new authorizations for the expansion or restoration of existing hydroelectric plants. In this vein, also the fourth extract contains the argument of a journalist affirming that some of these companies unrelated to farming have been *set up with the purpose of collecting national subsidies*. Although it was not reported in the analysis about the main

arguments pertaining authorizations, it is remarkable to notice that different times in the media debate, authorizations are represented as something *taken for granted*, *an ATM to get 1.5 million a year* (f=5 media debate).

The last two extracts further stressed this critical issue, by denouncing how *behind all the biogas authorizations there are few strands of companies and well-known names* of local industrial entrepreneurs that are unrelated with agriculture (*not for being farmers*). These industrial entrepreneurs are indeed associated with and cause of the *energy problems* - that is to the critical contextual issues regarding the wider RET development – and indicated as those leading the industrial development of the region (*the ‘Marche Model’ of widespread industries*) and now entering with strength in this new market of the *green economy*.

However, while there is no doubt that what happened has been guided also by large local investors (as the outcomes of the legal trials reported by the media reveal), the simplified authorization procedures, the absence of EIA, and the national subsidies have pushed also different small local investors to take advantage of this ‘opportunity’. In this regard, entrepreneurs are accused of being *dishonest* (not always in the legal term, but more often on an ethical point of view) and *looking for loopholes*.

“[W]hy, for example, this plant, this first 250 kW power plant, strangely, from night to day, went to 998 kW when the breeding was still the same?

Citizen committee - Media debate – 2014 – code: dishonest and looking for loopholes

“the entrepreneurs of a neighbouring municipality made us believe it was a project they did together with a local farmer who had a stable, **that my farmers were all in favour because they would put the products, so we were almost happy. However, talking with people we immediately realised that this was not the case, because **my farmers had not been involved in this business idea, the same the farmer who had the stable.**”**

Mayor - public debate 2012 – code: dishonest and looking for loopholes

The extracts presented report two experiences about the behaviours of some local entrepreneurs, who in order to take advantage of the contingent opportunities of incentives and authorizations are accused of having an unethical behaviour. Indeed, in the first extract, the spokesperson of a citizens’ committee poses a rhetorical question concerning the reason why a power plant serving an animal farm can quadruple *from day to night the power of the plant with the same breeding (from 250 kW to about 1 MW)*. The orator is clearly referring to the effects of the regional law excluding the EIA in case of power plants under the threshold of 1 MW, as the case he reports demonstrates.

In the second extract, a Mayor whose municipality has been interested by different RETs (PV and biogas) reports another case of dishonesty from local investors in manipulating and

persuading the municipality officers about the local added value of the project proposal and the positive opinion of the local population. All these discourses taking place in public and media debates revealed a quite negative representation of RET entrepreneurs, both regarding their motives and effective behaviours. In this regard, it is relevant to notice how they are clearly represented, mostly in public debate, using military and war metaphors (*aggressors, invaders, colonisers, land grabbers*) or metaphors associating their behaviour to the wildness nature of *predatory* animals.

“my hilly territory has already been devastated and made the object of predators, we had no defence”
Mayor – public debate 2012 - code: predators

“I have the experience, when the PV started it was an invasion in my territory and I have 6 MW for a territory of 15 km² for 2050 inhabitants”
Mayor – media debate 2014 - code: invaders and aggressors

“the territories are increasingly seen by the stakeholders as colonies, spaces to exploit, spaces often to be destroyed, without any attention for those who live there”
Citizen committee – media debate 2013 - code: colonisers, exploiters and land grabbers & not caring of citizens

“we must not lose in my opinion the positive identification between community and land, land and landscape. On the contrary, we can perpetuate it by making it more modern and aware, but in a continuous fight against all wild aggressions and abuses”
Spokesperson network citizens’ committees – public debate 2013 – code: invaders and aggressors

As all these extracts demonstrate, RET entrepreneurs – and their actions and motives – are often represented using metaphors that emphasise the shared perceived experience of disruption, an *almost physical aggression* and territorial *invasion* of local communities (i.e. citizens and local authorities).

Indeed, as the first two extracts show, the arguments of two local Mayors highlighted the strength, gravity and speed of territorial transformation and related impacts (*my hilly territory has been devastated; 6 MW for a territory of 15 km² for 2050 inhabitants*) representing entrepreneurs as invaders and predators. Moreover, this discourse underlines a further point, the feeling of powerlessness and frustration experienced by local administrators in facing these subjects and contrast these fast changes (*we had no defence; it was an invasion*).

The last two extracts report the arguments of two spokespersons of citizens’ committees. Their arguments emphasise again the relationship between the territories and the RET entrepreneurs, as well as the relationship between local communities and territory.

Indeed, through the arguments of the third extract the orator speaks in terms of meta-knowledge, assuming the perspective of stakeholders, individuals who perceive and treat the territories as

colonies and space to be exploited and destroyed, while not taking into consideration and caring about local people living there (without any attention for those who live there). This view is strengthened in the last extract, where the territorialisation of RET operated by stakeholders takes the shape of a *wild aggression and abuse*. All these extracts unveil the diffused perception and feelings of assault at the expense of people and places and operated by subjects perceived and represented as a hostile, unscrupulous and wild enemies. The military and war metaphors and the use of offensive rhetoric are widely diffused in arguments representing RET entrepreneurs. In this context, few of these entrepreneurs entered the regional debate to defend themselves. In particular, they relied on regional media to affirm their perspective, responding to the criticisms and accusations. As it is possible to notice in the chart presented about the way entrepreneurs represent themselves, the state of things conducted some spokesperson of regional agriculture representative bodies to intervene in both public and media debate, taking the distance from *such practices of speculation* by advocating their *identity and positioning as farmers*, that is producers of food in the first place.

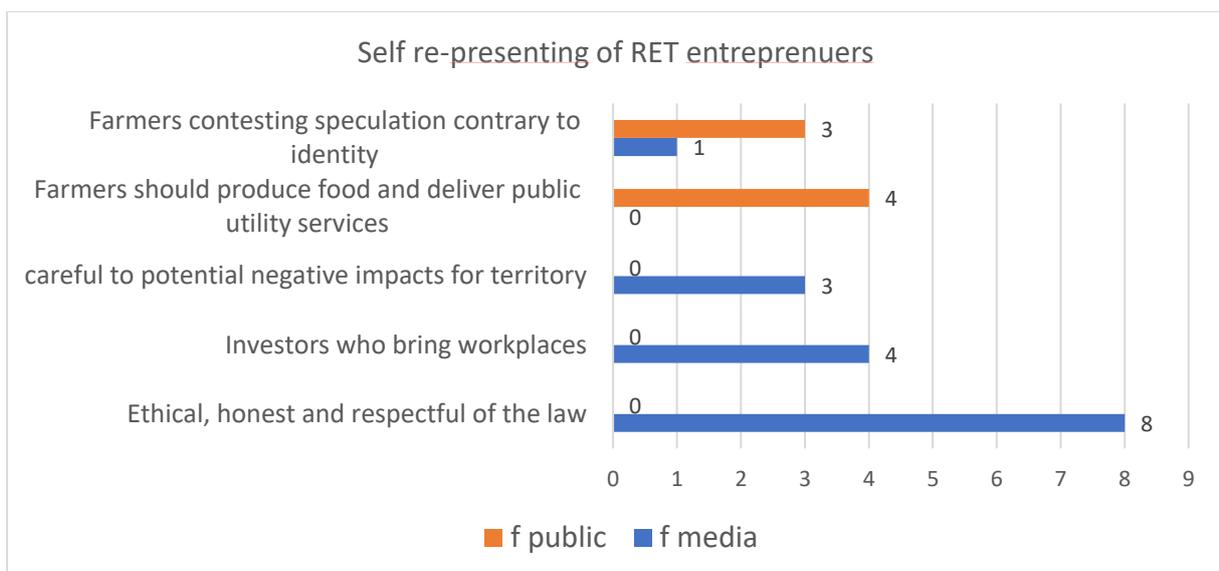


Figure 44. Representations of self: RET entrepreneurs/companies

“we are in favour of energy production but in line with the agricultural multifunctionality, that is, the main activity is the agricultural one, and then it can make public utility services. Renewable energy generation must be in this union, but it cannot be a prevailing business within the activity”

Agriculture Representative –public debate 2013 – code: Farmers contesting speculation contrary to agricultural identity & Farmers should produce food at first

“I have an ethical and rigorous attitude [..]. So when these gentlemen have proposed me to invest in this sector, I have not only posed the problem of the legality of behaviour, but also if from an ethical point of view this thing was good”

Entrepreneurs – media debate 2014- code: Ethical, honest and respectful of the law

“we are not the agricultural speculators who go there to collect public funds. We are in the renewable energy sector, we create jobs, we hope for a better future, we are investing with biologists to use the fertiliser material, [...] to use the less noble part of agricultural production, straw, we invested to avoid burning with the engines

Entrepreneur – media debate 2014 – Codes: carriers of employment & Sensitive to potential impacts)

*“Journalist: among the most interesting elements emerged and underlined by [name of entrepreneur] there is the aspect related to **the favourable treatment** that would have received the [name of company] Entrepreneur: “comparing the duration of the authorization procedures in the region, 90 days of maximum duration according to the law, if indeed the company had favourable treatments, the authorizations should have arrived quickly*

Journalist: the data revealed in the press conference shows how the biogas plants were always authorised after 90 days with an average duration longer than that regional”

Entrepreneur – media debate 2014 – code: ethical, honest and respectful of the law & not supported by or connected with politics

The first extract refers to the arguments used by a spokesperson and representative of agriculture sector in the region, which clearly express his positioning and opinion about the issue of renewable energy in relation to the agriculture activity and identity. Indeed, he expresses a positive attitude about RET within the farming activities, but only in certain conditions. This conditional acceptance of RET is linked with the *stated identity of farmers* and the *principle of multifunctionality of agriculture*. With this argument the orator states and stresses that the true identity and heritage of agriculture is the food production at first, and secondarily it can provide the diverse services of public utility or invest according to with the perspective of multifunctionality and the principle of social utility (e.g. the maintenance of the territory; the use of waste for energy production). In this view, energy generation is represented as one of the many activities characterising the multifunctionality of farms, that, however, *should be not the prevailing business*.

Instead, in the second and third extract during a media debate, two entrepreneurs tried to defend themselves from the accusation of speculative behaviours adopting a defensive rhetoric that emphasises their *ethics, respect of the law, and appropriate appraisal for impacts* as well as the *willingness to bring work opportunities in the region and create a sustainable future*. Indeed, in the second extract, the orator tried to convince the audience about his ethics, underlining how prior to the decision of investing in the energy sector he deepened legal aspects and also questioned the ethics of the investments and projects. On the other side, the second orator of the third extract claimed its company (*we are not*) as a legal and ethical investor in the renewable energy sector, highlighting the different actions undertaken to minimise the impacts and trying in making self-evident the awareness, care and consideration of entrepreneurs about the local impacts (*investing to use fertilising materials, to use the less noble part of agricultural production, avoid burning with the engine*). Furthermore, another relevant aspect refers to the

positive outcomes emphasised to put in a positive light the investors and investments in the regional green economy (*we create jobs, we hope for a better future*).

Finally, the last extract reports a code that is not comprised in the chart, but that presents the defensive strategy of a company, distancing them from politics and recognising politics as the unique responsible for the situation. This argument underlines how the company is not supported by or connected to politics, trying to convince through local media the wider audience about the untrue assumption of '*political favours or treatment of favours*' toward the company by showing the data about the length of authorization procedures in all the facilities owned and managed by the company.

5.5.2. Representing environmental NGOs and opposition groups

Starting from these premises on the perception and representations in the public sphere of RETs firms and entrepreneurs, this paragraph will deepen the representations of the public.

It starts by presenting and analysing the representations of citizens and citizens' committees as advocated in discourses of environmental NGOs and citizens' committees, namely the 'representations of us' and the collective identity positionings in discourses of 'environmental activists/active citizens'. It should be bear in mind that environmental NGOs and citizens' committees are often bounded together in alliances, coalitions, and networks, resulting in discourses revealing both collective identities based on inclusive categorization processes emphasising the active citizens' identity. On the other side, in some cases can be found processes of representations that operate particularizations revealing the distinction between different 'environmental activisms'. For this reason, these 'representations of them', even from insiders, will be reported and analysed as the 'representations of others: citizens and opposition groups'.

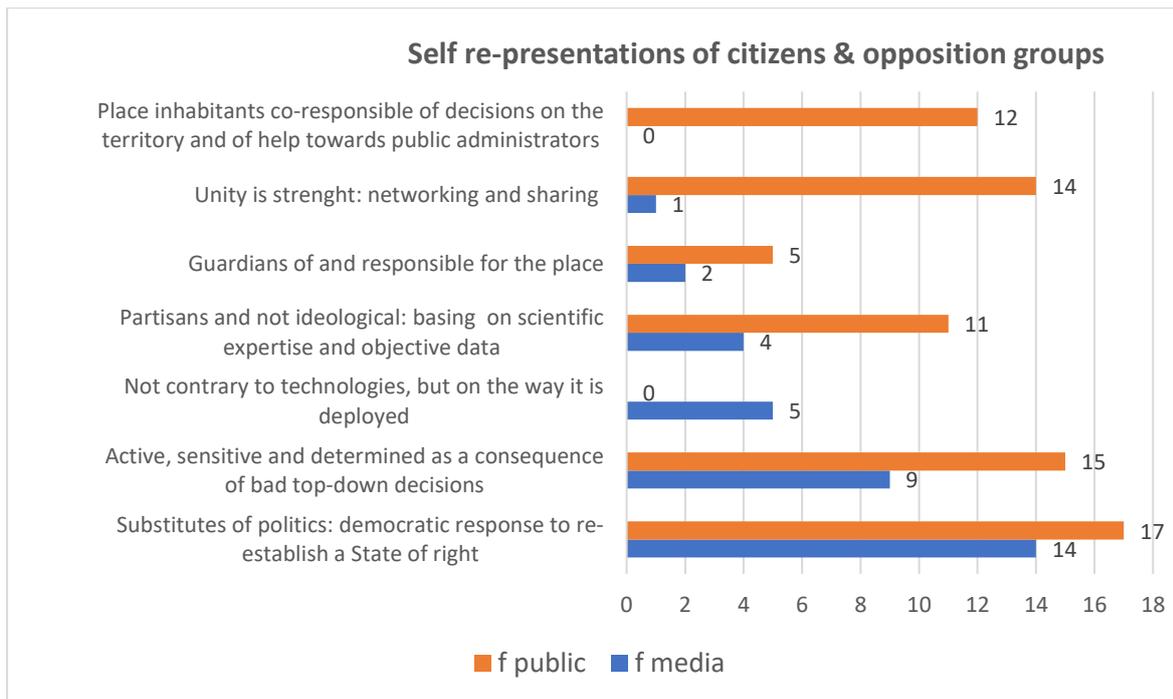


Figure 45. Representations of self: active citizens (Env. NGOs, citizens committees, civil society associations)

For what concerns the self-representations of citizens and citizens' committees, it is possible to notice that most of these discursive representations greatly permeate the public sphere with a higher presence in public debates. Active citizens represent themselves primarily as *substitutes of politics and a democratic response to re-establish a State of right* and motivate their mobilization as *active, sensitive, and determined as a consequence of bad (unjust) decisions*. However, this representation embeds also the role of local authorities, so the code is related to the coalition of these two groups as claimed in discourses pertaining the motives behind the protest, opposition and conflict of local communities that are inclusive of civil society and institutions.

In this context, the following extracts report the representations of active citizens as *substitutes of politics and a democratic response to re-establish a State of right, (rule of law)* as argued by the three spokespersons of three 'environmentalist networks/milieus' introduced in the previous part.

*“Journalist: the [name network] has gathered the adhesion of many citizens, has **interpreted the right** of many citizens **with strength and concreteness***

*Spokesperson: One of the strengths of [name network] is to be informed and to inform, **we have already made forty disputes in the Marche region and we have lost none, with about seventy committees, and some even outside the region**” Spokesperson network citizens' committees - media debate 2014 – code: *substitutes of politics and a democratic response to re-establish a State of right**

*“the **committees should not exist**, we should not be here tonight, we should be with our families, quietly, because **there should be those who are responsible for doing these things** [...] **there is an emptiness, empty spaces are filled in physics and even politics and therefore this political role of committees in substitution to politics**, citizens who have to roll up their sleeves to defend themselves from this attack on the territories”*

Spokesperson network citizens’ committees – Media debate 2013 – code: substitutes of politics and a democratic response to re-establish a State of right

*“**This [network] I believe is an experience of democracy**, as well as commitment, an experience in which **volunteerism is perceived for what it must be, that is a factor of transformation and change, not only of protection and defence of the weak, which supplies institutions but then eventually ends up with maintaining the existing, and the unfair that exists.**”*

Spokesperson network citizens’ committees - Media debate 2013 - code: substitutes of politics and a democratic response to re-establish a State of right

*“**we are accustomed that the laws are made by political representatives, and there comes a certain point in which citizenship comes to supply** [...] **we continue to fight and preside over this territory, but we also want to put ourselves in a relationship of help and co-responsibility with our political representatives”***

Spokesperson citizens’ committee - public debate 2013 - code: substitutes of politics and a democratic response to re-establish a State of right & Place inhabitants co-responsible of decisions on the territory and of help

The first extract presents the discourse of the spokesperson of a network engaged in different conflicts pertaining to energy and environmental large-scale projects (e.g. thermoelectric, gas storage and pipelines, biogas, oil drilling activities). Here, the journalist introduces and presents the network as gathering the voice and adhesion of many citizens, interpreting their rights (actually, this means being the spokesman representing citizens' rights),

In his argument, the spokesperson emphasises that the network aim and strength is to be informed and inform, and then coordinating and leading (legal) actions (*forty disputes*) on behalf of citizens (*seventy committees*) against injustices. Further, he emphasises another distinctive feature of this network, its effectiveness (*we have not lost one*). This argument highlights a fundamental point about this network, that is the opposition to injustice, the violation of law and rights, the defence of the smaller and weaker groups, which often are unheard or powerless in front of large and strong industries and (National and Regional) governments. On the other hand, the second extract refers to the spokesperson of the milieu engaged in the biogas battle. Contrary to the other milieus, this one is more recent in its history and the extract refers to the first years of its activity. The discourse indeed emphasises that *committees should not even exist and that these citizens should stay at home with their family*, representing local activists as simple citizens that perceiving the many lacks of political representatives (*there should be those who are responsible for doing these things; emptiness*) spontaneously take an active political role substituting politics to defend the territories and people from attacks, injustices and violations.

The third and the fourth extract instead, refer to discourses of another milieu composed of hundreds of environmentalist groups (environmental NGOs and associations, citizens' committees, etc.) and elaborating the popular proposal of law for territorial government. I think that the extracts themselves should be self-evident in underlining the differences between the milieus communicative formats as well as their function. To put it clear, the discourse of the third and fourth extracts highlight how the network is perceived and represented by its members as an *experience of democracy*, and not only as a *commitment* in place-protective action (*preside this territory*) or opposition towards something/someone (*fighting*). Instead, they represent themselves as volunteer citizens acting in substitution of politics (*volunteerism; supply institutions*), but animated by the desire of being a *factor of transformation and change*, for finding solutions to identify and tackle injustices. In this regard, they represent and position themselves as both enemies and allied (*in a relationship of help and co-responsibility with our political representatives*) of policy-makers depending on their response and positioning.

This argument introduces another recurrent code, or pattern of meaning, about citizens as *place inhabitants co-responsible of decisions on the territory and of help towards administrators*, a theme that is recurrent mostly in the discourse of the milieu just presented, as well as in discourses of environmental NGOs (also those not connected to this network) and experts during public and political debates (consultations about the Law on territorial government and the energy plan).

“we do not want to replace the politicians and the institution, we do not want to subvert [...] we are fine with the constitution that already gives the sovereign people the possibility of being present in the decisions, the problem is that no implementation laws have ever been made for these founding principles of our constitution [...] I cannot be a spectator of my future landscape, I want to be a co-protagonist of decisions, it is a responsibility that we all have.” Spokesperson network citizens' committees – public debate 2015 – code: co-responsible of decisions

“we must ask for help to citizens and associations, who have that collective intelligence, and the contact with the territory that can give optimal solutions [...] knows the territory and can give answers and solutions that the Region cannot give, not because it does not have the capacity or intention, but because it cannot gather all the information” Expert – public debate 2015 – code: co-responsible of decisions

The first extract presented refers to a further spokesperson of the milieu abovementioned. In his discourse, he stresses the fact that citizens are motivated not by the intention of replacing policy-makers or the institution, subverting the State, but rather by the aim of making functioning the State in the respect and fulfil of the constitution by implementing new legal innovations in this direction. Further, the orator clearly stresses the representation of citizens as inhabitants of place and co-responsible of the decisions about their environment, a

responsibility that is collectively shared and diffused. In the same extent, the last extract further underlines epistemic arguments about the value and necessity of looking for the cooperation of civil society to incorporate local bottom-up knowledge (*collective intelligence; contact with the territory*) to find better solutions fitting with places (*give optimal solutions*) that the Region from the top-down cannot find alone (*it cannot give..gather all the information*). A further relevant representation of citizens that is connected to these discourses relies on *citizens as guardians and responsible for the places*, a discourse shared by both environmentalists and local authorities allied with citizens' committees.

Further relevant representations of citizens are denoted by the reference to collective efficacy beliefs, derived from the sharing - among all the environmentalist milieus - of a representation evoking the proverb '*unity is strength*' and that reflects the efforts in creating powerful and large coalitions by the networking of citizens' committees, the socialization of experiences, coordination, sharing of resources and (legal -political, techno-scientific) support for local battles as the following extracts show.

"We have created this national committee that wants to support the local committees by putting together a pool of experts and trying to socialise all the experiences, the legal battles, and the study of what are the weaknesses of the projects"
Spokesperson national network of committees against biomasses – public debate 2012 – code: unity is strength: networking and sharing

having put on the net the citizens gave more voice to this protest which is a protest of civilization because this way of making energy is wrong.
Spokesperson citizens' committee – public debate 2013 – code: unity is strength: networking and sharing

*why do the citizens get together? why do 92 associations get together? and then I come to propose what is the political node, **the real emergency**. Today the citizens have understood that the emergence of individual problems continues to exist, they rise against the overbuilding, against biomass, consumption of agricultural land and photovoltaics, gas storage. But [the knot] **concerns the question of who decides what and how decides. The problem we usually call participation.***
Spokesperson - public debate 2013 – code: unity is strength: networking and sharing

The extracts just presented refers to different moments of the public debates organised by the different environmentalist milieus. As the extracts show, the discourse of these environmentalists clearly is based on the principle of networking and building a coalition of groups of active citizens in the territories as a mean to have a voice and get influence.

Indeed, in the first extract, the orator – a spokesperson of a national network of rural communities against biomasses – intervened during a public debate invited by the organisers. In this occasion, the *biogas milieu* is in its first phases of coalition building between the committees and other actors such as local authorities, experts etc.. Therefore, the argument is a

clear invitation to the many present committees at the event to get together entering in a larger network to *socialise the experience, get support for local battles* (i.e. against single projects) in legal and in technical and scientific terms.

In the second extract, during a further public debate organised by another milieu, a spokesperson of a citizens committee highlights that *putting citizens together, in network*, has a clear aim and outcome: getting more influence by giving more voice to the protest on regional energy policies and projects (*this way of making energy* – producing).

In the third extract – another public debate organised by a third milieu- the spokesperson of a citizen committee stresses the reason hundreds of groups (92) get together by repeating a rhetorical question and developing a reasoning on that. In this vein, the orator argues that citizens get together and rise against the many energy and environmental problems in the region (*overbuilding, biomasses, land consumption, PV on the ground, gas storage*). However, going beyond these different problems, the real emergency (*the political node; knot*) leading to these many protests and conflicts lies on procedural concerns of *who decides what and how decides*. This argument emphasises a shared representation of participation in the milieu where this is cultivated, a representation that views participation as the mean through which injustices can be identified and solutions to put remedy can be adopted. Procedural justice through participation is in this case advocated as the elective instrument and the real aim and reason moving protesters to ‘oppose and propose’. This, of course, reveals also an implicit argument on recognition justice of all those living in the territory as co-responsible of decisions.

The other two representations of citizens identified concern the representation of them as *partisans but not ideological*, because *basing their discourse on scientific expertise and objective data* and a representation of citizens as *not contrary to the technologies itself but on the way it is deployed*. This kind of re-presentations of citizens and citizens’ committees emerged both in the media debate and public debate as a response to negative representations of them and was mostly conveyed by local authorities, active citizens, environmental NGOs and local media. This reveals the use of defensive rhetoric to contrast and delegitimize negative representations and discourses about citizens as elaborated and vehiculated by others.

“the citizens, with an absolute attitude of common sense, often the committees are accused of a parochial and ideological attitude, but in this case, I have clearly seen in all the interventions made so far the common sense that has also allowed politics to improve in his activity and grow”
Mayor – public debate 2013 – code: *partisans but not ideological*

“Spokesperson: I immediately say one thing. No one is in general and abstract term opposing to renewable energy, and we are all convinced that renewable energy is an obligatory step to improve the energy balance of this country.

Journalist: but it always ends in yes, we all agree as long as it is not near my house. [a regional politician and the spokesperson shake their heads to say No]

Spokesperson: No, this is not the concept [..].

Journalist, spokesperson and regional politician – codes: Not contrary to the technology itself & NIMBY

The extracts just presented clearly show how these two representations are intertextually linked to the awareness or emergence of other texts containing negative representations of citizens' committees that may have the effects of delegitimising the protest and protesters. In the first extract, a local Mayor presents, relying on meta-knowledge, two opposite ways of thinking and talking about citizens committees.

He stresses how contrary to the diffused representation of citizens' committees, accused of having *ideological and parochial attitudes*, during the public debate where the utterance was produced all the different voices of the committees he was listening *are recognised as absolutely of common sense*, meaning fair and understandable concerns. Further, he represents citizens' committees in a more positive light by recognising in them a factor of awareness-raising, activation and growth of (local) politics.

On the other hand, the second extract refers to a media debate involving spokespersons of citizens' committees, two Regional Councillor and a journalist. After stating *that no one is contrary to renewables per se*, and using consensus (*we are all*) to reveal that *anyone is aware of the necessity of developing renewable energy*, the journalist interrupts the discourse of the spokesperson introducing a Nimby assumption about the overall agreement on developing RET as long as these facilities are not sited near the personal house (*but it always ends in yes, we all agree as long as it is not near my house*). The introduction of this argument by the journalist is clearly resisted and contrasted, both by a regional politician and the spokesperson, embedded in the *shaking movement of their heads* to communicate and contest this argument as well as the immediate interruption of the journalist to indicate the mistake (*this is not the concept*) and the fallacies of his utterance by later presenting the many -distributional and procedural - reasons of opposition.

As the following chart shows, both in public and media debate citizens' committees are accused of *having parochial attitudes, being terrorists, ignorant, uninformed, ideological, irrational, opportunists, or Nimby*.

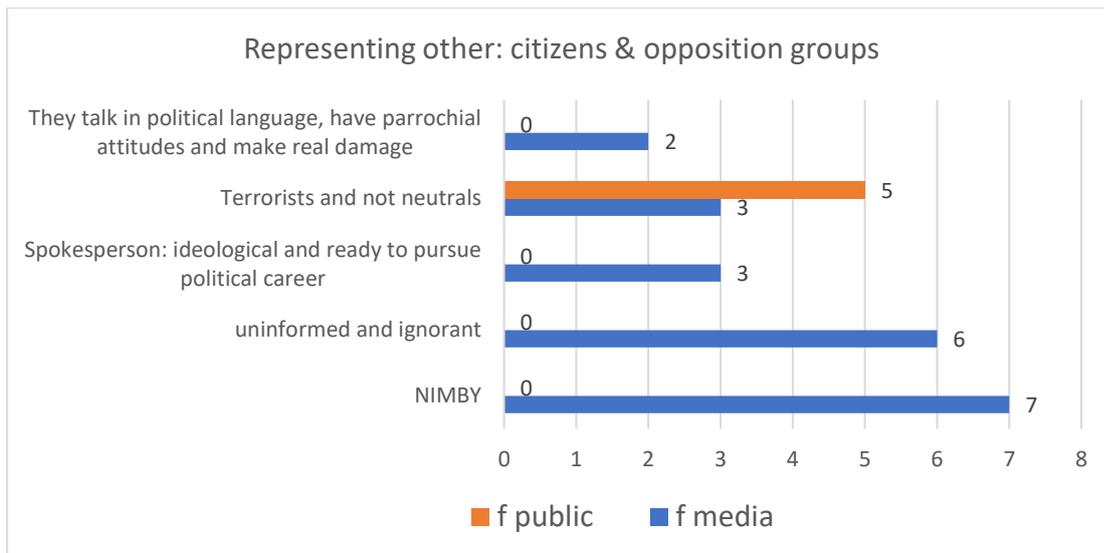


Figure 46. Representations of others: active citizens

This use of offensive rhetoric aimed (or resulted) in attempts to delegitimising the protest and the protesters and it has been used by different actors such as regional politicians, citizens, journalists, and entrepreneurs.

"The real objective of the committees, and in general of those who oppose biogas in the Marche Region, is political visibility [...] people who, in view of the upcoming elections will be able to play their game"

Entrepreneur – media debate – media debate 2013- code: ideological and oriented to political career

"what I wonder is why in the Region there are all these opposition groups, all these reactions? very well that there are, but why these same reactions are not there in regions bordering us where the power plants are in power even 50 times higher?"

Regional politician –media debate 2014– code: NIMBY

The two extracts just presented refer to the attempt of delegitimising the protest and the protesters on biogas through subtle discursive strategies re-presenting citizens' committees in media debate. First, an entrepreneur attempts to delegitimise the protest by making reference to some of the spokespersons/leaders of the protest and their true hidden motives for opposing to biogas in the region. Indeed, the fact that spokespersons, leaders or coordinators of these oppositions are often political activists (municipality councillors, Mayors), offered to the entrepreneur the opportunity to insinuate that citizens and the protest are guided and instrumentalised by these individuals animated by the hidden aim of *getting political visibility useful for the upcoming election*. On the other hand, the second extract refers to the discourse of a regional politician. In this context, she introduces a rhetorical question that particularises the opposition groups in the region in light of an implicit Nimby assumption: the irrational and

emotional motives denoted by fear. Indeed, the orator asks why in the region are present so many opposition groups, and why the same does not happen in other bordering regions with power plants 50 times higher in installed capacity. This rhetorical question attempts to particularise the committees in the region and reveals a clear (assumed) irrational motive guiding the protest. Furthermore, the politician uses this argument aware of the function it serves (re-present negatively citizens and the opposition as irrational). For this reason, she introduces a concession on the value and presence of so many committees (*very well that there are*) to minimise the utterance that follows, and the negative view of the protesters introduced with a disclaimer (*but why*). The negative representations of citizens committees involve also a view of them as *terrorists and non-neutral* reported by different actors such as citizens, regional and local politicians and entrepreneurs both in public and media debate.

“We have also been insulted we have had **mayors who went** house by house to **say that we are terrorists, we take advantage of the citizens' fears**” Spokesperson – media debate 2013 – code: terrorists and not neutrals

“the citizens have been informed in a distorted way about the biogas [...] **committees** [...] **give distorted information**” citizen – media debate 2013 – code: terrorists and not neutrals

“Public1: **Can you make a non-partisan speech, please?**

Public2: *who is saying these things? Present himself, name, surname and activity*

Expert: *I say what I think*

P1: *I do not have a precise idea, though*

P3: *but, do you have the [political] party flag?*

P1: *I would like a scientific and objective discourse*

P3: *he is doing it, if you listen to him you understand him. He is doing it*

P1: *he is not doing it, **this is not objective.***

Spokesperson: *information is objective because the numbers that have been shown are objective numbers, they are **objective foundations that lead us to be partisan, you confuse objectivity with impartiality***

P1: *to say biogas paladins is one thing, to say favourable people is something else, and since I do not have a precise idea yet, I would like..*

S: *..you make the paladin, the defender, do what you want*

P4: **these work at the ASSAM [Agency for Services in the Marche Agri-food Sector]**”

The extracts just presented concern the representations of citizens’ committees as terrorists and non-neutral. In the first extract, a spokesperson of a citizen committee reports the personal frustration of being accused by local mayors of making terrorism and taking advantage of citizens’ fears. The second and third extracts, instead, refers to the negative representations of citizens’ committees as conveyed by other citizens. In the second extract, during a media debate, a citizen argues that citizens’ committees are making disinformation (*informed in a*

distorted way) revealing an assumption of non-neutrality, terrorism by providing a distorted knowledge about the issue at stake.

The third extract refers to a public debate and is reported to highlight the climate of the debate characterised by a polarization of positions, prejudices and misrecognition of others' knowledge claims. Indeed, during the presentation of an invited expert about biomass, a citizen interrupts the presentation to demand a more neutral, balanced and objective speech so he can get a personal idea on the issue. This request, and the consequent utterance of non-neutrality produced the emergence of a climate of prejudice, aggression misrecognition and delegitimization of the person expressing these criticisms. Indeed, the orator is immediately attacked and questioned about his positioning (*who is saying these things? Present himself, name, surname and activity*) from the audience that represented him and the persons whit him as people with hidden personal interest of economic or political nature (*do you have the party flag?; these work at the Assam*).

This reveals also a critical issue that concerns information and the access and use of expertise. Indeed, in all the materials analysed, it is rare to find a concrete situation where experts and citizens can interact and discuss. Most of these encounters refer indeed to experts sympathising with the protest and offering their expertise to the debate. Thus, no counter-expertise is produced on the 'objective evidence' brought to light by citizens' committees.

In fact, the presence and intervention of (public) experts and of information disclosure is often claimed by different actors.

*“This is the situation of law in which we find ourselves for the protests of **those who do not understand anything in this story**, always to provoke the interlocutor [the present spokespersons ..]. The **fantasy that there are noises, emissions, all these things belong to the public discourse but not to the reality of the facts**. I came here with little hope. But I **hoped to hear some professor telling us clearly that these power plants are the most advanced in terms of electricity production, in terms of ecology and sustainability**”*

Journalist: the professor was invited and unfortunately today could not come.” Entrepreneur – media debate 2014 – code: uninformed and ignorant

*“**too many times, so many committees** - and here I go against some - **the famous Nimby effect, it is not that you are always right, sometimes you take crabs** [Italian idiom to indicate a gross error] **because there is no precise information**.” Spokesperson network citizens committees – public debate 2013 – code: uninformed and ignorant*

The extracts presented clearly demonstrate the point about the information disclosure, access to expertise and dialogue with experts. Indeed, in the first extract, an entrepreneur argues that the total block is caused by the opposition of *uninformed and ignorant* citizens, not able to understand technological and environmental issues (*do not understand anything*). Also, he

represented the public as persons thinking and arguing about biomass technologies in a way that is not adherent *to the reality of facts* or scientific evidence (*noises, emissions are a fantasy of public discourse*). In this regard, he stressed the hope and necessity of experts intervening in the debate to inform citizens and re-frame the public discourse on ‘exact information’ about the sustainability of RETs adopting the best available technologies (BAT), rather than on personal feelings or what is heard.

On the other hand, the second extract reports the discourse of an *insider* highlighting the fact that often committees are wrong and not able to understand (*you are not always right, sometimes you take crabs – gross error*) and that the *Nimby effect* can be a real factual problem. However, this is argued not as a fault of citizens, rather it is argued arising from the lack of information disclosure (*because there is no precise information*), which implicitly assumes a political responsibility of those responsible for communication and information (e.g. political authorities, firms).

5.5.3. Representing Regional politics

Following discourses’ intertextuality, this paragraph presents the main arguments used in representing regional authorities. The chart shows that in public debate dominates the representation of regional politicians as *promoters and defenders of speculators without any consideration or concern for the environment and the opinion of citizens*. This is the most present representation in the public debate. On the other side, the representing of regional politics in media debate presents a heterogeneity of discourses representing regional politics as *lacking or incapable, corrupted, not environmentally sensitive or aware, hostile towards citizens and ambivalent*, taking citizens’ side only when the protest has attracted a large consensus or space in the regional public sphere.

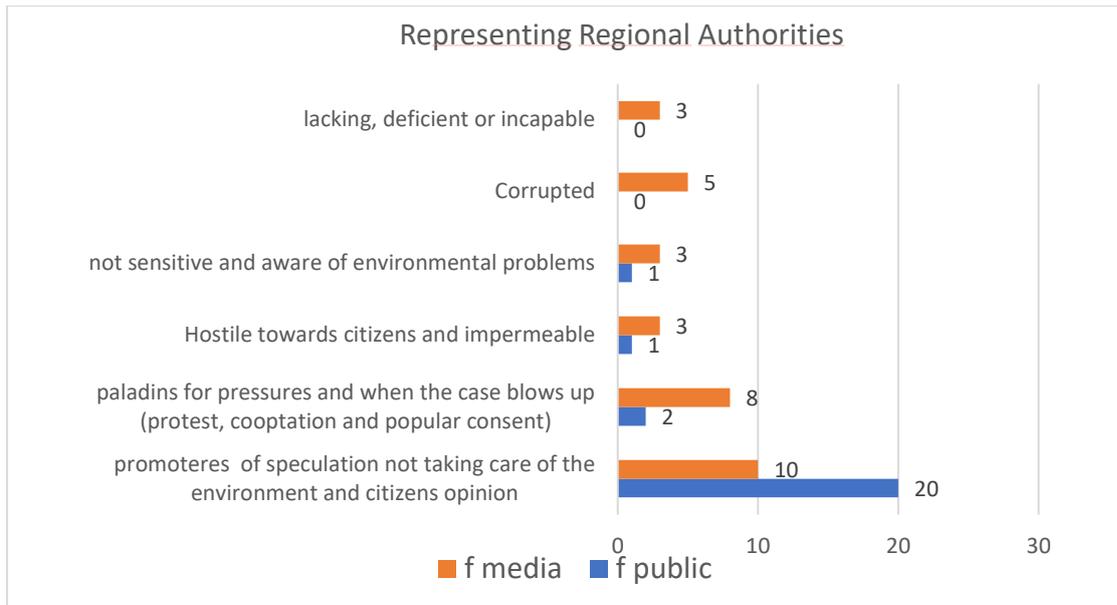


Figure 47. Representations of others: Regional Politics/Administration

*These are serious situations, **if the institutions become enemies of the citizens, if they do not protect them anymore, the principle of democratic representation is missing, so that those elected are no longer worried about the mandate but go to protect the needs and demands of the strongest***” local politician – public debate 2013 - code: favourers and defenders of speculators

*Therefore, **politicians most often defend the interests of speculators instead of protecting the environment and citizens' interest.*** Spokesperson citizen committee – public debate 2012 - code: favourers and defenders of speculators

*“those amendments have also been rejected by the councillor, **that today is so much the head of the class [...] you cannot arrive at the end and say I am the paladin when you have created the conditions**”* Local politician – media debate 2013 - code: paladins of justice for pressures and when the case blows up

*“There are **regional councillors who now come to express themselves against this when they first approved the law 3/2012!**”* Spokesperson citizen committee – media debate 2013 - code: paladins of justice for pressures and when the case blows up

The first two extracts are presented to underline the diffused perception and representation of politics *actively defending and promoting the speculation*, and on the other side not guaranteeing citizens’ rights and environmental protection. Indeed, the first extract reveals the institutional and social conflict involving local and regional governments, with regional institutions represented as behaving in the total disrespect of the democratic rules and roles they should rely on and play (*democratic representation* and elected official). Both the first and the second extract stress the representing of politics as defending the interests and needs of the strongest (speculators) while not paying attention to those of the weaker citizens who found

themselves attacked from the powerful coalition of politics and business. Indeed, beyond the coalition constituted by local authorities, citizens' committees and environmental NGOs, a recurrent code that is not presented in the chart refers just to a coalition that can be defined as *a political-business cartel* or *political-economic lobby* (f=13). The third and the fourth extracts report the discourse of a local politician and spokesperson of a citizens' committee accusing some of the regional politicians of having created the conditions for speculative behaviours (*when you have created the conditions; they first approve the law* 3) and only after the rise of the widespread protest and problem in the region have moved to stay and position themselves on the side of citizens. For this reason, they are represented as characterised by and accused of *ambivalence, double-face behaviours, incoherence between discourses and actions, co-optation of protest, and search for consensus*. This kind of behaviour is often argued as determined by the perceived strength of and consensus underlying the opposition. About this, local media play a great role by representing citizens' committees as right, validating and reporting their thesis, and defining them the *moral winners of the battle*.

Regional politicians instead are clearly perceived and represented by citizens' committees and local authorities as hostile towards active citizens criticising their work, and representing the Regional Institution as *impermeable*, i.e. not open to a dialogue and these criticisms, as it is reported in the following extract.

*“The thing that **lacerates** me and that **I cannot understand** is why so much **hostility** towards the **active citizens** and the **impermeability of political institutions**.” Spokesperson citizens' committee - public debate 2013 code: hostile and impermeable*

What is relevant, is that this argument highlights the perceived feelings of displeasure and frustration often proved by citizens when trying to interact with the Institution (*lacerates me*); something that is unbelievable and not acceptable. Furthermore, political representatives are accused of being not sufficiently aware and sensitive towards environmental issues, revealing a distance and the dyscrasia between citizens and their representatives.

*“**The citizens have an environmental sensitivity**, and we have seen it even when we collected the signatures, they care about the problem. But to this increase of awareness on environmental issues, to which many national associations have contributed working from years on the environment, on the places. To this increase of awareness, my perception is that **there is a radical decrease of awareness of these issues by our representatives**” Spokesperson citizens' committee – public debate 2013 – code: not sensitive and aware*

The extract just presented reports this perception and sad conclusion of a spokesperson about the scarce (environmental) awareness and sensitivity of political representatives.

In addition, representatives are represented as having two possible positionings for responding to the accusations and take their responsibility: that of corruption, meaning they are really associated to and favouring economic interests, or on the contrary that of incapacity.

*“this is one of the darkest pages in the history of the region, because **all the protagonists** who are here testify, wrongly or rightly, and accuse the region of failures, omissions, shortcomings, incapacity and other even worse accusations.” Regional Politician – media debate 2014 – codes: lacking, deficient & corrupted*

*“**he says that politics is unreliable**, I do not feel like supporting this, **I say that certain politicians are incapable**” Mayor – media debate 2014 - code: lacking, deficient, incapable*

This point is clearly addressed by a regional councillor that put it clear how the Region has a great responsibility about the widespread protest and legal problems, and how all the different groups (*all the protagonists* – i.e. local authorities, citizens, entrepreneurs) share the same perspective and accuse towards the Region. His argument reveals that the diffused representation of regional politics concerns two main points: competence (*failures, omissions, shortcomings, incapacity*) and/or corruption that is hidden from the discourse (*other even worse accusations*). This highlights that distrust is well grounded in public opinion both in the dimension of competence and ethics.

In responding to these shared representations and accusations permeating the regional public sphere, the Regional politicians and public officers are forced to face these discourses by taking the accusations as starting point to provide counter-evidence of their behaviour. In this context, regional politicians and public officers clearly recognised their many mistakes in both media and public debate. Their arguments reveal all a defensive function about the readiness of the Regional Administration of *understanding and governing the magnitude of changes produced by the national system of incentives*. For this reason, the orators greatly recognise their errors but stress *their past reactions* (regulation PV siting on the ground), and underline how the contingencies can be a starting point for the *emergence of a good politics* and an occasion of critical self-reflection to implement institutional arrangements to remedy.

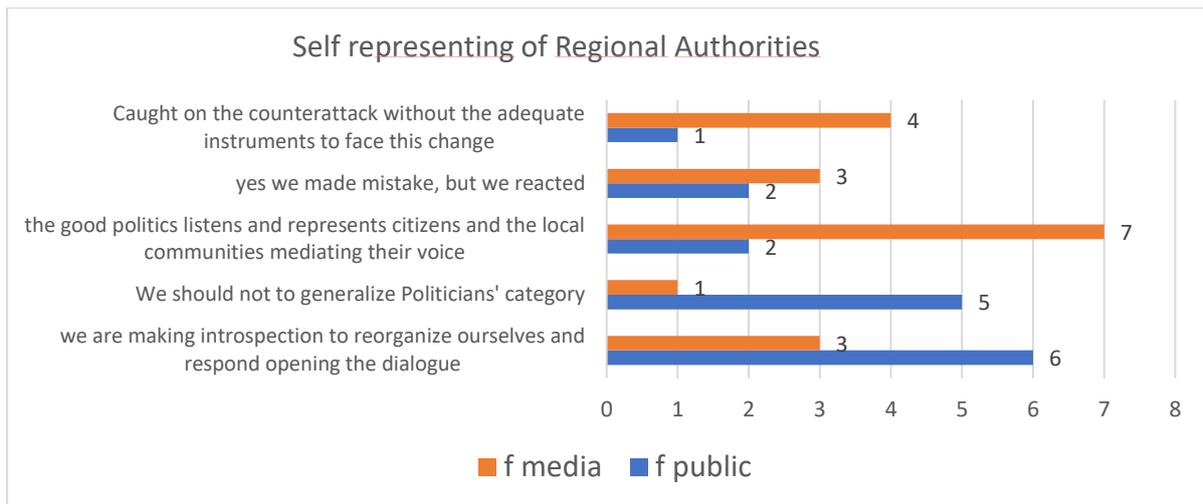


Figure 48. Representations of self: Regional politics/Administration

Drowned, inundated, caught in the counterattack from the PV, I say it in all honesty, **but let's say all things, this region has reacted**, someone else still looks [...]" Regional public officer – public debate 2012 - code: caught on the counterattack

"we must open this dialogue [...] **In the past this was missed**, we have to be self-critical, politics must be able to be self-critical, to say when it is wrong, **try to find the right corrections**" Regional politician - Media debate 2015 – code: we are making introspection to re-organise and respond with dialogue

"This is a possibility for good politics to emerge" Regional politician – media debate 2013- code: good politics listening and mediating

"within politics there are still people who believe in it, who do it because they are convinced, and they do it by listening to the citizens, they just need you to distinguish them, and do 'not make all the grass a bundle' [Italian idiom indicating a generalization]– Mayor – public debate 2013 – not generalise politicians' category

The extracts here presented provide some evidence about this interpretation. In the first case, a regional public officer admits the responsibility of the Region for the PV expansion in the regional hills, while representing in different ways the Region as unprepared to manage and govern this so fast change and development (*drowned, inundated, caught in the counterattack from PV*). However, he recognises that all things considered the Region has reacted - even if not so fast - in regulating the siting of PV while other Regions were not so fast in putting remedy (*someone else still looks*). This form of particularization has the clear scope of admitting only partially the guilt and making evident and valuing the actions of the Region once aware of the problem.

In the second and third extract, two regional politicians recognise the Regional lack (of *dialogue*) and that many errors have been committed. However, the situation is presented as an *occasion for critical self-reflection, for finding together solutions to remedy and for the*

emergence of good politics. This particularization of politics is often advocated by politicians to distance themselves from the negative representation of politicians and underline the presence – in the historical time and context – of a part of politics who still listens and represents the interests, needs, and demands of citizens. This argument is clearly used by both regional and local administrators, as the fourth extract shows, demanding citizens to not generalise among them, and be able to distinguish or particularise those we represent the good part of the broader category (*not make all the grass a bundle*), because are these politicians that need their help and support.

5.5.4. Representing local politics

With regard to the representations of politics, the main representations of local authorities concern self-representations and representations conveyed by citizens' committees. In particular, local authorities are recognised as *active, sensitive and determined because of bad centralised decisions*. However, as previously indicated, this representation refers to the coalition of local authorities and citizens opposing to unfair treatments and recognition by the Regional Government. On the other hand, local politicians represent themselves in the media debate as *not contrary to RET but in the frontline of opposition* motivated by the fact that they are *health authorities responsible for citizens and territory safeguard*. Furthermore, during public and political debates, local politicians represent themselves as *disillusioned and with no power* and agency when debating with regional politics or citizens' committees. Finally, it should be underlined that few negative representations of local politics emerge. These representations concern the generalization of the representing of regional politicians as *promoters and defenders of speculation* to local politician (e.g. Municipality councillors/mayors); a representation that derives from the perceived behaviour of some local politician promoting the development of RET without considering citizens' concern.

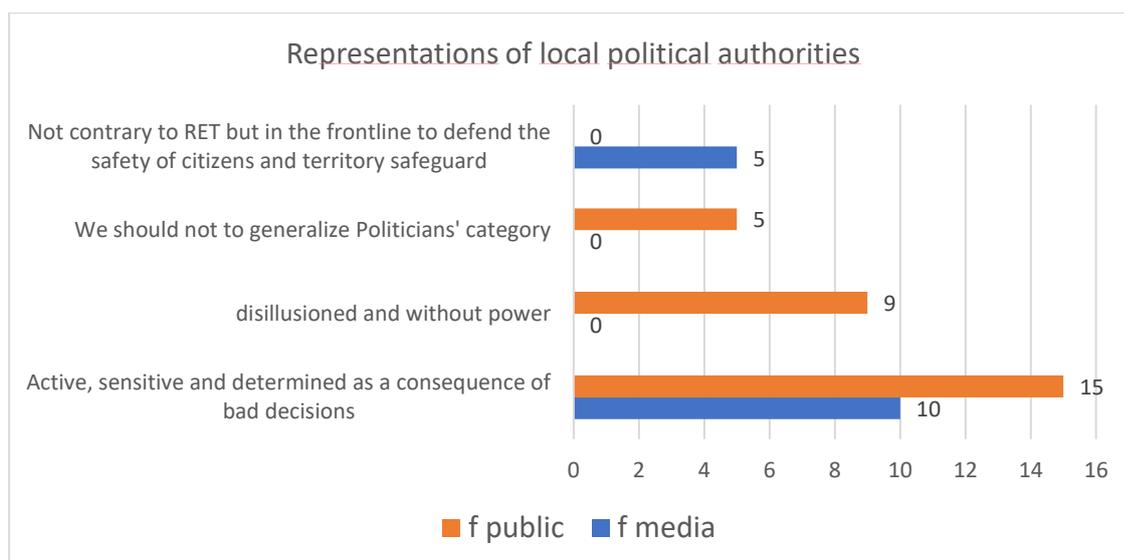


Figure 49. Representation of self: local politics/Administrations

“Actually, the loyal collaboration cited by [name of an administrative court judge] unfortunately is missing just because of this law. The [law] 387 expropriates municipalities and administrations of all those powers of planning in their own territories” Mayor – public debate 2012 – code: disillusioned and without power

“we are the front office, we have to respond to the citizens, and honestly, unfortunately, we raise our hands because the legislation does not allow us to play a fundamental role” local politician – media debate 2014 – code: disillusioned and without power

“[S]o, the point is: mayors are close to citizens, also because they are aware of having no power. They want to do a lot and do not have power, and it is only with your help that they can really do something for the territory” Mayor – media debate 2014 – codes: disillusioned and without power

“Our municipality is not absolutely against these facilities, because if we do not want incinerators, we should have some other form of renewable energy in our territories, but we would like to have all the security and protection for citizens” Local politician – media debate 2012 – code: not contrary to renewables but in the frontline to defend citizens and territory safeguard

“Administrators daily face the need to guarantee the health and protection of the environment and protect these rights, and on the other side they have someone who pulls the jacket [expression indicating an urgent solicitation to listen or do something] because of the crisis bites” Local politician - Media debate 2014 – code: not contrary to RET but in the frontline to defend citizens and protect the environment

As the first three extracts show, local politicians often argued both in public and media debate their opinion of having no power over their territory. Indeed, in the first extract, during a public debate with representatives of Regional Government and Administrative Court, a Mayor clearly stresses how *the principle of loyal collaboration* that was cited in the debate, namely the coordination and cooperation between levels or sectors of governance, does not exist in the reality. This is emphasised by arguing an *expropriation of powers of planning in their own*

administrative territory as a direct consequence of the National Law 387, which is related to the promotion of electricity generation from RES. In the same extent, the second extract stresses the same point about Mayors having limited power because of current legislation (*we raise our hands because the legislation does not allow us to play a fundamental role*). Moreover, this extract introduces a common and shared representation about the role of local politicians, i.e. *the front office having to answer to concerned citizens*. This representation of Mayor/local politicians as the *front-office having limited power* is clearly connected with arguments particularising them from the broader regional politics, and demanding citizens to not generalise and to support and help local politicians in a way that their limited power can increase and that coalitions built can have an influence (*is only with your help that they can really do something for the territory*). Finally, the last two extracts show widely used arguments and representations of Mayors *as local health authorities* – on the basis of the Law 833/1978 – obliged by law to protect the citizens' health. This is clearly stated in the last argument, and implicitly in the fourth extract. Indeed, in the fourth extract, the Mayor affirms that the position of local authorities opposing to RET is not determined by an opposition per se to technologies or renewables. Rather, the opposition is argued as determined by the need and duty to *guarantee the security and protection of citizens*. This is more clearly emphasised in the last extract, which shed light on the difficult position of local authorities, between protecting citizens and the local environment (*guarantee the health and protection of the environment and protect these rights*) and promoting economic investments and development in their territories (*they have someone who pulls the jacket because the crisis bites*).

5.5.5. Representing experts

To conclude this part of the analysis about actors' recognition, as previously indicated few experts take part in the debate with actors - excluding political consultations (i.e. interaction with decision-makers and public officers). Compared with other actors, few representations of them were present in these debates. Remarkable is that experts never appear in media debate, but only in regulated political debates interacting with politics, or in public debates providing their expertise to citizens' committees. Most of the arguments citing experts were self-representations involving university researchers and professional orders such as architects, urban planners, engineers, geologists. In these occasions, experts clearly demanded the recognition of their knowledge, and their involvement as fundamental for territorial

transformations, by affirming that too often they are not adequately recognised and involved (f=9). In other cases, experts and technicians linked with politics (i.e. policy advisors, public officers) are represented negatively as *planners who bring the region to the disaster* (f=1), engineers *not careful in clearly explaining the conditions for RET development* (f=2), public officers/technicians *not careful in examining projects* (f=1), or *unethical project developers* (f=1).

*I say one last thing, ideological because I do not want to engage in a technical discourse, because **technicians bring us to the disaster, you technicians bring us to the disaster and continue to make forecasts** – Expert planner – public debate 2015*

*The professor, which I respect, and I heard many of them in commission, I asked him “Professor, you should tell us, are these energy plants safe or not? let be clear, the exhaust pipe of the car, if you are distant 1 meter it kills you, 3 meters it intoxicates you, 50 meters it’s totally safe”. **No one has written that power plants should stay at tot meters from human settlement** so that there is no harm and discomfort. **I think that these things should be said, from technicians who elaborated the PEAR, because they took a lot of money because are consultancies we paid.**” Regional politician – media debate 2014*

*I want to say two words to my colleagues, **those who put their signature to projects.** Because everyone is doing a part, someone buy the land [for blocking the construction of access streets for the plant], others don’t give the licenses for landscape, and there are **the engineers who can act in line with their deontological code:** [he reads some part of the code about acting in line with human health and environmental protection]” Citizen – public debate 2013*

*“if there were a collaboration of all these subjects together, surely, we will get best results. So, my intervention is a **hope that this participation takes into account all the professionals who work with different skills on the territory**” Geologist – public debate 2015*

All these extracts are presented to highlight the negative representation of those experts involved in regional energy policies and projects. This negative representation is conveyed both by insiders, or members of the ingroup of experts, that by politicians and citizens. Indeed, the first three extracts provide some discursive evidence of this interpretation. In the first extract, during political consultations, an expert planner stresses in a provocative way that experts should be considered responsible for the many difficulties and tensions in RET development and environmental management. In particular, the orator highlights that techno-scientific or technocratic forecasts and governance brought the region to the disaster and that, that said, however nothing has changed in the practice (*you continue to make forecasts*). In the same extent, the second extract provides further evidence on the fault of experts. During a talk show, the regional politician member of the commission of inquiry for the biogas, sustains that experts

had not provided sufficient information about health aspects of biogas plants (*no one has written that powerplants should stay at tot meters from human settlements*). In this context, the orator aims to underline that if politics has many faults, in the same way responsibilities are distributed and shared with those experts providing paid consultancies for the regional energy plan (these things should be said, by technicians who elaborated the PEAR..they took a lot of money..consultancies we paid). The third extract, instead, presents the claim of a citizen and expert professional (engineer), which directing his utterance to his colleagues (those who put the signature) remembers that engineers should always consider and guarantee that interventions safeguard human health and guarantee environmental protection. While advocating and requesting a more ethical appraisal and deontological commitment from his colleagues, the orator underlines how different subjects, even institutional, put in front of these injustices and impacts are giving their own contribution to the diffused mobilization and resistance (*citizens who buy the land ..institutions that don't give the licenses for the landscape*). In this way, the orator sustains a call for army for all the professionals involved.

The last extract instead, provides the voice of an expert (geologist) advocating and asking for a deeper dialogue between decision-makers and all the experts from the territory who can provide their expert and local knowledge to get better policies and decisions.

5.6. Discussion of results and concluding remarks

To conclude and summarise, the study aimed to understand the historicity of RET development and their territorialisation in the regional context by analysing public, media and political discourses of the regional public sphere. Taking a longitudinal perspective across the years 2011-2017 allowed to better understand the process sequentiality of transformations and reveal critical moments and issues. Indeed, the period largely reflects critical moments and contingencies at the regional and national level, such as the biogas technology and PV diffusion because of favourable national subsidies and a Regional Law simplifying authorization processes and excluding Environmental Impact Assessment and related public participation for power plants under the thresholds of 1 MW. The period under examination reflects critical events connected to the national generous schemes for energy generation from RES (Conto Energia 2005 – 2013), which shaped first the rapid diffusion of PV on the ground covering rural areas throughout the region and the consequent fast land use change and spoiled landscape.

Thematic discourse analysis (Taylor & Ussher, 2001) has been used to examine the recurrent patterns of meanings people used in talk and text and their use in achieving certain functions.

The analysis focused on social representing and subject positioning as discursive practices to investigate how representations and identities are constructed, socially shared and used by and for individuals and groups, and their effects in social and political relations by focusing on discourse intertextuality (Billig, 2008; Fairclough, 1992b; Gibson, 2015; Voelkelein & Howarth, 2005; Wetherell, 1998).

The analysis has relied on the theoretical literature and particularly on the environmental justice dimensions (Jenkins et al., 2016; Schlosberg, 2003; 2007; Walker, 2009) as sensitising concepts to identify and better understand the main motives and arguments about community and socio-political acceptance of RET and related policies adopting a relational and spatial perspective. This is realised by focusing on the unequal distribution of costs and benefits (distributional justice), procedural fairness (procedural justice) and mutual recognition among actors/territories (recognition justice). These dimensions are taken as a coding framework to shed light on the techno-scientific, territorial, legal-political, and socio-cultural aspects of energy system change.

The preliminary analyses about voice and the distribution of main arguments across the corpora showed that when compared with other actors involved, protesters had greater space and voice both in local media and public and political debates. The high presence of protesters' voice in public debates can be considered a proxy of protesters' action of advocacy (i.e. posting video-recording of public meetings such as protest, assemblies, debates, forums etc.) revealing a biased selection because of the presence of these materials available in the web. On the other hand, the media and political debates reveal that protesters had undoubtedly greater access and voice in the regional public sphere.

Regional and local media provided in this case the space for conflict reconstruction (with media giving space to the main conflictual positions) and enactment, through the contestation and polarization of subject positions (i.e. opposition groups and local authorities VS regional authorities and RET entrepreneurs), and the use of offensive and defensive rhetoric for (de)legitimising the perspectives of self and others, the convey of polemical representations on the status quo.

Public debates instead provided the space for the sharing of experiences and the emergence of shared memories and narratives between citizens and local authorities about the perceived injustices in involvement and the territorialization of RET and the consequent place change and disruption. Moreover, public debate allowed the expression and negotiation of shared place-based meanings aligned with the criticisms, the networking and coalition building among actors and groups (local politics, protesters, agriculture representatives, experts and environmental

NGOs). On the other hand, dialogue, proposals and demands about concrete alternatives for regulation on RET development, institutional arrangements and barriers, public engagement practices and the valorization of local knowledge take shape more within political debates also revealing political resistances to open up the debate embedded in recurrent discursive constructions.

This analysis showed that people responses to RET were motivated by different factors: a lack of involvement and recognition of local authorities and communities, the inadequate consideration and evaluation of RET impacts and fit with place materiality and symbolic meanings. Further, simplification of bureaucracy on authorization procedures, the lack of regulation and guidelines setting the conditions for RET deployment, and windfall/raining incentives (i.e. distributed without criteria) had a major role in determining the conditions for diffused social conflict and protest. A protest that is based on the shared belief of an extremely unjust distribution of costs/impacts and benefits/advantages between communities of relevance, hosting the power plants and perceived as facing multiple negative externalities, and the private investors collecting public funds through generous subsidies by exploiting local resources and common goods.

More in-depth, arguments that concern distributional justice were significantly more present in public and political debates than in media debate, revealing the high presence in public debates of arguments concerning the perceived place-related impacts of RET deployment and distributed generation in the regional territory.

These arguments mostly referred to biomass, PV, and secondarily to hydroelectric and wind energy, and were mostly used and shared by local authorities, environmental NGOs and citizens' committees in their narratives, and partially sustained and diffused by local media. Arguments about impacts of RET concerning the environment and human health referred to the improper consideration, management, and evaluation of power plants and their risks about cumulation effects and the potential pollution of water, soil and air. These risks were mainly associated to the biogas plants (emissions of particulate matter, fertirrigation with the digestate, traffic problems) also highlighting a profound distrust both on the ethics and competence of firms, project developers, planners as well as decision-makers and public officers. What is relevant is that a large part of discourses about distributional justice focused on the impacts on the territory and the places. Indeed, the distributed generation model is perceived and represented as a multiplication of impacts devastating the territory and coinciding with a fast materialization of different and well-visible facilities throughout the territories. The development and diffusion in few years (2009-2013) of several on-land PV systems and biogas

plants are highly co-implicated in the discourses about these impacts. Biogas is represented as the last drop making the cup run over for all those territories facing these rapid changes on the local and regional landscape and land use. Renewables are indeed often represented as physical aggressions *eviscerating, devastating, tearing, massacring, disfiguring* the territories, and discourses about the materialization of RET are often associated to military and war metaphors such as *invasion, aggression, colonization* and to *predatory* and wild animal behaviours. These results corroborate previous findings about discourses accompanying the territorialisation of RETs (see e.g. Barry et al., 2008).

These discourses are linked to the exploitation of common goods (landscape, land, water among others) recognised as finished resources and value to defend, something that cannot and should not be fragmented and sold. Furthermore, concerning place-related impacts, a widely shared and used argument refers to the rural/countryside industrialization and agricultural land consumption derived from PV, biogas and wind energy. In this way, RET development is perceived as an ecological modernization and labels for industries acting contrary to the valued and essentialised representations of the rural and agricultural landscape and territory. Indeed, while PV expansion on the ground is directly visible and recognised for its impacts on landscape and land consumption, biogas problem is related to the particular size promoted (<1 MW) and the related supply configuration (dedicated cultivation of 300/400 hectares per MW) revealing the impacts on place where the facility is sited (traffic problems for transport and storage of raw materials) and the entire regional territory for its agricultural and tourism economy. The results highlight the value of social conflicts as moments of knowledge production and informal assessment of new technologies and policies (Cuppen, 2018) and the potential for adequate EIA procedures in identifying social impacts (i.e. damages and risks for local economies) beyond environmental ones (Larsen et al., 2018). In this vein, it is relevant to notice that while the arguments about the landscape impacts are widely shared and assumed as a sufficient motive to oppose to the particular RET configuration, protesters are aware of the possibility of being labelled as selfish, irrational and motivated by futile aesthetic reasons and as a consequence delegitimated. In this regard, the regional (rural and agricultural) landscape is re-presented drawing on valued representations highlighting its symbolic meanings connected to the regional history, identity, culture, traditions and broad memory, but also pragmatically connecting it to the materiality of regional economy - which is historically grounded and recently reinforced as – based on agriculture and tourism. This kind of arguments have the clear function of re-presenting the more abstract and perhaps expendable common good, the landscape, with its connection to the intrinsic materiality embedded in costs and impacts on local economies and

territories, in producing advantages only for private subjects totally disconnected from the existing local economy and not caring about these externalities (e.g. grabbing and consuming fertile land and influencing agriculture sector or ruining the hilly rural and mountain landscapes affecting tourism economy).

Regarding arguments about procedural justice, these represent a good part of the motives for opposing to RETs. Themes on procedural justice (authorization and assessment; participation; and regulation and guidelines) were differently distributed in the different corpora revealing a high relevance of arguments about unfair procedures of authorization and assessment in the local media, and of participation primarily, and regulation and guidelines secondarily, at the hearth of public and political debates.

Discourses about authorization and assessment highlight the diffused representation of unfair, illegitimate and illegal institutional procedures and behaviours. The arguments about the unacceptability of these procedures are clearly used by almost all the actors in denouncing and advocating the illegitimacy of the regional law, which excluded the assessment of environmental impacts and their territorial cumulation, while do not providing the recognition and inclusion of citizens and local authorities (municipalities, health and environmental authorities), and favouring in a direct way economic interest groups bypassing the concerns, opinions and requests of local communities and authorities. Moreover, discourses on authorizations and assessment emerging in the local media are often devoted to denouncing the many lacks, omissions and irregularities, as well as the lack of control of the Regional Administration in releasing authorizations to firms totally disconnected from pre-existent productive activities. Given the many critical issues enlightened by citizens, local authorities and environmental NGOs, political discourses about authorizations are characterised by attempts to re-present the political responsibility by de-politicising or politicising authorizations' procedures (see Pellizzoni, 2011). In these cases, regional politicians attempted to avoid or claim political responsibility for authorizations, which are represented depending on the circumstances as *'procedures of technical competence and not of political responsibility'* or *'procedures of technical competence but that draws upon political action and law-making'*. The incorrect behaviour and the responsibility of regional politics is clearly affirmed in different ways, first, by revealing the excessive simplification of bureaucracy, the scarce activity in understanding and mediating between various interests and positions or programming intervention with local competent authorities, and secondly in finding a solution to the overt problem of authorizations, by do not suspending or revoking them and looking for loopholes (ex post EIA).

About discourses on regulation and guidelines for RET deployment, these highlight the many faults and the lack of strategic capacity of politics at both regional and national level, revealing a perceived common trend of Italian energy policies, namely a ‘mess up first and solve it later’ approach. The shared belief about procedural injustice linked with regulation and guidelines is characterised by the recognition of the weight of national political action in setting up generous incentive schemes without pre-empting adequate regulation and guidelines determining the conditions for RETs promotion. Indeed, most of the arguments share this basic assumption, criticising the political action of national and regional governments by representing it as not strategic, careful and far-sighted, but rather as emergency-oriented, arriving always late (e.g. the identification of unsuitable areas for PV and biogas after the damage has already been done and is well visible by everyone).

Political action is represented in this perspective as guided by the rush to promote investments and use available funding without considering perverse effects and the basic principles of supranational treaties and of the national constitution (the precautionary principle of the EU; the social utility principle of Italian constitution, art.41) for guiding economic development. Moreover, it is remarkable that citizens, local authorities, experts and environmental NGOs widely claim the need of policies and decisions recognising the territory and its natural resources as common goods and ends rather than means or resources that can be sacrificed. In this context, a largely shared concern and request refers to the material conditions of the regional territory (overbuilding and soil consumption). In fact, different actors share the same concern on the rate of soil consumption and the industrialization of rural areas for energy generation, while aware of the presence of several abandoned and dismissed areas (buildings, shelters, industrial areas) which may be used and transformed from problem to resource by redeveloping them or in facility siting.

Regarding the last theme of procedural justice, namely participation, the related discourses were mostly expressed in public and political debates by citizens’ committees, environmental NGOs and local authorities denouncing the denial of the rights of information and participation of local communities in decision-making about RET projects. These discourses are characterised by arguments identifying information as the basis of responsible participation and stressing that transparency, information disclosure and the sharing of/access to expertise represent a right-duty of citizens, with the Region identified as the main responsible institutional actor for providing and sharing knowledge. Furthermore, it is stressed and demanded a more active role of the Region in finding ways to mediate between interests at stake and guarantee the democratic legitimacy of interventions. Several arguments and criticisms intended to the

Regions draw on the notions of inclusivity and timing of decision-making processes (see Stirling, 2014), by underlining and demanding institutionalised practices of public involvement and deliberation with competent authorities, that is all interested, responsible and affected parties, characterised by a preliminary up-stream engagement and continuity and systematicity (i.e. structured participation across the different circular phases of energy planning and decision-making: assessment, decision, implementation and monitoring). These discourses draw on the different rationales for public participation (see Fiorino, 1989), that is arguments emphasising the instrumental rationale (participation should be undertaken for achieving certain aims such as ensuring greater acceptance, support or trust), the normative rationale (participation should be undertaken because it is the right thing to do in democratic political systems) and the substantial rationale (participation should be undertaken to incorporate local relevant knowledge enhancing the quality of decisions). Following these criticisms and demands, which are widely shared among different actors, politicians are faced with giving an answer to and forced in taking the criticisms as a starting point of their arguments, revealing a discourse structuration (see Hajer, 1995). It is at this point that many political resistances and multiple positionings are enlightened (see Castro & Batel, 2008). Resistances are associated with their positioning as political representatives, part of the 'good politics', and party members, having the honour and the burden to 'listen to citizens and mediate their voice', but with decisions 'remaining of political responsibility'. The arguments and the use of disclaimer can be seen as deriving from resistances to share power and responsibility, limiting the agency of citizens as well experts and other authorities to have a voice beyond 'consultation' formats of participation. The need to recover a dialogue is also advocated by politicians, while referring, however, to a one-way communication (listening) or limited interaction about the formal decision-making process which takes place within political institutions, revealing in this way the uncertainty of the effectiveness of participation and of input use. This uncertainty, the perceived risks of co-optation and ambivalence of politicians' behaviour and positioning are at this point at the forefront of arguments of protesters asking coherence with the content politicians declare to personally agree and not with political party positions or logics of power. In this regard I have to recognise that this view - and the demand of coherence between discourse and action - is often expressed by different protesters facing with politicians throughout the data sets, by emphasising the often ambivalent nature of politics, constituted by open conflicts or passive alignments between institutions (national and regional; regional and local governments) and within political parties (national political party and its regional section).

For what concern the ‘relational/social side’ of RET development, the mutual recognition and treatment of actors and the way they represent and position themselves and others, the analysis reveals interesting aspects regarding the construction of socially valued identities and their use to legitimise or undermine certain versions of reality. Indeed, RET entrepreneurs are mostly represented in the local public sphere as intrinsic enemies of citizens and the territory, being them insiders or outsiders. Indeed, in this case, RET investors are often represented as the usual suspects and speculators of the green economy, namely local industrials following the money (incentives) and creating new companies, totally disconnected from territorial pre-existent activities, to invest in the renewable energy sector (PV, biogas). Thus, firms are accused of not creating positive outcomes or advantages for the territory while exploiting its resources and passing on the head of entire communities. For this reason, they are represented as *colonisers, land-grabbers, invaders, predators, aggressors* underlining their negative intention, behaviour and relation with the local place and its residents. These actors are so doing represented as insiders that, however, are positioned outside and opposing to the ‘regional community, identity and positive distinctiveness’. In the same extent, regional politicians are represented and positioned in different ways highlighting they do not deserve trust because *incapable, deficient, and lacking* or because *corrupted, not sensitive on environmental conditions or citizens’ concerns*, but rather acting as *promoters and defenders of speculation* or *paladins of citizens co-opting protest* and searching for *popular consensus*. In this context, both regional politicians and entrepreneurs attempt to delegitimise the protest and the protesters by undermining their knowledge, actions and legitimacy combining both offensive and defensive rhetoric (see Potter, 1996a).

Most of the arguments attempting to delegitimise protest and protesters were expressed in the media debate by regional politicians and entrepreneurs, representing citizens and citizens’ committees to the wider audience as *NIMBY* (selfish and irrational), *uninformed and ignorant, terrorists and not neutrals, ideological* people making damage and having hidden reasons. Protesters resisted to attempts of delegitimization positioning themselves within powerful coalitions of actors and voices defending the local territory (political authorities, NGOs, agriculture representative bodies, experts) and positioning opponents on the side contrary to what are recognised as the foundations of regional identity and economy (i.e. rural landscape and land, agriculture and tourism), representing themselves as ‘*democratic response to political lacks*’, ‘*guardians of the place*’ and re-presenting opponents as illegitimate ‘speculators’, ‘invaders’, ‘predators’, or as ‘promoters of speculations’ and ‘defenders of private economic interests’ rather than of citizens’ rights and environmental protection. In this context, while

entrepreneurs had little chance to undermine these arguments, regional politicians had to admit the mistakes, namely the unpreparedness in managing and governing such a complicated and rapid change they were confronted with. In this way, they tried to minimise the negative representations of politics as hostile, corrupted and not sensitive and careful of citizens and environmental protection by particularising the good politics. Another relevant aspect concerns the role and absence of experts. Indeed, experts and expertise are often demanded as a way to bring back the discussion to scientific arguments and evidence on both the opposing sides and recognised as fundamental to mediate between knowledge claims. This, however, reveals an uncomfortable position for experts, which are called to take part in the debate bringing their knowledge in a climate of open conflict, prejudice and stereotypes that influence the interaction. Finally, if so far, I dedicated the attention mostly focusing on the presence of themes, a theme that surprisingly is absent from all these debates concerns climate change. Indeed, the reasons for RET promotion and for energy system change are often indicated as deriving from EU or national and regional targets and to the alignment to legal innovations in the field. It is very rare to find in all these debates a reference to climate change and the urgency of global environmental change, excluding some utterance of experts during political consultations in 2015. Most of the discourses are indeed bent and crushed to the local dimension, with the few references taking a more global perspective overemphasising political decisions dropped from above and overlooking the ecological reasons of these choices. These findings point out that the longitudinal investigation of social conflicts during the implementation of energy policies and projects using of naturalistic data focusing on both institutionalized and non-institutionalized arenas allow research to enlighten the emergence of new context-based meanings, interests and values and the multiplicity and plurality of societal groups/milieus and competing coalitions and appraisals often not adequately identified and involved by policy actors as well as researchers (see Cuppen et al., 2010; Ellis et al., 2007).

CHAPTER 6 - ACTORS' PERSPECTIVES ON REGIONAL ENERGY STRATEGIES AND PUBLIC ENGAGEMENT: TRIANGULATING DOCUMENT ANALYSIS AND NARRATIVE INTERVIEWS WITH KEY INFORMANTS

6.1. Thematic analysis of public consultation documents on the regional energy strategy: exploring the conditional acceptance of energy system change

6.1.1. Research aims and materials

The collection, analysis, and triangulation of different textual data has been a major objective of this research, to investigate and better understand public engagement (communicative) processes and activities in their making in the real world, and the acceptability of energy system change between diverse publics as a process that is sensitive to experienced (power and institutional) relations and pre-existent knowledge, as well as historically, culturally, institutionally and territorially grounded. In so doing, the research has explored and navigated different textual materials providing empirical evidence about the vast argumentative texture (inter-textuality) of discourses (meanings) and positionings (identities) at stake in the regional energy transition.

Indeed, environmental discourse can be conceived as a struggle between various unconventional coalitions – made up of social actors such as scientists, politicians, activists, entrepreneurs or organizations representing such actors - sustaining a particular discourse/representation, that is a way of talking and thinking about environmental politics (Hajer, 1995; 2006). In these terms, a discourse analytical framework is used to illuminate the social and cognitive basis of the way problems and solutions are constructed, and common understandings are produced and transformed (Späth, 2012; Dryzek, 2005). This methodological underpinning has provided the evidence on multiple perspectives and positions in the way given social objects and projects are socially constructed and collectively shared. The social representations involved in the regional (representational) Project (representation of RETs, policies, laws, actors, places, territory etc.), which we may say that go to define the regional energy vision, were analysed by looking at how different elements of energy transition are conceived, conceptualised and conveyed by diverse groups and coalitions in the public and political sphere: among them RETs and associated infrastructures, policies, plans and regulation, local-based meanings and materiality (e.g. common natural resources), definition of common values, norms, and sustainability concepts and principles (precaution, social utility, circular economy).

By looking at the way these discourses and underlying meanings operate in the public and political sphere, stimulating conflicts and cooperation/coalition between actors, the research looks at the way discourse structuration is enacted in effective planning and policy-making (Hajer, 1995), revealing the way political influence and change is achieved, with emancipated representations becoming institutionalised, and how institutional change, in turn, is translated, transposed and re-presented by competent subject adapting or resisting change in institutional practice and norms (Castro, 2012). This moment of institutional change becomes itself a contested social object, a moment of greater tensions and struggle over meanings where old and new meanings and practices coexist, and where different interests and belief systems struggle in their claim for recognition and authority to fully construct the regional energy Project and sustain group interests and conceptualizations.

To fully investigate the socio-political dimension of energy system change (e.g. participation, institutional change, and acceptability) and understand how discourses and underlying meaning operate, as well as how interactions between actors developed over time, we cannot rely just on the memories of actors involved - since these are necessarily selective and partisan - while on the other side we cannot rely only on natural documents (Flick, Foster & Caillaud, 2015), which may not provide evidence on past interactions, expectations, factual experience, and other processes that are relevant to contextualise and interpret how meanings are created and transformed (anchoring, objectification, symbolic cultivation), sedimented and strategically used by actors in the relational encounter through the production, conveying, and circulation of texts (the act of representing).

For this reason, the research involved different kinds of textual data, in order to provide a description and critical deconstruction of how discourses, interactions and expectations developed over time and what these do in social and political relations (Voelklein & Howarth, 2005).

Since the research deals with participation in the public and political sphere, I partially followed the methodological guidelines of Hajer (2006) for applying discourse analysis to the study of policy-making. In particular, I adopted: desk research and general survey of documents and position in the field; document analysis for structuring concepts, ideas and categorizations; searching for data on sites of argumentation to reconstruct the arguments and account for argumentative exchange; identification of key incidents essential to understand the discursive dynamics and their political effects.

In constructing and analysing such data sets, the research was able to reconstruct the argumentative struggle accompanying the introduction and diffusion of RETs, the different

positions at stake, the key facts and incidents and the different publics widespread engaged in different regional locations. The analysis of natural documents (not produced/elicited by the researcher) and naturalistic data (i.e. interactions taking place without researchers' presence and/or influence) constitute a huge part of the research. The analyses of these documentary materials were used for different purposes.

In this context, a very rich set of data was constituted by the consultations' documents pertaining the Regional Energy and Environmental Plan 2020 (PEAR 2020), which is the focus of the study that is here presented. In the elaboration of the PEAR 2020 were organised two moments of public engagement: a listening campaign, by invitation, but open, inclusive and preliminary to the elaboration of the plan (2015), and the consultations with the public, key stakeholders and competent authorities (2016) required in the Strategic Environmental Assessment procedure.

The Strategic Environmental Assessment (SEA) is an institutional procedure that aims to integrate and ensure more effective considerations about environmental issues in the development of policies, plans and programmes that might have significative effects on the environment, and so doing guarantee the information, involvement and participation of the public in planning and programming processes. SEA has been introduced in the EU regulatory framework in 2001 with the Directive 2001/42/EC and transposed in the Italian regulatory framework in 2006 with the Legislative Decree 152/2006 – two years later the deadline for transposition: July 2004.

SEA should contribute to the “systematic and structured consideration of environmental concerns in planning processes and [...] ensures better and harmonised planning procedures and contributes to transparent and participatory decision-making processes” (CEC 2009, p. 11).

Indeed, SEA applies to a wide range of plans and programmes, and is mandatory on topics such as agriculture, forestry, fisheries, energy, industry, transport, waste/water management, telecommunications, tourism, town and country planning, land use or in case it is required an assessment under the Habitats Directive (protection of biodiversity and protected species).

Plans and programmes are elaborated by a (proceeding) authority (national, regional or local) and then submitted to legislative, regulatory or administrative positions (competent authority for the procedure: e.g. Regional Office for Environmental Assessments).

According to the national legislative framework, the SEA²⁹ procedure is characterised by diverse phases with pre-determined duration:

²⁹ <http://www.isprambiente.gov.it/it/temi/valutazione-ambientale-strategica-vas/normativa-via/normativa-in-materia-di-vas-nazionale-e-delle-regioni-e-province-autonome>

1. The screening, in which the proceeding authority transmits to the competent authority a primary report describing the plan or program and providing the information and data necessary to the evaluation of the potentially significant impacts on the environment. The competent authority transmits the preliminary report to competent subjects in the environmental matter to acquire their opinion (National or regional competent offices and ministers, health and environmental authorities). Considering the observations elaborated by the competent subjects and verified if the plan has significant effects on the environment, the competent authority subjects or excludes the plan or program from the SEA.
2. The scoping, or elaboration of the environmental report, is the phase where the proceeding authority elaborates a preliminary report on possible environmental effects for the plan or program implementation, consulting the competent authority and competent subjects.
3. The public consultations are undertaken after the elaboration of the environmental report constituting part of the plan/program during the entire process of elaboration and approval. In the report should be identified, described and assessed the significant effects on the environment and cultural heritage considering the evaluation provided by competent subjects. The publication of the environmental report constitutes the starting of the consultations with competent subjects and the interested publics having the opportunity of presenting observations and provide new or further elements of knowledge and evaluation.
4. The evaluation of the environmental report and of the results of the consultations, is the phase where the competent authority collaborates with the proceeding authority and carries out the technical-preliminary activities: acquire and evaluate all the documentation presented, as well as the observations, objections and suggestions presented during the consultation, and finally elaborate and express a reasoned opinion. Then, the proceeding authority, collaborating with the competent authority, provides the appropriate reviews to the plan/program by considering the reasoned opinion of the competent authority and the results of consultations.
5. The decision-making and information about the decision. In this phase, the plan/program, together with the reasoned opinion of the competent authority and consultation documents are transmitted to the authority concerned the approval and adoption of the plan or program (e.g. Regional Council). The final decision is taken and is published on the Official Gazette or the Official Bulletin of the Region and made

publicly available in the websites of concerned authorities with all the documentation (reasoned opinion; synthesis of environmental considerations taken into account in the plan/program, of the environmental report, the consultations, and the reasons of the choice in light of the possible alternatives identified; the monitoring measures).

6. The monitoring should ensure the control of environmental impacts related to the implementation of the approved plan or program, the verification of the achievement of pre-established sustainability objectives, to promptly identify the unexpected negative impacts and adopt adequate corrective measures. The monitoring is carried out by proceeding authority collaborating with competent authorities using the support of environmental agencies and the Higher Institute for Environmental Protection and Research. The plan or program identifies the responsibilities and resources that are necessary for the implementation and management of monitoring activities.

SEA descends directly from the Environmental Impact Assessment (EIA) Directive (EU Directives 85/337/CEE). Indeed, it was conceptualised based on the philosophy of EIA as an assessment process that may be appropriate also for policies, plans and programs - PPPs (Wood & Djeddour, 1989). Unlike EIA, however, SEA is conceived as a tool that may support and help in shaping the formulation and implementation of strategic actions and play a political role in decision-making processes (Partidário, 2015; Jiliberto, 2011; Bina, 2007).

However, the SEA practice has developed in multiple methodologies and a broader range of applications, often resulting in different interpretations of its strategic role and sight (Dalkmann et al., 2004; Gunn & Noble, 2009). This often results in SEA practices deeply grounded on the EIA tradition, shifting the focus from strategic thinking to ensure the sustainability of the plan/program, to the mere assessment of environmental impacts (Bina, 2007; Vicente & Partidário, 2006). For this reason, it is stressed that to realise the full potential of SEA requires an agenda focusing on adopting, testing and developing deliberative governance mechanisms to facilitate strategic innovation in the formulation of plans and programs (Noble & Nwanekezie, 2016).

In this regard, the planning and participatory processes about the Regional Energy and Environmental Plan (2020) has been approached with the objective of better understanding the socio-political acceptance of energy system change by different actors, and the way planning and participation processes, as well as the final outcome are conceived and evaluated by different actors.

In this context, it is remarkable that the baseline year (2015), refers to a moment of re-configuration for the Region, an institutional change characterised by a new Administration.

The events of past years (2009-2014) clearly required a greater effort in stakeholder and public involvement and governance and regulation of ‘renewable energy economy’. It is following these critical moments that many participatory pathways were activated to involve different publics and stakeholders in policy-making and planning. Example of this participatory approach can be found in the Rural Development Plan, the Law for the Territorial Government, and last the Regional Energy and Environmental Plan.

The participatory pathway for the regional energy plan has been characterised by a broader participation and greater involvement of different subjects across two years. In this context, I started to collect all the digitalised documents available related to the planning and participatory processes. However, the consultation materials, such as the observations of different subjects during the SEA, had been summarised and reported by the competent authority. For this reason, I decided to collect all the observations’ documents of consultations elaborated by the different actors, making a request to access and get a copy of the public documents.

The corpus of data collected and analysed consists of 277 pages containing more than 300 observations coming from N=59 actors at the different stages of the planning process; i.e. listening campaign, SEA screening, scoping and public consultations (see Table 10), as well as counterarguments to observations, the technical and non-technical reports etc.. Most of the observations in the listening campaign and the consultations came on behalf of collective actors (N=57) with few observations coming from individual citizens/professionals (N=2).

The analysis allowed to identify relevant actors and analyse the discursive construction of a wide range of positions (i.e. environmental NGOs, professional orders, citizens’ committees, firms, political parties and local authorities, representative bodies for industry, agriculture, small and medium enterprises (SME), trade unions, environmental and health authorities). In this way, the analysis provided a deeper understanding of factors for conditional acceptance of RETs and related policies (and institutional change) from different publics (i.e. the different energy technologies and the conditions for their deployment, the targets, aims and scenarios of the regional strategy, use of land and natural resources, and so on). This material also constituted the knowledge basis for participants recruitment to the interviews’ study.

To be more precise, the actors that participated to the consultations (see also Table 9) were:

✓ 23 civil society actors: twelve (regional or national) environmental NGOs, two networks of citizens’ committees, four citizens’ committees, three local environmental associations, two citizens;

- ✓ 24 Competent and interested subjects/authorities: two basin authorities, three local health authorities, four Regional Parks, two Provinces, two Ministerial Offices, two Regional Offices, one Regional Administration, six Mountain Unions and one University.
- ✓ 12 Stakeholders: Transmission system operator, two professional orders, one political party, one Municipality, two trade unions, and five representative bodies of different economic sectors.

N	Organization type	Involvement phase	N	Organization type	Involvement phase
1	Environmental NGO	Listening Campaign/SEA	30	Regional Park authority	Incidence Assessment protected sites
2	Environmental NGO	Listening Campaign/SEA	31	Regional Park authority	Incidence Assessment protected sites/SEA
3	Environmental NGO	Listening Campaign/SEA	32	Regional Park authority	Scoping observations competent subjects
4	Environmental NGO	Listening Campaign/SEA	33	Transmission system operator	SEA
5	Environmental NGO	Listening Campaign/SEA	34	Professional order	Listening Campaign/SEA
6	Environmental NGO	Listening Campaign/SEA	35	Professional order	Listening Campaign
7	Environmental NGO	Listening Campaign/SEA	36	Municipality administration	SEA
8	Environmental NGO	Listening Campaign/SEA	37	National Ministerial office	Scoping observations competent subjects/SEA
9	Environmental NGO	Listening Campaign	38	Provincial administration	Scoping observations competent subjects
10	Environmental NGO	Listening Campaign/SEA	39	Provincial administration	Scoping observations competent subjects
11	Environmental NGO	Incidence Assessment protected sites	40	National Ministerial office	Scoping observations competent subjects
12	Environmental NGO	SEA	41	Regional administration office	SEA
13	Local opposition groups network	Listening Campaign/SEA	42	Regional administration (neighbc	SEA
14	Local opposition groups network	Listening Campaign/SEA	43	Regional administration office	Scoping observations competent subjects
15	Local opposition group	Listening Campaign	44	Political party	SEA
16	Local opposition group	Listening Campaign	45	Trade Union	SEA
17	Local opposition group	SEA	46	Trade Union	SEA
18	Local opposition group	SEA	47	Representative body industry	Listening Campaign/SEA
19	Local environmentalist association	Listening Campaign/SEA	48	Representative body SME	SEA
20	Local environmentalist association	Listening Campaign	49	Representative body Agriculture	SEA
21	Local environmentalist association	Listening Campaign	50	Representative body Building	SEA
22	Basin authority	Scoping observations competent subjects/SEA	51	Representative body Manufactur	SEA
23	Basin authority	Scoping observations competent subjects	52	Mountain Union	Incidence Assessment protected sites/SEA
24	Local health authority	Scoping observations competent subjects	53	Mountain Union	Incidence Assessment protected sites
25	Local health authority	Scoping observations competent subjects/SEA	54	Mountain Union	Incidence Assessment protected sites
26	Local health authority	SEA	55	Mountain Union	Incidence Assessment protected sites
27	Citizen/engineer	SEA	56	Mountain Union	Incidence Assessment protected sites
28	Citizen/engineer	SEA	57	Mountain Union	Incidence Assessment protected sites
29	Regional Park authority	Incidence Assessment protected sites/SEA	58	University	Incidence Assessment protected sites

The material has been analysed with thematic analysis (Braun & Clark, 2006; Joffe & Yardley, 2004). After familiarising and reading preliminary the corpus, the coding framework has been realised involving and reflecting on the structure of the plan and related observations. The structuration of the plan/environmental report has determined the kind of (written) observations produced in the two moments of consultation. The observations have been coded following a grounded approach and letting the codes express the argumentative structure and function-orientation of discourses. A preliminary coding resulted in 378 codes distributed in 25 families. After the review and definition of themes, resulted in a set of 249 codes distributed in 9 main themes and 18 sub-themes.

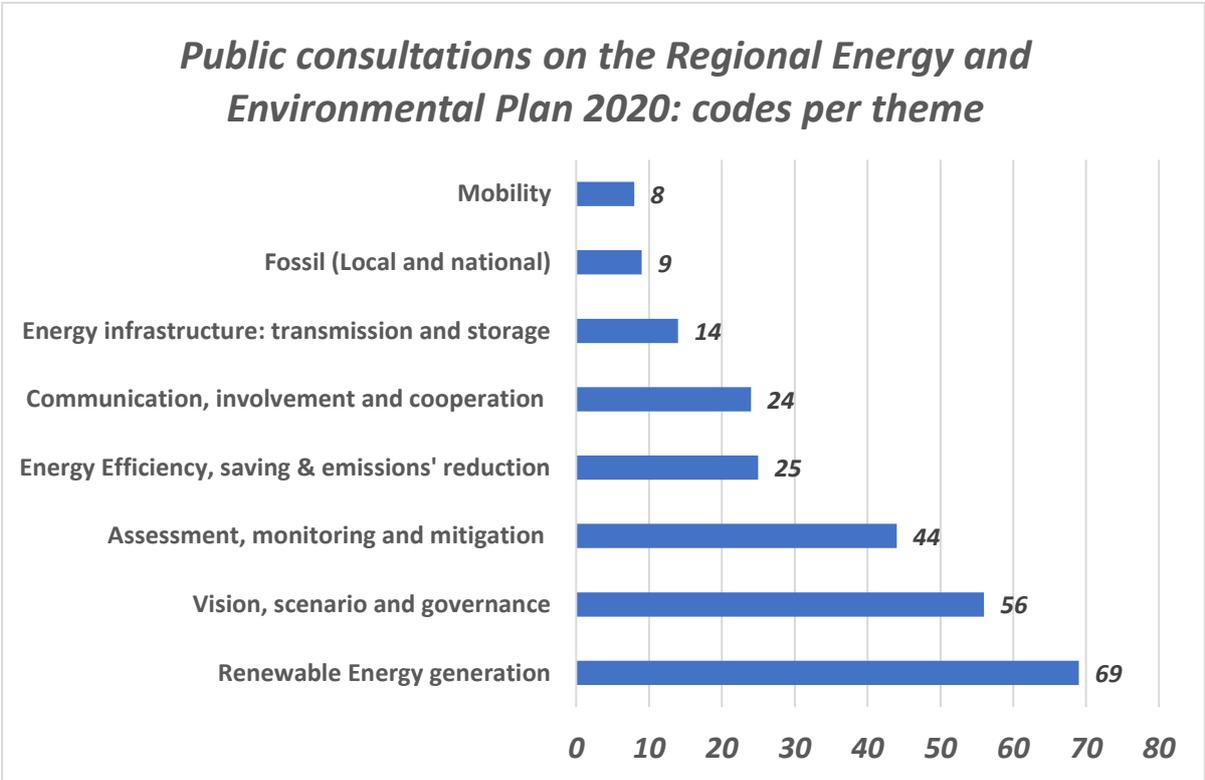


Figure 50. Main themes and frequency of codes per theme resulting from thematic analysis of public consultations

The presented chart has the aim of providing the reader with a bigger picture about the “richness of the debate” on the different themes regarding the regional energy plan. Indeed, the frequencies of codes do not reflect the number of observations regarding the argument or theme per se, but rather the measure in which the different themes were differently framed and represented by different actors. In some way, this can be considered a proxy of how much the theme is relevant or debated and contested by different groups.

As presented in the chart, the majority of codes concern renewable energy generation, comprising 69 codes and involving five sub-themes: bioenergies, wind power, solar energy (PV and solar-thermal), hydroelectric, and new/alternative RES and RETs such as geothermal or hydrogen.

Then, a major theme concerns the energy vision, scenario and governance, comprising 56 codes and three sub-themes: vision and scenario, socio-technical configuration, and governance and regulation.

On the other hand, the theme on assessment, monitoring and mitigation represents a great element of debate in the regional energy planning, comprising 44 codes and three sub-themes: monitoring (of the plan and technologies), assessment, and mitigation of potential impacts.

Greater relevance is posed on the theme of energy efficiency, saving, and emission reduction, coinciding with 25 codes and two sub-themes: assessment and regulation, strategy and implementation measures.

Communication, involvement and cooperation represent another rich theme, that comprises 24 codes, followed by the theme on energy infrastructure, with 14 codes, and comprising discourses on energy storage and transmission solutions, and finally the themes on fossil (f=9) and mobility (f=8).

6.1.2. Elaborating the regional energy strategy: vision, scenario and governance of energy system change

For what concerns the vision, scenario and governance of energy system change, observations point out that the question on what kinds of vision and scenario should guide energy system change, as well as how to govern such change are crucial issue and source of a rich debate.

Energy vision and scenario	f
Planning and evaluation intervention oriented to preservation, precaution and preventive action	16
Long-term strategy and decarbonization road map: need programming or difficult implementation	11
Energy saving is a priority for reducing consumptions and emissions: push the accelerator	11
Vision of regional self-sufficiency/energy independence	10
We share at most the strategy of the PEAR 2020	8
Authorise RETs fitting with the territory, preserving common goods and responding to social utility	7
Environmental impact assessment: no more soil consumption	6
Decentralization is the way, centralization no way!	4
Energy efficiency scenario: sharing the target	3
Evaluation of scenario not exhaustive	3
Scenario building: SWOT analysis of technologies for a comprehensive evaluation	2
Not sharing the vision of No middle power plants, albeit with a strong electricity deficit	1
Energy dependency ambitious challenge for the productive sector with great growth opportunities	1
Intergenerational justice	1
Never more against the environment	1
RES production strategic priority for work and economy	1
<u>Energy efficiency scenario: challenging governance choice</u>	1

Table 11. Codes about energy vision and scenario resulting from thematic analysis of public consultations

As showed in the table 11 regarding the arguments used on regional energy vision and scenario, a prominent code is represented by underlining the principles that should guide the regional energy transition, namely the careful planning and forward-looking evaluation of interventions in the territory responding to sustainability criteria of precaution, preservation and preventive action (f=16). This view was stressed by different actors such as many environmentalists and competent subjects and some stakeholders. The idea that energy planning should be undertaken by facilitating and promoting a strategic and far-sighted thinking is a commonly shared belief. For this reason, many claimed to the Region the elaboration of a long-term strategy and a road-

map for the main long-term objective: the decarbonization of energy system (f=11) that is forecasted for 2050.

This view stresses the need of using planning moments to program in the long-term and lay the foundations for the transformation required in order to facilitate future implementation. Many of the actors participating to the consultations represented the regional energy project with a vision of a self-sufficiency and energy independence (f=10), which is greatly shared among groups of stakeholders and environmentalists, especially in consideration of some territorial features (e.g. diffused industries, a higher presence of SMEs). This vision of independence, especially in the electricity sector, is greatly emphasised should be realised by concentrating on energy saving and efficiency (f=11) and then integrating renewable energy generation. Indeed, many participants underlined that is “useless to persevere in generating new energy - in a context of decreasing energy demand in last years because of the economic crisis - while wasting so much energy” and recognise energy efficiency as a great pillar and priority of the sustainable energy strategy, with many actors sharing the target and (energy efficiency) scenario decided for the plan. Energy independence and the efficiency scenario are represented by economic stakeholders as ambitious challenges with the great potential for economic development in different sectors (f=2).

Many of the participants underlined that most of the work should concentrate in reducing energy demand/consumption, something that is equally sustained by experts, stakeholders, and civil society, asking the region to push on this target and requiring integrated energy policies (in agriculture industry, household, transport and so on).

Further principles that participants recognised as guiding principles for the regional energy transition refer to manage RET authorizations and deployment in harmony with the territorial features, preserving the common goods (water, land, landscape, air protected areas) and with a (green) economic development and private initiatives responding to the social utility principle (f=11). The place-related fit of RETs represents a great concern, emphasising that the use of local common and natural resources should respond to the public good and utility, ahead of economic interests and needs. A further territorial concern is referred to soil consumption, with many actors remarking the sight of the problem and how it should be fully addressed in EIA practice as well as in regulatory plan and law for the territorial government (f=6). A further theme coincides with the climate of potential re-centralization of energy governance of recent years. In this context, many actors from civil society and experts underlined that despite the difficulties and critical issues of decentralization, this should be the right way to govern transition and that for centralization the response is ‘no way’ (f=4). Some critical discourses

and polemical representations concern the view of economic stakeholders about the size of power plants foreseen for the distributed generation model, which is argued as too reductive and not responding adequately to electricity deficit or economic feasibility (f=1) or underlining the strategic sight of energy generation from RES for occupational and economic benefits (f=1). On the other hand, experts and civil society members underlined the not exhaustive evaluation of the potential scenarios (f=1) on which the choice was made (Energy efficiency scenario VS Business as usual), and that it would be necessary to comprehensively analyse strength and weakness of different technological alternatives (f=1). Other discourses that were advocated by environmentalists as guiding principles were intergenerational justice (f=1), environment first and never against it (f=1).

In elaborating the energy plan, a further macro-theme refers to the choice of socio-technical configuration for energy system change.

Socio-technical configuration	f
Distributed generation in the territory, polycentric and prosumer	14
Distributed generation, territorial and/or closed micro-grids and energy communities	7
Space for small power-plants in self-consumption for households and small enterprises	6
Distributed generation & UES (Users' Efficiency Systems)	5
Size of power plants: regional dwarfism, small facilities anti-economic	5
House energy independence (Passive house, Near Zero Energy Building)	4
Energy districts: best practice to sustain and replicate for economic competitiveness and innovation	2
Economically self-sufficient power-plants to avoid speculation	2
No incinerator	2
Promote co-generation of electricity, heating and cooling	2
Smart city: redevelopment of public lighting, traffic lights and road signs	2
Smart city: sensors and dialogue with services for citizens	2
Size of power plants: at a national level, larger facilities are incentivised	1
Size of plants: at the national level little incentives hydropower for small sizes	1
Sustainable systems and for the benefit of the community	1
Synergies must be created in the territory for plant management and not many small plants (e.g. biomethane)	1
RES production: Development based on maintaining self-regulation capacity	1
RES production: analyse interventions/projects along the entire production cycle of energy and the plant	1
RES production: prohibition of the territorial cumulation same owner on more territories	1
<u>RES production: encouraging district heating in historic centres</u>	<u>1</u>

Table 12. Codes about socio-technical configuration resulting from thematic analysis of public consultations

The analysis of observations clearly revealed that the choice for a distributed generation model, that is energy production territorially distributed and closer to consumption sites, characterised by a polycentric governance and the active involvement of consumers as prosumers is often

advocated as the right way to face energy challenge (f=14) by different actors: civil society, experts, and some stakeholders. In fact, many participants promoted a view that greatly stresses on the involvement of local communities as an active agent for social change. This view is promoted in light of the transformation required and the foreseen change in socio-technical configurations: closed micro-grid, energy communities (f=7), efficiency users' systems (f=5), house independence through the passive housing/near zero energy buildings (f=4), or the industrial energy districts (f=4) with RETs serving energy-intensive industrial areas. Some civil society members, experts and stakeholders claimed that new development of RETs should concern only small power-plants in self-production and self-consumption configurations (f=6) and being economically self-sufficient to avoid speculation (f=3).

What is relevant in this regard, however, is the critical voice of some economic stakeholders questioning the economic feasibility of distributed generation and representing the sizes of RETs favoured by the regional plan as a 'dwarfism' and anti-economic (f=5), not fitting with the sizes foreseen in the national incentives (larger facilities incentivised, f=1; and small hydroelectric not incentivised, f=2). While civil society members demand sustainable systems benefitting local communities (f=1), the prohibition of territorial cumulation of power plants owned by the same company (f=1), both large and small economic stakeholders ask for larger, centralised and economically more feasible facilities, facilitating the investments or the creation of synergies (among farmers) in facility management (f=1).

Other less recurrent observations concern the denial of civil society to re-activate in the Region an incinerator (f=2), the demand from economic stakeholders to promote co-generation of electricity and thermal energy (f=2), experts encouraging district heating in historic centres (f=1) and the assessment of RET projects considering the entire life cycle (LCA). Furthermore, other issues concern effective decisions and incentives on smart city solutions at the municipality level (e.g. public lighting; ICT solutions).

The last sub-theme concerning the wider discourse on regional energy vision, scenario and governance are represented by the observations on governance and regulation.

Governance and regulation	f
Simplification normative framework for RES generation: clarity and short time-frame	7
Regulating unsuitable areas for all the RETs	3
Identify incentives for incentives beyond national	3
Energy efficiency: too many actions	2
A clear distribution of competences and coordination of regulation across scales	2
Incentives to sustain agriculture	2
Valorization of locally available resources and local projects	2
Add reference climate adaptation and energy system resilience	1
Add reference on gross final consumption and reduction emissions for the sector	1
Add reference on the climate & energy framework 2030	1
Centralization of energy governance	1
Local distribution burden sharing objectives to involve local businesses and capital	1
Need of regulatory and financial framework to attract investments	1
Simplification normative framework RES production from small plants within productive activities	1

Table 13. Codes about governance and regulation resulting from thematic analysis of public consultations

Many actors, mostly stakeholders, emphasised the need of simplifying bureaucracy and norms on RES generation, asking precise and short times for the procedures and clear rules since the beginning (f=7), especially in cases of small plants sited in productive activities (f=1), and the requirement of identifying incentives source beyond conventional national incentives (f=3). In this vein, it is also remarked that more coordination and clarity between regulation across levels of governance is represented as fundamental to attracting investments (f=2).

Moreover, some economic stakeholders observed that too many actions are foreseen and prioritised in the energy efficiency sector (f=2), that incentives are necessary to support the involvement of agriculture sector (f=2) and for valorising locally available resources and projects (f=2). On the other hand, some members of civil society, experts, and stakeholders noticed that the comprehensive mapping and identification of unsuitable areas for all the RETs is needed (f=3), and demand for a more decentralised responsibility about regional targets to involve local actors in the implementation of the regional plan (f=1).

Other few critical observations concern instead national and regional authorities underlining that the plan must consider and align to the new EU scenario, the climate and energy framework 2030, the national strategy on climate adaptation and resilience of energy system, and final consumption and emissions' reduction per sector (f=3).

6.1.3. Assessment, monitoring and mitigation measures

So far, were discussed the observations that concerned the more strategic side of the regional energy plan: the vision, scenario and governance for the regional energy transition. On the other

hand, assessment, monitoring and mitigation constitute a fundamental part of the planning process and about issues widely debated by actors.

For what concern the assessment dimension, this refers to different evaluations about the plan compatibility and interference with other plans, the role of EIA and SEA, evaluation of impacts deriving from the plan implementation, and deeper evaluations required to take precautional decisions.

Assessment	f
Evaluation of PEAR compatibility and interference with protected sites management and conservation plans	9
Assessment incidence for plants near protected sites	9
EIA and SEA should preserve the biodiversity of flora and fauna	7
EIA and SEA considering, preserving and safeguarding landscape conservation areas	6
Verify compatibility PEAR and the level of interference with environmental protection agency	6
EIA and SEA: include landscape protection of hills and ridges	5
Preventive impact assessment to do not repeat mistakes (PV and biogas)	4
Evaluation of state and protection of water courses/surface and underground water bodies	4
Assessment of water quality	4
Assessment and mapping of energy-intensive areas needing technological innovations	4
Evaluation of effects on the health of biomass and wind energy	4
Assessment of impacts: risk of pollution of underground water from agriculture-related nitrates	4
EIA should be preparatory to the expression of competent authorities on public health	4
Assessment scenario: lacking emission data, cumulation impacts and negative impact scenario biomasses	3
Assessment: exclusion of protected areas and neighbouring areas for large plant siting - yes if small & carefully evaluated	3
Assessment and management hydrogeological and flooding risk	3
Necessary a quantitative assessment of the plan's impacts	3
Evaluate the compatibility of the plan with national plans and strategies (emissions, climate)	2
Assessment of effects/impacts of the construction phase for power plants and infrastructures	1
Assessment air quality and identification of critical emissions	1
Energy audit for small businesses	1
Assessment of interconnection between agricultural practices and hydrogeological instability	1
Verify compatibility of the PEAR with Landscape observatory, tourism office, and basin authorities	1

Table 14. Codes about assessment resulting from thematic analysis of public consultations

In this regard, it should be noticed that many of the observations on this aspect and the broader theme derive from the observations elaborated by competent subjects (e.g. environmental and health authorities) and to a minor extent some environmentalist group or stakeholder.

In particular, experts required an in-depth evaluation of the compatibility or level of interference with other plans and competencies, such as with protected sites management and conservation plans (f=9), with the environmental (and health) competent agencies (f=6), with national plans

and strategies (f=2) and with other competent authorities on landscape, tourism and water basins (f=1).

Furthermore, competent subjects demanded an in-depth assessment for projects near protected areas (f=9), and the exclusion of protected sites and bordering areas for the siting of large-scale projects, accepting only small plants with careful assessment (f=3). Many other critical issues were expressed by different competent subjects, underlining the lack of careful data and integrative assessment. Among them, the assessment of the state and protection of watercourses (f=4), of water quality (f=4), the risks of water pollution from agricultural practices (f=4), the health effects deriving from biomass and wind (f=4), the evaluation and management of hydrogeological and flooding risks (f=3), the related connection with agriculture (f=1), and the air quality assessment and identification of critical sectors (f=1).

Furthermore, competent subjects, stakeholders and members of the civil society criticised the lack of different data, such as the quantitative assessment of impacts about the plan implementation (f=3), the assessment of impacts considering the construction phase (f=1), the lack of emission data, cumulation impacts, and the impacts of the biomass scenario (f=3), the identification and assessment of energy-intensive areas (f=4), the audit of SME (f=1). Finally, it is remarkable the conceptualization of assessment as a process that should preserve and strategically think about common resources, being preventive and precautional to not repeat the mistakes occurred in PV and biogas development (f=4). In this regard, competent authorities and environmentalists strongly demand the realization of the full potential of assessment procedures (SEA and EIA) in preserving biodiversity (f=9) the landscape conservation areas (f=6) and include the protection of both rural (hills) and mountain areas (ridge) (f=5).

A further crucial theme advanced by competent subjects concern the EIA as a practice that should be preparatory to the expression of competent authorities on public health (f=4), something that has been demanded many times by citizens' committees, local authorities and environmental NGOs since the first years of the period analysed in this research (i.e. 2012). While the assessment theme was mostly characterised by the voice and positions of competent subjects, and to lesser extent other actors, in particular, civil society, arguments on monitoring are more heterogeneous, reflecting the stakeholders' concern in monitoring the plan/strategy to adapt it to the ever-changing landscape, and the public concerns on monitoring the risks, and functioning of power plants.

Monitoring	f
Monitoring and flexibility plan: need technical standards and implementation review	5
Monitoring Change in the EU and ITA economic and regulatory environment	2
Monitoring: taskforce/observatory & thematic tables stakeholders & local authorities	2
Monitoring proxies of potential effects of power plants on health	4
Monitoring health effects of energy production from biomasses (pollutants like powders)	4
Monitoring of power plants: charged to the proposer/ implementer/manager	1
Monitoring of power plants: incoming and outgoing products, and published	1
Monitoring of the plan (public health indicators)	1
Monitoring of the plan: introduce, evaluate, monitor electromagnetic pollution and health criticality	1
Monitoring the annual impact assessment of the plan and the need to revise objectives	1
Monitoring: exclusively technical verification	1
Monitoring: little is said about the political-administrative activity following the monitoring	1

Table 15. Codes about monitoring resulting from thematic analysis of public consultations

Indeed, stakeholders greatly stressed the role of monitoring for having a flexible plan that can be easily re-oriented (f=5) in ways that fit with the economic and regulatory environment (f=2). For this reason, some stakeholders demanded: an annual monitoring of the objectives achieved by the plan and how to revise objectives or strategy (f=1), and to set up a task force/observatory monitoring the plan, and thematic working tables to have a dialogue with local authorities and stakeholders in order to adapt the plan (f=2). In this vein, stakeholders complain about the practice of having an exclusive technical verification (f=1) with little information about the activity of updating and set-up of institutional arrangements following the monitoring (f=1). The monitoring of the plan has been also advocated by competent authorities and civil society demanding the definition of proxies or indicators for the potential effects of energy production on health (f=4; f=1), introducing the electromagnetic pollution (f=1) and monitor in particular the health effects of energy production from biomasses (f=4). For what concerns the monitoring of facilities' functioning, members of civil society and competent subjects underlined the necessity of monitoring and information disclosure about the incoming products and outgoing wastes (f=1) put at a charge of the facility owner/manager (f=1). Regarding the mitigation of impacts, most of the concerns refer to biomasses.

Mitigation	f
Mitigation: biomass, digested composting to reduce impacts	2
Mitigation: identify measures for unforeseen effects of plan measures	2
Mitigation: measures seem adequate, to be considered localization	2
<u>Regional mapping of biomass emissions for elaborate mitigation measures</u>	<u>2</u>

Table 16. Codes about mitigation resulting from thematic analysis of public consultations

In fact, both from civil society and competent authority emerge critical issues concerning the increasing deployment of biomasses. First, the demand for the composting of digested waste for its proper use as fertiliser in agriculture (f=2), and second, the request from competent subjects on a regional mapping of biomasses emissions as foreseen in the plan to elaborate the mitigation measures (f=2). Finally, competent subjects require the identification of measures for unforeseen effects in planning implementation (f=2) and stating that other mitigation measures seem adequate but that almost depends also on the localization and siting conditions (f=2).

6.1.4. Renewable energy generation, acceptance and support for socio-technical configurations: disputes and tensions on RET deployment and unsolved critical issues

Renewable energy generation represents the most debated theme in the entire data set, counting 69 codes and distributed among few main RES and RETs (i.e. the biomasses, wind, solar, and hydraulic energy, and ‘alternative’ such as hydrogen, geothermic or biomethane).

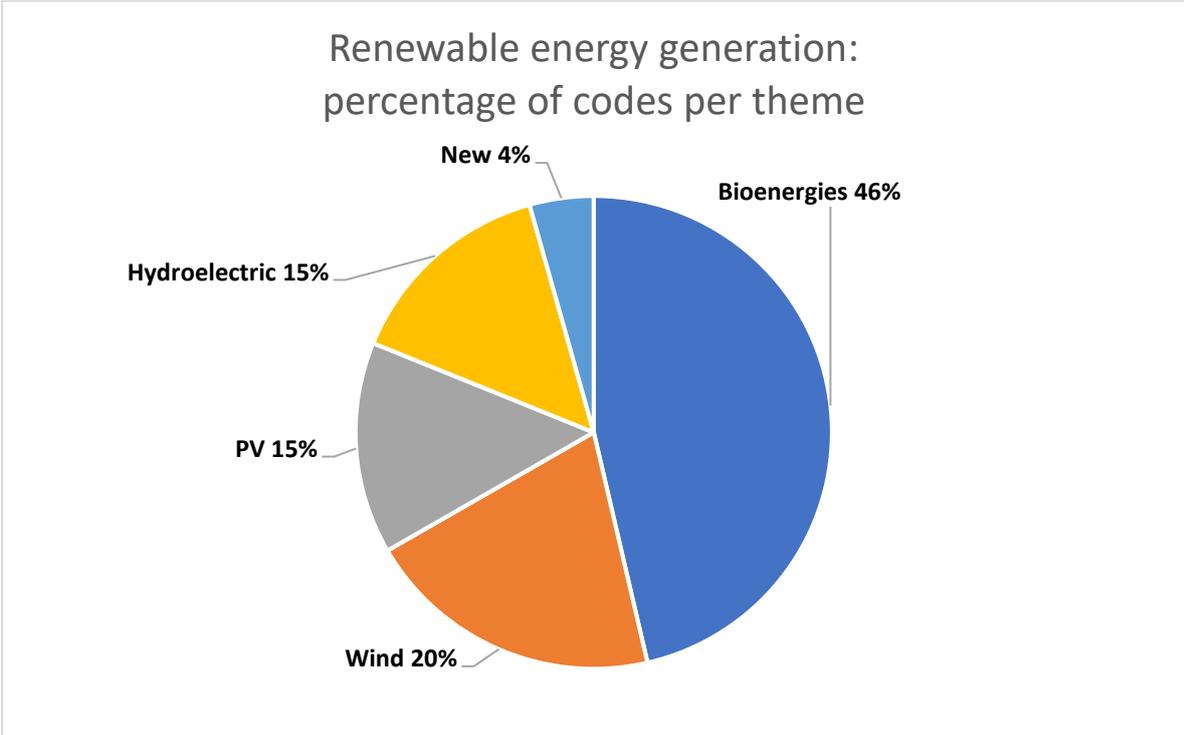


Figure 51. Macro-families of codes for the theme of renewable energy generation resulting from thematic analysis

More in-depth, most of the codes refer to the development of bioenergy, namely energy deriving from biomasses. Alone, the bioenergy theme counts almost a half of the total codes for the entire theme (46%), reflecting its past and present tensions.

Follows the wind energy, with the 20% of codes, the PV and Hydroelectric, both with a 15%, and new/alternative sources or technologies such as geothermic and hydrogen with a 4%.

Regarding the bioenergy deployment, as it is possible to notice from the table, multiple observations concern the forest biomass. Indeed, the PEAR 2020 foresees the development of bioenergy by adopting no more dedicated crops, promoting facilities in self-production and self-consumption configurations, and at the direct service of productive activities such as farms and breeding, wood industry and so on, in the individual or collective forms (synergies, partnerships). This kind of policy direction aims to valorise waste and favour a circular economy. In this regard, the plan aims to promote the recovery of residual biomasses and wastes in agricultural activities, animal farms, and last from forest management activities.

It is on this latter choice that most of the arguments are oriented. Indeed, competent subjects (particularly mountain union and regional parks) and members of the environmental groups strongly criticised this setting-up of the bioenergy development for the forest sector.

Bioenergies	f
Forest biomass, intensive exploitation of the forest system and neglected multi-functionality	12
Forest biomass: quantitative evaluation of biomass resource exploitation (+1095%)?	12
Forest biomass and deforestation	8
Biomass plants respect sustainability criteria in the intensification of agricultural and forestry practices	7
Biomasses and benefits for residents and communities	6
Residual biomass (organic and agricultural fraction) for the production and sale of thermal and electric energy	6
Biomass authorizations to "real agricultural" entrepreneurs, secondary energy activity and calibrated on real needs	5
Biomasses: limited growth - small plants for agricultural, forestry, and productive activities	5
Forest biomass: participatory management, development and maintenance of internal and mountain areas	5
Forest biomass necessary updating management plans and estimating actual quantities of raw materials and surfaces involved for short supply chain	5
Biomass: siting regulation and preference in industrial (abandoned) areas, not near houses	5
Residual forest biomass and critical transport and storage	4
Biomethane renewable source essential for automotive and heating, need clear rules for fuel	4
Biomass dedicated crops for biofuels should be taxed	3
Biomass to be economically stimulated and developing anaerobic treatment plants for recovery of organic waste	3
Use of organic waste should be excluded	3
Residual biomass clear regulation to coordinate and manage the market	2
Biomass biogas if to plant crops evaluate the whole energy system (LCA assessment: raw materials land and waste)	2
Forest biomass and biodiversity impact	2
Biomass location of plants for transport and storage	2
Biomass necessary analysis of digested waste material for correct use that does not pollute soils and aquifers	2
Biomass, verify emissions in the air	2

Biomass: mature technologies necessary synergy and entrepreneurial associations	2
Biomass size small plants do not attract investments	2
Dedicated crops for biofuels should be incentivised	2

Table 17. Codes about bioenergy resulting from thematic analysis of public consultations

The plan is greatly criticised for promoting an intensive exploitation of the forest system overlooking the multiple functions it serves (f=12). The Regional Administration is criticised for basing the decision about the biomass objectives on a quantitative estimate of forest biomass and deciding to increase the forest exploitation for energy purpose of the 1095% (f=12). This decision is the focus of many complains about the potential risk for deforestation (f=8) and the demand for following sustainability principles and criteria in agriculture and forest management practices (f=8). In this vein, the competent subjects for the forest sector stressed the updating of forest management plans and conducting further evaluations on the quantities of raw materials and surfaces involved for developing the short supply chains foreseen (f=5).

In the context of biomasses, many actors of civil society advocated a limited growth for the biomass sector and only connected with agricultural, forestry and productive activities.

Moreover, some members of the civil society and competent subjects remarked that bioenergy development should also re-distribute the benefits to residents and local communities interested by this development (f=6). It is in this context that many other demands are oriented to maintain the benefits of RET deployment in the local, by arguing for the residual forest biomass a participated management, development and maintenance of the internal and mountain area (f=5), or by releasing authorizations to ‘real farmers’, for energy plants calibrated on the needs and wastes produced, promoting an active role of farmers and the multifunctionality of agriculture (f=5). Furthermore, the siting of biomass plants represents another concern of the civil society members, demanding for siting regulation preferring industrial abandoned areas (f=5), while questioning how the residual forest biomass should be transported and stored (f=5) to evaluate the impacts. Further elements can be identified across the citizens’ concerns. These are connected with the diffusion of biomass plants supplied from organic (fraction of) urban wastes (f=3), an uncontrolled development without clear regulation (f=2), incomplete assessments not evaluating the entire energy life cycle of plants (f=2), the impact on biodiversity from forest exploitation (f=2), and demanding careful analysis of digested waste materials to do not pollute soils and aquifers (f=2), monitoring emissions (f=2), as well as the taxation of dedicated crops for energy purpose (f=3).

On the other hand, instead, some economic stakeholders clearly presented a different view of bioenergy development. Indeed, contrary to citizens and environmentalists, they pushed to

consider the potential of using the organic fraction of waste for (larger) biomass facilities, beyond the limit of self-consumption to sell thermal and electric power (f=6) and asking for incentives for stimulating anaerobic treatment of organic waste (f=3). They also emphasised the need for clear rules for the biomethane sector in light of its market potential for automotive and heating and criticising the Region for not having considered this sector more fully (f=4). In this vein, they argued that biomass technologies are now mature for creating large structures and entrepreneurial associations with farmers (f=2) and that the size of plants incentivised in the plan is anti-economic. Finally, contrary to all other voices, some stakeholders asked to incentivise dedicated crops for producing biofuels (f=2).

As it is possible to notice from this top-down analysis, the bioenergy sector is still characterised by different tensions revealing old and new struggles. Indeed, many of the concerns that emerged from the biogas development, about human health (soil, water ground pollution) as well as the environmental and place-related impacts (land consumption, damage to local agriculture) are re-presented by demanding more strict control over authorizations, the monitoring and mitigation of negative externalities, a more careful approach in siting and related problems of traffic and storage, and a territorial re-distribution of benefits. On the other hand, the objective of promoting a circular economy recovering and valorising waste is well-received by different actors, as far as this development does not require the intensive exploitation of resources. Moving from dedicated crops to the forest sectors for biomass supply raised many concerns and criticisms advanced from expert subjects and environmental citizenship complaining about forest intensive exploitation, revealing again an aggressive approach towards local natural resources.

In particular, it should be stressed that many competent subjects, environmental authorities and research organisations clearly produced and sent the same observations during consultations, highlighting their shared work and concern. In this regard, considering the weight of these perspectives and the potential repercussions for the implementation of the energy plan, I will provide entirely the joint observation:

“The **quantitative assessment of impacts was not carried out** in the Environmental Report. [...] for biomass production plants, **evaluate one or more scenarios on the basis of the plants already in operation and changes in the agricultural context** [...] for forest biomass plants it is considered essential to **carry out quantitative evaluations as the Plan proposal expects to increase the consumption of this RES by 1095%**. It would be necessary to **provide the extension and type of surfaces that could be interested and above all the time needed to make or keep the wood-thermal energy supply chains economically and environmentally sustainable.**”

Mountain Unions, SEA observation

The environmental competent authorities about the forest sector (regional parks, or mountain union) demanded a more comprehensive quantitative assessment of impacts about the biomass scenario, that is a modelling of the scenario on biomasses forecasted in the plan in terms of targets and objectives for different technologies (e.g. biogas, biomethane, biomass power plants) and sources (e.g. waste from forest management or agricultural processing). What is relevant is the demand for a more accurate analysis, considering more scenarios and considering the already existent plants and the local agriculture condition. By demanding a more accurate evaluation for the proposed biomass scenario, and more precisely for the forest sector, the text aims to underline the lack of sufficient information and careful evaluations to take decisions on biomass deployment. This is motivated by providing the quantitative details of the Regional proposal on forest biomass, which foresees an increase in forest resource exploitation of the 1095%. In such way, they clarify that such decision and target seem based on insufficient information and data also for what concerns the extension of the effective surfaces of the forest that could be interested (i.e. the extension of exploitation). Then, further points are introduced and stressed to re-present the Regional approach as not precautional: the time needed by the forest to reproduce the required residual materials (not evaluated), and the distance from the site of the primary resource and the facilities, which underline on one side the possibility of siting power plants close or within those territories that are often protected areas, or build infrastructures for the transport. These variables are introduced and stressed to remark not only the lack of a precautional approach towards the environment but also lack of basic evaluations on the environmental and economic sustainability of the actions foreseen in the plan.

Proceeding in discussing the observations on RETs, wind power is another critical disputed theme. The first PEAR of 2005 was very much aimed to develop wind energy but found many obstacles to its implementation. Indeed, the region is largely characterised by a territorial conformation with few zones fitting for this type of technology implementation. This few areas, moreover, are quite concentrated in hilly and mountain inner areas, and the region is interested by several protected areas with an high landscape and ecological value. For this reason, many competent authorities on environmental and landscape protection, as well citizens and most of environmental NGOs opposed to wind power in hilly and mountain areas.

Wind

Evaluate windiness, hours guaranteed production and landscape impact for all sizes and location	6
Siting distant from houses for health effects of noises	4
Wind power regulation siting on the Apennine and hilly areas interested by landscape protection for agricultural and tourist economies	4
Wind protection biodiversity and protected sites	4
Wind, modest production, Marche taillight	3
Wind should be insisted and where possible offshore	2
Small wind power plants for family use, farms and communities	2
Wind and mini-wind too much impacting	1
Find an alternative solution	1
RES production: wind power to support energy-intensive industrial activities by revising landscape constraints	1
Mini wind or vertical axis for coastal mountain municipalities (on-site consumption and storage)	1

Table 18. Codes about wind energy resulting from thematic analysis of public consultations

Conditions for the deployment of wind power are clearly stressed in the observations, showing the different positions at stake on wind power for the regional project. Many of environmental NGOs and environmental authorities stressed the need for better assessment to evaluate impacts and economic feasibility of wind turbines of different sizes and in different locations (f=6), the need of regulation on siting in mountain (Apennine) and hilly areas in light of their high environmental and economic value (for agriculture and tourism; f=4), the siting distant from inhabited areas to avoid health impacts such as noise emissions (f=4), the consideration of biodiversity protection and protected sites (f=4). In this vein members of the civil society argue that conventional and mini-wind turbines are too impacting (f=1), that should be authorised only small/micro-turbines for family, community, or company (shopping centres) use (f=2) and advocate the necessity to find an alternative solution for the regional project (f=1).

On the other hand, economic stakeholders and few environmental NGOs stressed the need to insist on wind power, especially for the off-shore production (f=2), remarking the low position of the Region in wind power production (f=3). In this vein, some stakeholders suggest revising landscape constraints to develop wind turbines serving energy-intensive industries and areas (f=1), and about deploying mini or vertical axis wind for coastal areas and municipalities (i.e. places thought as having sufficient windiness) for on-site production storage, and consumption (f=1).

For what concern the solar RES and the PV/solar thermal technologies, the perspectives are less contentious, with many actors sustaining solar sources and PV technology as the best solutions for the regional energy project.

Solar Photovoltaic	f
Integrated PV on the civil, tertiary, industrial (sheds) and parking areas	10
RES production: integrated PV to the built-in + storage for self-consumption	5
PV: speculation, landscape impact and land consumption	4
PV allocation - No agricultural land and historic centres for preserving architectural and environmental historical heritage	3
High-efficiency PV on water basins and positive evaporation effects	1
PV remote plants for villages and historic urban centres	1
integrated PV road sections (sound barrier)	1
PV panels disposal and area restoration	1
PV panels end of life - reuse instead of recycling	1
PV in rented roofs	1

Table 19. Codes about solar energy resulting from thematic analysis of public consultations

Many actors among civil society, stakeholders and experts agree in seeing the further potential in PV deployment but only with configurations integrated with the already built environment, in the civil and tertiary buildings, in industrial abandoned areas, in sheds, and parking areas (f=10). Many actors, moreover, advocated that the deployment of PV technology should be integrated with storage solutions for self-consumption, allowing prosumers to get energy independency storing solar energy (f=5). This kind of required socio-technical configuration can be seen as emerging from the various criticisms on landscape impacts and land consumption stressed also in the observations (f=4). In this vein, civil society members demand the exclusion of the siting of PV not only in rural agricultural lands, but also in the city historical centres to preserve the architectural and environmental heritage (f=3) and proposing the possibility in this cases of siting PV systems at distance serving the communities (f=1). Other observations refer instead to concerns on the end of life of panels and actions proposed. In fact, environmentalists posed the problem of what to do after the end of life of panels for the area restoration (f=1) or about reusing instead that recycle them (f=1). Other proposals for PV deployment concerns the integration on roads and highways substituting the acoustic barriers (f=1), the activation of community initiatives such as purchasing group or rented roofs (f=1) and finally the siting of PV systems in water basins (f=1). Almost all the arguments underline the acceptance and support for PV technology, often represented as the best source/technology that has not fully exploited. However, the main conditions for accepting PV are simply expressed in the integrated deployment of the technology in human-built environments and infrastructures, not consuming other fertile and rural land, and finding shared solutions to make available the space for a full deployment and exploitation.

Another RET that has been widely debated in the observations concern the hydroelectric. The hydric and hydroelectric represent the historical source and technology of the regional territory. Indeed, it should be bear in mind that almost all the rivers of the region have historically hosted hydroelectric facilities (in 2007 the number of active power plants was 98, with a power installed capacity of 230 MW mostly from large plants of energy companies). However, climate change poses serious problems to the potential of exploitation of the hydric sources, and hydroelectric is perceived as risking to undermine the minimal vital flow of watercourses.

Hydroelectric	f
Hydroelectric production: real-time monitoring and available data	7
hydroelectric monitoring for vital flow, watercourses and deterioration of water bodies	7
Hydroelectric impact assessment in exploitable sites in areas subject to environmental restrictions	5
Non-expandable! plants limited to small developments	4
RES production: hydroelectric impacts on the environment and biodiversity	3
Hydroelectric plants: identification and mitigation measures	3
Hydroelectric pumping for storage	2
Small hydropower, no incentives from the state	2
hydroelectric, the most important regional source	1
hydroelectric energy recovery from pipes	1

Table 20. Codes about hydroelectric energy resulting from thematic analysis of public consultations

It is in this context that many environmental NGOs, competent subjects and some stakeholders ask for a real-time monitoring and information disclosure with available data about the power plants in function (f=7) and the monitoring of the vital flow and the deterioration of water courses (f=7).

Environmental authorities on their side ask for assessing the impact of hydropower in areas subject to environmental restrictions (f=5). Furthermore, civil society members, some competent subject and stakeholders underline that hydroelectric is not expandable, and that further developments should consist in few other small plants (f=4), considering the high impact on the environment and biodiversity (f= 3) and for which should be considered and identified careful measures to mitigate the impacts of already functioning or new/extension power plants' proposals (f=3).

Economic stakeholders, on the other hand, sustained hydroelectric as the historically most important source (f=1) and that the sizes for hydroelectric energy generation foreseen on the plan are too small, stressing also the absence of national incentives for this small configuration (f=2). In this vein, they also proposed to use all the potential of hydroelectric recovering energy from pipes (f=1) and through the pumped-storage hydro plants (f=2), a way to store and deliver large quantities of electricity producing energy from the gravitational potential of water, by pumping and moving water between a lower reservoir to a higher elevation reservoir.

Finally, other solutions were advocated by different actors sustaining the necessity of thinking to the R&D and deployment of alternative technologies or products.

New/alternative technologies and solutions	f
No biomass burned and wood consumption, alternatives (solar thermal, geothermal and hydrothermal, and biomethane)	5
low enthalpy geothermal energy for industrial and private use: incentives and evaluation of geothermal territorial potential are needed	5
Hydrogen: promote and support research and application for automotive and heating	1

Table 21. Codes about alternative energy technologies/solutions resulting from thematic analysis of public consultations

That said, some civil society members and few competent subjects or stakeholders argued for avoiding burning biomasses and consume wood to generate thermal energy, proposing the adoption of other technological alternatives constituted by solar-thermal (for a full deployment of solar energy), the geothermic, hydrothermal, or the biomethane proposed by agriculture representatives (f=5). In this context, environmental NGOs and some stakeholders advocated the diffusion of heat pumps for cooling and heating, as well as the low enthalpy geothermic energy for the industrial and private use, demanding evaluations on the potential of the territory and incentives to sustain the deployment of alternative technologies (f=5), as it is also for the hydrogen, for which is demanded the promotion and support of research application in the motorised and heating technologies (f=1).

6.1.5. Energy efficiency scenario: assessment, regulation and implementation of the strategy

Considered the multiple constraints and problems in renewable energy development, the fact that the Region reached earlier the targets on RES shares for 2020, and the observation of participants to the consultations, the plan was elaborated focusing on energy efficiency and saving, aiming to an efficiency, saving and emissions’ reduction integrated policy (i.e. facing nested sectors of governance, such as agriculture, transport, industry, and building).

In this context, many observations focused on two main dimensions of energy efficiency and saving: the assessment and regulation arrangements and the strategy implementation measures required.

Energy efficiency, saving and emissions' reduction - Assessment and Regulation	f
Building: Upgrading and restructuring tertiary and civil sectors > standard efficiency restructuring	5
Revise itaca certification to ensure independence and credibility	3
Not shared regional actions promotion energy-environmental certification protocol ITACA marche	2
Health: support building/renovation of buildings with greater efficiency without reducing sanitary-health and safety	1
Building: new energy certification / redeveloped buildings to refer only to state regulations for simplification	1
Building: regulation of the PV installation and solar thermal obligations in case of reuse/renovation	1
Building: recovery built to limit land consumption	1
Building: need to identify and remove obstacles to the development of effective interventions. energy residential building and tertiary/industrial introducing reward mechanisms	1
Building: not acceptable insertion of the rules prescribed by ITACA in municipal building regulations, making it compulsory	1
Building: the obligation to energy audit on public buildings	1
Building: promote mandatory ITACA protocol	1

Table 22. Codes about assessment and regulation for energy saving resulting from thematic analysis of public consultations

In the context of assessment and regulation on energy efficiency and saving many observations from diverse actors pointed out the need of upgrading and restructuring the tertiary and civil building sectors, in light of a great economic and occupational potential. In this vein, different actors demand regulation measures (e.g. regulatory building codes) on building sector requiring higher standards of energy efficiency in the case of restructuring and new constructions (f=5). Several arguments on energy efficiency in the building sector concern the ITACA³⁰ protocol: a regional system of certification evaluating the environmental and energy sustainability of buildings.

Contrary to national certification systems such as the energy performance certificates (APE), the protocol adopted by the Region in 2011 (DGR 1689/2011), is more restrictive than the national one, not limiting the focus on energy consumption but undertaking a comprehensive evaluation of the overall sustainability of buildings (e.g. evaluating the materials and products of construction, consumption of soil, criteria on distance from public transport, commercial sites).

The adoption of such a more sustainable and restrictive evaluation of buildings represents a contested issue, especially among stakeholders. Indeed, while expert professionals asked the Region to sustain the regional protocol - that governs their profession - and revise the certification (f=3) to ensure the credibility of evaluations and independence (e.g. rules on the

³⁰ <http://www.regione.marche.it/Regione-Utile/Energia/Protocollo-ITACA>

choice and turnover of professionals) and promote a mandatory assessment under the ITACA protocol (f=1).

On the other hands, members of the civil society, some competent subjects and stakeholders promoted regulatory arrangements and institutional practices and assessment, such as the obligation for energy audit of public buildings (f=1), or recovering of built for limiting the soil consumption (f=1), or regulating the renovation or reuse of buildings demanding the obligatory installations of PV and solar-thermal plants (electricity and heating of sanitary water) (f=1). On the other side, competent authorities demand support for the construction and renovation of buildings promoting higher efficiency standards but without reducing those concerning sanitary-health and safety (f=1).

Economic stakeholders, instead, presented a different view, by complaining about the restrictive measures adopted by the region and the non-linearity with performance certificates promoted at the national level. It is in this context that they advocated their opposition to the Regional decision on the ITACA protocol (f=2) and affirming that the performance certificates for building or renovation should refer only to state regulation for simplification (f=1). Following this reasoning, economic actors contrast the unacceptable decision of making mandatory the protocol in the municipality regulatory codes (f=1) and demand the introduction of reward mechanisms to stimulate effective actions in the residential and tertiary sectors (f=1).

Energy efficiency, saving and emissions' reduction - Strategy and Implementation measures	f
Building: Energy redevelopment of the public, private & factories (building envelope, air conditioning control management)	7
Building: energy saving for private condominiums and supporting measures	6
Efficiency of industrial and agricultural processes	5
Energy saving ad-hoc funds	4
Building: promoting ITACA protocol in the public and private sectors (incentive, rewarding and compensation)	3
Energy efficiency: demand for economic stimulus and clear rules for ESCO operation	2
Incentives for the redevelopment of the regional building heritage and reuse of materials (circular economy)	2
Built recovery vs. demolition and reconstruction with high seismic and energy standards	2
Incentives VS tax relief for those unable to bear the costs (families, condos, companies, organizations)	2
Energy Efficiency: biofuel storage for tourist ports and Ancona	2
Energy efficiency: economic stimulus for businesses and research	2
Building: define which interventions are qualifiable and supported	1
Building: increase waste recovery, demolition, possibility of recovery/reuse material < environmental effects	1
Building: provide information point and inspection service for private buildings	1

Table 23. Codes for strategy and implementation measures on energy saving resulting from thematic analysis of public consultations

In the definition of the energy efficiency and saving strategy and related implementation measures, transversally to the belonging of the participants, in many advocated the energy redevelopment of buildings and industrial plants by focusing on buildings' envelope and the air conditioning control management (f=7).

Other transversal requests concern the support to energy saving measures in private condominiums (f=6), the institution of ad hoc funds for energy saving (f=4), the improvement of energy efficiency within industrial processes and agricultural practice (f=5).

Professional groups interested by the ITACA protocol demanded its promotion in the public and private sectors through some Regional incentive, rewarding or compensation scheme (f=3). Moreover, they highlighted the necessity of carefully considering the demolition of buildings rather than recovery (f=2), to implement energy efficient and anti-seismic significant measures post-earthquake (f=2) and the potential of waste recovery or the reuse of materials from demolition having less environmental effects (f=1).

On the other hand, economic stakeholders requested economic incentives and clear rules for the Energy Saving Company (ESCO)³¹ operations (f=2), incentives for the redevelopment of the building heritage and the reuse of materials in line with the circular economy principle (f=2), an economic stimulus for R&D (f=2), a clear definition of what types of intervention are considered and incentivised (f=1), the setting-up of informative points and energy audit for private buildings (f=1), and finally the request for a biofuel storage point in the port of Ancona (f=1). Finally, civil society members and competent subjects underlined the issue of energy poverty, and how incentives rather than tax reliefs are required to sustain efficiency and saving measures of those unable to bear the initial costs of interventions (f=2).

6.1.5. Communication, involvement and public-private cooperation: co-production for support in implementation

Another major theme discussed by participants refers to communication, involvement and public-private cooperation as strategic for the co-production of energy policies and decisions and to construct the support necessary for the strategy implementation.

³¹ Companies carrying out interventions to improve energy efficiency, taking on themselves the risk of the initiative and freeing the final customer from any organizational and investment burden. The economic savings obtained are shared between the ESCO and the end customer with different types of commercial agreement.

Communication, involvement and cooperation	f
Necessary sharing and dialogue with local communities to overcome critical issues of energy generation from RES	7
Information and awareness raising for citizens and companies: a priority we cannot postpone	6
Authorizations: the right of the public to provide evidence and observations	6
Preliminary involvement when all the project/planning options are open	6
Public-private cooperation to support R&D less impacting technologies (PV Tiles/Vertical wind turbines)	5
Training and information for defective citizens and opposition to RET	4
Public-private cooperation: promote purchasing group for energy technologies	3
Social acceptability, NIMBY and democratic willingness	3
Access and consultation of documents of planning and monitoring	2
PPP: ESCO facilitate and promote relationship with businesses	2
PPP: R&D Technology - invest in research for recovering and maintenance	2
Covenant of Mayors: involvement and support on territorial planning	2
PPP local forest cooperatives managing short supplies chains	2
PPP technological clusters for the call for tenders: University, Businesses and Regional Administration	2
information, transparency and participation in territory government (respect Aarhus)	2
Involving and sharing with stakeholders for structural funding measures	1
Information on the environmental benefits of renewables	1

Table 24. Codes on communication, involvement and cooperation resulting from thematic analysis of public consultations

In this regard, actors belonging to the diverse groups share the same assumption on considering the dialogue and sharing of responsibilities with the local communities (i.e. local authorities, stakeholders and residents) to overcome the critical issues of the distributed generation of RETs (f=7). Information and awareness-raising activities for citizens and companies are represented by heterogeneous actors as a priority that cannot be more postponed or neglected in light of previous experience (f=6). A further element of agreement among actors is represented by the required cooperation between public and private actors in supporting R&D to identify and adopt less impacting technological innovations such as PV tiles for the historical centres or vertical wind turbines for commercial activities (f=5).

On the other hand, competent subjects and authorities, as well as members of the civil society, advocated the right of the public to provide evidence and observations and asks the possibility of discussing possible prescriptions and further elements for mitigating the impact since authorization procedures (f=6). Moreover, they strongly demand preliminary involvement practices in assessment and decision-making about projects, plans and policies, ensuring the participation of the diverse publics when options and alternatives are present (f=6). In this vein, they also remarked that access to information and consultation of documents of planning and monitoring procedures should be enhanced (f=2), providing and respecting the right of information, transparency, participation and access to environmental justice as stated in the Aarhus Convention (f=2).

That said, this point is further stressed by civil society members that remarked and complained an institutional deficit on social acceptability, based on NIMBY assumption and misaligned with the democratic willingness (f=3). This point is now presented more in-depth considering the meaningful weight of the observation. Indeed, a forum of environmental NGOs and local citizens groups (committees, local associations), produced a single document of observations. In this document, crucial elements can be identified semantically showing this critical stance.

“In several parts of the document, the attention is focused on the phenomena of **poor social acceptability of energy plants and transport infrastructures**, citing the actions of committees and environmental associations: a solution that is proposed is to economically penalise the municipalities that do not accept energy projects. The Italian constitution, mentioned by us, does not provide space for these forms of coercion of the will expressed democratically by the communities interested by the projects.

The frequent references to the **local populations/committees/associations blocking the development and the public interest**, show - in our opinion - an **inadmissible conception according to which the economic interest must prevail over the democratic will of the people and even of the local public authorities who oppose the choices**. In our opinion, **it is clear, sadly [ahimè], a cultural and institutional deficit on this point, which overshadow the appreciable technical skills that are present in the elaborate [plan]**. We believe that **social acceptability is a consequence of the quality of the proposal, in terms of environmental compatibility and quality of life, and constitutionally, we believe that the popular will must always prevail.”**

- Alliance of Environmental Association and citizens' committees, SEA observation

Civil society members in this case remark that in several parts the document (the plan) focuses the attention on the scarce acceptability of RETs and associated infrastructures, constraining the implementation of the planned measures, and proposing economic penalization for those Municipalities that do not accept to host energy facilities. This kind of imposition is represented as anti-democratic and unconstitutional, not legal nor legitimate regard the communities at play. The frequent references about local opposition by different actors and the related pejorative assumption and representation of the public (obstacles to economic development and the public interest) are strongly criticised and responded by turning the table. Indeed, what is relevant of this argumentative intertextual struggle (see also the last page of chapter 3), is the way the observation turns around implicit assumptions and accusations towards the public and vehiculated by the plan. Indeed, this assumption on citizens is represented as inadmissible, indicating that the economic interest can prevail over the democratic will of citizens and even of competent authorities demanded to protect the environment. The utterance aims in this way to stress and complain about the tension between the local (citizens and authorities) and the regional level. Conflict is represented as no more between citizens and firms or citizens and politics. Tensions cross multiple divides across societal actors and sectors, even within institutions. In this way the discourse tends to highlight that the conflict is social as much as institutional, undermining the democratic rules of the game and favouring the economic interest

(protected by politics) to the public one (protected by the local residents and sometimes authorities). Furthermore, the discourse aims to accomplish a further function in turning the table. Aware of the often assumed and vehiculated public deficit of knowledge of ‘Nimby responses’, the observation introduces a deficit on the other side of the dispute, represented as cultural(ly-grounded) and institutional(ised), and that concern the democratic legitimacy and quality of decisions basing upon social acceptability of RETs can be reached. In doing so, environmentalists and citizens pointed out that meaningful and respectful recognition, procedural fairness, and more just and quality decisions/outcomes are required to govern energy transition.

In this vein, environmentalists also remarked the potential of re-distributing the benefits with public-private cooperation, promoting collective energy projects such as purchasing groups, cooperatives, or community energy (f=3) and demanded greater involvement of Municipalities in the Covenant of Mayors, and support on territorial planning to local authorities (f=2), as well as local forest cooperatives to manage short supply chains re-distributing the benefits with local communities (f=2).

On the other hand, some of the stakeholders advocated the need of addressing public oppositions to RETs by creating moments of education and information assuming that oppositions are mostly determined by a lack of knowledge (f=4) and provide more information on the benefits of renewables (f=1). Moreover, stakeholders aspire to a facilitating role of the Region in promoting ESCO operation with firms (f=2), investments in R&D for the (circular economy sector of) recovering and maintenance (f=2), advocating a stronger cooperation between industries, research organizations and the Region for participating to national call for tenders on technological clusters (f=2), as well as demanded a greater involvement and sharing with them about the elaboration of structural funding measures (f=1).

6.1.6. Energy infrastructure: the tension between transmission and storage preferences

Energy infrastructure represents another debated theme within the regional context, where can be identified some tensions between interests and representational projects.

Energy Infrastructure: Transmission and Storage	f
HV powerline: the need for improvement, efficiency and resolution of infrastructural deficiencies for energy saving and businesses	7
Smart grid, storage for the increase and upgrade of RES	7
Activate dialogue with national and local transmission system operator to plan priorities of intervention and expenditure forecasts	4
Smart grid and storage rather than the HV powerline project	4
HV powerline: Efficiency and strengthening of the transmission line to integrate RES (south-north transmission)	3
Incentives to adapt SME cabins and awareness-raising campaigns to support companies adjustments	2
The transmission line is a fundamental ingredient for correct efficient use of local energy resources	1
Transmission: smart and less impact solution (underground)	1
Transmission: solicit local authorities to speed up authorization procedures	1
<u>Impact assessment measures for network efficiency interventions at critical points</u>	<u>1</u>

Table 25. Codes about energy infrastructure resulting from thematic analysis of public consultations

Indeed, the Region has been interested in the 2000s' with a project for an HV transmission line linking Fano and Teramo and considered strategic for the transmission of electricity in the Region and across Italy. This infrastructural project has faced decades of resistances and oppositions from local citizens and authorities interested by the powerline project. That said, the project has never been realised because of this strong opposition, and after the economic crisis and the related decrease in energy demand, its relevance was downgraded by the same Transmission System Operator. In this context, it can be identified a binary tension between the economic and political stakeholders advocating the necessity of enhancing and making more efficient the transmission line, and the opinion of the members of civil society and competent subjects.

In fact, many stakeholders both political and economic stressed how much the HV powerline is strategic for both the regional and national interest. In particular, the main motives advocated are the deficiencies and inefficiencies of the network penalising the potential of energy saving and of the companies, with interruptions or fluctuations of electricity affecting productive processes (f=7).

In this regard, stakeholders strongly demand the re-activation of a dialogue with the transmission system operators to evaluate and plan the priorities of interventions (f=7) and realise impact assessment measures for the efficiency interventions in critical points of the

network (f=1). In doing so, they asked also to convince local authorities about the necessity of the major project (f=1), as well as incentives for adapt the electric cabins of SME (f=2). In doing these requests, stakeholders emphasised the multiple reasons underlying them, such as the need for strengthening and making more efficient the network to integrate energy from RES and facilitating the transport of this electricity from the south to the north³² (f=3), and also for a more efficient use of local energy resources (f=1).

On the other hand, many members of civil society and some of the expert subjects agree in considering smart grid and storage as the best solutions to increase and upgrade the contribution from RES (f=7). In this vein, environmentalists agree in considering smart grid and storage as the alternative solution to the HV proposed powerline (f=4), or at most find smart and less impacting solutions such as putting the transmission line underground (f=1).

In fact, although almost all the actors agreed with the vision of a tendential self-sufficiency or energy independence, the solutions proposed by actors are profoundly opposite. Many environmentalists, citizens, and some of competent subjects agree in considering the principle of self-production and self-consumption, the more active role of prosumers, and the possibility to store energy and become locally independent as fundamental pillars for the regional energy project, contrary to the perspective of stakeholders seeing in the inefficiency of the network, the self-consumption and the size of powerplants a weakness for economic competitiveness.

6.1.7. Sustainable Mobilities? Yes, please. Re-configuration of technologies and (public) infrastructures

Despite sustainable mobility is not a crucial object of this research, in this part are briefly presented some evidences on the observations about the theme, which underline the overall agreement and support for energy system change coherent with transport sustainability policies and projects.

³² This discourse about bringing electricity from the north to the south is often advocated arguing an overcapacity of the south of Italy. Indeed, being intermittent, the electricity from PV generated in the south has to be transmitted during the day to northern regions

Mobility	f
Energy saving/energy efficiency in transport through upgrading public and electric mobility (trains and buses first and foremost)	14
Distributed storage and recharge systems	7
Public and private electric mobility: high priorities and mature times to create solutions	5
Renewal of the vehicle stock for public transport	4
Energy efficiency: conversion of diesel engines to biomethane or LNG naval fleets	2
Urban cycle pathways and connections (also to industrial areas)	2
Sustainable mobility: priorities for environmental sustainability	1
Peripheral exchanger parking lots with PV recharge and vertical wind power	1

Table 26. Codes about mobility resulting from thematic analysis of public consultations

In fact, many actors of the different groups agree in considering the energy saving and efficiency in transport a vital role for sustainability transition. Indeed, it should be considered among many other things that the Marche are largely affected by pollution coming from internal mobility within the region (characterised by a comb structure) and that of transit (port and highway).

In this context, it can be identified an overall acceptance and support on the necessity of upgrading and integrating public and electric mobility in the regional infrastructure, with trains and buses first of all (f=14), with distributed storage and recharge systems (f=7), arguing that electric mobility in the private and public sector are high priorities and that it is time to create solutions (f=5). In this vein, civil society members and some stakeholder demand the renewal of public transport stock (f=4). Civil society members require more extensive urban cycle paths and connections (f=2) and advocating the priority of sustainable mobility for the environment (f=1).

On the other hand, some economic stakeholders stressed the need of promoting the conversion of diesel engines to biomethane or LNG naval fleets (f=2), aiming to stress the potential of biomethane for the automotive sector, or suggesting the construction of peripheral exchanger parking lots (connected with shared mobility solutions) equipped with vertical wind turbines and PV to recharge electric vehicles (f=1).

6.1.8. Carbon lock-in: dismissal of fossil VS ecological modernization

Finally, fossil sources represent another argument of tensions at the regional level.

Indeed, as previously written, the region is historically independent for what concerns the fossil fuels, having a refinery of national interest and 22 of-shore platforms for oil and natural gas extraction activities. The refinery of Falconara represents a historical environmental conflict in

the region, as the areas hosting the facility is an area defined by the Regional Environmental Protection Agency at high risk of environmental crisis.

On the other hand, a relevant recent episode concerns the 2016 abrogative national referendum proposing the repeal of a legislative rule extending the duration of the concessions to extract hydrocarbons in sea areas (within 12 nautical miles from the coast) until the end of their useful life deposits. Both these situations were at the forefront of some observations.

On one side, environmentalists strongly asked the Region to take a position on the rule extending the duration of extraction activities. This request - which was found by competent authority as not pertinent - is motivated by the fact that the centre-left political party governing both the Region and Italy in that period were the same. For this reason, citizens and environmentalists ask Regional politicians coherence with their representative mandate rather than the coherence with political party belonging and rules, and to take part in the regional opposition to national energy policies. On the other hand, all the references to fossil sources were connected to the refinery.

Fossil energy: local issues	f
API refinery: converting production towards environmentally friendly fuels	2
API Refinery: decrease the use of fossils and the level of emissions	1
API Refinery: conventional energies will still be needed in the long run. Wrong demonise or by-pass them	1
API refinery: investigating the possibility of second-generation biofuels production (from waste/reuse)	1
API Refinery: maintaining environmental performance with BAT	1
API Refinery: improve products' yield starting from less noble differentiated raw materials = more competitive	1
API Refinery: improve industrial site safety	1
API Refinery: do not repeat mistakes, consider the overall effect of the supply chain of biofuels	1
API Refinery: conversion in biorefinery unlikely and unrealistic maintain an occupational level	1

Table 27. Codes about fossil energy resulting from thematic analysis of public consultations

In this context, it is evident the tension between dismissing the facility, as requested by many citizens and environmental NGOs or undertake a requalification and ecological modernization of the facility towards environmentally friendly fuels (f=2) as suggested by stakeholders. Indeed, stakeholders, citizens and competent subjects proposed different solutions to preserve occupation and decrease the environmental impact by decreasing the use of fossils and the emissions, evaluating the possibility for second-generation biofuels from waste (f=1), using the best available technologies (BAT) to maintain the performance (f=1), improving the use of less noble ingoing products to increase competitiveness (f=1) and to improve industrial safety (f=1)

Even the citizens and environmentalists, despite their negative opinion, asked at least that the reconversion does not repeat past mistakes and consider the impacts of all the supply chain for biofuel (f=1). On the contrary, few actors expressed more critical and polarised positions. Indeed, an industry representative body, as well as trade unions, respectively arguing that conventional energy is still required in the long-term scenario, to do not demonise them (f=1) and that the conversion in biorefinery will result in a decrease of the occupational level (f=1).

6.2. Thematic discourse analysis of narrative episodic interviews with key informants: perspectives on RETs, related policies and public engagement practices

6.2.1. Research aims and materials

This paragraph presents the results of the interview study with key regional and local informants. The study relies on the thematic discourse analysis (Taylor & Ussher, 2001) of 22 narrative-episodic interviews conducted with key actors belonging to four typologies of groups: environmentalists, political-institutional actors, experts and economic stakeholders.

Narrative-based interviews are a particular kind of data elicitation where the interviewee is asked to present a narrative/historical account of an experience - related to the issue under study - of which the participant had direct experience from the beginning to its end (Riemann & Schutz, 1987). In eliciting narratives that are relevant for the research question, interview requires a broader generative narrative question but sufficiently specific for the experiential dimensions to be taken as a central focus of narratives (Flick, 2009).

On the other hand, the episodic interview is based on multiple theoretical assumptions about using people's narratives for collecting social science data. Episodic interview method was developed by Flick (1996) relying on these assumptions about the narrative composition of people knowledge and experience (see Bruner, 1987).

In narratives, the initial situation, or how everything started, is traced through a generative narrative question. Then, the events of relevance to the narrative are selected from the broader experience and represented in a coherent sequence of events on how things developed, and concluding in presenting the ending situation, namely what became (Hermans, 1995).

A further presupposition and rationale of episodic interview is that the experience of subjects about a certain topic or object is deposited and recalled in forms of narrative-episodic knowledge, closer to experience and context-related, and the semantic knowledge, composed

by meanings and symbols that are mutually connected (Flick, 2000 – See Fig. 52). In this regard, episodic interview is a method to elicit and analyse this narrative-episodic knowledge embedded in narratives and making semantic knowledge more accessible by more concrete and focused questions (e.g. personal definitions and conceptualization of given objects, so that meaning-making processes are enlightened (Flick, 2009).

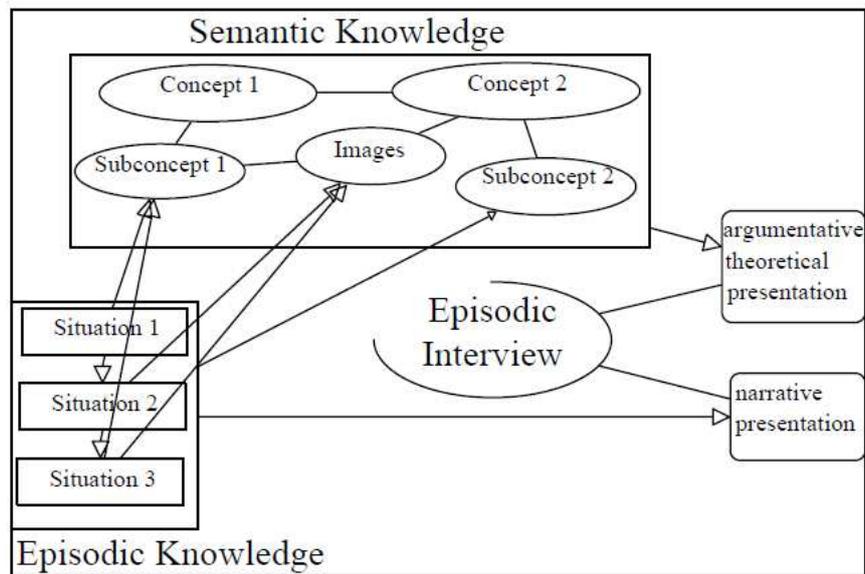


Figure 43. Forms of knowledge and presentation in episodic interviews (Source: Flick, 1997, p.4)

Indeed, in developing the episodic interview method, Flick (1996) relied on the distinction between episodic and semantic knowledge of Strube (1989): "Episodic knowledge is part of the world knowledge, whose other part - corresponding to semantic memory - is the general (i.e. not concrete, situatively anchored) knowledge, e.g. conceptual knowledge, rule knowledge, knowledge of schemas of events" (Strube, 1989, p.13).

To get access to both the knowledge parts in investigating concrete issues, the episodic interview should:

- a) combine invitation to remember and report concrete events of interest for the study object, more general questions aimed to elicit subjective definition, argumentation, explanation and so on that;
- b) mention concrete events and situations about which the respondents should have a certain experience;
- c) be sufficiently open to allow the respondent to select episodes and situations of which he/she has direct experience and decide on what kind of response provide if a narrative or a description (Flick, 1997).

The episodic interview tries to employ the advantage of narrative and semi-structured interview, combining narratives of situations (episodes) with questions (e.g. about subjective concepts, causes and consequences of a phenomenon) and moves back and forth between stimulating situation narratives and question/answer sequences. In fact, the central element of this type of interview is the recurrent asking to present narratives of situations or chain of situations, and the deepening of the respondents' imagination about expected or frightening changes and development (Flick, 2007). The episodic interview is usually adopted to investigate people's representation of given social objects of which they have direct experience in everyday life (see Flick, 1996 on technological change in everyday life).

The method has been developed anchored to social representations theoretical background, allowing the comparison between groups conceptualization of a given topic or issue. In line with the research's aims, I used a sort of episodic narrative interview to deepen the perspective of social agents and understand the individual points of view about the history of the community and place, the antecedents of public participation processes, energy policies and their implementation, and the interactions and expectations that characterised and guided all these processes, allowing the comparison between the multiplicity of representations within the context (Flick, Foster & Caillaud, 2015). Thus, differently from the episodic interview, which aims to elicit narratives on personal experience in everyday life, the adopted interview approach can be seen at the crossroad between episodic and narrative interviews. Indeed, the rationale of the interview study is that the meanings about RETs and associated social objects are highly dependent and grounded on experienced (power) relations. In fact, social representations involved in energy system change are profoundly context-dependent. In this regard, it makes no sense to investigate abstract conceptualizations of renewable energies without taking into account the whole experience about the implementation and territorialisation of RETs, of the encounter between different interests and positions at stake, that is the historical, socio-political, institutional and socio-cultural dimension.

In this view, meanings about RETs and energy system change are socially constructed and emergent in the knowledge relational encounters - imagined or real - reflecting the knowledge of significant others.

The interview aimed to deepen actors' representations and viewpoints on public engagement practices and energy policies and technologies. More in-depth, it aimed to deepen the perspective of key actors on institutional change and arrangements (policies and institutional practices: e.g. land use policies, public involvement practices) as well as renewable energy

technologies and related issues at stake (e.g. the places and the territorial dimension) by adopting a perspective sensitive to time.

The episodic narrative interviews were realised stimulating a personal narrative from the participants' own experience and/or role in energy technologies and policies in the regional context. The interview aimed to understand the viewpoint of different actors having direct experience and interest in energy system change in the regional context. The research aims guiding the study and the construction of the interview protocol were:

- a) stimulate a narrative on regional energy scenario, reconstruct past key events, present and future scenario on regional energy system change;
- b) elicit an interpersonal and intergroup perspective, stimulating the positioning and perspective of participants in light of the perspective and positioning of 'others', shedding light on aspects such as asymmetry, expectations, and recognition of different actors and groups (to illuminate the meta-representations or meta-knowledge, namely what they think that others know, think, value and intend to do – Raudsepp, 2005; Elcheroth et al., 2011; Andreouli et al., 2014);
- c) deepen the role of shared or conflicting discourses in stimulating coalitions, conflicts and engagement in the public and political sphere.

In this way, the interview aimed to investigate the representations of energy technologies and related policies, social actors and places involved. The interview's protocol has been designed to be linked with particular episodes or historical moments and turning points previously identified: the regional energy plan of 2005 and its implementation, the elaboration and implementation of the regional energy plan of 2016, and the participatory processes and activities related to them. In line with Flick's suggestion (2000; 2007), episodic interviews were transcribed in detail and analysed with a thematic coding.

The interviewees recruited for the study were all actors having a direct experience with the regional energy planning process and/or the implementation of energy technologies. Indeed, most of the participants recruited were identified through the preliminary analysis of documentary materials presented in previous studies (i.e. political, public and media debates and public consultations documents).

At first, a total of 87 relevant actors for the study (collectives or individuals) were identified and contacted for the first time via e-mail. Considering the very low rate of responses to the interview request, I proceeded to contact them several other times via certified e-mail and telephone. Most of the contacted persons and organizations never responded to the request even after several attempts with different communication channels (approximately 60%).

Excluding the final respondents composing the interviewees' sample, the remaining individuals refused the interview request. The final sample of interviewees is presented in Table 28, with information pertaining to the organization and membership, role or recruitment reason and the 'type of category' to which they belong.

As previously written, the 22 interviewees are divided into four groups: 'political-institutional actors', 'environmentalists' and 'economic stakeholders'. This division is purely artificial and actually may not represent the factual reality of multiple identities and positionings of the interviewees. However, it represents a segmentation operated to bring to light different perspectives and interests (multivocality).

N	Organization/Membership	Role/Recruitment reason	Category
1	Regional Development Agency	Manager	
2	Regional Administration	Public Officer (x2)	
3	Regional Government	Regional Councillor	
4	Large Municipality	Environment Office official	Political-institutional actors
5	Municipalities Consortium / Energy Service Public Provider	Energy Manager	
6	Regional Environmental NGO	Representative	
7	Regional Environmental NGO	Representative	
8	Regional Environmental NGO	Representative	
9	Citizen committee/local opposition group	Spokesperson (experience biogas)	
10	Citizen committee/local opposition group	Spokesperson (experience wind)	Environmental NGOs and Active citizenship
11	Environmental network/committee	Spokesperson (experience PV)	
12	Environmental network	Technical coordinator	
13	Industry Representative Body	Representative-environment division	
14	SME and Craft Representative Body	Representative-environment division	
15	Energy Company	Representative	
16	Agriculture Representative Body	Representative	
17	Trade Union	Representative-environment division	Economic stakeholders
18	Research Organization	Expert energy planning	
19	Research Organization	Expert environmental assessment	
20	Professional Order	2 mechanical engineers, 1 civil engineer, 1 electro-technic engineer	
21	Environmental Authority	Representative	
22	Research Organization	Expert socio-ecological systems and forest management	Experts

Table 28. Episodic interviews with 22 key local and regional informants

For instance, as it can be found in this sample, an ‘environmentalist’ may be also a political-institutional actor (i.e. a municipality councillor), or an ‘expert’ may be an environmentalist, i.e. being also a member of an environmental NGO. These multiple positionings can be identified, for example, in the labels ‘political activism’ or ‘scientific environmentalism’, with actors using their role and expertise as a mean to participate, have a voice and/or get influence. Most of the interviews were conducted face to face, in places familiar to respondents such as institutional and associative locations, or in public places. Some interviews were realized via Skype. The interviews were audio-recorded and transcribed verbally, except in two cases for authorization reasons. In these cases, I proceeded taking notes remaining adherent to participant viewpoint and discourse during the interview and reconstruct post-interview the discursive interaction, and finally asking the interviewee to check and revise the text if necessary. The interview began with a brief introduction on the general objectives of the research and the reason for recruiting the interviewee. Then we proceeded to the reading and signing of the information form and informed consent before the interview started.

Even in the case of interviews, with the support of the software Atlas.Ti 7.5., the method used to analyse the data is thematic discourse analysis (Taylor & Husser, 2001) meaning that analysis pays attention to shared and conflictual patterns of meaning, semantic and latent meanings, and the function they serve (i.e. sustaining a particular version of reality, accuse, justify, make evident contrasts).

In the following paragraphs, the main themes identified in the data set will be presented and discussed in-depth. The identified themes concern: (a) the geographies of energy transition, namely the spatial, place and territorial aspects at stake in energy system change; (b) the historical account about the implementation of the distributed generation model and RETs’ deployment and territorialisation; (c) the tensions between levels of governance (local vs national) and between technocratic and democratic governance; (d) the experiences and conceptualisations about bottom-up participation; (e) the interviewees’ perspective and experience about institutionalized procedures for public/stakeholder engagement; (f) the representational dynamics of recognition, resistance and conflict of the diverse actors; (g) actors’ perspective and evaluation on the 2020 regional energy strategy; (h) actors’ preference, acceptance and support about RETs and related policies.

6.2.2. Energy Geographies: spaces, places and territoriality of energy system change

This paragraph provides an account of the interviewees' discourses on the territoriality of energy transition, meaning the place, spatial and territorial features that were considered relevant to the interview topic by respondents. The theme on energy geographies largely reflects diffused and shared beliefs pertaining: the change of landscapes and land use; the overbuilding, industrialization and urbanization processes; the consumption of fertile soil and the coast; the balance between the coast and inner areas; and finally, the cumulation and concentration of impacts and polluting activities in some areas of the region.

A prominent code in the wider theme is referred to the main reasons of opposition to RETs, and particularly to the PV and wind technologies: *landscape and soil consumption beyond PV and wind energy opposition (f=12)*.

“The main fear is linked to the preservation of the landscape [...] the violation and the greatest violence was that against the landscape and then all the other aspects related to the violation of the environment, new roads for wind power and the issue of herbicides for the PV on the ground” - Interview representative environmental NGO – 28-02-2018

“I wanted to organise a demonstration against the PV on the ground. Here we have consumed hectares of vineyards putting the PV on the ground [...] the province of Ascoli was the first to put a ban and put the sticks in the wheel to this kind of realization, thanks to God, but here in the Marche there was that run to the PV that was a bit all over Italy” - Interview expert - 28-11-2017

“the wind power, on which the plan was very much aimed, did not have any development because some things had not been taken into account, as for the biomasses. Because the plan had not been able to foresee the strong resistance of the superintendence responsible for landscape authorization and environmental impact that in fact have strongly limited the development of that source, in some cases even rightly. [...] the current plan is the opposite of the previous one because it recognises the fact that in any case there are constraints on the territory, that the regional territory has a strong landscape and environmental value” - Interview political-institutional actor - 15-06-2017

As the three extracts just presented highlight, the unacceptance of wind and PV technologies is linked with disruptive changes in the landscape. In the first extract, the representative of a regional environmental NGO argues that the main reason of opposition to RETs derives from concerns pertaining to the preservation of landscape. What is relevant of this extract is the reference to the reasons of ‘others’ to oppose to wind energy and PV on the ground as a response to a violation of and violence towards landscape and natural environment. The use of the term violence strongly supports the findings of the other studies presented, with RETs territorialisation perceived and represented as a physical aggression. Moreover, the interviewee adds that landscape change can be conceived as the primary cause of opposition, that however is linked with other many aspects, such as the industrialization and urbanization of the siting

areas in the rural and mountain territory, with the construction of fundamental infrastructures for the construction phase of wind turbines (roads) and the use of herbicides in the siting and maintenance of the land where PV systems are sited. On the other hand, in the second extract is presented the narrative of an expert, who affirmed that the PV diffusion in the region, as it happened in the rest of the country, has been characterised by a ‘race to the fields’, to grab the available land and substitute several hectares of vineyards with PV. A further relevant aspect concerns the recognition of the political response to this rapid change, with only the province of Ascoli Piceno acting in a rapid way to limit and minimise the damage, while other provinces acting more later.

In the third extract, a political-institutional actor interviewed recognises that the development and deployment of wind energy foreseen by the regional energy plan of 2005 has been widely constrained -as it was for the biomasses - by factors that were not recognised and taken into account in the planning process. In this case, the landscape constraint and great value, and the resistance of authorities responsible for environmental and landscape preservation are recognised as the main factor and actor limiting the deployment of wind power in the region.

What is remarkable in the last two extracts analysed is the recognition by the two interviewees that limiting the deployment of wind and PV were actually positive facts (thanks to God, in some cases even rightly).

All these extracts, greatly support the previous findings of the concerns over the landscape and land use as the primary source for the evaluation of RETs territorialisation. These discourses on landscape and soil consumption at the basis of unacceptance of RETs are connected to many other themes concerning the value of landscape and land for regional agriculture and tourism (f= 6).

“it is a territory with a strong agricultural vocation, almost all the territory is full of olive groves, vineyards and organic crops and above all what struck us is that many young are acquiring the family businesses and are re-launching the market, making small quality productions that also export to Europe and America.” Interview spokesperson citizens’ committee - 18-10-2017

“renewable energies are a resource of this country, but the events of Basilicata and Puglia has taught a lot because **have been installed many wind farms that were just a speculation and have certainly disadvantaged a lot the agriculture”** - Interview spokesperson citizens’ committee - 20-07-2017

The extracts presented demonstrate that the representation of the regional territory as profoundly vocated to agriculture and tourism presents a lot of implications for the siting and choice of RETs configurations. Indeed, in the first extract, the region is argued having a past and future orientation towards the quality agriculture, with many young people rediscovering

this vocation and attracted by agricultural work acquire family businesses to reorient the production of regional agricultural products and specialities appreciated all over the world.

Moreover, as the second extract underlines, in this context renewable energy is represented as an asset for the entire national territory. However, this asset is argued should be approached in a critical way by considering their fit with the territory. As it was for the experience with biomasses in the public sphere - where the experience of other Italian provinces was debated and influenced public discourses on the risks and impacts of the introduction of biogas plants for agriculture - in this case, the experience of other southern Italian regions is reported to reveal the damage of wind turbines' installation for agriculture for speculative purpose.

The perception and representation of the changes introduced by the materialization of RETs in the regional territory is sometimes argued as profoundly influenced by people attachment to the place (bonds with the territory: place attachment and evaluation of place change; f= 5).

“We are very tied to the territory, and what distinguishes us is this very strong bond with the territory and with the territory I mean the town, the village [...] it is clear that in this context the idea that I come to put the power plant in front of the house is not so far from the band of [thieves] robbing in the villas” - Interview expert - 28-11-2017

“We are really in love with the Marche [...] a region that offers you everything and where even young people do not want to run away and look for a permanent place but want to stay there, to use that land, to make it profitable and reinvent a way of life in communities where everyone is included. This aspect of old and young generations working and staying together. I really love it.” - Interview spokesperson citizens' committee - 20-07-2017

The way people perceive place change caused by RETs is recognised and reported in some interviews by both political-institutional actors and experts reflecting on the reasons underlying opposition to the siting of RETs. As the first extract shows, the bond with the territory and the place of residence are recognised as something that clearly characterises the region and influencing the way people perceived the siting of facilities in their place of residence. The discourse of the interviewee highlights once again that the siting may be perceived as an aggression to the self, or to the private sphere. This is represented by comparing the siting of RETs to the home thefts' experience and causing an intense feeling of disruption with the past within the communities affected by RET development.

On the other hand, the spokesperson of a citizens' committee in the second extract reveals a strong regional attachment, a positive place distinctiveness (a region that offers you everything), and remarks a strong psychological sense of community, where community members are represented across generation as characterised by greater attachment and identification with the regional community and territory. In fact, all these discursive aspects of

the utterance greatly involve the perception of shared membership (we, old and young generations together), shared emotional connection (we are very tied with the territory; want to stay here; I really love it), influence and integration and fulfilment of needs (use land, to make it profitable; reinvent a way of life in communities where everyone is included), all aspects and dimensions that characterise the psychological sense of community, namely the psychological experience of community membership and life (McMillan & Chavis, 1986; Mannarini, 2009). Going forward, beyond the changes of landscape and in land use, a major theme about the territory concerns the balance between the coast and inner areas, and the urbanization and industrialization processes in the diverse regional areas. In this regard, the urbanization of the coast and chaotic industrialization bringing an essentialization of the remaining rural natural areas (f=5) represent a widely diffused and shared belief.

“another peculiarity here is that we have **two large areas, which are the coast and everything else** [...] **is all on the coast, so the coast now is gone, lost** [...] and **if you try to put something they say: “oh we already have everything”**. So, **the decision maker where has to go and put things? Inside!** also because the other power stations have been put along the coast, and where do you go to put then? **Basically, where people essentially are because they want to make a certain kind of life**” - Interview expert - 28-11-2017

The extract presented underlines the territorial configuration of the region as divided into two main areas: the coast, completely urbanised and where all the infrastructures are located, and the inner rural and mountain areas (the everything else). This kind of territorial configuration is argued as determining a critical issue about the siting of new infrastructures. Indeed, in the coast, it is affirmed the impossibility of siting anything because of a diffused perception of the coast as overbuilt and full of energy facilities, with no further possibility of infrastructure development. This fact is recognised bringing decision-makers to site facilities in internal areas, something conducing to conflicts because affecting people who choose to stay in inner areas looking for a certain kind of life (close to nature, retired), later defined in the interview as running away from industrialised, cemented, chaotic and polluted areas.

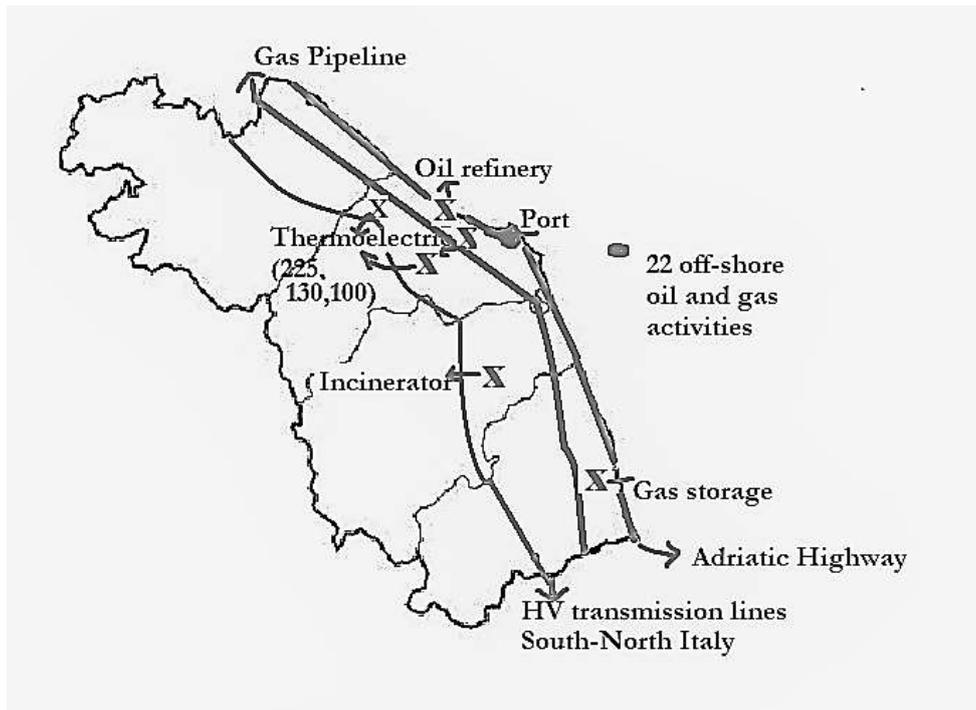


Figure 53. High-impact facilities and infrastructures (realised or planned) for transport and energy. Projects planned and not realised: gas pipeline and storage; HV transmission grid; Projects decommissioned: incinerator; thermoelectric power plants

The urbanization and consumption of the coast is recognised as deriving from a speculative overbuilding, a territorial characteristic that compromises every kind of development (Soil and coast consumption: speculative overbuilding and limited space, f=5)

“just look at the overbuilding of the soil and the coast to realise what has happened. From 1954 to 2007, approximately, the resident population of the Marche region has increased by 37% and the cemented surfaces of more than 300%. So, there has been a speculative building, with a low-quality construction really pushed to extremes” - Interview representative environmental network - 25-10-2017

“you have a problem of soil consumption, you're not in the American desert where you can put whatever you want, so there will never live there anyone, do you understand?” - Interview spokesperson citizens' committee - 20-07-2017

This is clearly acknowledged by citizens members of regional environmental NGOs and citizens' committees. Indeed, the first extract remarks and stress how the building economy has been pushed at the extremes for speculative purposes, totally disconnected from the needs of the regional population, and ending up in consuming the soil and the coast. This function is realised by building a solid case rich of details on the increase of soil consumption over time. This problem of soil consumption is emphasised also in the second extract, where the interviewee connects the Italian and regional problem of soil consumption to the difficulties in the RETs development and siting. This is clearly remarked by comparing the Italian territory

with the American one, characterised by extended and empty spaces (deserts) allowing to site facilities and infrastructures. This point stresses a critical aspect for energy system change and distributed generation that should be carefully evaluated during planning: the limited land and the need of finding space for siting energy facilities. This issue has been discussed recently by Wolsink (2018), stressing the role of co-production – the involvement of citizens in the elaboration of public policies and creation of public services - in making available space for distributed generation. This critical issue has been also deepened in discussing the findings of the previous studies of this thesis, revealing the opinion of several actors (i.e. experts, environmental NGOs and citizens' committees) about recovering and reusing abandoned buildings, factories and areas for the siting of energy facilities (e.g. PV systems, biomass plants). Even during some interviews, the respondents introduced the issue of *creating the space for siting RETs by recovering and reusing abandoned buildings, facilities and areas* (f=4) of which the region is rich.

I1: there are so many abandoned buildings, disused facilities, which could have projects of reconversion of their business [...] they can be used as a container, and on this, there is not a real policy of recovery of abandoned buildings and infrastructures [...]

I2: we talk of several hundreds of buildings left to decay, and on this, they are also close to watercourses, another problem - Interview experts - 4-12-2017

In the extract just presented, indeed, some experts introduce this issue by revealing how the region is full of so many places left to decay and that can be the object of reconversion and redevelopment projects and used as containers/place of location for RETs. Furthermore, in reflecting about this topic, the interviewees underline this sector could represent a very profitable investment and resource both in environmental and economic terms and that no policy has been considered and put in place about that.

Returning to the discourse pertaining the imbalance between coast and inland areas, some of the interviewees clearly introduced this issue by advocating the need of *integrated policies for territorial government* (f=4), meaning that the coast and the inland areas should be the subject of a strategic and integrated management, representing a fundamental way to deal with the *management of* (inland areas for providing and manage in a sustainable way) *common goods and natural resources* (f=3).

“even today we hear about infrastructures, which means roads and highways, to support the isolation of the mountain, but this is not the answer. There must be a qualification of the tourist offer [...] We [name of the NGO] have always claimed to give the Apennines a modern reading, which can really be a key to attract new human and economic resources, and that can guarantee a balance and

management of the whole region, obviously today the weight is almost completely on the coast, and the Apennines risk to remain abandoned. We think that, in the context of alternative energy generation, the Apennines can be an extraordinary laboratory, especially at this time, it must be completely rebuilt, precisely in rediscovering and researching the balance between coast and the Apennine inner area which unfortunately is missing today at the expense of the management of natural resources, from the territory, the rivers, the waters and so on.” - Interview representative environmental NGO – 28-02-2018

This is clearly stressed in the extract presented, with a representative of an environmental NGO criticising the work of the Region in attempting to deal with isolation and depopulation of the Apennine mountain by constructing new connection and transport infrastructure compared to the qualification of the tourist offer. The interviewee affirms what is the claim always advocated by the NGO to which she belongs, a modern reading of the mountain, as a laboratory for renewable energy, to attract economic and human resources and so doing restore a balance for the whole regional environmental management. This balance is argued should be looked for to equally distribute the weight of infrastructural developments (almost completely in the coast), contrast depopulation and correctly manage the natural resources of mountain areas.

On the differences between regional areas, a further theme stressed in the interviews with experts and environmentalists concerns the *concentration of risks and impacts in few areas* (f=5) and the recurrent *lack of recognition of these inequalities* (f=3).

“if the Region wants to reach energy self-sufficiency, meeting energy needs, then must also consider the costs of pollution. You cannot ignore that in our territory [Ancona] we have a polluting plant, a refining plant which has polluted and continue to pollute, where there is another thermoelectric power plant and perhaps with the possibility of putting there also a regasification plant.” - Interview representative environmental NGO - 14-07-2017

“on environmental equalization [perequazione] there is much to do in my opinion, because I realised when I was responsible for the environment in Falconara, a municipality super penalised from that point of view, because it was a landfill, an airport, a refinery, and so on, occupying most of this territory” - Interview representative environmental network - 24-10-2017

“our area is very penalised from an environmental point of view because then I do not know if you are aware of the solvents that were thrown by the shoe companies in the groundwater, so there is a strong pollution” - Interview spokesperson citizens’ committee - 18-10-2017

we have developed in a semi-chaotic way and we have hardly noticed, so we find the polluting industries, we know, and now we claim we do not want anything else” - Interview expert 26-11-2017

“We have always been told that are local recoveries [of biomasses], mainly related to the boom of production waste materials, so not new crops that will go to biogas, but then actually we have not seen how these were evaluated. We have only seen numbers, it seems to me that they are presented on the plate in the various provinces, in the various valleys, where everything is concentrated and possible because of transport or sources” - Interview expert - 8-12-2017

The extracts presented just clarify the diffused perception about the concentration of impacts and risks in some areas of the region, and the perception of lacking recognition of these impacts by institutions. Indeed, in the first extract, the interviewee is commenting on the regional energy plan, particularly regarding the biomass development, and its main aim of bringing the region to a condition of energy independence. In pursuing this objective, the interviewee argues that the Regional Administration should consider the costs of pollution in the shoulders of the limited area. In his utterance, this is emphasised by listing the different high impacts of energy facilities that historically polluted and continue to operate polluting the area as well as other foreseen further development of fossil energy facilities (refinery, thermoelectric plant, regasification plant). In the same extent, also the second extract refers to the impacts of the same area, but circumscribed to the municipality territory hosting the refinery and referring to high environmental impacts deriving from other infrastructures beyond energy production (landfill, airport). In his discourse, the interviewee starts the utterance by recognising that institutional arrangements should be designed to recognise these territorial disadvantages and costs and go to influence decision-making and planning (environmental equalization – perequazione).

In the third extract, the spokesperson of a citizen committee opposing to biogas in a diverse province underlines that the area, which has been interested by several biogas plants, has been historically penalised by industries in the shoes' sector deliberately throwing solvents into the river and polluting the water ground. In this case, it should be underlined that the interviewee expressed different times the preoccupation of malfunctioning and incorrect management of biogas plants present in the local area. Also, the interviewee remembers the denounces about the occurred spills of digestate from the facility merged into the river. This issue is clearly addressed also in the fourth extract, where the expert interviewed tried to explain why in his opinion so many oppositions emerged in the region. These are motivated by assuming the diffused perception of citizens about a chaotic industrialization, at first unnoticed, and polluting different areas throughout the region. This contingency is argued as bringing the diffused intolerance of citizens on new developments because of this awareness and distrust. All these extracts support the findings of a diffused distrust over local entrepreneurs and firms that seems have historical origins and that concerns the dimensions of competence and ethics.

Finally, the last extract presented concerns the discourse of a further expert commenting on the planning process about biomass plant' development and siting foreseen by the regional energy plan. In this utterance is relevant to notice that the interviewee assumes a dubious perspective on the explanations provided, the evaluation showed and the decision-making process. This can

be argued by looking at the way he presents this information: as something that the Region said and presented during consultations, but without explaining how these were assessed (we have seen only numbers). Moreover, the utterance is concluded by questioning the way this assessment is realised and decision-making is undertaken: as something proposed and dropped from above to the various provinces and more in-depth the few valleys that have the needed transport infrastructures and primary sources and where for this reason energy production from biomasses usually concentrates.

6.2.3. The historicity of renewable energies and distributed generation: reflections on the past

With reference to the historicity and territorialisation of RETs and distributed generation model, three main subthemes emerge: a) the regional energy and environmental plan of 2005; b) the interaction between national incentives and lack of government in determining the uncontrolled RETs development and deployment; c) the regional law for authorization on RETs excluding EIA and related effects.

Regarding the past energy planning of the region, the interview aimed to deepen the perspective of the diverse actors about the regional path of energy transition and related critical aspects. Several interviewees recognised and represented the regional energy plan of 2005 as *an innovative and courageous plan carefully made* (f=10) and reflecting the intent of the Region at that time.

“the 2005 plan was a very innovative plan, it was a courageous energy plan, where great pushing elements were inserted that served at that time to culturally ferry what was an old energy model up to the conversion and transition of the 2020” - Interview representative environmental NGO – 28-02-2018

“the PEAR had quite innovative elements, and we must recognise that it acquired fully and perhaps it was beyond the famous 2020 [...] the Marche stood at the maximum threshold, this I said from a positive point of view” - Interview representative environmental network - 24-10-2017

“when the first pear was made, ten or twelve entities were put together between universities, research studies, professional studies [...] a huge effort was made, of research and also economic, because that was the first inventory of greenhouse gas emissions of the Marche, but it was also the first attempt to create a system based exclusively on alternative energies, there was a huge political intent there” - Interview expert - 26-11-2017

“in the previous PEAR we shared the general approach as organization, and we had some doubts about one of the strategic choices, that is the decentralised production, which then was the most critical aspect, perhaps the most innovative but also the more critical, for a difficult practicality [...] one of the choices that inspired this position was to avoid the concentration of production in a restricted area, because then if you know a little on this issue the territorial situation, half of the electricity

produced in the Marche was concentrated in a radius of about 30 km [...] they wanted to overcome the concentration of the environmental impacts through the diffusion in the territory, and some feared that the environmental problem would be multiplied and spread.” - Interview economic stakeholder - 5-12-2017

As the extracts just reported show, the plan was well-received by different actors appreciating the effort of the Region of being a forerunner in proposing a new paradigm for energy transition: the distributed generation of renewables.

The first two extracts presented clearly highlighted the perspective of environmental NGOs, with representatives recognising the innovative and courageous elements introduced, and the challenging objectives going beyond what required in the long period. This political courageous intent and the great commitment and effort are recognised also by the experts involved in the regional energy planning, as the third extract demonstrates. Indeed, the interviewee stresses that the strategy was an attempt to shift the regional energy system, greatly dependent on electricity import and fossil fuels, towards a system completely based on renewable energies. On the other hand, some economic stakeholders were the most critical voices in this regard. As the last extract shows, while the interviewee affirms that the general approach (or the general strategy) was mostly shared and appreciated by the trade union, the distributed generation model was perceived as the most innovative but also the most critical aspect for its practicality. Indeed, the extract presents another recurrent argument - both in the interviews and the other data sets – about *distributed generation as a multiplication of impacts vs the concentration of energy production* (f=6). As shown in the excerpt, during the interviews few actors argued that distributed generation model was inspired by the rationale of avoiding the concentration of energy generation facilities – with related impacts - in restricted areas, something that still characterises the region. However, while this rationale is perceived as making sense, as an adequate measure to face the existent territorial inequalities, as testified by the interviewee, many were preoccupied about the multiplication and diffusion of impacts throughout the region. Another relevant aspect concerning the regional energy plan of 2005 is the relative technocratic path and choice that limited the effectiveness of the plan. Indeed, the elaboration of the plan was mostly *guided by evaluations of technical and economic nature, with scarce consideration of social and environmental aspects* (f=2), determining a consequent *scarce acceptability because of a lack of public involvement* (f=1).

“the plan made its projections looking at the technical potential of the source, not taking into consideration the most delicate aspects [...] evaluated the cost of technology, the current state, the economic development of the sector, but did not consider environmental and social aspects that constituted the constraints

[..]

Another critical aspect is that **the old plan had not been submitted to SEA, and this fact has then weighed on its implementation and its sustainability**, because in any case, the fact of submitting [the plan] to a **transparent and enlarged participation since its development ensures that it is more sustainable and more accepted**” - Interview political-institutional actor - 15-06-2017

As testified by a public officer, the elaboration of the renewable energy strategy was mainly based on models evaluating the potential of RETs looking at the economic feasibility, the costs and incentives of the technologies, the potential of the RES, while not taking into account environmental and social barriers to their implementation, that is the social acceptability of socio-technical configurations and the environmental impacts. In this regard, the interviewee also recognised that the lack of norms and institutional practices for public involvement – the Strategic Environmental Assessment - constituted a very critical issue. In fact, the elaboration of the plan did not provide space for public participation, which determined a neglect of the social and institutional barriers. This is recognised as not only affecting the acceptability of the plan, but also the quality and sustainability of the plan. What is relevant is the recognition by the interviewee of the great potential of earlier and inclusive participation, and of the instrumental and substantial rationale of participation, i.e. improving the quality of decisions and enhancing the acceptance of the strategy.

Beyond this, regarding the implementation of the plan, many of the interviewees agree that the *major critical issue* was that *since then everything changed* (f=8), meaning that the contingencies following the elaboration and approval of the plan determined diverse effects influencing its implementation.

“since 2005 everything has really changed, that is in 2005 we were in a phase that we can call of Don Quixote [..] What happened though is that **the world around us changed, the electricity consumption has decreased as we all know** [..] **the fuel mix has radically changed** [..] and **another thing that has changed has been the huge contribution of PV**” - Interview expert - 28-11-2017

“the plan after a few years has become old, because then the evolution of both technology and incentive policies has essentially changed the energy context at national level, and therefore also regional [..] **it was based on a scenario without considering this policy so strong on renewables, and then these incentives then led to a sort of market distortion**” - Interview political-institutional actor - 14-06-2017

“we came from a previous plan that in some ways did not work, because [..] then at that time the world really changed, so it no longer made sense” - Interview economic stakeholder - 19-10-2017

As testified in the extracts presented, after the approval of the plan many radical changes in the broader scenario rendered the plan ineffective and unrealistic. Indeed, all the projections and variables considered in the planning process were no more valid. This is recognised in all the

arguments presented. In the first extract, the expert interviewed recognises that the period was characterised by instability and uncertainty. Many contingencies in the global and national scenario are advocated as affecting the plan implementation, such as the decrease in energy consumption caused by the global economic crisis, the change in the mix of fuels, and the great diffusion of PV because of the national subsidies scheme. This is also recognised by the public officer, who argues that technological change and the market distortion introduced by national incentive policies rendered the plan ‘old’. In the same extent, the industry representative emphasises that the plan was not implemented because of multiple contingencies rendering the planned strategy as no more making sense.

In this context, the national incentive scheme and the lack of governance from the Regional Authority are widely recognised by the majority of interviewees as bringing a chaotic deployment of RETs. Indeed, recurrent arguments in the interviews concern the *lack of planning and government of change and of the new economy* (f=12).

“what we have emphasised [...] was a missed planning by the region, so there was no government of that process. It was written an ambitious plan, a plan that could lead very far, but it was not accompanied to the end [...] therefore, in essence, accompany and not leave free what was a new market” - Interview representative environmental NGO – 28-02-2018

“So, there was a renewable sector not managed by the region” - Interview representative environmental NGO - 14-07-2017

“in a country like Italy, where you have concentrated industrial areas and not many, agricultural areas, tourist areas, etc. your policy must be much more concrete much more reasoned [...] the regions must work in close contact with the citizenship to understand what we can do and what we cannot do. We cannot afford to throw away neither the money nor the soil nor the energy.” - Interview spokesperson citizens’ committee - 20-07-2017

As shown in the first three extracts presented, the Region is accused by environmental NGOs of having left the renewable energy sector and market ungoverned and unaccompanied. Thus, the interviewees emphasise how this new market has been left without rules, lacking the opportunity of planning the deployment of RETs in line with territorial features and needs. This is particularly stressed in the third extract, where the interviewee contextualises the lack of the Regional Administration considering some characteristics of the national context: the concentration of industrial and tourist areas and the shortage of agricultural land (i.e. soil consumption). These listed features highlight the relevance of careful planning and policy-making by Italian Regions, as well as that of involving citizens in these processes to identify and understand potential negative effects. The discourse is rendered more incisive by

underlining that lack of planning and citizen involvement can lead to negative outcomes that they cannot afford (consuming soil, wasting money and energy).

This lack of planning and government from the Region is argued conducting to a disorganised growth of renewable energies in the territory, and particularly, in line with the discourse of the public sphere, the *rapid materialization and uncontrolled development of PV systems on the ground* (f=9).

“the **Marche have grown almost wild** [in maniera quasi brada..] **and people have seen the world changing**, that is, we have seen the world change **from the point of view of the landscape**, etc.

I: Do you refer to the materialization of energy technologies and infrastructures or..
..**yes, exactly, without preliminary information**” - Interview expert - 8-12-2017

“In the Marche, there was a **large development of PV**, and **now there is a regulation** that actually prevents making photovoltaic on the ground, **as a citizen I say that this is not wrong**” - Interview economic stakeholder - 9-11-2017

“**a very strong access, almost violent, even in its rapidity of the PV systems on the ground**. The source that could and should obviously be **the main alternative to the fossil, unfortunately, has been used in the Marche in an absolutely unexpected and unpredictable way in that speed and quantity**.”
- Interview representative environmental NGO -12-07-2017

The diffusion of PV systems is described by diverse interviewees as unexpected, wild, large and violent in the speed and quantity. As described by an expert interviewed, this wild growth is characterised by a rapid change of landscape. On the other side, as testified by an economic stakeholder, the large development was faced by the regional administration by banning the siting of PV on the ground. What is relevant in these two extracts is the shift in discursive positioning and identification. Indeed, the discourse of the expert and stakeholder is characterised by an implicit or more explicit shift in identification from professionals to citizens. Indeed, while the expert identifies as a citizen in describing how the great change of the landscape was perceived, in the second case the stakeholder explicitly identified as a citizen in evaluating positively the action of the Administration to ban the siting on the ground.

On the other hand, in the third extract presented, a representative of an environmental NGO emphasises the violence and strength of the PV materialization on the ground and stresses how the solar source, conceived as the main alternative to fossil sources has been used in an unacceptable manner.

Almost all the interviewees agree in considering the PV development on the ground as a distortion deriving from national policies and lack of regulation at the national and regional level. However, some respondents show in their discourse a quite ambivalent position towards

this issue, recognising in this *wild and uncontrolled RETs development* a positive effect, namely *the reaching of targets because of distortions coming from national energy policy* (f=9).

“for the **biomethane and biogas, as unfortunately happened with the photovoltaic** where **there was a race to the fields**, but we always say that **the race to the fields has served to achieve some objectives**, because **if we had not forced by entrepreneurs probably this advancement would not have been there**” - Interview representative environmental NGO – 28-02-2018

“With the photovoltaic, we have reached and exceeded the objectives that had been indicated to us, among other things **in a very tiring way**, in the sense that **we quickly went to cover [the land], after the rules arrived**” - Interview economic stakeholder - 21-11-2017

“**substantially, and thanks to God, the new regional planning foresees very few interventions**, because the **major part of the interventions that have been made**, basically those of **PV, derive not from a regional policy, but from a national policy, the incentive policy**, which in some way the region has been seen to arrive [...] without too much planning, **but at the end from my point of view it was useful**, it was a **positive thing** because **we have achieved goals** [...] Fortunately, what had been done by imposition coming from outside allows us to reach 2020” - Interview expert - 26-11-2017

The first extracts presented refers to a representative of a regional environmental NGO. This highlights that the uncontrolled development of RETs in the regional territory brings to reach the targets allocated to the Region. It is worth noting that the interviewee reveals that the development of biomasses followed the similar path of PV: a race to the fields, with firms renting the available land in the region. This race to the fields is widely represented with negative connotations by the interviewee, that, however, shows an ambivalent position in this regard. This is clearly underlined in the recognition of the usefulness of entrepreneurs' actions and pushes in getting an advancement in RETs' diffusion and targets' achievement. On the other hand, the interviewee of the second extract, an industry representative, sheds light on the fact that reaching the regional targets have been possible through the quick and unregulated land covering with PV. Last, the expert interviewed and reported in the third extract clearly shows a diffused ambivalence in evaluating RETs diffusion. The interviewee argues that the new energy plan does not foresee major interventions because of the rapid and great diffusion of PV, which allowed the Region to reach the targets. This development is recognised as happened in an unpredictable way because of national incentive policy, representing the region as unprepared and passive in facing this change. What is relevant is the acknowledgement of a positive aspect that concerns the regional energy plan: the few interventions foreseen about renewable energy generation (thanks to God). Indeed, this may be recognised as the result of the frustrating experience, expressed by the interviewee, that concerns the community acceptance of and opposition to renewables. Moreover, following this rationale, the interviewee

clearly affirmed several times his perspective on the ungoverned development of RETs, which is perceived as a positive thing, allowing the Region to reach the 2020 targets.

While recognising in the wild and speculative development of RETs the positive outcome of reaching the targets, some interviewees recognised distributional injustices pertaining the fact that *the incentives were too high and windfall, ending up in favouring companies and speculative ventures (f=5) and disfavouring households, not distributing and leaving richness in the territory (f=5).*

“I believe that **the PV [solar] is the most beautiful source we have**, but **here was exploited very badly, as a mean of speculative gain[.]they destroyed our extraordinary countryside**, because you see the countryside **full of these panels** on the ground” - Interview political-institutional actor - 11-07-2017

“there was the **temporary illusion** of setting up companies, creating jobs, but then when the **incentives dropped** and the **incentive for the entrepreneur was no longer a source of gain**, the **companies failed**, and the **people lost their work**. **The incentive** is important, but **should be distributed, in the territory [..] reach directly the main actor: the private citizen, the families [..] you have to hit all of them horizontally, you cannot consider the main investment at the industrial level** and then **leave aside the families** or however allocate less money to families” - Interview representative environmental NGO -12-07-2017

“The **incentives** for photovoltaic systems, according to **our hope**, had to be **distributed in a widespread manner on the territory and in the most democratic way**, and **above all had to not disfigure** but be **properly located**. Instead it has unleashed what has been unleashed **in many regions, see the Puglia, the Veneto [..] foreign investors, Spanish, German companies, connected also with local companies**, etc., were going around, **looking for available land on the territory, offering logically significant rents [..] without any regulations** and without **anyone raising a finger**” - Interview representative environmental network - 25-10-2017

The extracts just presented underline in a clear manner the distributive injustice of the incentive scheme. Indeed, as testified by a regional councillor interviewed, incentives determined the incorrect diffusion of PV. The solar RES is represented as the most suitable source for the country, however, the technology exploiting this source has been used basing on speculative aims resulting in the destruction of the countryside. Furthermore, the second extract reveals a more complex picture of the distributive injustice of incentives on PV. The environmentalist interviewed stresses that the incentives have been not horizontally distributed in the territory, benefiting private citizens and families. Instead, he acknowledges that the way incentives were set up mainly prompted industrial investments. In the long term, this resulted in the illusion of distributed wealth (new companies and jobs), which only after the cut of incentives revealed the sad reality: a vanished wealth.

In the same way, the third extract underlines the unfair distribution of incentives. The interviewee affirms that contrary to the hope and perspective of environmental NGOs

incentives were not distributed in a widespread and democratic way. Rather, the incentives are described as ending up in disfiguring the territory of many Italian regions, with foreign investors connected to local firms operating without any rule and grabbing available land offering high rents. This unfair distribution of costs and benefits in RETs development is also emphasised in consideration of the local pre-existent economies. Indeed, as it was found in the study previously presented, arguments on landscape concerns are strictly connected to those that pertain the unequal distribution of benefits, advantaging the private investors, and the costs remaining in the territory and its local economy (*it is not only about landscape, but also about risks for local economic activities* – f= 6).

“In the moment of the **photovoltaic boom**, the so-called **speculative bubble** that was on this energy, many **investment funds went in and tried to lease the land and made huge plants** [...] then **it became a jungle**, which effectively could have great environmental impacts, but in other cases it was a strong landscape impact. So, **there was a slowdown**, because **our areas besides agriculture live on tourism**, which is the **future of our country, our still lifes, the hills** etc., **with all these reflecting mirrors** it is certainly **not a beautiful postcard**” - Interview economic stakeholder - 6-12-2017

“It was a speculation that has benefitted the individuals but not the communities, with the only result that when you look over the hills of the Marche you see **hundreds of PV plants, which do not attract the tourist** [...] **the areas of the first hill near the sea live a lot of tourism** and above all of **reflected tourism**, of tourists **coming to the sea and then approaching the surrounding hill.**” - Interview spokesperson citizens' committee - 20-07-2017

The extracts just presented clearly illuminate that concerns over landscape change are objectified as having an impact on local economies. Indeed, both the agriculture representative and the spokesperson of a citizen committee opposing to wind energy share the representation of landscape as an asset for local economies. In the first extract, the interviewee remembers the period of the PV diffusion represented as a speculative bubble with investment funds renting land to site large PV systems. This deployment is represented as a jungle, meaning a situation without rules having an environmental impact and above all a great impact on the landscape. In this context, the interviewee emphasised that once realised what was happening the agriculture representative body attempted to face the situation. The main motive of this is identified in the costs of RETs development for the local economies. Indeed, local economies are described as greatly relying on tourism besides agriculture, which is represented as the future of Italy. Further, some local natural resources characterising the regional landscape (the still-life of hills) are represented as a strategic asset for tourism, which has been compromised by the PV on the ground (reflecting mirrors .. certainly not a beautiful postcard). In the same way, also the interviewee of the second extract stresses that PV diffusion has advantaged individuals while disadvantaging the local communities and economies. Again, the interviewee underlines the

hilly landscape value for some regional areas that live on tourism. These areas are described as compromised by hundreds of PV plants, stressing how this visual impact ends up in not attracting the tourists and damaging local economies.

After the period of PV diffusion, between 2010 and 2012, the regional context is characterised by a regional law on RETs authorization, which opens the way to other RETs, greatly promoted also by the change in the national incentive policy prompting other RETs beyond PV(2012-2013). This is also well underlined by interviewees. Indeed, the third sub-theme belonging to the broader theme about the historicity of RETs is represented by the *regional law for authorization on RETs excluding EIA and related effects*.

Most of the discourses about this issue emphasise the *exclusion of EIA in authorization procedures and the illegitimacy and illegality of the law* (f=10) as the main motives of the diffused protest and legal trials.

“at the end of the legislature, these have issued dozens of authorizations, if not hundreds, on biomass, and speeding the process by excluding the EIA, and this was the regional law 3, famous, which was then contested by the constitutional court” - Interview political-institutional actor - 6-02-2018

“Then a regional law that ignored European regulations, for which there is an ongoing trial concerning the biomasses, but also the wind turbines of the community of Camerino. illegal and illegitimate! in contrast with the national and European laws” - Interview representative environmental NGO - 14-07-2017

“the plants were excluded from the EIA due to the size of the plant which is not substantially in our legislation, or rather it is not really legal from the point of view of European directives. EIA must always be done, or at least a screening, regardless of the size.” - Interview spokesperson citizens' committee - 18-10-2017

As testified by a regional councillor and the representative of an environmental NGO, the regional law 3/2012 on authorization procedures and the related legal trials involved mostly biomasses and to a lesser extent other RETs such as wind farms and hydroelectric plants' restoration.

The regional law, which excluded the RETs under the threshold of 1 MW from the EIA, and consequently the participation of citizens in the EIA process, was strongly contested and declared as illegitimate and illegal, not responding to the EU directives and the National Law on EIA. While different RETs are implied in this law, the latter has mostly affected the development of biogas plants because of the favourable economic and technical conditions for their deployment (e.g. high incentives, lower costs). In fact, some interviewees recognise the potential of biogas technologies and how alike PV *it was a good opportunity but has been used for speculation* (f=4).

“I’m not contrary to biogas, but if it is adequately used, not for speculation. Instead, the biogas was deployed for the incentives, for speculation” - Interview political-institutional actor - 11-07-2017

“biomass and biogas, these have really become the focus of recent years, because, given the results of the first two [PV and wind], everyone then threw themselves there, because they understood that there was really the deal. Because, as we know, the incentives have decreased a lot compared to the early years of photovoltaics, because however, the wind had great difficulties on EIAs.” - Interview representative environmental network - 24-10-2017

As testified by a regional councillor in the first extract, biogas represented a good opportunity that however ended up in following the same path of PV: a good technological mean to produce energy but deployed with bad configurations to get incentives. This is recognised and described also by the representative of an environmental NGO in the second extract, revealing that biomasses and biogas entered only recently and with strength in the public debate. This is recognised as the result of several firms investing in the sector after seeing the evolution and trajectory of other technologies benefitting of incentives (i.e. the decrease of PV incentives and the environmental constraints of wind energy).

While procedural justice concerns are widely presented in the discourses of the interviewees, as it was found in the analysis of public sphere, the lack of EIA is strictly connected to issues pertaining distributive injustice: the *cumulation impacts and the distance of siting areas* (f= 6).

“the problem was not the installed power capacity of the single plant, but it had to do with the fact it should be assessed in the territorial area within which those plants are sited, the cumulative impacts of the plants, and therefore this led to a whole series of appeals” - Interview representative environmental NGO -12-07-2017

“We debated a lot on the point of view of legality because the authorization process was not correct, and in some points regarding our territory with the fact of cumulation with the other [biogas] plant” - Interview spokesperson citizens’ committee - 18-10-2017

As emphasised in the discourse of the interviewee (the representatives of a citizen committee and an environmental NGO), while procedural justice arguments are central and concerning the correctness of procedures, the exclusion from EIA procedures raised many concerns regarding the lacking evaluation of cumulation of impacts within the territories characterised by critical environmental conditions or the presence of further energy facilities.

On the other hand, some of the interviewed stakeholders and experts underscore that the regional law declared unconstitutional was *made in good faith, motivated by choices of technical nature and transposing the national legislative decree 152* (f=4).

“I’m not a paladin of politicians but there was really a huge mistake, because that was done in good faith [...] things that were exquisitely derived from a technical, technological, environmental

and environmentalist choice, sponsored by us with the numbers, went to end for a series of chicaneries, because we are talking about very modest installations, made with the best technologies. It makes me say: if you do not want the biomass, then enough!" - Interview expert - 28-11-2017

"the biomass had great difficulties. We stumbled across the whole affair connected to the appeal on the EIA screening on biomass and biogas plants. Then, all that has generated this impasse that blocked us [...] the region itself has made a battle finding the law blocked, unconstitutional. That's hallucinatory because it is the only regional law that transposed, [the 152] and they contested the attachments, but the attachments are as such of those of the 152, and in some case, they were more restrictive. It was considered unconstitutional for some parts the law 3 but many other laws at a regional and national level were not contested" - Interview economic stakeholder - 19-10-2017

In the first extract presented, the expert interviewed underlines that the regional law was made in good faith. He argues this by using a stake inoculation (Potter, 1997) to preliminarily reject the potential assumption on his lack of objectivity considered his role of expert advisor of the Regional Administration. Indeed, he claims of being not a paladin of politicians to introduce the sequent argument about the good faith of the law, which is described as based on evaluations of technical, technological, environmental and most of all environmentalist nature. It is worth to notice the claim of an environmentalist orientation of that choice, sponsored also by the group of experts to which the interviewee belongs. In this regard, the interviewee claims the objectivity (with numbers) and rationality of that choice (modest installations made with the best technologies) while questioning the response of protesters as irrational, and for this reason advocating the passive acceptance of this position and the closure of the dialogue (if you do not want the biomass, then enough!).

Instead, in the second extract, in telling the story concerning the regional law and the biomass critical issues the industry representative points out that the regional law was transposing a national one. Highlighting this fact, the interviewee aims to underscore the irony and ambivalence of the situation, with the regional law considered unconstitutional while transposing national regulation, which however has not been contested as it was also for other laws basing on that decree. This argument critically reflects the shift of the responsibility from the Regional Administration to the National Government. However, as the following extracts show, the responsibility is also claimed to be of 'some individuals' that instrumentalised and raised the attention on the issue.

"Someone awake has raised all this mess on biogas, which was really a mess [...] that is for two years was the block, we gave up investments from outside, people who wanted to come to invest and went away, because it would have to do the EIA, while in other situations barely the screening, a hallucinatory thing" - Interview economic stakeholder - 19-10-2017

"Today we cannot even mention the word biogas. We are certainly paying all that looting, even by those who have politically instrumentalised, those who instrumentalised economically, then

entrepreneurs, so it is clear that **when you do not keep the bar of the government happen things like these**" - Interview representative environmental NGO – 28-02-2018

As the two extracts exemplify, this instrumentalization of the issue is advocated by diverse actors (in this case the representative of industry and of an environmental NGO), which reveal in the first case two years of total block and lost investments in the sector, and on the other the long-time effects of the economic and political instrumentalization of biogas issue: the biogas intolerance or territorial aversion.

In fact, the feeling of citizens' *intolerance over biogas* (f=5) is remarked by some of the interviewee perceiving and representing citizens (the others) as victims of instrumentalization and disinformation bringing them to develop an attitude of total closure regarding new developments.

This intolerance is reported also by the interviewed spokesperson of a citizens' committee opposing to biogas, who however refers mostly on the existent biogas plants authorised with the discussed law and authorization procedures.

"I think these plants created in this system should be razed to the ground, and alternatively you could create a biomethane structure [...] seriously evaluating the problems related to the digestate and waste disposal, and put it on the network and use it for the good also of the local community, in my opinion, it could be a good solution." - Interview spokesperson citizens' committee - 18-10-2017

As it is possible to notice in the extract presented, the intolerance over biogas is palpable in the discourse (should be razed to the ground). However, this intolerance seems linked with the multiple injustices discussed so far (procedural, recognition, distributive), bringing to the siting of these plants and the diffused opposition. While this does not provide sufficient counterevidence to consider the perceived intolerance over biogas as wrong, it highlights few crucial aspects. First, procedural justice clearly represents a crucial factor leading to diverse public responses to the technology itself (intolerance, unacceptance and so on). Second, issues pertaining distributive justice are considered fundamental for the acceptance of bioenergies, considering both the minimization of impacts and the correct management of the facilities (i.e. waste disposal and digestate shedding) as well as the distribution of benefits to the communities hosting the plant (use it for the good also of the local community). Third, a crucial factor concerns the distinction operated by the interviewee in referring to the biomethane rather than biogas. In fact, the biomethane³³ is produced by the biogas purification, and compared to biogas

³³ <https://www.qualenergia.it/articoli/20150430-passare-da-biogas-a-biometano-un-nuovo-metodo-promette-grandi-risparmi/>
<https://www.gse.it/servizi-per-te/rinnovabili-per-i-trasporti/biometano>

presents multiple advantages such as the transmission in the network (minimising also the risks of storage) or the greater energy efficiency. Biomethane can be seen as a technological development of biogas technology for producing gas from waste and residual material and for multiple uses (transport fuels, heating, electricity)³⁴.

6.2.4. Polycentric governance of decentralised energy systems: opening-up or closing-down? The intrinsic ambivalence of the Italian case

In discussing the regional energy scenario and governance, some of the interviewees introduced and discussed the perceived tension and critical issues concerning the decentralised governance of energy transition. In fact, some of the interviewees - in particular experts, representatives of environmental NGOs and political-institutional actors – reflected on the tension between national and regional governance and between opening-up or closing-down the debate on policy and planning and the role of citizenship in the energy transition process.

A common theme shared by some of environmental NGOs representatives concerns the criticisms on recent actions of the national government in the attempt to re-centralise the governance in the energy and environmental matter - the so-called Sblocca Italia (unlock Italy)³⁵ and the referendum of 2016 to change the Title V of the constitution, and particularly the art. 177-118 on subsidiarity and participatory governance (see also Sarrica et al., 2018). Some of these arguments are connected to the attempted introduction, in the abovementioned political changes, of a clause of supremacy of the *national/general strategic interest in bypassing the local communities: a weak point of democracy in which the State does not respond to its own rules* (f=5).

“it was told by the council of ministers that the general interest could overcome any conflict, could choose as it seemed to him, and this is in our opinion a big democracy weak point [vulnus]. If there are rules that the State makes, the State must be the first to respect them, I mean, there cannot be people above the State” - Interview representative environmental NGO - 14-07-2017

As reported by the interviewee, the criticism on this political intent is recognised in the fact that advocating this ‘general interest’, the Government can take decisions without considering the basic rules of the State, and not recognising the institutional and civil society actors interested. In his argument, the interviewee emphasises that also the council of ministers has to respond to the State democratic rules, and not using the political power to bend these rules and the soul of

³⁴ Biomethane has been recently incentivized by National Government (3/2018)

³⁵ A national law 164/2014 aimed at promoting and unlocking infrastructure projects of national interest such as transmission lines for gas and electricity, onshore and offshore oil and natural gas extraction activities.

democracy acting in an authoritarian manner. This is further stressed by the interviewee in reporting and criticising the words used by a Prime Minister in relation to the Sblocca Italia, which underline a negative view and the *misrecognition and disrespect of local voice and willingness* (f=4).

“you know, **the Renzi's famous little committees**, and **after December 4 we taught him to talk about the people of the committees** [...] the committees are the **citizens who have the power to send or not people like you to govern**, so **you cannot be offensive to the citizens** [...] that was a vision of **centralization, but a return back** when you were not even born in 1974-75, **when the decentralization began, the establishment of the Regions, in application of the constitution. That is, we go back 40 years, it was not possible, it was not acceptable, that is, you cannot think of being able to restrict [the decisions] to few selected**” - Interview representative environmental NGO - 14-07-2017

The utterance is produced in talking about the coalition and alliance of regional environmental NGOs with citizens' committees opposing to energy projects. In this context, the interviewee introduced the issue of misrecognition and disrespect towards local oppositions in the national territory by the National Government. This is realised by using the active voicing of the Premier of that period, Renzi, which represented the protesters as little committees [comitatini – a pejorative diminutive suffix]³⁶, aiming to delegitimise the protests by representing them as a minority hindering the achievement of the objectives of national strategic interest. In presenting this perspective the interviewee clearly criticises the work and positioning of the government and underlines that this form of disrespect and offensive rhetoric has been punished in the context of the national constitutional referendum attempting to re-centralise the governance of energy – among other things - (December 4). Further, he represents citizens committees as those (electors) having the power and sovereignty on which representative democracy is based. Following this argument, the interviewee presents the actions of national government as something unacceptable, as violating and wasting the principles on which the constitution is based. This view and action of National Government are argued as bringing 40 years back the country by recentralising the decisions and restricting them to few selected and powerful actors

³⁶ “Io mi vergogno di andare a parlare delle interconnessioni tra Francia e Spagna, dell'accordo Gazprom o di South Stream, quando potrei raddoppiare la percentuale del petrolio e del gas in Italia e dare lavoro a 40 mila persone e non lo si fa per paura delle reazioni di tre, quattro comitatini”

“I feel ashamed in going to talk about the interconnections between France and Spain, the Gazprom or South Stream agreement when I could double the percentage of oil and gas in Italy and give work to 40.000 people and we do not do it for fear of reactions of three, four little committees” Matteo Renzi, July 2014.

of national politics; a form of anti-democratic authoritarianism that cannot be accepted or even thought as possible.

In this context, discourses on the intervention of the State, or also a dirigisme approach to energy and environmental decisions are debated in the interviews by experts showing different assumptions and beliefs on the issue. A first theme refers to the perception of *policies, plans and projects dropped from the above and characterised by little dialogue with the territory* (f=4).

“I1: I think we have never been involved as professional order, but I also believe that the municipalities were not heard [...] as the territorial plan, made by the regional summits and then presented to the municipalities

I: an idea that anyway [policies and plans] are a bit dropped from above, is it so?

I2: there was no dialogue, let's say it in a clear way, now something

I1: now at least from six years there is more involvement, for culture and mindset

[..]

I3: I remember that a mega executive of public works said: "this central administration has all the tools and all the levers to bypass your refusal, closed". Just to say, I think that actually, **we are talking about 2005/2006, actually, the plans and projects fall from above [...] this for **the big projects. Surely even at the regional level, we have a little bit of this approach, we should now see how this type of approach in the practice in the region is re-launched [rilanciato – re-presented in institutional practices]**” - Interview experts - 4-12-2017**

During the interview with some experts of a professional order, the issue of scarce involvement and dialogue with stakeholders and with local authorities emerged. In this context, interviewees affirm the lack of their own involvement but also the perception of a scarce dialogue between levels of governance, coinciding with a dirigisme approach characterised by a one-way communication of information provision, where decisions are communicated to the lower levels of government and local actors. Following my request of clarification, a further interviewee introduced further criticism affirming a total lack of dialogue in the past and arguing that only in recent times some change seems occurring. It is then underlined by the other interviewee that these changes in dialogue and involvement coincide with recent changes visible in the institutional practice and culture. However, during the interview, and a few minutes later a further expert reports another episode from the past testifying what is perceived as a common trend of centralised governance: *a misrecognition and disrespect of local voice and willingness* (f=4). This is realised by directly reporting the words used by an executive in the case of a large-scale project and revealing an attitude and behaviour of total closure of the dialogue and of misrecognition of local voices and interests. This episode is reported just to present what was a common experience and approach in cases of large-scale projects, a kind of approach that is argued as characterising also the Regional Administration, but rhetorically underlining that the

institutional changes previously reported are far from being taken for granted and considered a real change in the political domain.

With regard to this distinction and tension between local and national governance, it is worthy to notice that some experts, and particularly the public experts interviewed (i.e. providing their expertise to administrations) showed a form of cognitive polyphasia, which is an ambivalence in their cognition that concerns the opening-up or closing down the debate on energy policies and planning, or also about decentralization and centralization (*Governance: we need a dirigiste approach, because citizens and local politics create immobility* - f=2). This contradiction is closely related to the possession of different rationales and experience in the planning and implementation of energy strategies.

“I still think that the only approach that could work is to start immediately with the process of information on citizenship, but I also came to the conclusion that these things need a dirigiste approach. In the end I am not against the fact that the energy matter is brought back under the control of the state, and no longer left to the regions [...] when everything is under central control the territory no longer has a serious voice in regard, and maybe some mistake is easier that is done, but it is the only way to act [...] local politics is too directly involved in a possible approval of a project, that is if the population does not accept it, this is placed at the fault of the politician, the local administrator who accepted it, and then the local administrator is not able to make these choices” - Interview expert - 26-11-2017

As the extract demonstrates, the interviewee presents in his discourse a variability on what kind of approach should be adopted. Indeed, while the interviewee still believes that the only approach that could work to implement energy strategies and RET projects is the preliminary process of public engagement. He also argued that, however, arrived at the conclusion that implementation requires a dirigisme approach, that is a top-down imposition. It is relevant that public engagement, however, is represented as a one-way information provision, which greatly emphasises a deficit model of the public. Moreover, the expert interviewed advocates his positive attitude on a possible re-centralization of energy governance, excluding local voices (communities and authorities) from the decision-making processes. This kind of re-centralization, State control and imposition, despite the risks of conflicts and mistakes caused by the exclusion of local knowledge, is argued as the only way to act and unlock the development of RETs. This is explained by referring to the usual conflict involving local and regional/national politics, representing local politics as too directly involved and interested to the risk of losing consent in approving projects that may be not welcomed by the local population. This view endorses a negative representation of local politicians/administrators, namely the so-called NIMTOO (Not In My Term Of Office) behaviour, with local politics having to choose between opposition to the siting of RET avoiding losing popular consent (an

egoistic motive) and going forward in promoting RETs in their territory despite local opposition (an altruistic motive).

In recognising the need of finding a way to act, overcoming opposition and implement energy strategies, the interviewee further deepens the motives of his ambivalent positioning on decentralised and centralised governance (*national politics is not far-sighted while local one is blocked- f=1*).

“the dirigisme approach would need a far-sighted policy at national level, and there, unfortunately, the last SEN [National Energy Strategy] is not the best of farsightedness, and the other side of the coin is this: at the local level it is easier to make far-sighted planning than at the national level, but the problem is that at local level the forward-looking plans do not go forward, even the positive and virtuous ones, they are stopped” - Interview expert - 26-11-2017

The interviewee acknowledges that while a dirigisme approach is needed, this requires a far-sighted policy at the national level, which unfortunately he recognised as not the case of the Italian energy policy. In this case, the interviewee refers to the national energy strategy approved few months before the interview, and that is described as not oriented to the long-term. On the other hand, the local level (regional and municipality) is represented as the best scale for planning far-sighted strategies compared to the national one. Despite this, the ‘problem’ is again identified in the factors stopping, undermining and hindering its implementation even when projects and policies are, in his opinion, positive and virtuous. The arguments used by the interviewee greatly shed light on the frustration proved by some experts interviewee, struggling between two competing beliefs and positioning on how energy governance should take shape. Furthermore, the arguments underline a well-grounded belief and representation of the public as deficient (of knowledge) and moved by irrational motives, as well as of political inaction and stagnation as a result of the search for consensus and populism.

On the other side, environmentalists put it a different perspective on energy governance and how to deal with energy transition and public engagement, that is *the community/citizen should be at the core of the strategy* (f=4).

“our idea of the region is an idea of country and territory that goes to give strength, breath and oxygen to the awareness of local communities as a great pivot on which today all the great innovations, and all this great revolve at this time of great change rotate [...] because otherwise thinking about renewable energy is clear that no place according to citizens will be the ideal place to host a landfill, a wind turbine or a biomethane plant, if we do not look at it with an optics of an overall well-being, a greater well-being for everyone” - Interview representative environmental NGO – 28-02-2018

“We asked the Region to imagine the future, to think how to reach the energy independence of this territory. To do this, people should be at the centre of the strategy, as active subjects of social innovation and change, for reaching the energy targets.” - Interview representative environmental NGO -12-07-2017

The two extracts presented underscore a different representation of public and local communities. Indeed, as both the respondents emphasise the citizens and the local communities should be considered the main actor for the transition towards a low-carbon society. This is stressed by underlining that all innovations and changes, being social or technological, involves the citizen as the main subject to engage and activate. This discourse endorses a representation of the public as -potentially - active rather than passive, aware rather than deficient, and oriented to the common good rather than selfish, a view of the public that stresses their role as consumers and active citizens. What matters, is the way they are included in the process of change, being the regional energy independence or national energy transition, involving both information provision and deliberation in finding shared solutions or adopt more environmentally sensitive measures and technologies. The proactive role of citizens is indeed a crucial part of the transformation of energy systems at the EU level. Indeed, the EU energy strategy greatly promotes the role of citizens as prosumers (producer and consumer). However, this proactive role and the contribution of the citizens and of local communities in energy generation remains, according to some of the interviewees, overlooked in the Italian policy. Italian energy policy is perceived and represented as hindering the development and engagement of citizens, communities or cooperatives active in the energy market and policy.

“the context is that of adapting to the European 2030 [...] objectives in which these aspects emerge, which I said, that is to make the consumer more active in the whole process, the objectives are strengthened and more ambitious [...] the European Commission is also reviewing the energy market legislation and I see that the Italian state is opposing this more radical position of the European Commission, which is a much stronger role for consumers, closed networks and therefore the energy micro-market.” Interview political-institutional actor - 14-06-2017

“at the national level, it seems to me that this discourse has not passed yet, of the free producer who come together” - Interview representative environmental NGO - 14-07-2017

In the first extract, a regional public officer is commenting on the recently approved National Energy Strategy. In this context, she argues that that Italian energy policy should adapt to the EU legislative 2030 framework concerning the greater engagement of citizens in the energy market. However, as both interviewees recognise, the Italian Government is more resistant to this opening and is obstructing the development of socio-technical arrangements to fully participate to the energy market as individuals or collective (i.e. self-production and self-

consumption, local micro-grids directly connecting producers and consumers, community/municipality energy, energy cooperatives, and so on). All these EU aspirations greatly stress the active role citizens are expected to play in the near future. On the same extent, EU policy urgently demands a proactive role of local communities and authorities in the energy market and policy, which requires a better coordination between levels of governance and a greater decentralization. In fact, in the current EU context, local authorities and territories are expected to widely contribute to the energy market and policy, (i.e. municipalities, villages, neighbourhoods, provinces, districts, regions, counties etc.). This is also emphasised in the interviews by different local and regional informants interviewed (*Eu directives and targets' transposition: Burden sharing, involvement and proactive role of the regions – f=4*).

“I1: **Nowadays there is a respect of all those European directives** that perhaps in the past was not so apt, and at least did not **invest the regions of a proactive role for** which must, **within a certain period, get the results** with their own plan, that is the Burden Sharing strategy to which it must respond. Then **with a target that in the past was not so binding**, and then evaluate the path if it is effective in achieving that goal

I2: we can say that **everything has become apter and more open to collaboration in recent years**, even as a sensibility” - Interview experts - 4-12-2017

“They [the Region] told us **that it is important to adapt the PEAR to the new objectives of 2020 and 2030, and this constitutes the conditionality for accessing EU funds 2014-2020**” - Interview representative environmental NGO -12-07-2017

As testified by some of the interviewees, the transposition of the EU directives and targets at the regional level invests the Regional Administration of binding targets and duties that should be reached and accomplished in a given time. This transposition is argued as prompting institutional change and regulatory arrangements in defining, implementing and evaluating the regional strategy, with a particular attention to involvement and co-production processes. Moreover, as the respondents underline, the transposition of the Burden Sharing (the distribution and allocation of national targets to the Regions) represented the leitmotiv of the elaboration of the Regional Energy and Environmental Plan 2020, and a conditionality to access to EU funds to implement the strategy.

6.2.5. Bottom-up participation and community activism

The two paragraphs that follow discuss the findings that concern one of the two objects (with social acceptance) of this research: public engagement. In this regard, will be presented the main arguments used by the interviewees to think and talk about public engagement, being it bottom-up and spontaneous (community-based participation, grassroots activism, civil society

associations and groups) or top-down, provoked and institutionalised (e.g. information provision, consultation, deliberation and sharing of expertise, power and responsibility).

These paragraphs are devoted to analyse and discuss first the discourses on bottom-up participation and then the discourses on institutionalised participation. This choice is related also to maintain a historical analysis of narrative experiences in the turning points identified: a) the collective mobilization and diffused protest in the period 2009-2014; b) the attempted re-configuration of 2015-2016, with participatory processes in planning and regulation on energy transition and environmental governance and management; c) the outcomes of this processes in terms of psychosocial correlates and the applied (policy) implications (2017-2018).

Many arguments about bottom-up participation and activism concern the *networking and coalition building activities in collective action and advocacy* (f=14). These arguments are strictly connected to discourses that concern the *perceptions of collective efficacy* (f= 4) and *hope and democratic optimism* (f=5) in prefiguring and fighting for a sustainable future, but also discourses unveiling *discontent and disempowerment in engaging with the political sphere* (f=3).

“we all realised that it was no longer enough to dedicate our attention to the institutions, but we had to solicit particular attention and sensitivity among the citizens. This led us to do a whole series of meetings, conferences, among other things much more participated than we hoped, and therefore the awareness has gained this idea of founding a network of associations” - Interview representative environmental network - 24-10-2017

“We worked on this popular law proposal for the sustainable governance of the regional territory, and we have drawn up the law, we have studied, written and discussed within the committees and in the territories. We have involved in this work of writing the law, in addition to the technicians of the Marche region, also high-profile people linked to the university world” - Interview representative environmental network - 25-10-2017

“we [name environmental NGO] are part of the [name] Marche Forum, and in 2014, we presented a law proposal of popular initiative with over 8500 signatures [...] we involved a hundred local associations, elaborated a text with the technicians, landscape architects etc, and the draft was then discussed in this forum with the movements [...] faced with the weight of the economic powers that bought the politics [...] people must count, through the committees, the associations. We are representatives recognised in court, as the bearer of public interest at the judicial level. So, this is important, in front of this weight, our weight, that alone is minimal, but put together it is greater.”
- Interview representative environmental NGO - 14-07-2017

The three extracts pertain to three different representatives (for province and belonging to different ‘environmental groups’) in a powerful coalition including hundreds of local committees and local and regional environmental associations). What is relevant is the mutual recognition and remembering of the great commitment in engaging and mobilising local

communities/citizens in collective action of protest and advocacy, an effort that then led to the drafting of the popular law proposal. This locally-based and territorially-grounded activism, and the creation and management of a regional forum networking all these territorial experiences and voices are recognised as a powerful mean to get a change. As the first extract shows, the interviewee recognises that beyond focusing the attention and efforts on politics (i.e. get influence) they started to organise moments of the debate, meetings, conference throughout the territory, aiming to engage and sensitise citizens. Following this grassroots activism in informing, sensitising and discussing environmental issues at stake, and perceiving the great participation of diffused and diverse actors, the idea to create and manage a network of associations emerged.

As the second and third extracts show, this network and powerful alliance has matured over the years, developing and submitting the proposal of popular law in 2014. What is relevant is the recognition of the huge effort to elaborate the law including so many voices, experiences, and interests (*more than 8500 signatures, hundreds of local associations*) throughout the region, mobilising and using expertise (*technicians of the Marche, high-profile people linked with university; with technicians, landscape architects etc.*), and debating and working on this topic in the network (*we have studied, written and discussed within the committees; discussed in this forum with the movements*).

In the third extract, it is worth to notice that this participatory experience is discursively linked with collective efficacy beliefs (f=5), namely the belief that with collective action it is possible to get influence and bring about a change. This is stressed by comparing the power of economic incumbent actors with that (lower) of people, which however should always count through the diverse forms of participation (committees and associations). In this context, the interviewee clearly puts in place a discourse that highlights how in front of this power citizens and even environmental NGOs alone cannot make a difference. Instead by joining together the efforts and voice citizens are recognised as going to be more powerful, get influence and bring a change because of the greater weight of the alliance/coalition.

Furthermore, these participatory experiences are reported and remembered connected with positive emotional states described as a democratic optimism and the shared belief that bottom-up participation can contribute to a socio-cultural and institutional change towards an overall sustainability and the proper management and preservation of common goods (f=4).

“The experience of the public water [and nuclear] referendum in 2011, that was a moment of great activation, of territorial networks and great participation [...] we did banquets in a capillary manner in the territory. Perhaps, if we didn’t do this we would not have had that amazing result.

And those experiences, had created a democratic optimism in the territories, you know, the belief that engaging from below it would have been possible to change the way we govern common goods such as water, but also the soil, but also the landscape, but also the quality of the places of life [...] we all became convinced that with a commitment of citizenship it would have been possible to determine a turning point, aimed to the overall sustainability” - Interview representative environmental network - 25-10-2017

As testified in the extract presented, a crucial moment for the grassroots involvement in sustainability and environmental activism is recognised in the period preceding the national referendum of 2011³⁷ (see also, Mazzoni & Cicognani, 2013). This is represented (also by other environmentalist interviewees) as a moment of great ferment and widespread participation throughout the territory, ending up in the creation of widespread relationships and networking activities. This great participation is well-remembered and positively represented as the prove that grassroots activation can lead to greater changes in the broader landscape (such as the national context), bringing a diffused democratic optimism and the hope of determining a cultural shift in the way common resources (water, soil, landscape, quality of places of life) are conceived and managed. This battle to protect the commons from the attacks of private interests is greatly undertaken by engaging in the public, political and mediatic sphere, an advocacy that with no doubt had their effects influencing over time the regional policies. In this regard, several discourses underlining *the perception of collective efficacy are connected to the coalition building also with other groups beyond active citizens* (f=5) such as political and environmental authorities (Provinces, Municipalities, Superintendencies, Natural protected sites), research organizations and professionals (universities, architects, planners, lawyers, engineers and so on). In fact, a common trend in navigating the different textual materials (interviews, naturalistic data) is the recurrent identification of coalitions in sustaining a particular perspective or version of reality. This may be found especially in the case of (written) public consultations, where the same contents are jointly communicated or split and repeated by different actors taking advantage of multiple positionings and belongings (e.g. citizens committee and municipality; scientific environmentalists working in environmental authorities or health authorities, and so on). This makes evident the intrinsic difficulty of segmenting groups' conceptualizations and boundaries, with multiple positionings and belongings at stake. The advocacy initiatives listed by the interviewees are multiple and reflect a great engagement that is territorially diffused and played in multiple coalitions. In the end, the network of committees works in a prefigurative way, embedding in the social practice of participation the

³⁷ With a turnout of 57% of those entitled, and a consensus around 95%, the referendum established water as a common good and the popular opposition to the privatization of the water service, as well as the popular opposition and the consequent stop to the Italian nuclear program

kind of social change demanded. This change is often advocated as a socio-cultural change, that is involving anyone in the elaboration of new meanings and practices, and institutional change, translating and institutionalising new meanings and practices through law and policies. In this context, perception on collective efficacy is often associated with effective political advocacy instigating policy changes such as in regulation or planning.

“We succeeded in obtaining an important first intervention from the province of Ascoli Piceno. At the time the provinces had a minimum function and set the first limits, but the region continued to be deaf, so even there a network of committees was created, also because beyond the protection of cultural heritage landscape there were many interests who saw unexpectedly the risk of having attacked this horrible thing [PV panels], and even there we did a great work of complaint in the press, at the Rai [National TV], we have denounced a lot and in the end they have been forced to make a legislation, which has a series of weaknesses but at least has blocked this thing, and regulated it in a fairly acceptable way.” - Interview representative environmental network - 25-10-2017

“Then we constituted a committee, to protect the [Ascoli] Piceno hills from the wild wind, to represent our interests, and since I was also three years in the environment committee, we tried to deepen the occasions of knowledge and we approached all the associations [names of three well known NGOs), to summarise, to all the associations present in the area trying to make a network and finally we contacted local, provincial and regional administrations. The municipality immediately made it clear that it was not favourable, so we urged the province to think and discuss it and then later the region” - Interview spokesperson citizens’ committee - 20-07-2017

“..authorizations continued to be released, that of Corridonia is June 5th, Loro Piceno 12th of June, those of our territory [Macerata], because then in the Ancona province there were many more..

I: So, what have you done?

R: we have made a campaign to raise awareness by supporting at that time a network of committees that was created to contrast the onset of these facilities realised in a way not entirely legal, in compliance with the law.” - Interview spokesperson citizens’ committee - 18-10-2017

The interviewees in the extracts presented stress the relevance of engagement in the political-legal sphere through advocacy, coalition building and the organization of collective action.

The extracts put it a crucial emphasis on the constitutive role played by the Provinces as the administrative meso-level between Municipalities and Region. Indeed, some provinces (Ascoli Piceno, Pesaro-Urbino) are often mentioned by the interviewee as timely proactive, more forward-looking and participatory oriented. This supports the argument and finding of Prontera (2008a, 2008b, 2009), which found that different Provinces have opted for different energy governance approaches. In particular, this reflects the findings on the types of governance, integrative and participatory, adopted by the two provinces of Pesaro Urbino and Ascoli Piceno: involvement of institutional and non-institutional actors in deliberative settings, creating

synergies and strategic partnerships between private and public actors and sectors, inclusive decision-making in policy formulation and minimization of conflicts.

Moreover, it is surprising to notice that the majority of opposition (and voices) in the date set come from the provinces of Ancona and Macerata, which according to Prontera have been characterised by a directive form of governance (i.e. low involvement of non-institutional actors, dirigisme and public management of local resources).

As reported in the first extract, on narrating the issue on PV on the ground, the interviewee remembers that the first to take action and limit the damage was the Province of Ascoli Piceno, setting limits on the provincial regulatory plan. The interviewee also stresses that at that moment the Provinces still had a role and that the Region still do not listened even after the Provincial intervention. This emphasis on the role of Provinces raises a point that concerns the potential of decentralised governance -something that has been limited at the provincial level— and that is linked to the relationship between levels of governance. What is relevant is that following the lack of recognition from the Regional Administration the network of committees was created as a direct consequence. Moreover, coalitions with local economic stakeholders and decentralised authorities were built. The advocacy action is represented as oriented to denounce in the public sphere the multiple injustices and instigate the political sphere to react. This advocacy is remembered as founding the support of local economic stakeholders as well as institutional authorities, and the interest and attention from national and regional media, something that is recognised as bringing an effective change by forcing the Region to recognise the problem and legislate and regulate the deployment of PV in a way that is not fully shared but at least recognised as fairly acceptable.

On the other hand, the second and third extract illustrates the discourse of spokespersons of local committees respectively opposing to wind in Ascoli Piceno and biogas in Macerata.

The first highlights that following the awareness about a wind farm project in the area, a committee was created to represent the interests of the area, and started to discuss, study and inform within the local community, as well as approaching regional environmental NGOs. This is represented as leading the local groups to join together and made a network involving multiple collectives. In this configuration, local citizens had the possibility to get their voice to be heard and re-presented by a more powerful group composed of experts, NGOs, local authorities, economic stakeholders etc, in different settings (public and political sphere) and communication channels (TV, press, debate).

The third extract, on the other hand, reflects a different provincial situation and network. The spokesperson explains that witnessing the ongoing release of authorizations in the area of

Macerata, in parallel to the already existing public discourse on their legitimacy, the formed committee joined and supported a network opposing to biogas to organise awareness-raising activities and opposition, conducting advocacy actions in local media and the public and political sphere. This network is participated mostly by local groups of the Ancona and Macerata provinces, which as testified by the interviewee were largely affected by biogas development.

Moreover, the construction of alliances and cooperation between citizens' local committees and environmental NGOs is remarked as providing the opportunity and space for *experiencing more democratic practices and mechanisms* ($f=5$), encouraging egalitarian decision-making and cooperation among the groups involved in the collective action (Maeckelbergh, 2009, 2011). In this regard, bottom-up participation represents a form of self-governance that assumes a prefigurative orientation, as a 'school of democracy' that develops and enacts the desired transformation in social and organizational life reality (Della Porta, 2009).

“it was a satisfaction to find a correspondence in the idea of acting together. I am often the author of the various documents because they [the actors involved in the network] know that are sent to them, so they look at it, they modify and after, I receipt them, and we put it to the vote. Those who express a positive opinion sign the document and then we exit with the press release. It's one for all and all for one.” - Interview representative environmental NGO - 14-07-2017

“we made information meetings, initiatives of discussion on the qualifying points of the law with the local realities, then dozens of meetings on the territory, we divided into provincial sub-groups, and then these sub-groups involved the local population on the themes” - Interview representative environmental network - 25-10-2017

“a sort of macro-association where we have always gone ahead with these assemblies in which everyone had a vote [...] this has meant that there was an internal democracy and therefore also the small territorial committees diffused throughout the Marche felt recognised and then heard” - Interview representative environmental network - 24-10-2017

The three extracts provide narrative evidence on the organizational arrangements of 'different environmentalisms' working together. Indeed, while citizens' committees are often unstructured, and above all not institutionalised, regional environmental NGOs are more structured and get greater access to expertise and recognition at least in the political-legal sphere. The point here is that different groups owning different resources and narratives come together to mutually strengthen their own contribution. Indeed, the issue of recognition is a crucial point here. Being often not institutionalised as civic associations citizens committees are often ignored from consultation/participation process, contrary to more institutionalised, although local, civic associations or regional environmental NGOs, which are present in the regional register of civic associations, and thus recognised.

As testified by the interviewee of the first extract, finding a common ground to act together is presented as a satisfying experience. The respondent underlines how different groups acted together to take position statements on the diverse environmental issues at stake (e.g. the regional energy plan, specific projects and infrastructures, land use policies and so on). A first draft is often written by the interviewee, a well-known representative and historical environmentalist, then the draft is shared through the wider network, commented, modified, discussed by its members putting it to the vote and signed by all those sharing the content of the communication. This strongly emphasises again the representation of unity, cooperation, dialogue and sharing as the strength of and potential of this kind of collective action (it's one for all and all for one).

While this utterance concerns the horizontal work in network, the second extract highlights instead the organization of the vertical and horizontal work of the network: a widespread community organising through locally-based meetings aiming to inform, discuss, and raise the awareness and engagement of local communities. This kind of participatory action is represented as relying on a great decentralization of groups organising banquets and meetings on the territory, divided for provinces and involving the citizens in debating the themes, the law proposal, and collecting signatures.

This form of participation can be fully considered prefigurative and falling within the new environmentalism (Hershkowitz, 2002; Speth, 2008), which covers all those movements and activities guided by the belief that strengthening the local is one of the key levers to instigate potential change toward sustainability. This is realised by encouraging local citizens, politicians, environmental specialists, and business people to work together to identify appropriate measures and take action to address environmental issues at a community scale (Connors & McDonald, 2011).

They can be also considered prefigurative because characterised by “movements groups whose structure is characterised by decentralised authority .. an egalitarian ethos and whose decision making is direct and consensus-oriented” (Polletta, 2002, p. 6).

Indeed, as the last extract makes evident this macro-network proceeds with moments of deliberation (public assemblies), where every participant has a vote, and where every voice is equally recognised (“being the president of a well-known and large NGO or the citizens of a small local committee”). This kind of democratic practice guiding the network is recognised and argued as giving the voice, and the fair recognition and treatment to those often lacking the symbolic and material (institutional) recognition to fully participate: the small informal local committees. The symbolic recognition is a huge point here. As I will demonstrate indeed, the

symbolic (institutional) lack of recognition has played a major role in the past as well as in the attempted participatory re-configuration activated by the Region.

The wins of this environmental coalitions and networks are manifold and often advocated by the same citizens, or claimed by local media, local authorities and so on, recognising in the concerns expressed by these actors the status of legitimated social knowledge.

So far, the paragraph provided multiple discursive evidence on the cognitive and emotional psychosocial correlates of bottom-up participation, such as feelings of collective efficacy, perceived socio-political control and influence, hope, enthusiasm or anger, distrust, and perceived grievance. Engaging in all these spheres (political sphere, public sphere, techno-scientific, media sphere), ‘fighting the battle and proposing alternative solutions’, has represented for many groups and individuals a huge investment of time and energy that sometimes has not been recognised, fairly treated or rewarded. This sheds light on a crucial aspect about the management of cooperative and dialogical relationships between citizens and institutions and the related negative effects: the disillusion and the disempowering effect.

“for this law, there was a bad [political] game. We presented this law, we had meetings with the councillor, territorial meetings, then the [regional] council decided to create their own text parallel to ours. This text took some general principles of our law, but then went in a completely different direction, in fact, emptied [of meaning] everything.

I: and nowadays, in what stage is the law?

We were convinced that the proposal would have been cancelled due to the fall of the regional council, but no, it remains valid [...] **from there, however, no one took care of it, no one took the initiative. Given the great effort we have done and how we have been played, there are no more energies. People direct energy on other things”** - Interview representative environmental network - 25-10-2017

“At the regional level, unfortunately, I have to complain about an absolute silence, and it is not clear what they want to do if a proposal will come out, as I imagine, from the council. And this would allow for statute obligations to reopen the discussion with a still valid proposal. So far, they told us that the earthquake issues completely overwhelmed them [...] but **there is a limit to everything, we believe it is absolutely essential.** [...] I hope you can interview the executives and officials working there” - Interview representative environmental network - 24-10-2017

The perception of manipulation or co-optation, the political disillusion, frustration and disempowerment are quite palpable in the discourse of two respondents of the network realising the popular proposal of law for the territorial governance.

Indeed, as the interviewee of the first extract highlights, the pathways for the new law is represented as a bad [political] game and argued as a placation and manipulation. Indeed, the respondent stresses that the network had different meetings and consultations with the Regional Council, that in the end decided to elaborate a parallel draft taking some fundamental principles

of the law and emptying them from the ‘original symbolic meaning’ as it was cultivated in the environmentalist network.

Then, both the interviewees recognise that the Region has pulled the path of the law for long until the expiry of the electoral mandate. This is recognised by the interviewee of the first extract as an intentional game, a way to placate protest and manipulate protesters. Despite this, the newly established administration started in 2015 a new participatory path for elaborating the law, while the popular proposal of law is still valid. However, also this path has not yet been completed, letting the Region, according to the interviewees, without adequate regulation to govern the territory. In fact, as shown in the second extract, the path was blocked by the heart-quake that fully interested and shifted the work of the Regional Administration. The feelings of frustration and disempowerment are clearly present also in the discourse of this interviewee, which complains an absolute silence from the Region, something which is conceived as unacceptable despite the situation, and that the issue of the law is of crucial importance and urgency.

6.2.6. Institutionalised participation in environmental assessment, decision-making and planning

This conducts us to the second part of the participation/engagement theme, which is devoted to report and discuss the findings on discourses about *institutionalised public engagement*. As previously explained, institutionalised public engagement involves different processes and activities ranging from one-way communication, such as information provision, to two-way communication, such as public consultation and deliberation. This part of the thesis will concentrate on the discourses and representations about institutionalised participation as it was constructed by the interviewees reporting their experience and conceptualization on the issue through personal or group narratives.

In particular, the majority of the respondents interviewed complain *the lack or scarce communication and information, which do not respect the Aarhus Convention* (f=19) on access to information, public participation and access to environmental justice.

“the Marche, as you know, live a situation of the old model of supply [...] there are many committees where there is a whole discourse related to the health of citizens and territory. Because then, for any novelty is not condemnable the citizen. Unfortunately, any news creates disarray, it creates difficulty to understand if it is actually the right solution. So, it is a path that is certainly halfway, it was not calculated what is the cultural significance of this operation.” - Interview representative environmental NGO – 28-02-2018

“There is really a need for a broader democracy of information [...] a participation is healthy, serious, real, aware only if there is complete and correct information. I cannot actively participate in a [decision-making] process if you do not make the data available” - Interview representative environmental NGO -12-07-2017

“access to the documents is an extremely complicated thing and should be the basis of the concertation. That is if you do not even have a way to see the acts, of what are we talking about, concertation of what?” - Interview spokesperson citizens’ committee - 18-10-2017

“although there are laws, there is the Aarhus Convention, which is a founding principle of the European community, which says that all citizens must be informed and be able to participate in decisions, and this is almost never done” - Interview political-institutional actor - 11-07-2017

“I1: I think that in a certain way there were not (communication or the involvement of citizenship), I think that the citizens have seen a power plant arrive as a result of an entrepreneur who has made a type of investment

I2: or a plan that was done miles away from them

I1: exactly ...” - Interview experts - 4-12-2017

“these really small power plants were opposed by the local populations, which have not been well-informed, and I have to say that I think it was a big mistake of all of us, in the region, and in general for all. Because I find absurd that people do not know the PV problems that are not only aesthetic, but there are many problems, pollution, heat island etc.” - Interview expert - 28-11-2017

Almost all the interviewees agree in considering the lack or scarce information and communication as a real issue hindering the potential of renewable energy deployment. In the first three extracts, the perspective of environmentalists is presented to show different points. As the interviewee of the first extract reflects, many of the committees emerged in the region come from territories affected by the ‘old model of supply’, which is the fossil one, and where the topic of citizens’ health is widely debated and at the hearth of public discourse. In reflecting on this fact, the interviewee recognises citizens cannot be condemned for not accepting technological innovations about what they are not informed or able to understand. In shedding light on this aspect, the interviewee implicitly admits that communication with and information to citizens to accompany the deployment of RET were lacking. Regional energy transition is implicitly represented as a halfway or interrupted path, for which the ‘cultural significance’ has not yet been fully considered and addressed.

Moreover, as shown in the second and third extract, access to information represents a very critical factor. Information disclosure is represented as urgently required for a broader democracy of knowledge, to build the necessary knowledge and capacities so that citizens can fully take part in knowledge production and decision-making. Indeed, access to information is recognised as the basis on which participation is and should be grounded. However, this is represented as greatly constrained by complicated bureaucratic procedures to access the

information. It is in this regard that the interviewee of the third extract externalises her disappointment by adopting a rhetorical question emphasising that if the information is the basis of dialogue, then, because information is lacking, it is not clear on what should be based this dialogue.

This point is further stressed by local and regional politicians as the fourth extract points out. The interviewee recognises that despite national and supranational laws, access to information, communication and participation in decision-making processes are very often not fully respected and ensured. To stress this, the interviewee uses an extreme case formulation that presents the respect of the laws and rules as exceptional rather than normative.

The last two extracts, on the other side, reveal the perspective of experts (public experts and professionals) on information and communication lacking or neglected.

In the first extract, in remembering personal situations during a group interview, few experts put in doubt - according to their own experience and sight- the presence of communication and citizens involvement on RET. Citizens are here represented as passively experiencing and suffering the results of investor's choice and project developers, or of plans that are dropped from the above. Indeed, this negative conceptualization of the regional activity about communication and information is greatly stressed by representing the entire process as ungoverned and unaccompanied on the one hand (investor's choice and citizens unaware) or imposing plans and strategies elaborated without including local perspective and knowledge (miles away from them).

Finally, also the public expert of the last extract recognised the fault and mistakes in promoting RET deployment. Indeed, in remembering the local oppositions to biomasses and biogas, he underlines that actually, citizens were not well-informed and that the responsibility and fault is a bit of all, of the Regional Administration and also of the experts. To explain this point of view he highlights the absurdity and irony of another well-known issue, the PV, and how public opposition and discourse was mostly characterised by aesthetic motives, which reflect a partial view and knowledge on the multiple problems of on-land PV (pollution, waste, heat island).

A further crucial theme about information and communication on RETs concerns the recognition that *communication and information on monitoring and risk assessment are crucial for acceptance* (f=8).

This is recognised by diverse actors, as economic stakeholders, citizens committees and expert, who mentioned several times the crucial role that monitoring should play in project development.

“I am talking about **an informative aspect: the monitoring, I can even site a thermal energy plant inside a city complex, but obviously it is necessary to demonstrate and show to the citizens who host this facility what are the monitoring activities that evaluates the risk.** If we go to **demonstrate the types of monitoring** and that there are **the possibilities to make clear prescriptions** to that type of system for authorization, **at that point obviously the citizens can understand and can also be implemented** [the technology]. **But it is clear if tomorrow you arrive and say we build [...] things that are not carefully planned, and citizenship is not involved, nobody accepts them!**” - Interview expert - 8-12-2017

“**we required a preliminary participation, during the project [design], a collective participation, and then some serious checks, that is a specific programmatic commitment regarding the controls of emissions, and soil. In short, guarantees that the plant is correctly managed**” - Interview spokesperson citizens’ committee - 18-10-2017

“**I think you have to give all the information in such a way to have a greater .. not reassurance, but awareness on the one hand about the level of risks, but on the other also about those that risks maybe are not.** Because there is **a multiplier effect that is often given by an inadequate knowledge [...]** now **you cannot enough to talk about biomass. People are alarmed,** but actually, they can represent resources and even full use of the supply chain” - Interview economic stakeholder - 21-11-2017

In the first extract, an environmental specialist is advocating the role of monitoring for enhancing the public acceptance of RET. In fact, he argues that thermal plants can be sited also inside city complexes (i.e. close to home) as long as one can make available to the community hosting the facility the information about monitoring and risk assessment, showing competence (proper management) and ethics (information disclosure on risks). This discourse greatly undermines the Nimby assumption on the distance of RET from human settlement and recognises acceptance also as the product of transparent information disclosure and proves about the facility correct management. On the other side, it is stressed that when project development and siting are not carefully planned, involving and including the concerns and opinions of citizens in these processes, acceptance can hardly be achieved.

In this regard, close to information disclosure and monitoring, correct management can be fully considered a crucial factor for community acceptance. Indeed, as already mentioned, competence is a fundamental dimension of trust (Earle and Siegrist, 2006), the degree of trust citizens have in public authorities or the project manager for the facility proper functioning and maintenance. This can be further recognised in the discourse of the spokesperson of a committee opposing to biogas in the second extract. The interviewee indeed, emphasises that preliminary information and effective participation since project development, as well as the communication and information on environmental monitoring activities are fundamental for the acceptance of biogas. This discourse is strongly associated with the concerns about possible malfunctioning or incorrect management of biogas plants and linked with discourses on citizens’ health (air emissions, soil). The fear for improper management is clearly presented in

the discourse by stressing the need of guarantees over time through a transparent monitoring program.

The third extract, instead, presents the perspective of an economic stakeholder, which highlights the significance of objective information on the risks, but also a two-way communication listening to and facing the citizens' concerns. In his discourse, the interviewee implicitly states that citizens are not well-informed which represents a multiplier effect on fear about unknown even improbable risks. This discourse largely reflects the issue of biogas, and once again citizens are represented as moved by fear rendering this technology not tolerated by citizens. In this context, the interviewee poses great expectation on the role of objective information provision to educate and inform citizens in a proper manner. This discourse is greatly shared by some interviewees, sustaining the *need for scientific and objective information to educate and inform the citizenship (f=6)*. Despite this, the limits of this kind of approach are recognised in the assumed inability of the public to take a rational stance about RETs and their more emotional predisposition to act moved by fear.

“is very frustrating because in these situations **one can try to behave objectively**, that is, **making a list of the costs and benefits of certain installations**. However, most of the time **people tend to focus their attention on some aspects**. Maybe someone who has various interests **talk about something that can configure risks for the population, even very vague even very distant, even very small, at that point any kind of rational reasoning is immediately stopped**” - Interview expert - 26-11-2017

“the thing that we have emphasised from the beginning was also **the information and participation, also conceived as a training moment of citizenship**, because in our *opinion very often there is a bad information and instrumentalization of citizenship* [...]so, **try to give information that is correct and transparent, in this way, where there is no prejudice and there is obviously no demagogy, maybe..**” - Interview economic stakeholder - 19-10-2017

“I am convinced that here we go ahead on the basis of stereotypes. What is missing, in my opinion, is **someone who has the courage** – it is missing here, and I think is missing a little everywhere, here for sure - **to say the bare and raw truth, to admit that certain positions are stupid, that is, the numbers, here we never see the numbers!**” - Interview expert - 28-11-2017

In the first extract, the public expert interviewed claims to have lived a very frustrating experience in public communication and information intended to citizens of the communities interested by RET projects. In this context, he complained the inability of the public to be rational in RET decisions and evaluate the project in terms of costs and benefits, and their tendency to be guided by irrational concerns (stressed through the three-part list very distant, very vague, very small risks) that undermine the possibility of a rational discourse and dialogue to emerge. A point that is relevant in this discourse is also the assumption that these public concerns derive from rumours about potential risks for the population, produced and circulated by persons having a personal (economic) interest. This discourse about the instrumentalization

of the public, with distorting or bad information, and the political co-optation of the local protests represents a shared perspective by diverse actors.

In this regard, in the second extract, the economic stakeholder greatly remarks and reflects this perspective. She affirms that the organization to which she belongs has constantly demanded to the Region a program of information and participation of citizens. These activities are conceptualised as top-down and pedagogical, aiming to re-orient the discourse on objective data (correct and transparent). The interviewee stresses the relevance of undertaking these activities because of an assumed disinformation and instrumentalization of citizenship. This emphasises how the public discourse and sphere are conceptualised: as flawed by prejudice, disinformation, demagoguery.

This conceptualization of the public and of the social climate is further sustained by another public expert, in the third extract, who however depicts a different picture. Indeed, in his opinion in both the sides of the disputes on RET, the communication and encounter are guided by stereotypes. The interviewee remarks also that what is missing in the particular (and generalised) situation is to face public opinion and concerns and demonstrate with objective data that some positions are not rational (stupid). This is represented as the bare and raw truth, something that public experts and politics have not the courage to do and say.

This assumed inability of the public to be rational and grounded in their discourse and thought on objective information, can be considered a rationale influencing actors to assume a more directive approach, preferring the DAD model (Decide - Announce - Defend) to inform to and communicate with the public, rather than preliminary public deliberation on alternatives.

On this topic, interviewees claimed different times their *criticism on the often-adopted DAD approach and the demand for upstream engagement* (f= 9), that is bringing together members of different publics and stakeholders in a dialogue about emerging technologies and innovations, in a phase previous to the elaboration of policies and decisions guiding their deployment and diffusion.

“this strategy of involving the citizens in the consultation of the plans started in 2015: a listening campaign, on this plan but also on other plans. Previously the plans were presented after the elaboration, and this is obviously a constraint, because using the knowledge and skills of those who work on the territory often moves the agenda on what are the problems and how to practically solve them, that maybe sometimes the region has difficulty to perceive [...] this requires an intelligent administration, willing to spend time and resources, because it is easier decide what you want to do and then communicate it” - Interview experts - 4-12-2017

“So, if the region is going to do a concertation work, it is obvious that citizenship is ready. I absolutely believe so, as long as the methodological rules are made clear from the beginning. Because the discourse of participation, you know better than me, is an extremely complex discourse. If you want to make real participation, that is to elaborate a [policy] text in a shared way, it is one

thing, if we conceive participation as it is generally conceived, that is, as a meeting in which the stronger has already made its decisions, informs the other and tries to convince him of the goodness of those decisions, and at most accepts minor changes, but not substantial, marginal, just to say that something has been done, then at these levels there is no intention to waste time.” - Interview representative environmental network - 25-10-2017

“To eliminate the conflict, as far as possible in a preventive way, one can do this only through a process of awareness and participation, prior to final choices [...]it is evident that you must also give a credible result. Certainly, not a consultation that ends up with sweetness and light [tarallucci e vino], we love each other, we have listened and audited and then I go forward. [...] I have been a technical consultant for several committees, for many projects with significant local impacts, and I assure you that sometimes we have managed to find alternative solutions to those proposed and that have led to results in a way that was acceptable by local communities” - Interview representative environmental network - 24-10-2017

This perspective is advocated by several actors, such as experts, environmentalists, as well as political institutional actors and economic stakeholders. This shared viewpoint concerns the past experience on the adoption by the Region of a DAD approach in engaging with the public. In the first extract, an expert acknowledges that institutional arrangements on this topic have been adopted quite recently with the newly established administration who undertook different participatory processes for the elaboration and update of regional policies on different sectors (e.g. energy, agriculture and rural development, territorial governance etc.). In making a comparison between the past and the more recent experience, the interviewee remarks that in the past policies and plans were elaborated and then presented and communicated to the various actors. This approach is strongly criticised and represented as constraining the quality and legitimacy of decisions, not recognising and including the contextual knowledge of those living and working in a direct contact with the territories. The inclusion of this knowledge during the elaboration of plans and strategies is greatly advocated by the interviewee as a means for enhancing the quality of planning, in the identification of problems and potential solutions which are hardly recognised by a centralised administration not fully aware of local dynamics and contingencies. This kind of institutional change is represented as urgent and requires a clever institution acknowledging the potential of this (participatory) approach and investing for this reason time and resources.

The distinction between different mechanisms and methods of participation and the presence of different rationales guiding engagement institutional practices are addressed in the discourse of the environmentalist in the second extract. The utterance is produced in relation to the (assumed) change of institutional practices of public engagement. In this context, the interviewee starts her utterance by pointing out that if the Region wants to really start a dialogue and implement a real participation the public is ready (i.e. is a political actor sufficiently aware

and competent to get involved). However, the interviewee clarifies that real participation can be fully considered such only when rules (and roles) are clear from the start of the process. This remarks the different conceptualizations of participation by different actors. Indeed, the respondent distinguishes between two assumed rationales underlying and then guiding participatory processes and activities. On one side, the real willingness of institutions to share the responsibility of decisions, and elaborate policies by co-production processes based on mutual dialogue and search for shared solutions. On the other side, emphasising the recurrent approach and conceptualization of participation, as the encounter between different actors characterised by power differentials (and maintained as such), with the stronger taking decisions and persuading and manipulating others, leaving little room for substantial change, i.e. constraining the agency and producing the uncertainty on the effectiveness of participation itself and the input use. In this regard, the interviewee recognises in the latter position and the DAD model the usual behaviour and conceptualization about participation by political institutions. This reveals in-depth distrust and disillusion about institutionalised participation and politics, and the related choice of avoiding taking part in a fake participation, namely a choice of defection (there is no intention to waste time).

This representation of institutionalised participation as persuasion and manipulation is further stressed by the environmentalist interviewed and reported in the third extract. Indeed, the interviewee argues that conflict management and resolution can be undertaken only by adopting a participatory approach that aims to build public knowledge and capacities (awareness-raising), and stimulate deliberative participation preceding the decision-making (participation prior to the final choices). In this regard, the interviewee remarks that this public engagement practice in decision-making should conduce to credible results/outcomes. This stresses that decisions should reflect the broader view of the situation, fully addressing public concerns and considering more information and alternative ideas and knowledge, and with conclusions reflecting the best available evidence so that participants accept as fair both the decisions and the processes leading to them. In this light, the respondent compares this kind of deliberative participation with participation as conceived by political authorities: a mere listening activity ending up without taking into consideration the input in final decisions or producing credible and legitimated results (with swiftness and light .. we have listened.. and then I [regional authority] go forward). Then the interviewee concludes the utterance by remembering and narrating the personal experience as expert advisor/consultant for local committees and on different projects characterised by significant impacts on the local place. In choosing and reporting his experience, the interviewee aims to underline and sustain that including local

citizens in the process and discussing with them the conditions of change ambitions and projects, it is possible to find an alternative, shared and more acceptable solutions. This reveals that the main factor hindering this change in participation is recognised in the effective willingness of institutions to share responsibility and power in decision-making, allowing and stimulating spaces for dialogue and mutual influence, which reflects a change in interpersonal relationship and treatment. Recognition and fair treatment of other and their knowledge are a vital part at play in the participatory encounters. All these discourses critically point out the different rationales underlying participatory activities. It is worth notice that all the environmentalists interviewed represent and conceive participation as based on substantial, instrumental, and democratic rationales. Participation should be managed in a way that enhances the quality of decisions, rendering them more socially legitimated - even if actors do not fully agree with the recommendation for action – and responding to the democratic principle.

In this context, however, as testified by multiple actors, institutionalised engagement is often conceived and undertaken in a different way. In particular, interviewees claimed different times the *criticism on invited participation and group segmentation* and the *limited dialogue among actors* (f=8) as constraining the potential of public and stakeholder participation.

“[compared to the PEAR] on the [law for the] government of the territory there was a greater work by the Region, that is, the themes were divided, so landscape, urban regeneration, and each title involved information meetings and provided the possibility that associations could express themselves. Something that has not been done on the PEAR, where there was the presentation once or twice of the document and then the final restitution, so probably the path of PEAR would be interrupted, in the sense, approved the document, the work between the region, citizens, and associations would probably be interrupted [...]

The auditions are made separate. There was a separate management, first the administrations then were invited the environmental associations and farmers, then trade unions, various stakeholders. Unfortunately, this is a modus operandi that they use on the whole line, in short, from the listening campaigns, we are unpacked in this way, are made different packages” - Interview representative environmental NGO – 28-02-2018

The extract just presented is here used to summarise some critical factors about institutionalised participation in planning and programming. Indeed, as it is testified by a representative of an environmental NGO, a first critical factor can be found in the way participatory processes are designed to build and enhance (or not) capacities of the diverse actors and fundamental for better (mutual) understanding, dialogue and decision-making. The respondent underlines that in this regard, the participatory path for the law on territorial government has been characterised by different moments of information and dialogue divided per theme, where participants had the possibility to inform themselves and better understand the issues at stake and dialogue with

others. On the other hand, the interviewee underlines that this kind of approach has not been used for the energy plan, where no preliminary information and contextualization of the plan has been provided, a consultation with a limited or inexistent dialogue between the parties. The interviewee clearly remarks this point by representing that participatory path as a limited time frame of participation and cooperation, excluding the dialogue among parties (e.g. citizens and experts, environmentalists and economic stakeholders) by means of consultations separately organised and managed by segmenting groups/interests (unpacked). The interviewee proceeds in stressing this critical issue by referring to invited participation as separate auditions of the diverse groups conceived as expressing a similar point of view and having similar interests. For this reason, participation is argued as unpacking/segmenting social reality and treating the different parts separately, which is recognised as the *modus operandi* guiding institutionalised participation events (e.g. consultations with written observations and scarce dialogue). This kind of approach reveals that institutionalised participation is often undertaken limiting to the minimum the deliberative encounter between different interests, opinions, and forms of knowledge of the diverse actors contributing in different ways to the broader energy and environmental policy scenario. This kind of institutional practice, assuming interest groups clearly identifiable and characterized by shared opinions, values, and interests, has been greatly criticized by social research, highlighting how these assumptions about ‘stakeholders’ and their contribution to decision-making may conduce to not recognize the diversity of publics and related competing visions and perspectives (Chilvers & Longhurst, 2016).

Moreover, in this regard, it would be questionable to what extent this separate participatory (listening) approach can lead to ‘shared or better solutions’, ‘mutual understanding and trust’ ‘identification of multiple institutional barriers and ecological constraint’ or the ‘identification and discussion of alternative solutions’.

Despite the remarked limits surrounding the participation in policy-making and planning, the majority of actors interviewed recognised a significative change and improvement in institutional practice, letting interviewees hope for further improvements. First, regarding the planning of the regional energy plan, many of the interviewees claimed their appreciation on *preliminary involvement as providing space for action and influence* (f=8).

“Actually, unlike the past, something has been built together. They waited for the proposals of the stakeholders [...] and then they built the plan, so maybe the fact that it was not pre-packaged is useful because at least you had room for manoeuvre, to be able to affect” - Interview expert – 11-09-2017

In the extract presented is illustrated a common perception and shared discourse among actors, which refers to the appreciation of preliminary consultation in going to elaborate the plan. Indeed, as testified by the interviewee, a change and shift from the past is clearly visible and recognised in the final outcome represented as built together. The fact that the plan has not been previously elaborated and presented (pre-packaged) is recognised as a crucial indicator of the regional willingness to construct the strategy using the input deriving from the consultations. Furthermore, this fact is recognised as giving to participants the space for expressing and letting their voice to be heard, and the required space for action or agency (room for manoeuvre, to be able to affect, i.e. the possibility to get influence and the opportunity of eventual modifications induced by the publics involved).

While recognising these instrumental benefits of preliminary involvement, another crucial positive aspect of the experienced institutional change is identified by few respondents in the *recognition and inclusion of minority groups previously not recognised* (f= 6) and not invited to participate (e.g. local associations or opposition unstructured group).

“the new administration has opened a public hearing to all the subjects, even subjects and associations that maybe were not like us constituted in non-profit organization, so all those who had something to say [...] they did a comprehensive work [inclusive- Lavoro a tappeto], which we appreciated because it is a beginning, a start of what should be effective democracy, that is you listen to people, not only those who have interests to make. This was the keystone that allowed us to look at the Marche Region for the first time in a slightly different way, before making the plans they came to discuss with all of us” - Interview representative environmental NGO - 14-07-2017

“we pointed out that the listening campaigns should have been open to all the associations of interest, therefore to enlarge the participation to all, not just to some perhaps more famous NGOs. Because minor associations, which have a more local range of action, and which are perhaps not very structured, they tended to not invite them. Many associations that until then were ignored, were invited to participate, we were also pleasantly affected” - Interview representative environmental NGO -12-07-2017

As it is reported in the two extracts, the two environmentalists interviewed remark the positive evaluation of the institutional procedural change in planning and participation. A recurrent argument concerns the recognition and inclusion of subjects and collectives that were overlooked or not adequately recognised in previous planning and decision-making. In fact, this is semantically reflected in the utterances of the two interviewees, which refer their appreciation of such an inclusive opening overcoming the institutionally-grounded lack of recognition (i.e. the absence/presence of the collectives in the regional register of environmental associations, on which invited participation is often based upon) of more locally-based associations, or not structured/spontaneous groups such as local opposition committees, that often had to find some escamotage to get the recognition and let their voice to be heard (i.e. building advocacy

coalitions with environmental NGOs, local political authorities, economic stakeholders, and so on).

Despite the recognition of several limits and critical issues surrounding institutional change on participation, by undertaking a preliminary involvement and attempting to be inclusive of all those voices often ignored, the Regional Administration is perceived and represented in a more positive light. This can be identified in the first utterance, where this step forward made by the institutions is represented as a keystone for having a different representation of the Regional politics, and a first step of the path towards a greater democracy, which listens, considers and dialogue with all those having an interest beyond the economic one.

However, it should be clarified that this kind of preliminary and inclusive approach is represented as the result of a subjective choice or personal discretion of political representatives and thus a random thing rather than a standard or common practice in decision-making and planning. Indeed, this is recognised by different representatives of the ‘environmentalist group’, which underline how the *lack of clear and binding rules for participatory and inclusive decision-making (f=5)* has hindered the potential for institutionalised participation.

“Unfortunately, not having a binding law, we were faced with the most different situations from the procedural point of view [...] sometimes they denied to us of participating, in some other cases Municipalities have even made us intervene and bring documentation. This is an almost subjective approach, depending on the person in charge of the offices. It is unacceptable, this must be said!”
- Interview representative environmental network - 24-10-2017

“I was not allowed to verbalise anything, so I do not understand why the last year I was allowed to say something and verbalise at the end of the services conference. I asked: "please could you explain to me why the last conference of services was allowed?" and the president's textual reply was: "because this time the president is me” - Interview spokesperson citizens’ committee - 18-10-2017

As the two extracts show, the two interviewees denounce a set of situations of procedural ambivalence, in which citizens are excluded or included (in having or not a voice or the right of documenting) in decision-making procedures depending on the persons in charge. Indeed, they remark how such inclusion has been determined and and have varied depending on the persons in charge of the competent office. In fact, while in the first extract, the interviewee shows his disappointment by stating the unacceptability of this ‘subjective approach’ and demands binding rules for regulating and ensure participation, the second interviewee utilises an active voicing in reporting the explanations provided by the person in charge, demonstrating that the denial to document the procedure was based upon personal decisions of the person in charge. All these the situations described by participants had the function of showing how lacking mandatory rules on (implementation of) participation allow the emergence of

procedural discriminations, taking sometimes the form of misrecognition operated by public officials.

To summarise, despite the many critical issues identified and discussed by the interviewees, almost all the respondents state a sort of appreciation about the attempt of re-configuration, sharing and opening of the Region (preliminary involvement, recognition and inclusion, perceived efficacy/influence) and underlined the enhanced quality and legitimacy of the final outcome.

Indeed, all the interviewees share a common discourse and belief, and the same rhetorical construction (disclaimer) showing the recognition that *a change has occurred*, with a *region more willing to include, listen, and consider the voice of diverse social parties* in decision-making and planning, *but more sharing, constructive and continuative dialogue are required* also in the implementation phase ($f=22$). In this regard, it should be underlined that this shared discursive pattern emphasises different meanings. All the actors share the idea that participation should not be treated and undertaken as an event limited in time and space, but rather as an ongoing process necessary in all the circular phases characterising planning and decision-making (assessment – dialogue – decision – implementation). Participation is demanded as continuous and systematic, in all the policy sectors to ensure the social, economic, and environmental sustainability of decisions, and their feasibility across time and dimensions (technical, economic, institutional, social etc.).

Indeed, respondents from all the groups (economic stakeholders, experts, political actors, and environmentalists) stressed the need for monitoring on plans and projects in order to promptly intervene or reorient strategies and plans.

“I1: we have detected this willingness to listen and we hope that the Region will be even more able to listen to us and receipt the indications if they believe that our indications are correct

I2: this is what we would like, a constructive dialogue, and a continuous dialogue

I1: also during the implementation phase of the plan, a true sharing is when you want to share seriously

I: so, what do you expect is that there is a communication [..

All: **a real dialogue]**

I3: at least an annual briefing, however, [to do] not remain excluded

I2: a real dialogue between the various subjects

I3: because then let's be clear, this is a plan and the implementation phase will be a little different, very often is very different”

“On the implementation of the plan, there has not been an ongoing dialogue with the region. Neither before or now, this is recent, it has been approved a year ago, so I mean, we asked with a certain consistency “tell us how it is going, with the data etc.” [..] we asked that the monitoring should take place constantly” - Interview economic stakeholder - 9-11-2017

“we asked the involvement of the social parties, not only to monitor but also to correct. The region can use the associations, trade unions, representatives of the interest groups or the territory [...] that is, not wait for the next plan to read the examination and analysis of things that have not worked. Some things can inevitably change [...] you need to correct during the race, and if you have all the subjects involved you can also correct better” - Interview economic stakeholder - 5-12-2017

The three extracts presented clearly show this point on the demand for continued participation and dialogue to promptly intervene and adequately correct. In the first extract, a group of expert professionals interviewed is commenting (among other plans) the regional energy planning process. In the group interview they recognise the change in institutional practice, and for this reason, they stress the expectation and hope for more continuous and constructive dialogue. It is at this point that they introduce and emphasise the discourse on participation to monitor the plan and correct/reorient the strategy. In so doing, they all underline the necessity of institutional arrangements in this regard, as the right solution to monitor and respond to the over changing scenario on which the plan is based upon.

This is further stressed in the second extract, where an economic stakeholder, aware of the past negative experience, claim his disappointment on the regional continuous lack of commitment in providing moments of monitoring, updating and dialogue among subjects. This is emphasised also in the third extract, and what is relevant, is the common reference to the past planning, which went forward without monitoring and the inclusion of the diverse subjects in reorienting the strategy and take adequate regulatory and institutional arrangements. This is relevant for different reasons. First, despite the appreciation for some institutional change, many of the subjects are very critical and suspicious towards the participatory path undertaken by the Region, often conceived as an attempt of persuasion, manipulation, or tokenism and to respond to the more binding laws. Second, there is the recognition that the rationale of the Region was to face and manage a situation of social (and institutional) conflict and increasing distrust towards the regional institutions. For this reason, the common belief is that institutional change should be accompanied, by demanding such particular attention to institutionalised participation over time and learning by the past (unlucky) experience.

In this regard, many of the actors interviewed, without distinction on the belonging group, represent themselves not only as actors having an interest on the issue at stake, but also having the experience and knowledge to actively support or promote the strategy, providing the knowledge and view on the territory to reorient it over time.

6.2.7. Facing the social/relational side of the regional energy transition: representational dynamics of recognition, resistance and conflict

This paragraph presents and discusses the findings that concern what here I define the social/relational side of energy transition, namely the interplay of representations of social categories in shaping the relational encounter between actors. This is relevant to understand the anticipations/expectations (based on stereotypes, implicit models, or prejudice to name a few) and representations about others at play in influencing the dialogical encounter between different types of knowledge, namely how (meta-) representations have the potential of orienting the positioning of self and other and the consequent dialogue. This has been realized also in the analysis and reconstruction of the regional public sphere examining how different actors represented themselves and others in the many disputes across time and territories. However, in the analysis conducted so far, the presence and voice of experts were in some way neglected, as it was almost the same for economic stakeholders. Indeed, in the data sets I was able to get a picture on the interaction between different actors (experts and politics, citizens and politics, local and regional authorities), but little about the dialogue between citizens and experts or between economic actors and citizens. These situations were almost invisible (at least with regard to my reconstruction and analysis) in the public sphere, with the scarce presence of companies and (public) experts beyond potential allies of committees and environmental NGOs (e.g. agriculture representative, expert advisors/consultants, or scientific environmentalists). While much has been documented so far on the dialogical encounter between politics and protesters, or between experts and politics, further elements of reflection on the role of (meta)representations in guiding the encounter between actors are introduced basing on the way knowledge and positions of others are perceived and consequently treated. In this regard, the analysis focuses on aspects such as anticipation (expectations), evaluation, symmetries. Indeed, the SRs approach assumes that representations are sensitive to experienced (power) relations and that the outcome of knowledge encounters profoundly affect the emergence and change of meanings.

With regard to the dialogic self-other-object triangle overlooked so far: the experts-publics relationship, the representations of the public, and in particular of opposing publics (citizens' committees) oscillates in a continuum that goes from the most extreme BANANA and NIMBY representations to that of citizens as sensitive consumers and energy citizens.

The representations of the public as *NIMBY or even BANANA* (Build Absolutely Nothing Anywhere Near Anyone), *underlining a very negative view of citizens* (f=5) is often advocated,

especially by some experts and economic actors. In this regard, many authors have indicated the usefulness of analysing the implicit models or representations of the public (Maranta et al., 2003; Barnett et al., 2012) by experts or policy and economy actors.

However, scholars have critically warned researchers interested in the study of NIMBY naturalistic discourse (Burningham, 2000; Batel & Devine-Wright, 2005), about critically reflect on their own assumptions, and about how NIMBY should never be used as a concept or category used by the researcher himself. With this point, I aim to emphasise that during the entire research, and particularly during the interview I never used NIMBY (or similar concepts and assumptions) as a shorthand concept to elicit the perspective of the interviewee in this regard. Rather, I often referred about the phenomenon through terms such as public/community responses or local oppositions, or social acceptability of renewable energies.

In interviews and/or recruitment communication I preferred to present the research and the interview in the more vague term, interested on the 'social dimension' of renewable energies and related strategies and policies, such as interaction, communication, cooperation or conflict. However, I should remark that in presenting myself as a PhD in social sciences interested in energy policies, planning and technologies, and affiliated with a Department of philosophy, education, sociology and applied psychology, most of the interviewees has demonstrated an awareness of some research strand or terms of which I have familiarity, and recognising (assuming) my figure as a sociologist.

It is in this context that some of the interviewees used the Nimby and Banana concepts by taking for granted my knowledge on the terms.

“Energy is a theme on which the population is sensitive [...] but then since everyone knows that they have energy inside the house, and therefore do not risk, when it comes to discussing these issues they are all rigorous and uncompromising. About energy, if it is not NIMBY it is BANANA. Unfortunately, there is no ability in the population to rationalise energy issues and take objective decisions basing upon costs and benefits ratio. People on these issues are prone to frighten themselves. They arrived to say that a cogeneration plant was able to bring cancer in the valley, and people believed in it and get scared, people who are not experts in the subject, rightly frightens. Once fear is there, you cannot convince them anymore that the risk is not there. If you are in favour you are never perceived impartial. They have also accused me, it is a hop that people think badly [of you], “you say yes because you are working with those who want to do” so it is really difficult this type of approach” - Interview expert - 26-11-2017

“The attention to the environment here is maximum because is an extremely small society, a built-up environment, so there is a lot of attention both from the decision makers but especially and unfortunately also from the people, who from this point of view do not understand anything. If there is a place where NIMBY BANANA, call it as you like, the Marche is undoubtedly [...] you never see the data, and when you tell to someone that the power plant is two [Fiat] panda engines [car], that looks at you and thinks that you are an asshole who wants to take it around. Here is the matter, so surely this is typical of the Marche more than in other places, there is the clam closure, the

famous banana if there is a place where the BANANA works, do you know it? build absolutely nothing anywhere near anyone!” - Interview expert - 28-11-2017

“We believe that there is this possibility of smoothing this famous effect of the NIMBY, and therefore of using informal moments [...] citizenship might be interested, and it would take more serious information on these issues, otherwise you will get lost behind to the fears, because now we all know everything, we access everything but we are prey of the fears, of the irrational, and the scientists, but in general the scientific data are no longer valuable, they are put on the same basis as heard or generic terror that is ventilated. Then a communication that is effective and transparent but also based on technical data.” - Interview economic stakeholder - 21-11-2017

The three extracts are here presented to highlight a point. The first two extracts derive from interviews with experts that had experience of research and consultancy for the Regional Administration. During the interview, both the experts introduced the NIMBY as well as the more extreme BANANA concepts to represent the public. Indeed, in the first extract, the interviewee starts his utterance by remarking that energy issue is a very sensitive subject. In this context, citizens are represented as vigilant, rigorous and do not wanting to compromise. This attitude assumed in the public is then connected to a general selfishness of who is deficient of knowledge to understand or be aware of the problems, and do not care because they have the access to basic energy services. It is at this point that the interviewee stresses the negative representation of the public by presenting ‘citizens of the community affected by RET projects’ in a continuum between NIMBY or BANANA, and thus excluding other alternative public reasons or representations. The interviewee proceeds by remarking how, according to his experience, citizens are never rational on energy issues (unable to use a rational approach) and always prone to being afraid about new installations and extremely susceptible to rumours on impact on health and the environment. This kind of attitude of non-experts is often represented as understandable by experts, who refer to the emergence of fear as something obvious, a normal effect, which however is so insidious that after it emerges it is almost impossible to have a dialogue and convince citizens of the contrary. Finally, the expert introduces further experiences denoting the citizens’ misrecognition, mistrust and accusation about experts. Indeed, the interviewee affirms the impossibility for experts of being perceived as neutral, impartial and objective in the cases where they are in favour of the technology/project (it is a hop that you are accused). Even if (public) experts have no direct relationship with companies, the interviewee reports the experience of being accused and linked with those having a (political or economic) interest in the project.

Even in the second extract, the expert reports a personal perception of citizens as extremely sensitive on the environmental matter and very much close to the implicit assumptions of the discourse in the first extract. This kind of public attitude is traced back to its causes that are

grounded to the industrialization and urbanization processes in an extremely small society. In this context, the attention on the environment from different actors – including experts and decision-makers - is claimed as maximum. However, in this context, citizens' sensitiveness is particularised from the entirety and conceived as an obstacle (especially and unfortunately) because of a lack of knowledge (who do not understand anything). Following, the interviewee reproduces the same discursive representing and positioning of Marche citizens in the two more extreme representations of the public: Nimby or Banana. The particularization and contextualization operated clearly have the objective of emphasising that the concepts of Nimby and Banana greatly fit in describing people living in the region, their motives and their actions. This kind of representation of the public is then rendered more factual by reporting a personal narrative. The episode is presented to render self-evident the irrationality and ignorance of the public on technological subjects, the social climate of distrust and scepticism towards experts and a closing attitude from the citizens. Indeed, the interviewee remarks this by claiming that when expert intervene to say or demonstrate (comparing) with data something that is opposite to the committees' claims, then citizens end up in misrecognising expert knowledge usually treating it as a partial opinion from someone paid by the company/companies potentially involved in the deals (they look at you and think you are an asshole who wants to make fun of them). The public attitude and event reported by the interviewee aim to demonstrate once again the total closure of citizens towards and distrust on scientific claims advanced by experts. The misrecognition and delegitimization of science and scientists are further stressed also in the third extract by an economic representative. Indeed, the interviewee asserts that by providing transparent and objective information (communication that is effective and transparent but also based on technical data) to the public and using informal events to 'educate' citizens has the potential of attenuating the Nimby effect. Again, citizens are represented as having an irrational attitude and emotive orientation (get lost behind to the fears). It is at this point that she underlines that however the problem is more complex and pertains a constant delegitimization of science (scientists, but in general the scientific data are no longer valuable), the increasing instrumentalization of citizens, populism and the post-truth era (we all know everything we access everything; scientific data are put on the same basis as heard or generic terror).

“I realised that even the smallest committees do not simply move on the basis of more or less ideological or demagogic oppositions, but they are even documented by asking experts of the highest level, an opinion, technical assistance, and this means that we are in the ambit of article 118 of the constitution, that is where there is the subsidiarity of the citizen with respect to the

administration [...] It is not true that citizens are not aware or careful about what is happening in environmental and energy matters, health etc, damn if they do. They are more attentive than before and then we must make the administration understand that they can no longer think it is enough to just write in a program ten words, of sustainability we fill all the mouths. Now the citizens have understood that there is this risk and therefore they are more careful than before.” - Interview representative environmental network - 24-10-2017

However, this representation of public as ignorant, selfish and oriented to have emotional and irrational responses towards the siting of RET is greatly resisted and criticised by representatives of environmental NGOs claiming that local oppositions are not based on ideology or demagogy. Instead, most often oppositions are argued of being informed, accessing and using expertise and asking technical assistance fully exercising what should be their constitutionally-based right and expected role (article 118; the subsidiarity of citizens). The interviewee underscores that citizens are often more aware than is usually conceived, and is this sensitivity and awareness of potential risks that motivate them to participate and demand pragmatic and sustainable policies and not the usual rhetoric on sustainability and participation having no effect on reality.

However, what is relevant in many of the discourses of experts is the lived experience of lack of recognition, distrust and constant delegitimization questioning the neutrality, personal interests and competencies at stake in the situation. This awareness seems in some way a motive of frustration bringing sometimes experts to put in doubt their own communicative and interactional approach or the usefulness itself of adopting a participatory approach.

“Here, both from our side of applied research, and on the side of decision makers, you can bet that it has been tried to do the best, we have been there inside [...] you can be sure that what happened, happened simply because a wrong operation was done, I think, as I told you, communication was wrong, there's nothing else”- - Interview expert - 28-11-2017

“I1: we always say that we are competent, that we can give support, but there is something that we have been asking for some time in our rooms, we are probably wrong about communication, [interpersonal] contact, we make mistakes, and it may be interesting to understand how to improve this situation [...] we should make a step closer to the citizenship that does not perceive us as a category that can perform an activity for the community, but only a profitable activity for itself [...]

I2: maybe we should be the ones we propose, but it takes time, there must be an emotional involvement and you have to believe in it. But it is fundamental because often they see ourselves as those who intervene only because they have a personal advantage [...] but it is not the whole category that is so. Absolutely, especially in institutional activities, it is the opposite.” - Interview experts - 4-12-2017

“then I think we live a historical and social moment in which we do not recognise anymore the competence, I mean that each of us is convinced that we are self-sufficient, so having the internet

and the opportunity to learn allows us to acquire skills. In this way, the value of competences is no more recognised. For sure the error is also of who has the competence, the way it transmits it and makes it available, and here it opens up a whole new world” - Interview expert - 8-12-2017

Indeed, as the public expert of the first extract underlines, by adopting a rhetorical device of stake management and confession (i.e. admitting that both from his group of belonging and the Administration has been done the best they can), is that the many problems occurred can be explained as caused by mistakes in communication. In this way, the interviewee stresses that while institutional actors and their advisors did their best, he admits the possibility that the mistakes of the operation (i.e. RET development) can be traced in the communicative activity that would have accompanied the deployment and diffusion of RETs in the region.

In the same extent, traces of this meta-knowledge of experts, that is the experts' awareness of how they are perceived and represented by other, can be found in the second extract, where a group of professionals is performing a group reasoning assuming citizens' perspective. In so doing, the first utterance starts by introducing a long-time question about why citizens perceive the category of experts (in this case the engineers) as individuals pursuing (personal/professional) private economic interests and not the public interest.

In rhetorically asking the reasons for this assumption, the interviewee underlines the importance of learning and building social capacities to engage constructively with the public. Indeed, she stresses this point by underlining the probability of errors made by experts in communicating and interacting with citizens, and the personal and group interest to better understand the reasons behind this issue and improve the dialogical encounter and approach with the general public. Following this personal reasoning, a further interviewee intervenes to introduce and add a particularization from the discourse of the colleague. Indeed, he underlines that what advocated by the colleague requires a stronger motivation by professionals of the category (emotional involvement and personal beliefs), considered the resources (it takes time; it is not remunerative) to dedicate in this public and voluntary activity. In this way, the interviewee clearly aims to particularise the group of interviewees (and those other active participating members) from the rest of the category/professional order. What is more relevant in the discourse of the interviewee is the final part of the utterance. Indeed, here the interviewee complains the perceived misrecognition of the professional group in their public institutional activity, which is viewed as clashing with the reality: the social category intervenes in institutional sphere aiming to the social utility and making a public service and not aiming (only) to get professional advantages. This interpretation finds further evidence in the

discourse that follows the utterance, underlining the different activities the group members offered voluntarily for the public good (from their widespread work and cooperation with the civil protection following the sequence of heart-quakes in the region, to their availability to information meetings and debate on themes of their expertise such as the energy one).

Finally, the last extract refers to the representative of an environmental authority. Once again, the theme on delegitimization of knowledge and competence is at the forefront in the encounter between experts and the citizens. The interviewee emphasised this point by underlining the historical social moment in which these relationships are grounded. In this way, he underlines the role of the internet in providing the false belief of having just a click away all the knowledge we need, undermining as a consequence the value and recognition of competences. This utterance, that refers to the concept of post-truth, is then grounded to a further aspect. In the same extent of other discourses, expert recognises that errors can be found on both sides, indicating the relevance of the way experts communicate and make available to other their knowledge. Once again, this discourse stresses the role of more 'social competences' to orient and manage the dialogue among experts and non-experts. This part of the discourse is clearly remarked as of huge relevance in the field (it opens up a whole new world), a widely debated relevant issue among different expert publics.

On the other hand, for what concerns the social side of RETs' deployment and diffusion, the thesis widely discussrf on the representations characterising different actors (regional and local politics, protesters and environmentalists, firms) and how these guide interactions shaping cooperation (coalition building and networking) or conflict (legal, mediatic and political disputes). However, some points should be emphasised about how the re-configuration of the regions, or the institutional change, is or not building trust, dialogue and capacities to govern and manage energy transition. Indeed, as many actors testified, the limited dialogue is greatly affecting planning and implementation. Experts often find themselves between economic and political interests, a position of discomfort and source of frustration. For this reason, it seems that most of the time experts carefully avoid engaging with the public because of negative anticipation and expectations grounded on previous factual evidence.

Experts and expertise are clearly claimed and requested by all the different parties advocating an increase of communication and dialogue to improve all the phases of the energy transition process (from assessment, dialogue on alternatives, decision-making, to implementation and monitoring).

However, it should be remarked the 'social climate' and the facets of public discourse to understand the kind of context in which experts are expected to contribute. The social climate

is characterised by a deep politicization of energy issues, embedded also in institutional conflicts between local and regional authorities; a climate of in-depth distrust towards politics, science, and firms that is grounded in past and present experienced (power) relations. Local population and political authorities, often indicated as local communities or territories to indicate their usual connection and coalition, are often misrecognised by experts and economic actors, who see in this coalition a homogeneous entity characterised by NIMBY and NIMTOO assumptions: selfishness, localist and parochial attitudes, lack of rationality and emotional orientation, political instrumentalization, populism, politicization of science and post-truth. While these assumptions may find some effective confirmation within the multitude of local oppositions, especially in the first part of innovation deployment without preliminary information and communication, local territories are condemned by a constant misrecognition of their motives and, I argue, consequently treated. Actually, the analyses discussed so far show a different and quite more complex picture, where the coalition between local politics and residents, as well with environmental NGOs, experts or local stakeholders clearly reflect claims for recognition, inclusion, equity, respect, sharing, dialogue, influence, health and environmental protection, and the preservation of common goods among many others.

“people get scared and say no, at that point the local politician when the territory says no, has no alternative to follow them [...] sometimes there are initiatives a little bit cheating, or dangerous for the environment and not necessary for the community, and there would also work the veto of the public opinion and territory. The fact is that the veto of public opinion and of the territory works for everything fundamentally [...] I also participated in situations in which citizens were preliminarily involved to understand if it was worth going forward, but the result was always the same, NO!! this is the common data that I think is impossible to not see in a negative way [...] adopting that type of participatory approach the results are bad, at least from my experience, I cannot tell different stories from these because these are the stories I lived” - Interview expert - 28-11-2017

“and even that project was interrupted because for each municipality in which the power line had to pass, a committee was formed with the mayors on the frontline [...] the territory cannot be blamed because it is worried about the state of health of the environment, but very often this is the result of a failure to seek the necessary involvement of the populations, these things cannot be dropped from the above, and even then we are always in the middle, mediating” - Interview economic stakeholder - 5-12-2017

As testified in the first extract, the siting of RETs is represented as problematic considering how public responses often find the support of local politicians. The behaviour of politicians is argued as having no other choice because, oriented to preserve their political capital, the popular consensus, and avoid unpopular choice and consequent conflicts. In his utterance, the interviewee remarks the factual implications of this kind of socio-political situation that can be identified in the language variability and the use of a disclaimer. Indeed, through this discursive

construction, the interviewee aims to highlight the existence of project proposals and entrepreneurial activities that should be stopped (cheating, dangerous, and not necessary for the community), and at the same time, how the veto of local communities do not distinguish from positive and negative proposals, but rather reflects a generalised and aprioristic no, totally stopping or blocking every RET project.

The respondent tries also to render more factual and persuasive his argument and point of view by reporting his experiences as an expert across different events and practices of involvement, even preliminary, always conducting to the same kind of response and output. For this reason, the interviewee conceives participation, and adopting a participatory approach in general, as useless, not working, and producing outcomes and effects that are contrary to the rationale or aim guiding the implementation of participation activities and communication. All these episodes reported are fundamental to understand the anticipation and expectation guiding the engagement with or avoidance of public.

On the other hand, as affirmed by many actors, among them the economic representative of the second extract, the territory, including residents and political authorities (with the mayors in the frontline) can and should not be blamed because are worried about environmental conditions. The emergence of local opposition, in this case regarding the Fano-Teramo HV powerline, is represented by the interviewee as determined most often by failures and lack of procedural nature (recognition, inclusion, and mediation) and the imposition of top-down decisions (dropped from the above).

That said, another issue that pertains the limited dialogue and interaction among actors are represented by economic stakeholders and different publics (residents, local politics, etc), and highlighting the role of the Political Authorities in mediating this relational encounter between different interests, concerns, and opinions at play. Indeed, the representations of firms and entrepreneurs, being local (e.g. overbuilding economy and diffused industry) or not (multi-national land grabbers), is characterised by deep-seated distrust providing the anticipation and expectations that derive from pre-existent historical environmental problems in the region (i.e. polluting of diffused industrialization and soil consumption) and more recent experienced relations in RET deployment and diffusion (speculation, exploitation of natural resources, procedural and distributive injustices, as well as disrespect, misrecognition or lack of recognition). To summarise, all these experienced (power) relations provide the ground for a representation of economic actors, their motives and behaviours, as dishonest, unethical, incompetent or lacking attention, pursuing only the private interests, exploiting local natural

resources and the common goods without attention to the environmental and social externalities of economic activity.

“There is always a lot of hostility, because we always think that the industries are a priori polluters and we do not think it is clear that they are plants that are certainly not at zero option but it is equally true that produce wealth, prosperity, employment, and that also follow a whole series of regulations that are also very stringent among others” - Interview economic stakeholder - 21-11-2017

“the company did not show any sense of cooperation if not arrogance and disrespect, so much so that at the last service conference they also opposed the presence of the committee [...] they should declare that do not use the organic fraction of waste, they have not declared their intention in the project, because it must be revealed before .. who controls them if they will start to use a different material for the supply when they had to start again, who controls them?” - Interview spokesperson citizens' committee - 18-10-2017

The reported extracts provide a useful picture about meta-knowledge and representations on firms and entrepreneurs. Indeed, in the first extract, a representative of the industry sector claimed the perceived hostility and generalization of the entire category as polluters a priori. This stresses the presence of stereotypes and prejudice in the perception of industry actors, and how these anticipations and expectations may guide the interaction and responses to RET projects by the publics.

The interviewee also stresses that these projects are often perceived by the public as not essential for the ‘regional project’ while clarifying that they are not a zero [impact] option, but however that they represent a lever for regional economic development while emphasising that actually are more environmentally sensitive responding to binding regulation. In this argument, the respondent is attempting to emphasise that RETs implies costs and benefits and that these are often not equally considered. This form of meta-knowledge can be seen as relying on the economy-environment themata and balance. The representative aimed to stress with a three-part list the many benefits of RET deployment and development for the region (wealth, prosperity, employment), which are often overlooked in favour of the assumed ‘zero alternative’ ‘or no way’ attitude and decision.

The second extract remarks, on the other hand, the recently experienced relations with local entrepreneurs. In her discourse, the spokesperson of a local committee underlines that the firm showed a conflicting and non-cooperative attitude, arrogant and disrespectful behaviours towards the committee. This utterance greatly emphasises the conflictual relations and interactions between actors and the well-grounded distrust anchored to experienced relations. Moreover, the interviewee remarks with a rhetorical question the anticipation of non-ethical

behaviours and of the deficit in institutional monitoring and control as a great cause for concerns.

All these aspects further highlight how the issue of mutual trust, recognition, and anticipation in dialogue and interaction among actors represents a fundamental and critical part of the regional energy transition (Walker et al., 2011). The distrust towards project developers, managers, industry actors and firms is well-grounded in historical and more recent experienced relations, characterised by lack of recognition and disrespect for the local population and the local environment/places, involving distrust in the ethic and competence dimensions (Earle & Siegrist, 2006) and an anticipation, expectation and prejudice coherent with this representation of economic initiative. In this regard, it is remarkable to notice that institutional and social control and monitoring, as well as a deliberative participatory governance to regulate and orient the economic sector and activities, are greatly required by different actors and represented as crucial mean to get fairness and legitimacy of decisions.

On the other hand, as we have seen in the case of public-experts relationship, the limited dialogue among them can be seen as a direct consequence of a social climate and situation characterised by a radical conflict and polarisation of positions, situations that understandably some experts find frustrating, and of discomfort, which conduce institutions to a separate management of public engagement practices, unpacking and limiting the dialogue among groups, invited as perceiving having a particular type of interest and voice. This remarks another aspect that concerns the dialogue with experts and the provision/sharing of expertise during the participatory process. Indeed, despite recognising in a positive light the preliminary and inclusive involvement, going beyond what is legally required, some participants remark the limited moments of dialogue and information on the different themes and aspects characterising the regional energy plan – contrary to the participatory path for the law of territorial government.

Furthermore, the narratives, experiences, and representations vehiculated in the discourses of experts underline different critical points. The situation of social and institutional conflicts among regional and local institutions (e.g. Municipalities, Provinces and competent authorities on environment and health), firms, citizens and environmental NGOs, represents a social context often avoided (understandably), or undertaken with a baggage of meta-knowledge underlining the negative aspects of interactions and engagement with the public and political sphere. This highlights the experiences of lack of recognition and legitimization of their (expert) knowledge, often perceived and represented as not neutral, bent to economic and political interests at stake.

This experience of delegitimization and misrecognition of the knowledge, image and position of experts is often advocated as a frustrating factor, hindering every kind of rational dialogue, and bringing experts to avoid the interaction with the public as a source of discomfort, frustration and potential conflict, while continuing in asking how to engage with them and improve communication and dialogue. This highlights a crucial tension in experts' conceptualization of the public. Indeed, some experts greatly show a tension between adopting a participatory approach (what should be rationally made) and the more emotional response and orientation to re-centralise decisions to bypass political inaction and stagnation in implementing RETs and reach energy and climate targets.

This kind of rationale is often aligned with a representation of the local opposition to RETs (i.e. local residents and authorities) greatly emphasising NIMBY and NIMTOO assumptions of the public and local politics, even bringing to light more extreme representation, such as the BANANA, conceived as fully fitting with Marche citizens (attitude of total closure and emotional orientation to fear and conflict).

On the other hand, other experts reveal on the same extent the climate of distrust and lack of recognition and legitimization about experts and expertise. These experts report similar experiences and relationship, despite not so frustrating and tense, having to do with their professional and voluntary/participatory behaviour. In doing so, in many remark the crucial role of public engagement with science and science engagement with publics, requiring a different culture, mindset, competence, and engagement of science in public to fruitfully engage, integrate and benefit both local and experts' knowledge.

6.2.8. Present and anticipated scenario: perspectives on the 2020 regional energy strategy and the regional energy vision towards 2030

With regard to the elaboration of the regional energy strategy, the interview aimed to deepen the perspectives and socio-political acceptance of the plan by key actors. In this regard, the focus is on the socio-political acceptance of the RETs technological configurations and the related policy. The paragraph presents and discusses the findings that concern the regional energy and environmental plan 2020 and the definition of the regional energy vision for 2030. It should be bear in mind that at the time of the planning process the Region already reached the targets about the share of renewables on the final gross production of energy. Then, as testified by diverse actors, the strategy was characterised by diverse consultation moments, of

which the outcomes influenced the targets, aims, and priorities, namely a major focus and commitment on energy efficiency and saving rather than energy generation from renewables (*consultations defined the strategy and priorities resulting in a more shared plan distributing responsibilities – f= 7*).

“the objectives were substantially consolidated: [energy] saving and efficiency. The consultation played an important role on the strategies and above all on the priorities to be given to the target, if it was better to deepen and strengthen the production of renewable energy or instead focus on reducing consumption[.]from the listening campaign emerged very strongly that it was preferable to reduce consumption and work a lot on efficiency, also because it was evaluated s much more difficult and complex but at the same time more advantageous under many points of view, both economic and social. Because acting on efficiency means to intervene in all sectors, from transport to businesses, to agriculture, so you have to do a 360 degrees policy. At the same time also social because acting on consumption, on the micro, make more shared the policy because you rely a lot on the behaviour of the individuals, on the role of the community to internalise the policy and act to pursue the regional goal [..] everyone asked us to push on energy efficiency and reduce consumption, both the companies and citizens, so there was no more opposition [..] there are only economic benefits, so the good of this plan is that different positions conveyed, there was no longer this stark contrast between the associations and companies.” - Interview political-institutional actor - 15-06-2017

As the interviewee admits, the consultations shed light on what seemed a shared priority and strategy among all the subjects: enhance the energy efficiency and saving and reducing energy demand and consumption. Indeed, most of the interviewees greatly emphasise the energy saving and efficiency as a crucial sector for reaching sustainability targets as well as to promote economic development. Therefore, prioritising and working on energy efficiency is represented as an overall acceptable and supported action by the diverse actors.

Furthermore, the respondent stresses that on this objective all the parties agreed, and the diverse and multiple positions conveyed on the same point, making visible the shared view on the potential of the energy efficiency scenario. This scenario is also evaluated by the institutional actor as the more difficult and at the same time more promising, requiring integrated energy policies involving nested sectors of intervention: agriculture, transport, industry, building. On the other hand, as testified by the regional officer, an energy efficiency and saving policy was stressed and demanded by all the actors, showing a path clearly feasible and acceptable, without major ‘social obstacles’. Indeed, the presence of different positions pointing to energy efficiency as a crucial engine for the whole regional development, determined the choice of the scenario and the related targets.

In this context, the strategy appears positively evaluated by all the environmentalists, also for what concerns the renewable energy development, seeing the plan as *acceptable because foresees the increase of renewables while critically regulating them* (f=6).

“Renewable energy is a magic word within which there are many things, some positive and some negative. Reflecting on the mistakes, what happened with the old [plan] allowed to reorient the trajectory giving substance to the enthusiasm - You know, you need both. This plan seems to me more concrete and directing the limited resources on those renewables that can then return the benefit to the whole population” - Interview representative environmental NGO -12-07-2017

“there is no longer that uncritical evaluation of renewable energy as the panacea, but there is a different evaluation: well, renewable energies are these, what are the advantages? what are the disadvantages? how much can we recover? where can we invest? we need, for example, a continuity, so we focus on the energies that can allow the storage. There is the need to develop renewable energy but also to act on buildings and energy efficiency, especially in the public [sector], etc., and then focus on the energy efficiency and the recovery of the building stock. In short, it seemed to me that we added an element of concreteness to the new plan” - Interview spokesperson citizens’ committee - 20-07-2017

“we have given a substantially positive judgment to the new plan, because it does not foresee the construction of other power plants, but provides instead an increase of renewable energy linked to an improvement of what has not been governed [...] the wind power is regulated, which is fine, the solar was regulated more seriously, etc.. So basically, in the end the judgment is [good]. So, in this scenario, we agree.” - Interview representative environmental NGO - 14-07-2017

As the three extracts show, environmentalists underscore that the renewable energy umbrella has many facets and meanings and that the current plan conceptualises more critically the renewables by better regulating the conditions for their deployment. As it is stressed in the first extract, reflecting on the experience and the mistakes made in the previous planning allowed to reorient the trajectory rendering the plan more concrete. Further, the second and third extract reveals that the Region seems having critically engaged with the issue of socio-technical configurations of RETs and energy policies fitting with place conditions, needs, and available resources.

However, various criticisms on the strategy were stressed and should be underlined. First, few interviewees argue that *listening to the citizens and aiming to avoid and reduce conflicts the Region is simply postponing the problem (f=3)*.

“With this plan we arrive at 2020, in which the situation is under control, we respect the targets, the requirements of the Burden Sharing [...] basically, it was decided to stop and slow down [in renewable energy production] because this was the result of the consultations, and honestly, for the results we were asked there was not even the need to make this advancement. Then, if Europe will ask us an advancement for the next programming [2030], especially on climate change, to reduce the overall environmental impact of the regional energy sector we will see..we should reason about it.” - Interview expert - 26-11-2017

The expert interviewed stresses that the consultations brought the Region to postpone or reduce the priority of further development in renewable energy generation. This statement subtly criticises the position of the Region, which decided to slow down and constrain the RET

deployment to listen to citizens. This institutional behaviour is argued as just postponing the problem to the future time frame in reference to the new objectives and targets for 2030.

Moreover, while the strategy finds an overall acceptance from diverse actors - from environmentalists to economic stakeholders – and recognised as containing many of the indications and proposals of the diverse subjects participating to the consultations, they question the feasibility of implementation. The Energy Plan is accused of containing *too many actions and priorities considered the scarce resources (f=6)*

“In the final version are contained several things indicated by everyone, even from us, if I can make a note perhaps too many. I mean, in the end, the Region has chosen to put everything inside. The plan is well done and widely shared in the general objectives, but the relationship between the [economic] resources and the objectives and actions is absurdly unbalanced. There are important goals, a large number of actions and even priorities and very limited resources [...] we should choose the priorities” - Interview economic stakeholder - 9-11-2017

“We appreciated many parts of the approach [...] clearly it is a more pragmatic plan, more fitting with the reality and more adequate on the administrative and bureaucratic viewpoint. However, we must see if it will be implemented [...]we shared the scenario, we agreed on the most challenging [the energy efficiency scenario] because it was the time to take up the challenge. Let’s see what is done, and let’s get some priorities too” - Interview economic stakeholder - 19-10-2017

In fact, different interviewees recognised that the final plan contains many of the indications and proposals of the diverse subjects participating in the consultations. This underlines the perceived influence about the participation of the diverse groups and the appreciation of the Regional willingness to listen and consider the different voices. The plan is frequently evaluated as more pragmatic and concrete, regulatory adequate, and fitting better with the contingent reality.

However, some interviewees (economic stakeholders and political actors) stressed that in the end, this opening conducted to put everything inside, giving high priorities to a number of actions that are perceived as excessive for the limited resources. This is underlined in particular by the economic stakeholders which frankly questioned the implementation of the plan and advocated the need for choosing more strictly the priorities to give to the plan more concreteness.

In this vein, the plan is represented also as *a literary exercise, ambiguous and having too many nice words and intentions (f= 5)* bringing doubts on its actual implementation. This representing of the plan is transversal to the diverse groups of interviewees and sheds light on aspects pertaining to trust and the perception of manipulation and persuasion.

“In this plan, there are many words and few facts because the facts will not be made” - Interview political-institutional actor - 11-07-2017

“we asked to write these concepts in a clear and precise manner, in a way that you cannot beat around the bush [girarci intorno] so that there are concrete objectives that the Region wants to pursue. You know, if something is written in a smoky way you have the excuse to not make it happen” - Interview representative environmental NGO -12-07-2017

“We need a constant monitoring activity of the activities carried out, to check how the plan is going because in the previous one [plan] we talked about an annual check that was never made, the plan remained a Molock, blocked, untouchable, so it did not fit with the reality. Programming makes sense if it is adapted to the evolution taking place, otherwise are just words, a literary exercise of the writers” - Interview economic stakeholder - 19-10-2017

As affirmed in the first extract, according to the politician interviewed, the plan contains many words and few facts, meanings that many of the actions indicated as strategic priorities will not be undertaken.

On the other hand, the environmentalist perspective sheds light on other critical issues, as the second extract shows. The representative of an environmental NGO represents the plan as ambiguous, using smoky words, not clear concepts and precise objectives. This seems to presage a way through which the Region can find a way to escape and avoid the indicated objectives.

In this regard, a critical voice is put in place also by an economic stakeholder. More precisely, the third extract shows what is a widely shared belief (by experts, environmentalists, economic stakeholders) and fundamental point of regional energy planning, something that is recognised as missing in past experience: a constant monitoring activity.

This is advocated as an urgent institutional arrangement that should be undertaken to check the implementation and reorient the trajectory adapting to the contingent reality. This utterance is emphasised by representing energy planning, and particularly the past planning experience, as a literary exercise for those elaborating the document. This strong criticism is further stressed using a three-part list (Jefferson, 1990) to emphasise the negative experience (a Molock, blocked, untouchable) and by explaining that programming makes sense only if adaptable to the ongoing change and evolution of the landscape.

On the other side, some of the interviewees unveil other criticisms on the plan.

First, the plan is represented as improved, acceptable and more critical in approaching energy issues. However, many perceive that in the plan *still weigh the interests of economic incumbents* at different scales, with *economic interest prevailing over a more precautional and environmentally sensitive approach* (f= 7). In this regard, revealing the perceived ambiguity of the plan and the doubts on the implementation, the respondents highlight that beyond a (techno-

scientific and socio-political) monitoring, the social control is a central part of the process, with continuous struggles to obtain policies that are more oriented to the principles of precaution and social utility.

“we see a plan that has improved. Then is evident the activity of the lobbies that still weighs [...] it is not easy, the economic interests always prevail on good ideas, so the battle is a battle that will never end, in the absence of a cultural vision that takes into account the citizens' interest expected and guaranteed by the constitution, article 9, article 32, article 42 and 43 that says that the economic initiative is allowed but must have a social purpose, so it must respond to social interests, of the community, not on its own” - Interview representative environmental NGO - 14-07-2017

“this plan is certainly much better of the previous one [...] but this plan has been done on the basis of what the central government has done, on the needs of the central government and of economic stakeholder [...] although improved, this plan is very ambiguous” - Interview political-institutional actor - 11-07-2017

As highlighted in the first extract by the environmentalist interviewed, although the plan is improved it is made (self)evident also the weight of the economic interests, which are perceived always prevailing over the (common) good ideas and interests. For this reason, he underlines that the (environmental) battle and the social control are never-ending, at least as long as the respect for the constitution and citizens' recognition will not be adequately institutionalised and culturally generalised and accepted. Then, the interviewee renders more precise and detailed his argument listing and remarking the legal principles that should guide the regional environmental politics: promoting the development of scientific research and culture and the protection and preservation of the landscape and the historical and artistic National heritage (art. 9); health protection as a fundamental right of the individual and the interest of the community (art. 32); private property and the pursuit of private interest recognised, guaranteed and regulated in compliance with social utility or function (art. 42); essential public services and goods having characteristics of general interest can be managed by public authorities to guarantee the accomplishment of social utility (art. 43). In particular, the last article is further clarified to stress that economic initiatives intervening and managing public services or common goods should always pursue the interest of the broader social community and not of the economic actors. This principle of social utility, as well as that on the precautionary approach, are some of the main arguments and concepts used by the environmentalist milieu in referring to the principles that the RET economy development and the regional energy policies should aim and pursue.

Anyway, also political actors recognise the improvement of the plan, but put it the ambiguity and how it seems a direct consequence and profoundly connected to the national policies, which

are represented as aligned with the interest of national incumbent actors.

Moreover, further criticisms from environmentalists and experts refer to the *partially complete regulation*. This represents a huge macro-theme involving the different institutional changes and arrangements that are (proposed, claimed and) required to enhance and ensure the sustainability of the plan.

Indeed, it is argued in different ways that the regulatory pathway of the region is incomplete, lacking elements that are crucial for the overall sustainability and acceptability of environmental policies.

These mainly concern the broader government of the regional territory, including regulation on: environmental management and protection; land use consumption and landscape preservation; the assessment and management of protected sites, natural resources and risks; the comprehensive evaluation and identification of suitable and unsuitable siting areas in regulatory codes; the institutionalization of public participation and of mechanisms to evaluate and equally distribute the costs and benefits of the transformation required.

Some of these dimensions were presented also in previous paragraphs on participation and will be further deepened in the sequent paragraphs. That said, this part of the paragraph will focus on the most critical issues that pertain regulation:

1) First, the *development of bioenergy*, and particularly the *biomasses from forest management*. Indeed, after having focused on biomass from crops, the plan expects that biomasses derive from the waste of existent productive processes in self-production and self-consumption (e.g. agricultural processing, breeding dejections) and from waste/residual material deriving from forest management.

2) Second, the *pathway of the regional law for the territorial government* mentioned many times in previous parts. Indeed, in 2015 the newly established Regional Administration activated a participatory process for elaborating the regional law for the territorial government (that in force was dated 1992). Some materials pertaining to the public consultations of these two pathways have been also analysed in the examination of the regional public sphere. It should be noticed also that the alliance of environmental NGOs and a network/forum of hundreds of local committees and associations, worked in the territories as community organisers (e.g. mobilization, information and advocacy) and in network elaborating a proposal of law of popular initiative on territorial governance gathering more than 8500 signatures and submitting the proposal to the regional council.

That said, many shadows, doubts and criticisms on the plan concern what has been not evaluated and addressed by regulation during the planning process and setting up of institutional

arrangements. A first critical issue concerns the uncomplete regulation about the areas for siting, which should be indicated in the regulatory plans by carefully evaluating the overlooked hydrogeological risks in the territory.

“The unsuitable areas [for siting] have been indicated, but there are areas at hydrogeological risk, and these are overlooked in the plan [...] about the siting, the Region cannot elaborate an energy plan without indicating the siting areas, so we need the regulatory plans [per municipality]” - Interview representative environmental NGO - 14-07-2017

As demonstrated in the extract just presented, despite in the energy planning process some critical issues of RETs deployment were addressed, other issues were overlooked, and regulatory adjustments are still required for an overall sustainability, in consideration of nested policy sectors.

About this, many interviewees agree in considering that different issues were overlooked or not adequately evaluated in the final plan, and that regulation on these unclear issues is urgently required to ensure the sustainability of the strategy and proper environmental management. In this regard, many criticisms concern the deployment of residual biomasses from forest management.

These criticisms were mostly highlighted by experts and natural protected sites managers and authorities. Indeed, as we seen, all the competent authorities of Natura 2000 (protected) sites or mountain areas (i.e. having interest and competence over the forest sector) produced the same observations to the SEA of the energy plan, highlighting that the forecasted increase of biomasses form forest management would have increased by 1095%.

These criticisms about the use of forest resources for energy purpose have been greatly stressed also during the interview with an expert in the field of socio-ecological systems and forest management. To summarise, the main criticisms underlined in the interview concern: a) the *intensive forest exploitation for energy purpose without considering the forest's multi-functionality and the potential trade-offs*; b) the *elaboration of quantitative objectives basing on a single reference, without considering the territorial baggage of [local and scientific] knowledge*; c) the *acting in a decisive way rather than precautional and postponing the problematised issues in the future (implementation tools)*.

That said, overquoting is often considered a common mistake, or at least not a standard, in discourse analysis. Indeed, in this regard Antaki and colleagues (2003) warned on the risk of under-analysis by means of over-quotations or quotation isolated from their context. In this regard, Antaki and colleagues (2003, p.31) remarked that “analysis means a close engagement with one's text or transcripts, and the illumination of their meaning and significance through

insightful and technically sophisticated work”. It is in line with this reasoning that I firmly believe presenting a larger interview extract on these points can be useful. Actually, I also believe that this makes justice to a significant and shared conceptualization within the composition of environmentalists, competent authorities and subjects in the environmental matter, as well as having greater relevance in inter-textuality and political terms (i.e. being influenced and generated as a response to political counter-positions, and having a pragmatic effect in social and political relations),

“About the forest **they saw that we have the cubic meters**, so they thought: “**we can use the forest for energy purpose**”, but this implies **a trade-off** that has not been evaluated in terms of **forest multifunctionality**: the recreational one, for the hydrogeological stability, the carbon capture and above all the kind of economic development [...] then **it goes in the direction of an intensive exploitation of the forest without evaluating the costs and benefits in integrated terms**.

[...]they **abandoned the dedicated crops** saying: “here there are too many problems, **we go to the forest**” but with **the same superficial approach**, because **even there they will find problems, of variables not considered**. **They are again taking decision without having adequately studied the complexity of the system**.

[..]

They have taken a single reference, a PhD thesis of 11 years ago, **and indicated the objectives about the use of the forest, without considering the evolution of the sector, without structuring a knowledge baggage, which we have in this region, for acting with a more precautional and sensitive approach**. **They are planning, about the forest sector, basing on a single reference**. Methodologically, it is like **if you are doing a review and you say that the topic is addressed by a single publication**

[..]

to our observations, they responded: “partially acceptable”, “**if further studies will become available they will be taken into account in the annual implementation programs**. In any case, **will be encouraged the forest wood-energy short supply chains**”, but **we do not know what it means short**, “**integrated upstream with sustainable forest management tools**”, **which must be elaborated, because there is not a regional forest plan**. In my opinion, **these counter-observations are reductive, very vague**.” - Interview expert – 11-09-2017

The large extract presented greatly reflects the position of natural and protected sites’ management authorities of the region. The interviewee starts his utterance by describing and underlining how the Region is approaching the forest for energy purpose. In practice, he highlights that the Regional Administration has based the decision about using residual forest biomass for energy purpose by estimating and mapping the quantity of biomasses within regional forests. However, this kind of assessment on the energy potential, and the sole focus on the energy functions provided by the forest, are argued as superficial, not taking into account the different functions that the forest provides and implying potential trade-offs (e.g. in socio-ecological functions such as carbon capture and storage, or hydrogeological stability). Thus, the direction indicated by the plan is argued as going again towards the intensive exploitation of natural resources – in this case the forest – without evaluating the complexity of the system and the multiple costs and benefits this implies.

In this vein, the interviewee stressed also that for the forest sector the objectives of the plan are not well-grounded on solid (scientific) data and (local) knowledge and that this implies an approach not precautional or sensitive. This is emphasised by putting more clearly that the objectives and actions indicated in the plan are simply methodologically incorrect and not making sense (a literature review with a single reference).

Finally, the interviewee comments the counter-observations provided by the Regional Administration - during the SEA of the plan - to respond to the claims advanced by the protected sites' management authorities and environmental NGOs. In so doing the interviewee highlights the vagueness and superficiality of the discursive account of counter-observations by pointing out that some crucial concepts are not clear, taken for granted and unproblematised (we do not what it means *short supply chain*), and that just postpone the problem to regulatory arrangements that still need to be made (*the forest management plan*). Once again, the incomplete regulation is argued as hindering the potential and sustainability of the regional energy policies.

In this regard, the regional law for territorial government is another crucial regulatory issue often mentioned by the interviewees. Nowadays, the (participatory) planning pathway of the Law has not been completed, and environmental NGOs and the network of local citizens groups are continuing to ask this fundamental regulatory arrangement to the Regional Council.

Indeed, the law is argued can regulate many problematic aspects in the broader environmental management in the region.

“They [politicians] persevere to talk about the urban law. Instead we proposed a law for territorial government, which is a very different thing, that is an organic gaze, the organic gaze is lacking, thus the capacity to put together territorial planning, the valorization of the rural areas, the enhancement of landscape, the ecological network, but also the protection of watercourses [...] with this law our goal was to determine an effective turn in the government and management of the territory” - Interview representative environmental network - 25-10-2017

As testified by the interviewee, in fact the regional law for territorial government proposed by popular initiative presents a systemic and organic reasoning and sight, putting together the management, planning and valorization of urban and rural/inner areas, the preservation, proper management and enhancement of landscape and all the natural common resources (water, land, soil, natural sites) as a value/asset to defend. The law proposed by the environmentalist network is argued as a huge effort to determine a governmental and institutional change in the management of the territory/environment in its entirety. On the other hand, what politics seems to propose is represented as lacking this organic gaze on the territory: an urban law, an old-fashioned approach, vague, not meaningful and not adhering to the complexity of the territory

and related needs and priorities.

In this context, *regulatory arrangements to enhance procedural and distributive fairness, a sort of social contract re-distributing more equally costs and benefits* (f= 8) represent other relevant issues for RET promotion and addressed by different actors interviewed.

“I think that the region must intervene to redistribute these social and environmental costs [...] this of environmental compensation or equalization of the territories, and not on a municipal basis, but territorial, in order for example to redistribute wealth in a fairer way [...] a sort of social pact between communities and institutions that compensate as much as the community is forced to suffer and take charge for all, and this should be done through a regulation that determines what are the weights and on which indicators should be implemented the equalization” - Interview representative environmental network - 24-10-2017

“Our observation proposed two things. On one hand of reasoning together to identify circumscribed zones where put large power plants, which are not speculative but of real support to the [Municipality] Administrations. For example, Offida, a neighboring municipality has a large PV plant serving all the Municipality [...] investing in these renewable energy plants but with a return on all citizens, because for a small municipality is a significant income that allows doing other things with the money they recover.” - Interview spokesperson citizens' committee - 20-07-2017

“Often the interests are many, then they may be opposing and conflicting with each other, so you can do nothing [...] unfortunately there are many little things in relationships, but a sort of integration must be there, it is inevitable. When someone wants 100 but knows that in the end, it comes out 50, for example, you can satisfy both. And the same must be done in concertation among different realities. And if there is a benefit for all, less CO₂, less waste etc., for those that produce and those receiving energy. However this legislation, I do not know if at the regional level .. maybe should be at national or even supranational level.” - Interview economic stakeholder - 6-12-2017

“I1: In the upper part of Emilia [region] there are big housing complexes where there are all the production plants, mega power plants, and they don't see these thermal power plants producing thousands of MW for heating the neighbourhoods, they don't see them as an obstacle, an enemy. Indeed, they tell that the cost per kW is so low that they are very happy, and then every year or six months they receive the environmental report of the monitoring activity

I2: Instead, to us, they send the epidemiological investigation” - Interview experts - 4-12-2017

As the four extracts presented show, the setting-up of regulatory arrangements to re-distribute the advantages of renewable energy is a common theme among experts, local entrepreneurs, citizens committees as well as environmental NGOs and local authorities. Many of the interviewees posed the problem (and question) related to how to intervene in the unequal distribution of costs and benefits in RET deployment and the potential forms of re-distribution of benefits to adopt (among them compensation, equalization, community benefits, community or municipality-owned renewable energy plants).

In the first extract, the technical representative of the environmental forum comprising local associations and environmental NGOs, stresses the urgent need of a Regional response to

redistribute environmental and social costs. In this context, the interviewee sustains that some form of environmental compensation or territorial equalization should be elaborated by taking into account the assessment of costs paid by wider geographical areas, rather than the usual municipality level, considering the administrative borders. Indeed, the municipality scale is strongly advocated as an incorrect way of assessing risks, costs and impacts, escaping the interconnected geographies of inequalities affecting the region (e.g. compensate a community hosting a landfill, but not those neighbouring that are equally interested by impacts even if in a different way). This kind of evaluation should provide, according to the respondent, the basis to reason and discuss about (weights and on which indicators) re-distribute benefits and set-up regulatory arrangements to fairly compensate and balance costs and benefits. In this way, the interviewee claims and defines this kind of institutional operation as a forming and restoring of a social contract between local communities and the many other societal actors operating within them. This view emphasises the nature of social acceptance as a social contract on which discuss and agree to lay the foundations of the 'local green economy' development.

This argument is further stressed by another interviewee, belonging to a local committee opposing to wind energy and cooperating/in coalition with local municipalities. The interviewee reminds that with local authorities proposed to the Region a dialogue about the siting process, identifying areas where install wind farms and agree on what kind of public benefits can be distributed. In this regard, the interviewee reports a solution based on her experience about the practice of a neighbouring municipality investing in PV plants sited on the ground but serving the municipalities, recovering funds and using that for public utility investments. This kind of solutions and social contract is argued as an example and best practice to return some reward impacting positively also the community of relevance at large.

The recognition of the relevance of mediation/concertation among interests at stake in finding and constructing common and shared solutions, which may benefit the different sides of the dispute, is also addressed by a representative of the agriculture sector. In this utterance, the interviewee is relying on his episodic memory and reporting the many disputes within (agricultural association) and between groups (agriculture entrepreneurs and citizens). In this context, he stresses the complexity of the relational aspect in finding common solutions that may mediate between different and often opposing positions and interests. This agreement is represented as a hard task, but of vital importance, otherwise, it is taken for granted that the development of RET will never be acceptable. While this argument on concertation and re-distribution of benefits is taken and represented as a milestone for RETs deployment and diffusion, the interviewee questions himself on who should be demanded to regulate this aspect

so that this can be effective in the practice (identified in the national or even supranational level).

In fact, arguments about the assessment of costs and benefits and the consequent re-distribution of them are often presented as something not regulated and taking (or not) various forms depending on the discretion and the operation of local authorities and investors. About this issue, the fourth extract presented reflects the utterance of two expert respondents. In the extract, in reflecting on how to promote the community acceptance of RETs, they refer to available knowledge on situations/cases of other Italian Regions (Emilia). In particular, the interviewee highlights his knowledge and experience with large thermal plants sited in the urban space and providing the heating to the close neighborhoods at favourable prices. This kind of re-distribution of benefits, by providing energy services at a favourable price is presented by the interviewee as a crucial factor for the acceptance and support of citizens living nearby the facility (they don't see them as an obstacle, an enemy; the cost per kW is so low that they are very happy). Then, once again, a further aspect favouring acceptance of RETs is identified in the environmental monitoring and information activity about the power plant and provided by environmental and health authority in precise and scheduled time frames. It is at this point that a colleague intervenes and introduces a critical and contingent issue, which underlies the high environmental impacts and externalities of some areas (those at high risk of environmental crisis) of the Region where are sited large power plants. This is stressed by comparing the virtuous situation just told, to the pragmatic contextual reality, where more than monitoring it is more adequate to talk about epidemiological reports. With this utterance, the interviewee aims to further stress the different environmental conditions in which some facilities go to operate and the multiple critical areas affected by polluting activities throughout the Region.

Instead, some experts and institutional actors report a different narrative on the (little) possibilities offered by current regulation as well as the effectiveness of available and known tools to address the distributional injustice.

“the experience on the territory is that always comes someone to say "here, they want to buy us, give us a sop" Instead, if there was an agreement, if the energy installation is virtuous, which makes sense even in future perspective, the least possible impact, because zero impact does not exist - I always speak of the least possible impact - and therefore can make sense at the local level. Since the impact is never zero if that impact you make him pay with something that is to the benefit of the community, the community does not let itself to be bought, accepts to contribute to the community and in return is compensated for the commitment that must put to accept that installation. In my opinion, this is a healthy mechanism” - Interview expert - 28-11-2017

“the compensation measures were minimal, I think there was a planting, more or less extensive, I do not remember well and other compensation to guarantee the restoration [of the area], but I remember that the municipality opposed because were about 100,000 euros for the restoration of places, which instead from an analysis of technicians has emerged that to restoration would take just under one million euro, and then was also contested but not accepted by the proposal company” - Interview spokesperson citizens’ committee - 18-10-2017

“the compensation attenuates the debate, but it is not sufficient, since the compensation instrument is usually associated as communication, the population associates them with compensation works for a new landfill. So, the compensating works can certainly mitigate the opposite part but more than anything else they can mitigate those undecided. For the opposite part, compensatory works I do not think have any effect [...] legitimise the idea that what you are doing is a damage to the community, because you go to compensate to compensate something, because the most correct term is to compensate the community of something, it means that it was damaged, so in reality these compensations in the collective imagination are appreciated, it’s clear that nobody says no, but the opinion about the facility should not be affected.”
- Interview political-institutional actor – 29-03-2018

The extracts presented just reflect the different opinions regarding providing community benefits framing them as community compensation.

Indeed, as the first extract shows, the expert interviewed affirms that, according to his experience, the provision of community benefits proposed in some cases determined the emergence of critical voices underlining and representing the benefits as a bribery to buy and give a sop to the community affected. This reflects the findings of previous research on community benefits’ provision (see e.g. Cass, Walker & Devine-Wright, 2010; Walker, Wiersma & Bailey, 2014), which emphasizes the problematic nature of community benefits, often perceived and conceived as a form of bribery or buying of communities and decision-makers, and without distinctions about the timing of their revelation³⁸.

In this regard, however, the interviewee conceives this kind of operation as a healthy mechanism that can be adopted by formulating a sort of agreement with the communities interested. In fact, the respondent stresses a fundamental point: every energy facility has always an impact, and that while reducing the impact by adopting best available technologies or using waste or residual material (plants virtuous and making sense) the impact should be compensated with appropriate measures to the benefit of the community. In this regard, he introduces a personal consideration, arguing that community in this way is not bought, but is accepting to host the facility contributing to the common good and agreeing that, in turn, the proposing company contributes to the community.

However, the experience about concertation, mediation, and bargaining to find an agreement

³⁸ In this regard, Walker (2017) suggests the institutionalization of community benefits as a policy requirement to avoid the bribery rhetoric

reveals itself a difficult task, especially when these activities, being unregulated, are left to the personal initiative or commitment of the proposing companies and local authorities.

Indeed, as testified in the second extract, the interviewee remembers the concertation of the municipality with the proposing company to establish compensation measures for the community.

The interviewee presents this mediation as a downward game, with the proposing company limiting the compensation measures to a tenth of what municipality technicians estimated for the place restoration and contesting further requests.

On the other hand, the third extract, of a public official adopts a different position and view regarding compensation measures.

In fact, the interviewee stresses that compensation does not solve the problem, but rather it concurs in rendering the problem objectified. According to the interviewee and other experts, compensation is usually adopted with high-impact facilities - most commonly landfills, highways, airports, or large industrial facilities, comprising energy sector. For this reason, compensation is argued as legitimising the idea that externalities negatively affect and make a real damage to the community at play. Moreover, according to the interviewee, compensation has a double effect. On one side, it affects mostly those undecided in the community, bringing them in a stance of passive acceptance (they don't say no), on the other hand, it objectifies and renders more 'socially legitimated' the concerns expressed by those characterised by an oppositional stance. This point is relevant because offers (discursive) evidence on the possible risks of compensation frame. First, opinions may be at this point polarised, with those contesting the facility becoming intolerant, and those more neutral or passively accepting the facility as active supporters.

This community divide, from those actively supporting or passively accepting the facility in consideration of compensation measures, and those contesting the (socio-technical configuration) of the proposed facility is at this point a possibility. In this regard, more studies are required on this issue. In fact, community benefits, community renewable energy, community or public ownership and many other social configurations of RET are in the frontline of social research in recent years (see Walker & Devine-Wright, 2008). However, Italian empirical evidence on the acceptance of feasible measures to re-distribute the advantages of energy innovations is scarce, requiring further investigation. Compared to other EU member states, the absence of such mechanisms in current Italian regulation can be a cause of this research neglect, however, knowledge on this issue in context is urgently required to inform decision-makers, and deliberative decision-making processes. Indeed, the regional pathway

analysed is characterised by multiple forms of opposition based on procedural and distributive justice, remarking the demand for institutional change and regulation about fair participation and just distribution.

It should be remarked that at this moment the Italian energy scenario is slowly shifting towards a more active engagement of citizens in the energy market, as prosumers, and in energy policies as energy citizens. New socio-technical configurations (Users' Efficiency Systems, micro-grids, district heating to name a few) are going to be promoted and (should) open a micro-market in which citizens and local administrations are called to adopt a proactive approach, and with companies founding new organizational arrangements to locally provide energy services and cooperate with politics and civil society in finding a common ground to discuss and find possible shared solutions.

6.2.9. Conditional acceptance of RETs and energy system change: acceptance, support and preference for socio-technical configurations

For what concerns the acceptance of RETs, this paragraph presents and discusses the findings of the interview study about acceptance and preferences for socio-technical configurations of energy system change.

In fact, the energy paradigm proposed, the distributed generation of renewable energies, represents a widely debated and contested choice. While almost all actors, especially environmentalists and civil society, greatly support the adoption and promotion of the distributed generation model, bringing energy close to consumption sites and providing benefits to the groups and communities interested by this development, other actors conceive distributed generation as useless and complicating/multiplicating the problems.

Indeed, many economic stakeholders and experts argued that distributed generation of small power plants presents many issues (f=11) and mainly affecting the economic feasibility of the plan implementation.

“I: so, are you saying that it is a problem to have focused on small plants?

I1: yes, because then the costs are many and without incentive, without anything. Then, we are talking about a sector [agriculture] that there are very small [profit] margins, are always quite narrow margins, and so if no one helps them [farmers] nobody does anything [...] making a big structure, you always have problems, apart from the committee of the No , but logistics, important investments, many heads to put together, that is no longer a reality such a farm. Renewable energies, at least those not speculative and with least impact, could be a resource for the territory, for the farmer, but also for the whole community, because the farmer is a bit the gardener of the territory. The big problem is this, unfortunately, the farmer is a gardener and custodian of the territory [...]this social function must be guaranteed” - Interview economic stakeholder - 6-12-2017

“Those [power plants] of smaller dimensions are also those less profitable from an industrial point of view, they can be useful for the farmer, but from an industrial point of view they have a null return, this is one of the themes of difference of vision with the extensors of the plan, the dimensions of the plants, this stimulus to incentivise micro or small size plants. Although we make a critical, very rational and meaningful analysis on the previous plan, diffused co-generation is proposed here again, although rationally aware that it has failed in the previous plan, because widespread small-scale cogeneration is not profitable. There is this tendency to the non-industrial dimension, to the dwarfism of the plants, which are plants that are objectively unprofitable, and the same with respect to biomasses [...] but we continue to point in our opinion, in this case, a bit ideologically, and, oh well, this is our idea clearly” - Interview economic stakeholder - 19-10-2017

The two extracts presented refer to the perspective of small (farmers) and large investors (industry).

During the interview, both the stakeholders stressed that the size of the plants promoted in the plan and following the distributed generation principle are not economically feasible.

The representative for the agriculture sector of the first extract underlines that the problem on the sizes promoted for power plants is their small margins of profit in the absence of incentives. This is particularly relevant especially for farmers, who have few margins of profit in their activity, and are oriented to be careful in investments. The interviewee stresses also that while there are many problems in realising large facilities (opposition, logistics, large investments, coordination and cooperation among stakeholders with new organisational forms), a careful promotion (not speculative and with least impacts) of renewable energies can be a huge resource both for the farmers and the broader community. This utterance aims to emphasise the fundamental social function of farmers, as custodians maintaining the common good of agricultural land and rural landscape (gardener and custodian of the territory), a function that must be preserved and guaranteed (by politics) orienting energy policies so that the farming multifunctional activity can benefit of renewables and so doing preserve also the commons.

The discourse of the interviewee stresses many points already advocated in many discourses circulating both in the public and political sphere. These concern the role and social function of agriculture sector in the regional project, the potential of renewables for favouring farming multi-functional activity and undertake the proper maintenance and valorisation of the territory, a social object conceptualised as a common good and fundamental asset for the regional project and (economic) development.

On the other hand, the second extract reports the perspective of industry actors. The interviewee indeed stresses that the small size of power plants as promoted in the regional energy plan are not at all profitable, having an economic return that is not interesting for industrial investors. In fact, the respondent underscores that the sizes promoted and incentivised may be useful for the agriculture but not for industry. This is conceived and stressed as a point of contrast between

views, that of planners and the Regional Administration elaborating the plan, and that of industry actors. The interviewee expresses her complain pointing out with a three-part list that despite the (critical, rational, meaningful) evaluation of the previous plan, the same principles are represented. This utterance aims to shed light on the ambivalent position of planners and decision-makers by emphasising the contrast between the rational evaluation (the assessment) and the final plan (the decision) by pointing out that although rationally aware decision-makers opted ideologically (and inexplicably) to non-industrial and not profitable dimensions for energy generation plants and contrary to the national government policies (a regional dwarfism). About the scarce economic feasibility of small power plants and other critical issues of distributed generation, other experts expressed some perplexity on the plan implementation and effective results.

“I have to be honest, I see in my activity the exploitation of a water jumps of 3 meters, it seems to me that they are presenting many small [hydroelectric] projects. It is true that the sum of many small projects may coincide with a great energy production, but we must understand that these small projects are actually productive in a very limited period of the year, then in certain other moments produce almost nothing. It is true that in times of crisis you must exploit everything. This modus operandi is very much a child of a plan where a certain target has to be achieved and many small projects are realised, which then some amortise almost immediately, for some other the profitability is very low. Look at the change of ownership, it is a very clear signal that there are two phases: someone does the project, the subject who takes the permissions, then after a few months gives the project to another company, so this is a symptom that the system has a narrow economic sustainability” - Interview expert - 8-12-2017

“the ratio was the distribution in the territory of resources, technologies and among other things, not the mega-projects but small power plants. For this reason, the squabbles have also multiplied, because instead of finding one, two or three tables you could find thirty, and this complicated authorisation process because somehow all the small power plants were no longer bypassed by the ministry, they were all locally approved. However, as you can see, actually an excellent idea, power plants in cogeneration, always of medium-small size, eventually clash with the sad reality, that such a plant can have difficult management. Because not too big, you have to know how to choose the territory because then if it changes, you have the heat and then someone has to use it.” - Interview expert - 28-11-2017

As the expert professional in the first extract puts it, several small-size projects are presented for authorisation procedures, even with the low potential of installed capacity (hydroelectric with water jumps of 3 meters). The interviewee stresses that while is true that many small projects can together have a great contribution regarding the general target and objective, many projects realised have a very limited (seasonal periods of) capacity and small-size rendering them economically unsustainable. What is relevant in this discourse is that the choice of the Region, of opting for promoting distributed generation and incentivise small power plants, is

represented as the effect of a mandatory target to be achieved (child of a plan), ending up in the exploitation of all the possibilities for generating energy. This target-oriented approach is criticised as a rationale considering most the political short-term target than the economic development and sustainability of policies in the long-term (the system has a narrow sustainability).

On the other hand, the expert in the second extract is discussing the main rationale guiding the planning process. In so doing, he underlines some of the critical issues that concern the choice of distributed generation with small-size plants. Indeed, the interviewee represents the choice as an excellent idea, that however clashed with multiple difficulties (the sad reality). More in-depth, these difficulties concern the multiplication and the consequent difficult management of concertation tables and authorisation procedures (from one, two or three to thirty) at the local level. Moreover, the choice for small or medium-size plants in co-generation that would have to reduce impacts generating both electricity and heating, resulted in a more difficult management of plants. Indeed, to reduce impacts the plants should go in co-generation. However, this implies choosing the right territory for siting the facility, in order to use the heating produced (a municipality, community, neighborhood, district, company, an industrial area locally supplied).

On the contrary, environmentalists agree and claim the distributed generation model as the right energy paradigm on which base the regional energy vision and scenario, reducing the overall environmental impact of the energy system and promoting a form of territorial self-sufficiencies.

“the fundamental thing, beyond the integration of different sources, is the fact that we have to bring energy production as close as possible to the final consumer, this is really the turning point, I am a Rifkian [Jeremy Rifkin] from this point of view, already ten years ago he sustained these things. For heaven’s sake, **with all the technological difficulties of the possible loss of energy along the transmission, but a region like the Marche** is not Lombardy, Piedmont or the Emilia-Romagna, we **have the 98% of companies that are mini or micro-enterprises,** and this means that **we can afford to produce energy very close to the final consumer, because of the characterisation of this diffused businesses and activities,** so we do not have big cities, and therefore **district heating can be very good. We do not need large distribution dorsal** [Fano-Teramo HV powerline], **but we need precisely localised systems,** here, where exactly production and consumption are very close” - Interview representative environmental NGO -12-07-2017

“the biogas is fine, the micro-wind even, that's fine, the biogas is fine, for farm self-production and consumption, the discourse of storing renewable energy the same, the single producer, the householder, the industry that **produce and or sell [electricity] directly to the enel or just use it,** while it is **good to talk about small plants, a valley or a farm, to get together and finance it, and discussing the fact of being able to accumulate the electricity and be able to distribute”** - Interview representative environmental NGO - 14-07-2017

As the environmentalist of the first extract underlines, beyond careful evaluation and the choice of the RES mix to adopt in a territory, bringing energy generation close to consumption sites is represented as the smarter solution and turning point for a sustainable (energy) transition. Furthermore, the interviewee stresses the territorial configuration (not big cities) and industrial SME texture (diffused industries), as a crucial variable, compared to other regions, to opt for implementing locally-based socio-technical innovations (district heating) and small diffused RETs.

In this regard, the interviewee aims to shed light on what can and should be the regional energy vision: a vision of developing territorial self-sufficiencies in distributed energy generation and provision, developing an energy system that does not depend anymore to the inefficiencies of the transmission network, and that does not need HV powerlines crossing the Region, but more localised energy systems.

The environmentalist of the second extract, instead, highlights further elements of reflection. The interviewee is commenting and agreeing with the final decision of the plan (distributed generation, small-size power plants such as micro-wind, or biogas in self-production and consumption).

The vision proposed by the environmentalist stresses again the discourse on territorial self-sufficient configurations. In promoting this vision, the interviewee emphasises that such an energy policy should activate energy consumers (companies, citizens) to become producers, joining together to finance and invest in local energy projects and be able to produce, store and/or distribute locally the energy generated. As the interviewees stressed, small-size and carefully evaluated plants are well-received by different actors convinced that the size may favour community/public acceptability because of minor environmental impact (f=5).

“the other thing, more about the social side, is that the experience we have lived and that have been repeated, on renewable sources, the photovoltaic has certainly worked, other alternative renewable sources a little less, some of these have the aversion of territories and problems such as biomasses, the wind power here is not diffused. Even there, a sort of decentralised production talking about little plants can be a form, the mini-wind, for example, can solve some of these forms of environmental impacts” - Interview economic stakeholder - 5-12-2017

“for example, one thing that we put in the document you read is the discourse on the new [PV] tiles, the possibility to discuss the regulation of implementation of the plan in the Conero Park [protected site]. We have expressed a favourable opinion, no to mini-wind turbines, too much impacting, with more than 30 meters, rather the micro-wind.” - Interview representative environmental NGO - 14-07-2017

As an economic stakeholder puts it in the first extract, some renewables have not diffused as it

was expected (have not worked), because of some critical factors such as the strong opposition from the territories to certain technologies (aversion, biomasses), procedural and legal issues (biomasses problems) and wind power landscape impact. In this context, the interviewee assumes that in the model of decentralised/distributed generation from RES the small-size of the plants (mini-wind) can be a good compromise addressing public concerns.

However, as the environmentalist interviewed stresses in the second extract, the environmental NGOs advocated the adoption of less impacting technologies, especially in those protected ecological environments where wind turbines should fit (No to the mini-wind, rather micro-wind).

Indeed, he emphasises that following the presentation of the plan, which foresaw the development of mini-wind turbines, among the claims present in their observation there were the suggestion and demand for investing in technological innovations limiting the environmental impacts such as the PV tiles for the houses within protected areas.

The demand for investing producing or adopting technological innovations (f=5) represents a further theme of the regional energy strategy, with many actors stressing the potential of technological alternatives often not considered, such as PV tiles for urban historical centers and valuable areas, mini-wind and wind energy with vertical axis and without blades, the biomethane, or integrating PV in present infrastructures (e.g. highway).

These demands were advocated by different actors from all groups complaining the lack of consideration (and political support) for alternative technological innovations (vertical wind turbines without blades) or renewable energy products (biomethane) in the regional energy plan.

“the wind is downsized differently than before, but they still count on it, but the idea that they have on wind power is different because they have the idea of wind with the blades of 50 meters, when in Spain the wind is working without moving parts, there is above the shopping centers. The wind with 50 meters’ blades is finished, it is dead, this is in shopping centers and does not bother, it makes no noise, it does not bother your eyes

[..] we have km and km of highways where we put that crap of sound-absorbing panels but why we do not put the solar panels? and they laughed. In the Netherlands they did the cycling paths, in Norway they made the squares of the schools, and we cannot put the solar panels in the highway?”
- Interview political-institutional actor - 11-07-2017

As the political actor interviewed sustains, the plan has downsized the support to wind power in the region, but however is still focused on deploying this technology despite the different oppositions from different subjects (local authorities, citizens, environmental NGOs) and the multiple landscape constraints in the region.

In representing the regional choice of incentivising the mini-wind energy, the interviewee

remarks the incompatibility of this choice in light of the scarce socio-political and community acceptance by defining the conventional and mini-wind as finished, dead, and complaining the often neglected potential of innovations by politicians and the lack of support for implementing alternative technologies or siting solutions (PV panels in the highway, or the vertical wind in urban energy-intensive complexes such as shopping centres).

Coming back to the vision of territorial self-sufficiency for the Regional Project, almost all actors agree on this foreseen direction for the region. However, a tension may be found in the way different groups conceptualise the local transition towards renewable energy systems. Indeed, while economic stakeholders sustain this vision by advocating an upgrade of the transmission network to integrate energy from RES, environmentalists view the self-sufficiency as profoundly linked with an idea of autarky, a territorial energy independence that can be possible with infrastructural investments not on transmission lines, but rather on storage.

“One of the objectives that we have always pushed is that of energy self-sufficiency, that is, what we say is that our region must push as much as possible towards a production of electricity that allows us to be much autonomous as possible, has a sense or less we can argue, we say that this should be there as an input. The old plan talked about self-sufficiency tendency, then if the goal is a self-sufficiency we said we cannot do it with these measures and objectives that you [Region] have put [...] we import electricity from other regions, and this also means that we are more subject to the network infrastructural problems that are there, the bottleneck, interruptions, fluctuations” - Interview economic stakeholder - 19-10-2017

“We suggested adding some pillars. That is, they put three pillars in the PEAR, our association agrees on these three pillars of the regional project. But we believe that the achievement of the third pillar [reduction of gross final consumption of energy], related to the other two [an increase of electric and thermal energy production from RES], should pass through the mobility and residential energy independence, thus the people, not only the industries. So, we proposed to add a fourth pillar: the energy independence of buildings and mobility. So, when you are going to make houses you need to make them independent. I mean, when you are going to make a building, for example, a condominium or what it is, by law you should also make for the building, or N houses, an electrical column, to facilitate the development of the electric vehicle industry” - Interview representative environmental NGO -12-07-2017

As the stakeholder of the first extract affirms, energy self-sufficiency or electricity independence represent long-standing demands of stakeholders intended to the Regional Administration. Indeed, the interviewee stresses the possibility for the region of becoming autonomous and that this point should be the basis of planning and/or debate.

However, she remarks that this objective is not realisable if the Region continues to put in place the measures forecasted. The relevant point here is that according to the interviewee the electricity deficit added to the network infrastructural problems affect the entire region. This is

indeed emphasised by adopting a three-part list (bottleneck, interruptions, [voltage] fluctuations) that gives weight to the complaint and demand about the upgrade and strengthening of electricity transmission line.

Indeed, during the interview the representative underlined many times the problems for the productive processes of technological companies (voltage fluctuations and interruptions), the high costs of energy for both companies and citizens, the weight of energy dispersed because of inefficiencies in the network, or the difficult integration of RES large plants among other.

On the contrary, the idea of energy independence and self-sufficiency advocated by environmentalists passes through the integration of RETs and storage solutions.

The interviewed environmentalist is commenting on his own experience of the consultation processes for the PEAR 2020. In so doing, the interviewee emphasises that while the NGO to which he belongs shares and supports the regional three-part strategy of the plan (increase in electricity and thermal energy from RES, and reduction of final gross consumption of energy), the achievement of these targets is argued as dependent from another pillar on which the Region should construct the strategies and related policies and regulation. This keystone is recognised and represented by the interviewee in energy independence in the building and transport sectors. In this regard, he highlights that the entire strategy should point in this direction and put in place coherent policies and regulation laying the foundations of these changes (i.e. electric columns for supporting the deployment and development of electric vehicles). In this discourse the reference to storage is not semantically reported, however, triangulating the utterance of the interview with the observation to public consultation, it is possible to argue that the energy independence in the transport and housing sectors are directly linked with policies, plans and laws integrating and supporting in the building sector as well as companies the production of energy from RES (often identified in PV production) and storage solutions for intermittent energy sources (e.g. solar, storing in the day electricity for night-time energy demand).

This is relevant as it can be found in many of the discourses of environmental NGOs and citizens promoting the vision of energy independence or self-sufficiency and reveals a profound tension between the scenario prospected by environmentalists and economic actors.

In fact, on energy infrastructure, i.e. transmission and storage, economic and political actors tend to view the necessity of upgrading and making more efficient the grid for different reasons: connecting the forecasted increase of RET power plants as well as for transporting electricity from the south to the north (f=6). Moreover, the security and stability of energy supply (grids and cabins) represent a great problem for the industry and economic sector, resulting in dispersions, interruptions, overloads affecting productive processes (f=3).

“the problem of renewable sources is transport, the just in time. If you, in Padova, in winter, you need the energy that is in Sicily because there are 30 degrees, there is no transport [...] it is useless that you change the light bulbs on public lighting because the savings of a light bulb with a grid badly made with cables that disperse 20 or 10%, so the energy saving is to review the entire public energy infrastructure, public electricity [...] if we want to start with savings, I tell you, very well, but we have energy transport infrastructures that are 30 years old.” - Interview political-institutional actor - 11-07-2017

“there is also the whole problem of the Fano-Teramo [HV transmission line], which has been postponed and was not wanted by mayors. It is a bottleneck at the Italian level, of high tension, which we create, and it also affects us clearly. Terna [TSO] had planned it, was behind ten years and then greeted us [...] That is a missed opportunity, and that was a responsibility of the mayors where had to pass the power line [...] a network so critical creates further problems, so we must be as self-sufficient as possible. The problem of the network is very much felt by our companies and above all the medium voltage, because often there are micro-interruptions that negatively affect the production cycle, penalise the most technologically advanced companies, and create considerable damage.” - Interview economic stakeholder - 19-10-2017

The two extracts presented underline the critical issues surrounding the high voltage and medium voltage power lines as identified and underlined by political and economic respondents.

In the first extract, the politician interviewed represents transport as a very critical issue in renewable energy deployment. In arguing this issue, he points out the problem of distribution of natural resources (the overcapacity of solar source in Sicily with 30 degrees in winter) and makes the case of the transport of electricity generated through PV systems from the south to the north of Italy. In so doing, the interviewee remarks different criticisms on the broader energy strategy, which aims to increase production from RES and promote and improve energy efficiency and saving (public lighting, light bulb) but without intervening in the major waste of energy, the transmission infrastructure (a grid badly made, with cables dispersing..energy transport infrastructures that are 30 years old) dispersing between the 10 and 20 per cent of energy. The whole policy of energy efficiency and saving is in this context represented as a fruitless effort, a lost battle that concentrates the efforts on minimal savings (light bulbs) but does not solve infrastructural problems.

In this vein, also the stakeholder interviewed stresses the critical issues surrounding the deficient transmission infrastructure. Indeed, the interviewee underlines that critical issues in the transmission infrastructure can be found both in the high voltage and medium voltage transmission lines and the electrical cabins/substations. In pointing out these two issues, the interviewee stressed the negative effect and damage deriving from transmission deficiencies that affect and penalise companies.

As a matter of fact, in presenting the issue about the HV transmission line the respondent attributes several times the fault (and the missed opportunity) to the Mayors of municipalities interested by the project. In so doing, the interviewee aims to remark that the opposition of ‘few communities’ blocked an infrastructural project that is strategic at national and regional level (bottleneck at the Italian level .. which we create, and it also affects us clearly) and for this reason stresses the necessity of pointing to self-sufficiency.

However, environmentalists and citizens have a different view on the importance of the HV grid project per se, or about the whole issue of energy transport.

“There is a **premise** to be made. **That project, born in the late 90s is the son of a period in which there was an increase in energy demand** and therefore it was a **backbone that had to replace a whole series of other lines medium or high voltage** and that had to **transfer energy along the entire Apennine ridge, to redistribute it on the various territories** where it was thought there was this demand for energy growth. **Things are not like that now, from 2010 onwards**, if we look at their data, **it is not required**, there is no increase, **there is even a decrease**” - Interview representative environmental network - 24-10-2017

The extract presented well reflect the often-adopted discourse of local committees and environmental NGOs about the HV transmission line. Indeed, as the interviewee clearly underlines, that project is perceived and represented as having the only purpose of transmitting energy from distant consumption sites to the areas of demand, stressing that it should pass along the entire Apennine ridge. This purpose is often argued as being based on assumptions that are no more correct. Indeed, the interviewee underlines that the project has been planned in the 90s’ in a situation of increasing consumptions and energy demand, that nowadays is very much changed. The economic crisis with the failure of many companies has indeed prompted a decrease in energy demand that brings citizens and environmental NGOs to perceive the project as nonsense.

On the other hand, many of the environmentalist groups advocated storage as the principal engine for territorial self-sufficiency (f=4) and stating a strong preference for storage solutions to the HV grid project of the transmission system operator (f=2).

“**We proposed the storage as a further relevant factor for independence. We must start thinking about storing energy at home**, so that we can **become independent** from the energy point of view [...] we must think **that in the future energy we will not have to re-introduce [energy] into the network**, so **we have to study, also technologically**, how **in a future not too far** we will not be forced to re-enter the network, so that we **really plan an energy independence of buildings**” - Interview representative environmental NGO -12-07-2017

“Terna wanted to go with **the power line halfway up the hill, and this too was blocked by the protests**, and the **Region did not give consent to the power line. The alternative would be to network everything that is photovoltaic with batteries**, all the discourse of **conservation of renewable energy**

and then put it on the network when it is needed. Distributed generation with storage, to re-introduce in the network the solar energy accumulated” - Interview representative environmental NGO - 14-07-2017

As the two extracts of environmentalists' discourse underline, storage solutions at household and infrastructural levels are argued as the main engine for territorial self-sufficiency and independence.

Indeed, the two environmentalists remark energy storage as a future not too far, for which is essential to lay the foundations. In the first extract, the interviewee is sustaining the view of the environmental NGO to which belongs and commenting the observations on the energy plan about energy independence at household/building level (Near Zero Energy Buildings, from passive to active houses). On the other hand, in the second extract, the interviewee is discussing the HV grid project, blocked by the protests and the advocacy of local territories on the Regional Administration, which in the end did not give the consent.

That said, the interviewees propose different environmental solutions, reflecting on infrastructural investments (distributed generation with storage), or regulation and incentives for storage (integrated with PV) at the household/building level, reflecting the greater role that is expected from citizens in the energy market (involved as prosumers).

The same engagement of citizens in the energy market is advocated also by institutional respondents, who underline that the regional energy project aims to follow this path.

“Maybe I have the possibility of building a (power) plant in the company, in an industrial area, and maybe I do not need all the energy produced, and rather than putting it in the national grid that often has defiance - and here are critical, so the network cannot absorb it because it has inefficiencies - I have the opportunity to sell the energy to the company that is close to me. The plan foresees this and goes towards that direction. At present there are some limitations that are determined by the national legislation, because in any case at European level we are orienting on the prosumer model, giving the possibility to the consumer to become an active part of the market. At the present time, through user efficiency systems it is possible to sell but still, there is not this complete measure of the network [...] If someone makes the photovoltaic and exchanges energy in the place, the energy that you do in self-consumption will be paid to you a much lower price than that. So you are a bit penalised in going out from the network because you cannot come out completely, you have to stay, however, you are disadvantaged in some way” - Interview political-institutional actor - 15-06-2017

In the extract presented, the institutional interviewee is commenting on the coordination between the recently approved plan and the regional energy policies and the policies at the national and EU levels. The interviewee makes the case of companies producing more energy than those consumed to highlights that socio-technical configurations for local production,

distribution and sale are foreseen in the energy plan (closed micro-grids or efficient systems of users). However, these local socio-technical configurations are limited by national legislation, with the National Government demanded to receipt and transpose EU strategy on citizens' engagement in the energy market, liberalising the sector. Indeed, the interviewee admits that some configurations proposed in the plan (the users' efficiency systems) are hindered and limited by the incomplete liberalisation and monopoly of the transmission grid, and the penalisation/disadvantages for prosumers connected to the grid (paid to you a much lower price than that).

In all these discourses it should be noticed that the continuous reference to storage is often associated with solar RES and PV technology. Indeed, the intermittent source of solar is often argued as the best RES that Italy has, while PV technology is often represented as the future and best technology for the Italian context, not fully exploited and with a further potential of deployment (f=11). Indeed, many of the interviewees sustained the crucial role that solar energy still can and should play in the regional energy transition.

In the discourse of both environmentalists and some economic stakeholders, it can be found a common conceptualisation of PV and solar energy, as a technology and source not fully exploited, badly used, and with an increasing potential despite the end of incentives, integrated with the building sector (f=6). To summarise, interviewees affirms that many efforts should be made at the regional level to support the full deployment of solar energy in the forms of PV or solar-thermal panels that may be not so attractive as an economic investment but remain a good solution for citizens/householders. Moreover, in many argues for a deployment of solar energy in the forms of community energy such as PV systems on distance for villages, or in industrial areas and sheds (f=7).

“We have said that on small-scale electric renewables such as small photovoltaics there is not much reliance, and instead we think there would still be spaces, both on PV and solar thermal, there are still many spaces, also because unfortunately, we go towards an increasingly hot and dry climate [...] there are experiences of remote PV for the villages, because it is clear that in a historic village you do not put the panels, but everyone in the 70s, 80s, and 90s, all cities and villages have realised industrial areas, usually downstream, this is a feature, which now often are dilapidated areas, the warehouses are vacant and so on. So, why not use these areas for thermal power stations or remote PV, so this is an idea that we put there” - Interview economic stakeholder - 9-11-2017

“the preferred source is the solar one in my opinion, can be placed quietly on the roofs of sheds rather than in the fields, unused sheds, because then it is disputed that the sheds are not structurally adequate to receive all because they are made in prefabricated [...] if there are no regulations that encourage the technical transformation of these warehouses that make them accessible [...] in some way we must recover this loss, which is a social, economic loss, and we have lost territory forever, so we try to use these sheds as adequate tools to produce energy, this is just to say this is one of the elements on which we think too little” - Interview representative environmental network - 24-10-2017

“We are in favour of photovoltaics but no longer in fertile areas, but all the warehouses, in the streets, highways, new homes, because that in our opinion is our future.” - Interview representative environmental NGO - 14-07-2017

The three extracts presented demonstrate the point I raised. In fact, transversally to the groups of interviewees, almost all actors agree in considering the solar source and technologies exploiting this RES as the most appropriate RET measures for the Italian context. Interviewees agree also in considering the panels (PV and solar-thermal) integrated into the already built as the only socio-technical configuration available and fitting with the regional and national context, characterised by overbuilding and soil consumption. Relying on this shared contextual knowledge, many of the interviewees suggest different solutions for finding and making available space for PV systems and so doing valorising the abandoned, disused areas, a loss of territory that may represent a good solution for redevelopment policies.

Indeed, the first extract reports the discourse of an economic stakeholder in the sector of SME and the building sector. The interviewee emphasises that both at the regional and national level, with the end of incentives, there is an overlooking of the further potential of PV deployment, which instead is considered having a great role that should still play in integrated forms. In particular, the interviewee, among many others, stresses the unexpressed potential of solar-thermal beyond PV, and the contextual effects of climate change (dry and hot climate) that renders the PV and solar-thermal technologies on which it is possible to rely on the future (contrary to hydroelectric). Moreover, the respondent recognises that also in those cases where PV does not fit with the place (it is clear that in a historic village you do not put the panels) for landscape constraints (historical village – protection of the environmental and architectural heritage) there is a possibility to find solutions for remote PV. What is relevant in the extract, is the recognition of an Italian (and regional feature) of urban historical development: the creation of industrial areas in the villages and municipalities. These areas are represented as dilapidated, a waste of soil that is vacant and that may provide the space and opportunity to site energy facilities (thermal plants or remote PV) recovering, restoring, redeveloping and valorising the area.

This is an often-used argument and shared place representation advocated by different experts, economic stakeholders and many of environmentalists. Indeed, these arguments are often at the forefront of environmentalist discourse on solar energy and PV deployment. In fact, both the interviewees stress the solar and PV technology as the source to prefer or the future of the nation. In sustaining their view, the respondents underline both the potential that PV still has integrated into sheds/warehouses, roads, highways, new homes emphasising the multiples place

where it is possible to site and integrate the technology for a further and more just development aiming to enhance the distribution of benefits of RETs deployment. In fact, many respondents underlined several times the potential deployment of PV serving municipalities, in community-owned or financed forms, as well as in promoting a reuse and valorization of the many losses that sheds and abandoned industrial areas represent, and adequate political action in this direction (so this is an idea we put it; this is one of the elements on which we think too little; that in our opinion is our future).

About hydroelectric, often represented as the most important and historical energy for the region, few interviewees affirmed that there is no possibility in the region for further development (f=5) and underlining the critical issues about the deployment in context (f=3).

“Here there is no development for hydropower, little stuff, but on the other hand the rivers are few”
- Interview representative environmental NGO -12-07-2017

“Right now I see many small plants, that is, we speak of 60 kW, 150, 200, but also because we take advantage of the jump of water a few meters, more than that there is not.” - Interview expert - 8-12-2017

“a couple of companies have done good jobs with hydropower, companies close to the river that were able to take the concessions. Then in our areas [Macerata] there is upstream a lake with the dam, maybe the lake itself is owned by [name energy company], but there is another little power plant nearby, and what happens? to give the few waters to keep the power plant, all on the power plant, and then on the river, there is nothing left. Then, downstream, who made the waterfall with the hydroelectric has no water” - Interview economic stakeholder - 6-12-2017

“The hydroelectric is creating a lot of problems to the coast, for the simple fact that they [companies] take the water and the sediments remain inside the river and do not end up in the sea. So, we find a coast here in the Marche, 180 km that most, the 80% is eroding, and on one side we find the beaches rise, where there are maybe few hydroelectric plants, and on the other hand, where the rivers hold all the sand and the lithoid material we find that the water has come under the chalets” - Interview representative environmental NGO -12-07-2017

The first two extracts report the considerations of an environmentalist and an expert about hydroelectric development in the Region. Indeed, both the two interviewees remark the scarce potential for further development of hydroelectric because of the few rivers and spots still available for technology implementation (rivers are few; jump of water of few meter, more than that there is not). On the other hand, the following extracts refer to the discourse of the consequences of already functioning hydroelectric for further development of the technology. In the third extract, the agriculture representative underscores a critical situation in the area of Macerata, where a company, owner of a large plant, is taking all the water from the basin to get it flow and maintain in function the hydroelectric plant. This is argued as a huge problem for those small local companies [farmers] close to the river and investing in the technology and

finding their little plants without the sufficient water to make them function (then, downstream, who made the waterfall with the hydroelectric has no water).

Furthermore, the political respondent of the fourth extract remarks that the hydroelectric developed in the region is creating significant environmental problems to the coast. Companies are once again accused of an extreme exploitation of rivers, compromising the minimal flow and letting the sediments remain in the river. That said, the relevance of this argument relies on how the rivers are exploited and what effects this has on the regional environmental critical condition. Indeed, interviewees frequently refer to climate change as a major force affecting the quantity of water in the rivers and consequently hydroelectric development, as well as the detriment of the coast. The coastal erosion represents, in fact, a significant and greatly shared problem in the region. The interviewee provides in this case sufficient details to build the case for concern over hydroelectric functioning and further deployment, arguing that of the 180 km of coasts in the region, the 80% are in erosion, with hydroelectric contributing to increasing the damage by holding the sediments in the river and not letting them flow into the sea.

For the many reasons presented (climate change, saturation of plants and scarce water of rivers, coastal erosion and impairment of the minimal vital flow of watercourses), the majority of interviewees believe that a further development of hydroelectric is not materially possible nor desirable.

On the contrary, wind energy represents a contested issue and long-standing dispute in the region. Many interviewees have underlined the many problems on wind energy implementation, and the strong opposition of environmental NGOs, citizens, local authorities and environmental competent institutions. However, some of the economic stakeholders and experts see in wind energy a mature technology with the greatest technical potential (in terms of production and conversion of electricity) and less impact compared to other RETs (f=4).

“I1: I personally consider the wind power the least impacting solution. I must be honest. Yes, perhaps for those who love nature and see this large blade could create some perplexity, but let's talk clearly, in terms of subsequent impact, that is a plant that when you decide to take it apart, remove the fixing on the base and that plant does not leave any type of pollution, everything is taken away. Hydroelectric leaves an impact, however, is greater, an infrastructure that is there, the thermal has repercussions at the level of emissions. I mean, is a system that I can use in a moment of need, in ten years I have an alternative energy I take it down, I take it away and I have left no impact. Yes, it is true, they say that there is a death of birds, but perhaps with the biomass plant with emissions, we are sure that there is not the same type of impact when we talk about a combustion? we do not talk about the exploitation of the wind.

I2: but more than anything else is the location, the problem is to integrate the problems of landscape with the properties and performance of these plants” - Interview experts - 4-12-2017

This point is clearly at play in the discourse of an expert professional, who consider wind energy the least impacting solution compared to other RETs such as hydropower or biomasses, which are characterised by infrastructural or emissions impacts. Wind farms are represented as a good temporary solution in times of crisis, and that can after years be dismantled without leaving high impacts. The utterance aims to remark the multiple benefits of wind power implementation, which puts in the shade and misrecognise the relevance of environmentalists' concerns over the landscape or death of birds. This is stressed by making reference to all the other RETs types of impacts, represented as, perhaps, more valid concerns.

On the contrary, most of the environmentalists and some of the political institutional actors see and argue no future for wind power in the regional context, with windy suitable areas coinciding mostly with protected sites and areas with landscape constraints (f=4). In this regard, it is remarkable that only a few environmental NGOs sustain wind power in the Region, with only one of the interviewees advocating for wind energy implementation (f=1).

“For the wind farm here in our region, first of all, we believe that there are no conditions of 2000 hours of wind to have a productive sustainability, and second, it is not the case because our region was the first to approve the regional environmental landscape plan, so, beyond the 2000 nature sites, we have our region that is extremely interested by landscape constraints” - Interview representative environmental NGO - 14-07-2017

“Our association is in favour of all forms of renewable energy, a position that is always welcoming towards wind energy, which has left other associations in this [consultation/planning] path perplexed, and this is the reason that led us to present a separate document of observations, while if I remember correctly, most environmentalists presented a single text. All positions are understandable, such as those for the protection of landscape, the perched villages, but for us, the fact that in the Marche there is not the possibility to make the good wind power is a defeat of all.” - Interview representative environmental NGO – 28-02-2018

The two extracts report the perspective of two environmentalists that represent wind energy as the main dispute within the regional cooperation between environmental NGOs.

In the first extract, the interviewee stresses that the contextual features of the region, namely the few windy areas and the extension of protected areas (for landscape and/or biodiversity), are such that impede the wind power to be deployed without bending the rules for environmental protection (landscape plan) and the legitimate role and mandate of environmental protection authorities (e.g. Natura 2000).

On the other hand, the second extract reveals the tension between different views in the environmentalist social reality. In fact, the interviewee presents the NGO to which she belongs by highlighting the positive attitude and reception of all the RETs, especially wind, perceived as a way to deal with and face environmental challenges.

The interviewee underlines that this welcoming attitude towards wind energy left some environmentalists perplexed during public consultations and that because of these different points of view the observations to the energy plan were separated, with almost all the NGOs producing a single text as Alliance. What is relevant in this utterance is the recognition that within the environmentalism are present different positioning, perspectives and focus or particular interests. These positions are identified in those more concerned with the quality of the local environment and landscape heritage (mountain, perched villages), and implicitly those more concerned in and oriented to environmental global challenges. Despite recognising that all positions are understandable, the interviewee shows a sort of disregard about the value of protecting the landscape when the problem of energy system change is so pressing. This can be argued by looking at the last part of the utterance representing positively wind power (the good wind), and its failed implementation as a defeat of all, a lose-lose game where no one is winning. With regard to the bioenergies, as it was in the case of observations to the regional energy plan, also in the interview context the biomass RES and RETs were the most debated issues.

Considered that I already discussed in-depth the issue of biomasses in all the analyses presented so far, in this part I present some relevant aspects discussed by participants in the interview study. First of all, a relevant and shared argument concerns the perception of bioenergies by the public. Indeed, many of the interviewees discussed the experience with biomasses and how the public has perceived the related RETs as unhealthy and very much close to the incinerator (f=6).

“we went around Italy to see these plants and prototypes. There was a good incentive to do so, then there was all the controversy of gasification and in the end there is all waned, everyone [saying] “No Incinerators!” because they were seen as a sort of incinerator, therefore pollution, etc., and even there, there was a strong uprising at the popular level that made these situations as if they were big incinerators” - Interview economic stakeholder - 6-12-2017

“We are favourable to plants for anaerobic digestion, but today we cannot mention the word biogas that there is a revolution, because obviously it is seen as something dirty, something unhealthy, something that hurts [...] all issues of emissions have scared the citizens and I have heard compare the biogas plants, which unfortunately seemed to have become nuclear power plants [...] a small boiler was seen as a producer of very strong polluting powders. This produced fear, and for the biogas also about the digestate that was produced” - Interview representative environmental NGO – 28-02-2018

“the biomasses have been seen by the population - according to us very often instrumentalised - as a potential incinerator because they saw the evolution of the incinerator, and therefore a priori opposed. So, the biomass was seen with great difficulty” - Interview economic stakeholder - 21-11-2017

All the three extracts are relevant for different reasons. First, the meta-knowledge on public

perception of biomasses and biogas is shared by different actors, being them economic stakeholders or environmentalists.

In fact, all the three interviewees emphasise the same point: citizens have perceived bioenergy technologies as the follow-up or technological upgrade of incinerators. The interviewee of the first extract is remembering the period of national incentives for biomasses, with farmer associations interested in investing and looking for the best technologies across the country. Then, he remembers the local oppositions to biomasses as a controversy on the gasification process and a popular uprising against biomass plants characterised by the motto 'No Incinerators'. This utterance aims to highlight that biomass power plants were perceived and treated as incinerators: high-impact facilities and source of strong pollution.

This is further stressed also by the environmentalist of the second extract presented. The discourse of the interviewee represents once again the word biogas to the popular uprising or revolt (revolution) determined by the fear about pollution and human health. The respondent indeed emphasises through a three-part list (something dirty, something unhealthy, something that hurts) the public reaction to biogas as determined by fear on emissions, with biomass plants perceived so impacting that the interviewee compare them with the nuclear power plants, while for the biogas emphasises the fear about pollution from the digested waste.

Finally, the third extract of an economic representative stresses once again this representation of the public as perceiving, treating and representing biomass power plants as incinerators. The interviewee is very explicit in assuming that citizens have perceived these technologies as the evolution of incinerators and that for this reason they irrationally opposed (a priori opposed). Nevertheless, the interviewee introduces a further belief about the instrumentalization of public opposition for political purposes, and how fear has been amplified by discourse comparing biomass to incinerators.

The second aspect that is relevant to notice here, concerns the territorial belongings of interviewees sharing this discourse and assumption. Indeed, all the interviewees sharing the assumption of citizens perceiving biomass plants as incinerators come from or work in two provinces: Ancona and Macerata. This may be a very relevant point, that finds a parallel with the previously discussed studies.

Indeed, the reconstruction and analysis of discourses on biomasses in the public sphere showed that, especially in a first moment, biomass technologies, even in the case of biogas, were often associated to health discourses concerning the emissions of greenhouse gasses and fine dust. Then, the discourse of opposition to biogas by local committees can be easily identified as evolving and offering a broader range of motives for opposing to biogas and reflecting different

and more variegated discourses on the risks for health about biogas, as well as many other local negative impacts and procedural injustices. The analysis showed also that most of the committees opposing to biogas and conveying more discourses on health risks about that technology are located in the provinces of Ancona and Macerata. While it is true that these two provinces were mostly affected by biogas development, I argue that this explains only partially the higher presence and activation of committees of the two provinces. Looking at the energy geography of the Marche, the presence or proposal of high-impact energy facilities may provide further factors of reflection and potential explanation of why so many committees opposing to biogas are located in the two provinces, why their discourse is more characterised by health concerns, and why many actors of these areas believe that citizens perceived and understood biomass plants as incinerator. In fact, the province of Ancona has historically a huge concentration of high-impact facilities (refinery, port, civil airport, thermoelectric power plants) rendering a large area of around 100 km an area at high risk of environmental crisis for the levels of pollution. On the other hand, Macerata is the only province that has been interested by the highly contested presence and functioning of an incinerator. The incinerator³⁹ has functioned for sixteen years and was decommissioned in 2013 (after monitoring activities registering for seven times an overrun of the dioxin emissions limit from the chimney) proposing the reconfiguration of the facility for using only organic waste. Moreover, Macerata can be considered a pioneer province in the deployment of the biomass RES.

In this context, it is remarkable that both areas are highly interested by polluting energy generation facilities burning materials to produce electricity, as well as the Provinces indicated by Prontera (2008a; 2008b) as having adopted a directive approach to energy governance, with little participation of non-institutional actors.

That said, the diffused belief that citizens saw biomass plants as an evolution of incinerator may be not so naïf or a form of misrecognition of citizens' motives for protest. Instead, this presents an empirical evidence deserving reflection and further studies.

Indeed, citizens of the areas at high risk of environmental crisis or interested by burning and polluting energy facilities might be influenced by this (familiar) socially relevant contextual knowledge in anchoring and make sense of new (unfamiliar) technologies for energy generation that are characterised by similar production processes or products. In this direction, further studies are required to better understand how people make sense of new energy technologies by anchoring the unfamiliar with the familiar knowledge about energy generation technologies (see also Upham et al., 2015 on fracking). That said, unfortunately, few information,

³⁹ <https://www.ilrestodelcarlino.it/macerata/cronaca/2013/09/04/945036-inceneritore-cosmari-chiude.shtml>

communication, and participation characterised the diffusion of this kind of RETs. It is possible that this deficiency, added to the diffused distrust towards firms and politics, gave the space for the emergence of public concerns and conceptualisation of biomass and biogas plants as advanced incinerators or high polluting facilities. Nevertheless, across time many of the concerns expressed in the public discourse (e.g. improper maintenance and malfunctioning of facilities and digestate spill in the river) found confirmation strengthening the presence and legitimacy of the protesters in the public and media sphere. We should add to this equation that over time the discourse of protesters on the impacts of the facilities became more elaborated and variegated, involving and shedding light on multiple distributional, procedural and recognition injustices, as well as providing a critical and comprehensive assessment of RETs (e.g. energy life-cycle and project/infrastructure lifetime), founding a greater space and consensus in the public sphere.

However, to remain strictly adherent to the main concern of this paragraph, which pertains the socio-technical configuration of RETs, even during the interviews some of the respondents highlighted the aspects pertaining to the proper management of facilities and the concerns over the digestate use as well as emissions (f=4).

“They carried out a completely irregular fertilisation because they created some quagmires, some stagnations of slurry, and so we denounced so many times as committee these situations, with photos, reports and what else [...] then there was a blitz of the forest [rangers] that has determined the closure of the plant for some time, because it has been found pollution of a water well [...] from a measurement of the Arpam [Regional Environmental Protection Agency] came out that they exceeded 9 times the limits of the emissions” - Interview spokesperson citizens’ committee - 18-10-2017

As the spokesperson of a citizens’ committee testifies, the protesters complained and demanded different times about the control and monitoring of the management and maintenance practices of the facilities in their entire production cycle. In so doing, the interviewee provides multiple (rhetorical) evidence on the irregular and unethical behaviour (irregular fertilisation .. quagmires, stagnations of slurry) citing the many documents produced by the protesters, as well as the scientific evidence of competent authorities (Arpam) confirming the concerns often-advocated by protesters (pollution of water well ..exceeded of 9 times the emissions).

Another widely shared theme that can be found in the diverse data sets refers to the use of dedicated crops for energy production, stressing the ethical and ecological side about the proper use of resources such as land, water, wastes (f=5).

“we also thought to make the biogas with dedicated crops, but even then, there was more an ethical choice to give up, because they needed lots of hectares [...] it seemed a waste to us cultivate to make

energy. So, we stopped a bit, then some companies went on alone, especially the big companies. **Instead, our goal was to be able to exploit waste material,** from pruning to straw, all that could be an organic waste, **and could be a resource to be exploited”** - Interview economic stakeholder - 6-12-2017

“this aspect of the supply impoverishes the territory, I mean, **dedicate the land exclusively for the mais** that would have introduced **in the anaerobic digestion,** in our opinion **this would have determined a great impoverishment, from the alimentary point of view, of the zone”** - Interview spokesperson citizens’ committee - 18-10-2017

“You know, one thing is to make a power plant where you use it improperly and you go to **distort the use of agriculture,** with **products that had nothing to do with,** and that is **only finalised to energy.** **Another thing is to use for energy [purpose] something that derives from the proper activity of agriculture and forest management”** - Interview economic stakeholder - 5-12-2017

As all the extracts show, dedicated crops are conceived by different actors - from economic stakeholders to environmental NGOs and citizens committees – as unethical, inappropriate, a waste and impoverishment of territory, a distorting and inappropriate use of agriculture and the disrespect of the ‘philosophy’ of biogas, based on circular economy and valorisation of wastes from agriculture, breeding and forest management.

These aspects are greatly emphasised in all the extract presented. In the first one, a representative of the agriculture sector remembers that the choice of a group of farmers to give up on biogas from dedicated crops was based on personal ethics and conceptualisation (or representation) of agriculture: producers of food and providers of public utility services. The waste of land (lots of hectares), and the waste of the products of the agricultural activity (cultivate to make energy) are indeed advocated as the rationale guiding farmers to give up, in some cases, to invest in that technology. On the other hand, the interviewee stresses the main motives that attracted the interest of farmers in the new market: the possibility of transforming the organic wastes of the economic activity in a resource that can be exploited, producing further income and fully realising the multi-functionality of the enterprise.

In the second extract, the point of territorial alimentary impoverishment or loss is also stressed by the spokesperson of a citizen committee, who strongly criticises the supply configuration of the biogas plants, relying on extensive land of maize, with the possible future scenario of a distortion of agriculture and an impoverishment of fertile soil and food supplies.

In the third extract, a further economic stakeholder emphasises that the main problem of biogas deployment was the intentional improper use and distortion of the agriculture internal market towards dedicated lands and food productions for the only energy purpose. In strongly criticising this model, the utterance aims also to emphasises what should be this ‘proper use’ of agriculture and the possible link and conciliation between energy and agricultural sectors: fully

exploit the normal and already present agricultural production of waste transforming them in a resource. In the same extent, while many of environmentalists contest the deployment of biomass for electricity production (i.e. burning biomass with consequent emissions), they are often favourable to biogas or biomethane technologies advocating the positive value of bio-digestion processes, a properly valorising waste of farming and breeding activities and producing energy for the self-consumption or connected to and supplying other users.

The same kind of discourse, pertaining the circular economy, the valorization of waste and the proper management of the territory can be found in the same extent in many discourses about forest residual biomass from forest management. Indeed, some interviewees see forest management with a double valence of securing, managing and maintaining the territory facing hydrogeological instability and producing energy from waste (f=5).

“our areas and our forests are a little abandoned, even if there is an important vitality, for which the management of the forest is important, so who has the forest and does the management, if he does not call directly farmer must call someone else, and usually does not call anyone [...] on the one hand you can manage the territory and do a maintenance and you can prevent some instability, and then secondly since there are all these waste, raw materials from waste [...] a maintenance of the territory that is always an added value that remains over time.” - Interview economic stakeholder - 6-12-2017

“There is no more land maintenance. We in the Marche have the 99% of the municipalities that are at risk not only seismic but also hydrogeological, landslides, etc.. Therefore, very often the floods we have downstream, are increasingly the product and the effect of the lack of maintenance of the territory in the mountains [...] so we say to use resources for those territories, to do maintenance and recovery hydrogeological instability, and on water resources a similar thing [...] like a system of taxation for ecosystem services, of mountain communities. A system of municipalities downstream that pay something to the mountains municipalities, a compensation and at the same time an insurance policy” - Interview economic stakeholder - 5-12-2017

In fact, the two economic stakeholders presented in the extract vividly show this point arguing that forests are abandoned and that there is no more land maintenance, despite the many risks linked with hydrogeological instability. All these aspects are shared by many of the respondents belonging to different groups, and as showed in the extracts presented, remarks the added value of maintenance of the territory, something argued as remaining over time, reducing potential damages determined by floods, landslides and so on that characterise almost the entirety of the region (99%), and enhance in this way also the management of ecological and common resources (water). Following this reasoning, the utterance of the second extract greatly emphasises this aspect of the eco-systemic services. These are often provided by small municipalities (mountain communities), in terms of inhabitants, but responsible for large portions of territory and as a consequence for the majority of natural resources. The utterance

is relevant also for a further aspect introduced by the interviewee: the need of resources for this maintenance of the territory, which being invaluable could also take the form of a compensation to local communities providing eco-systemic services at the benefit of the broader regional community.

However, as sustained by many competent authorities, environmentalists and some political stakeholders, the forest management forecasted in the plan, rather than a proper maintenance of the forest and the provision of eco-systemic services, is represented as an intensive exploitation of 'forest waste' not keeping count of the complexity of the forest socio-ecological system, and of the multiple eco-systemic functions that this provides (e.g. carbon capture and storage).

In many questioned the extent to which forest will be exploited, remarking their criticisms by arguing the scarcity of 'industrial green' in the Region (f=3), and the perplexities on the approach and choice adopted by the Region, while also questioning about the siting of power plants and how it will be decided (f=4) or how costs and benefits will be distributed (f=3).

All these issues are still open and debated, demanding further institutional and regulatory arrangements to reach an overall socio-political and community acceptance for biomasses and RETs in general. On the other hand, economic acceptance by investors and firms about regional energy policies and RETs configurations remains anchored to concerns over monitoring and co-production about planning, strategy implementation and correction during the race, as well as by concerns over the economic feasibility or profitability of distributed generation with small and medium-size plants.

6.3. Acceptability, participation, and co-production in energy system change: concluding remarks and a critical discussion

The chapter presented a study adopting a triangulation of data (natural documents and interviews) and methods (thematic and discourse analysis) to better understand social acceptability and public engagement about energy system change in the regional context.

Indeed, the study has investigated public engagement and social acceptability of RETs and related policies by different publics as expression and product of communicative and interactive processes that are grounded with power and institutional relations and practices, as well as historically, culturally and territorially influenced by pre-existent knowledge and experience.

Both public engagement and social acceptance are conceived in this work as social facts that should be approached in their processual/temporal dimension, that is, as social objects never totally fixed or determined. Instead, these are conceived as continuously produced in a constant struggle over meanings and positioning that actors strategically use to get influence and recognition in the public and political sphere, and so doing fully participating in the definition of the regional energy project.

The research adopts a longitudinal/processual perspective, paying attention at the different phases and historical moments of the participatory phenomena and RETs' deployment in context, examining changes in representations and relations across time, and the role of psychosocial factors and processes.

By adopting a social psychological intergroup perspective on social acceptance and public participation (communication, cooperation and conflict in intergroup relations), the research has mainly focused on psychosocial factors and processes such as trust, shared and/or contested meanings and interests, common identities and belongings, representation and positioning of self and other, recognition and misrecognition of others' knowledge and position, perceived procedural and distribution injustices, as well as expectations of results, perception of collective efficacy, or socio-political control, to put it simply: agency.

Being informed by a psycho-social literature on these issues, the research has looked at:

- The individual in relations - rather than isolated subjects abstracted from their context - keeping into account the effects of meta-knowledge in interpersonal and intergroup relations (Elcheroth, Doise & Reicher, 2011; Raudsepp, 2005).
- the ways in which technological, legal, political and public sphere innovations are receipted and re-presented allowing diverse actors to adapt or resist change (Batel & Devine-Wright, 2015; Castro, 2012).
- the representation of and personal involvement with places by different actors (Walker et al., 2011; Devine-Wright, 2009).
- the interplay between representations, identities, and communication (Batel & Castro, 2009; Jovchelovitch, 2007; Howarth, 2006).
- the ways in which knowledge of other is perceived and treated in knowledge encounters (Jovchelovitch & Priego-Hernandez, 2015).

In this direction, the research matched Social Representations, Justice, and Identity theories and a discourse analytical approach to examine the contextual politics of change in the regional energy transition.

According to this aim and task, the study aimed also to contribute and fill the research gaps identified in social acceptance and MLP literature presented in the first chapter.

Adopting a societal psychology perspective, connecting individual levels of analysis with the analysis of the relational and societal dynamics that shape and give meaningful essence to political behaviour and phenomena, the research has looked at:

1. The spatial, place and territorial aspects at play in regional energy transition (Adil & Ko, 2014; Bagliani et al., 2010; Bridge et al., 2013; Calvert, 2016; Coenen, Bennewroth, & Truffer, 2012; Devine-Wright, 2009)
2. The interaction between (innovations in) the legal-political, public, and techno-scientific spheres (Batel & Devine-Wright, 2015; Castro, 2012; Seyfang & Smith, 2007).
3. The temporal dimension, or historical account of events, and of the social and relational dynamics in interactions and expectations among actors over time (Batel, 2018; Walker et al., 2011)
4. The coordination and interaction between multiple scales of action and governance (Bulkeley & Moser, 2007; Goldthau, 2014; Sarrica et al., 2018; Wilbanks, 2007) and the potential tensions between top-down and bottom-up change ambitions and projects (Howarth et al., 2013; Sarrica et al., 2018)
5. The role of multiple actors and coalitions, operating at different scales, in driving or obstructing system change by influencing and shaping energy policies' formulation, technological configurations and trajectories (Devine-Wright et al., 2017; Geels, 2014; Smith et al., 2010; Späth & Rohracher, 2010; Wolsink, 2007)
6. All the three dimensions of acceptance – socio-political, public/community and market acceptance -, corresponding to the broader acceptance of RETs' deployment and diffusion, that is about socio-technical and politically-related changes, such as in policies, plans, programmes, or regulatory and institutional arrangements, e.g. in land use, siting, participation, and cost-benefits distribution, (Devine-Wright et al., 2017; Szarka, 2007; Wolsink, 2018a)
7. Energy system change as a whole, rather than the single part, namely the implementation and siting of single RETs (Jenkins, 2016; Parkhill et al., 2013; Pidgeon et al., 2014). This means look at the: choice on the mix and targets of RES and RETs and the (regulatory and institutional) conditions for their deployment and territorialisation, the associated energy infrastructure for transmission and storage, the multiple externalities of the energy life-cycle (from supply to waste disposal) and technologies' lifetime (from siting and construction to place restoration) of RETs.

This represents the main contribution of the study on the topic of social acceptance of energy system change. On the other hand, for what concerns the second research object: public engagement, the study has tried to shed light on the psychosocial factors at stake in different participatory behaviours and practices, namely bottom-up participation, taking shape in the diverse forms of community participation, collective action and protest, and top-down institutionalised participation in the context of energy projects, policy-making and planning processes.

Bottom-up participation is approached as a “source for the inclusion of divergent normative appraisals in energy policy and planning” (Cuppen, 2018, p.29), namely a site of knowledge production and emergence of new meanings, values and interests, and that provide moments of informal context-dependent assessment about new technologies and policies.

Institutionalised participation is approached with the awareness about its own paradoxical nature, demanding diverse actors to cooperate, and constituting at the same time both an opportunity and constraint for citizens in having a voice and get influence in decision-making processes (Mannarini, 2014; Regonini, 2005). In this regard, the research critically questions the increasing rhetoric about the democratisation of participation and decision-making in the political sphere and analyses the ways in which different actors (decision-makers, technicians, scientists, entrepreneurs, civil society) conceptualise participation and mutually conceive the other, and what expectations about that guide their behaviours (Bauer, 2014). In this regard, institutionalised practices of public engagement are analysed in their real world making in the region across time, capturing how institutional practices and change are receipted by different key actors (Castro, 2015). Public participation in environmental assessment, planning, and decision-making is analysed according to the three criteria of quality, legitimacy and capacity (Dietz & Stern, 2008; Fiorino, 1989). About the quality criteria, the research analysed the way actors perceive the institutional change in addressing public concerns, considering new and relevant information, generating new knowledge and ideas, and if the outcome reflects a wide range of viewpoints on the situation and the best available evidence. On the legitimacy criteria, the study analyses if and how distrust among participants is reduced or on the contrary exacerbated, if participants recognise the decision and the process leading to that as fair and acceptable, even in the case they do not fully agree with the recommendation for action. With regard to the capacity criteria, the research examines if participants, including experts and decision-makers, are more informed about the issue at stake and the perspective of others in that regard, and if organisers and participants develop capacities on inclusive and participatory decision-making.

These aims and research questions do not intend to provide an evaluation of the work of the Region on planning and participatory practices. Rather, the research aims to provide useful insights for the regional community at large as a starting point for meaningful dialogue and enhancement of public engagement and decision-making practices, that is, improve communication and co-production to build the necessary capacities, support, and acceptance that are required for the regional energy transition.

By focusing on acceptance as a complex process involving political, legal, social, and technological innovations, the legal-political or institutional domain and change represents an essential part of this analysis, as much is that on technological configurations.

In this regard, by triangulating public consultation documents and narrative episodic interviews with key informants, the study provides an in-depth understanding and deconstruction of the regional transition pathway, the diverse components implicated in public engagement and social acceptability about energy system change, as well as shared and contested meanings struggling in the definition of the regional energy project. For instance, the thematic analysis (Braun & Clarke, 2006) of public consultations' documents for the regional energy plan provided an accessible way to access to the perspective of diverse stakeholders on diverse themes or topics such as vision, scenario and governance; renewable energy generation; assessment, monitoring and mitigation; energy efficiency and saving; communication and involvement; energy infrastructure for storage and transmission, and so on.

The analysis of public consultations and the SEA process shows that the institutional practice allowed the emergence of strategic thinking and the assessment not only of mere environmental impacts, but social impacts as well, demonstrating the strategic sight of participation in ensuring the sustainability and acceptability of the plan. In this respect, however, it is only by preliminarily opening the debate on energy planning, recognizing and including the diversity of publics and normative appraisals, that the institutional practice of involvement has facilitated strategic thinking in the formulation of the plan. It should be remarked that many of the observations produced were found in informal and non-institutionalized arenas, concerning both the moments of public debate presented in the fifth chapter, as well as during the (not required by law) listening campaign preliminary to the elaboration of the plan. Indeed, many of the observations concerning 'social impacts' about the implementation of the plan are redundant and reflect discourses emerging in the public sphere in previous years characterized by diffused controversies and conflicts.

The findings on this analysis, as well as those related to the analysis of the public sphere, are used as a starting point for the narrative episodic interviews, and for triangulation using the three data sets for cross-validation.

The analysis of discourses related to the geographical, spatial, or territorial aspects at stake in the transformation of energy systems has revealed the relevance of historical problems for current energy transitions, such as the overbuilding and industrialisation processes in using land and consuming soil, as well as in polluting throughout the region. Further critical aspects of the current energy transition are identified in the unbalanced relationship between the coast and inner rural and mountain areas. The coastal area is identified as completely overbuilt, consumed, and largely affected by environmental burdens, concentrating most of the environmental impacts and polluting activities in the region (diffused industries, energy and transport infrastructures and large-scale facilities).

It is mostly in this context that many interviewees claim a sort of environmental equalisation of environmental costs and benefits, highlighting the distribution and concentration of impacts in some regional territories and the need for locally re-distributing benefits (e.g. redeveloping abandoned buildings and industrial areas, representing a territorial and economic loss, for siting RETs not consuming further soil).

On the contrary, the inner rural and mountain (landscape and) territories are widely recognised and represented as the asset, brand, and crucial resource for the regional economy based on agriculture and tourism, namely land and landscape; the cultural and environmental heritage and source of regional identity, memory and tradition - coinciding in an essentialization of the countryside landscape, and particularly of agriculture rural land (see also Batel et al., 2015); abandoned and not managed areas although they host most of the common resources (water, land, landscape, natural areas, etc.) recognised as value to defend and not be exploited or sold to the best offer.

All these representations about the regional territory strictly emerge in relation to RETs deployment and diffusion, which is characterised by a diffused perceptions and representation of RETs territorialization as a physical aggression to the broader territory, the places of relevance and to the self.

For what concerns the historicity of RETs, many of the interviewees recognised that the previous regional energy plan was innovative and courageous, defining a strategy aiming to deploy RETs adopting the model of distributed generation in line with the regional industrial texture (widespread industry, mostly SME), and attempting to prompt energy districts. However, the elaboration of the plan has been characterised by a technocratic pathway, without

public participation, and looking only at economic and technological aspects of RETs and overlooking environmental and social aspects and impacts at play. This is recognised as a factor that greatly limited the development of renewable energies foreseen in the plan (e.g. wind energy and landscape constraints). Anyway, multiple changes in the landscape scenario are represented as turning points in the regional energy condition (economic crisis, change in the mix of fuels, changes in incentive policies for RETs). The windfall generous incentives for PV and the relative lack of government of this change are represented as the main factors determining the uncontrolled RETs deployment and diffusion, coinciding with the representation of distributed generation as a multiplication of impacts. In this regard, the regional path is widely recognised as lacking the planning, regulation, and management of change. The diffusion of PV panels across the regional hills and the rural and agricultural fertile land is perceived and represented as fast and violent in its impact, affecting the (idealised and essentialised) landscape and consuming further (already scarce) soil. In this context indeed, rural land and landscape strongly start to emerge as the foundations and primary common resources of the entire regional community.

The diffusion of PV panels on the ground is such fast and extensive that the Region reached the targets of RES share 'because of/thanks' to a 'market distortion' introduced by incentives' national policies. These incentives are widely represented as too high, windfall (with no control), speculative gains, and badly distributed, favouring and attracting more the industrial investments respect to the family/household adoption, advantaging private investors and threatening/disadvantaging local economies and communities. Indeed, PV diffusion is represented as bringing only costs to the territories and having created the illusion of a diffused wealth (creation of companies and occupation) ending up in a sad reality for the territory once incentives ended: wealth disappeared and costs at charge of the territory.

In this already critical situation, a further crucial event and turning point is introduced with the regional law for authorisation on RETs excluding the EIA. This law emerges in a period of change in incentives policies (2012-2013), with the cut of incentives for PV, and the introduction of incentives for the deployment of other RETs (biomass, wind, hydroelectric etc.). This is recognised as pushing and orienting investors in considering other technologies beyond PV (no more incentivised) and wind (for size, installed capacity, and landscape constraints), and to mostly focus on biomass and biogas plants.

By excluding from EIA the power plants under the threshold of 1 MW, the law is contested as illegal and illegitimate, not respecting the EU directives or national laws, and so doing excluding citizens and not evaluating neither the cumulation of impacts in the siting areas nor

the distance from human settlements. As it was for the PV expansion, also in this case, investments in biogas technology is represented as a speculation that again exploits common resources (public money of incentives, land) at the advantage of private companies and at the expense of local communities and economies.

In this regard, the lack of communication, information, and participation, as well as the assessment, control and monitoring on the power plants by competent authorities, largely influenced the development of biogas and consequent public responses and conceptualisations. In fact, public responses to RETs are animated by an experience of continuous disrespect and lack of recognition, as well as the perception of multiple procedural and distributional injustices. The emergence of further oppositions in the Region about bioenergies seems characterised by an initial representation of biogas as unhealthy and an evolution of the thermoelectric and incinerator technologies, especially in those areas and territories that are most affected by pollution and large-scale high-impact facilities and infrastructures. Following the first protests in the region, many citizens' committees of the communities interested by biogas plants started to organise and undertake networking activities in the public sphere to debate, inform and organise actions of advocacy and collective mobilisation. The discourse and representation of biogas are across time cultivated, refined and conveyed by different protesters' groups throughout the region, involving multiple criticisms and injustices revealing the territorial unfit and damage of the socio-technical configurations of biogas promoted (a speculation, exploiting local resources, advantaging investors and damaging local communities). At this point, more than acceptance it is possible to talk of a diffused raw intolerance towards biomasses and biogas.

The years that follow are characterised by a tension spreading in all the national context between 'opening-up or closing-down the debate' that is possible to trace also in participants discourses. This tension concerns the re-centralisation of energy governance attempted by the National Government in recent years. The environmentalists stated a very negative opinion of national energy policies introduced in those years. Among them, the introduction of a national strategic interest clause (law 164/2014 - Unlock Italy), represented as a weak point of democracy, with State not responding to its own rules. Moreover, environmentalists complained the institutional disrespect, misrecognition of local voices and willingness, as well as the disrespect of the same constitution on decentralisation, bringing back the country 40 years ago (National Referendum, change of Title V of the constitution, art. 117-118 on subsidiarity and participatory governance).

In this regard, an overall sharing seems to emerge in considering national politics, and in some way also regional one, as often imposing top-down change ambitions and projects, without having a dialogue with and feedback from the territory.

Instead, other actors advocated an ambivalent positive opinion on the centralization of energy governance. While the local level is recognised as the best suitable scale for far-sighted energy strategies, this level is often recognised as politically blocked by the public veto, with local politics often supporting the local opposition or directly on the front line. It is in considering what looks like an insurmountable barrier and source of frustration, the ‘recurrent a priori and emotional opposition to RETs development’, that some actors show an ambivalence between decentralisation of policy and planning and re-centralisation of governance and a more dirigisme governmental approach - despite the recognition that national politics is not far-sighted.

On the contrary, many other interviewees advocated the fundamental role of local communities and citizens in energy transition, claiming a more decentralised and proactive role and approach from the Region, and the local sharing of targets for a greater involvement of local actors and of citizens in the energy market and policies. Nevertheless, despite the planned regional measures in this direction, these are represented as hindered by the national policies, with Italian Government that seems to oppose to the EU strategy on decentralised locally-based energy systems, the more active role of citizens as prosumers, the micro-grid, and more in general the development of an energy micro-market.

Regarding the social/relational side, it is remarkable that many experts and economic actors interviewed have an extremely negative view of citizens, ranging between the more ‘soft’ label Nimby to the more extreme Banana. Citizens are often perceived and represented as irrational, lacking knowledge or misinformed, emotional and characterised by an attitude of total closure and uncompromising positions on RETs. Even the Mayors, and more in general the local politics, are perceived and represented in a negative light, as Nimtoo, and too susceptible to issues of popular consent, always ending up in a total block for RETs and associated infrastructures’ development.

Anyway, these negative representations of the public and of local politics seem to emerge from frustrating experiences of interactions with them, and of a continuous experience of misrecognition and delegitimization of experts’ position and knowledge (e.g. not trustworthy, in the payroll of companies). On the contrary, other interviewees across groups seem have a different representation of citizens, ranging from a representation of them as having no fault in being concerned about the environment or health, or actors fighting for more sustainable and

democratic policies, informing themselves and undertaking awareness-raising, protest and advocacy activities often based on the access and use of expertise. In this regard, however, all the experts seem aware about the relevance of (and the possible mistakes in) science communication and engagement with the public, often finding themselves without the necessary motivation and/or capacities to engage with the public and establish a fruitful dialogue. In light of the often voluntary and frustrating past experience in engaging the public with science, experts seem often avoid interaction with the public, arguing the presence of a (hostile, instrumentalised, and demagogic) social climate undermining every type of dialogue, and the risk of being entangled in political and institutional conflicts. This highlights the very uncomfortable position of experts, as well as the anticipations/expectations guiding their behaviour and interaction. The same discourse can be done regarding companies, with citizens perceived constantly as hostile and having a generalised and a priori distrust towards companies perceived as pursuing their own profits with no care for the local communities or environment. This stresses again the role of mutual expectations in guiding interaction between firms and citizens.

For what concerns bottom-up participation, the findings unveil the variegated participatory experiences of local groups and actors engaged in a form of grassroots activism characterised by information, awareness-raising and deliberation activities, networking and coalition building, and collective action in protest and advocacy in political and media debate. The period under analysis coincides with a period of great ferment in the national context, a diffused environmentalist wave that conduced to what is represented as a success: the 2011 National referendum on nuclear power and water as a common good. In this regard, many environmentalists report that this period of capillary work and participation in local communities determined a sort of hope and democratic optimism in active citizens and determined the development of a shared belief that bottom-up participation can contribute to a socio-cultural and institutional change towards an 'overall sustainability' and the 'proper management of common goods'. Many of the discourses highlighting the perception of collective efficacy are linked with political advocacy (i.e. towards Municipalities, Provinces or the Region) instigating policy changes and actions such as in regulation and planning to face procedural, distributional and recognition injustice, as well as in creating network and coalitions working together. In so doing, it is relevant to notice that the grassroots engagement and cooperation of local groups and communities with environmental NGOs is represented as a democratic experience, adopting deliberation and direct democratic practices and mechanisms in their activities, and providing in this way the adequate recognition of those small,

unstructured and local groups often not recognised, included and heard by politics. The lack of institutional recognition of local groups is in this way overcome by joining powerful actors, networks, and coalitions.

In this regard, grassroots engagement is often represented as originating from injustices and unfair treatment, accompanied by anger, distrust, concerns, fear, dissatisfaction, bringing citizens to locally take action. On the other side, this activation and the participatory experience is often remembered in a positive light, characterised by hope, optimism, satisfaction and collective efficacy beliefs. What is relevant in approaching participatory experience as a process across time, is the enlightenment of how experienced power relations influence participants beliefs. Indeed, in engaging in so many contexts (political, mediatic, public) and multiple actions (intended to citizens, or firms or politics), some discourses of activists shed light on the disempowerment experience deriving from engagement with politics. In fact, in many advocated the perception of co-optation, persuasion or manipulation of citizens and protest in institutional practices.

In the context of institutionalised participation, almost all the actors complain about the overtime lack of adequate institutional actions respecting the Aarhus Convention – i.e. information, participation and access to environmental justice. To the same extent, several actors recognise as necessary the dialogue with local communities to overcome the critical issues of (distributed) energy generation from RES and claiming information and awareness-raising activities for different publics as a priority that cannot be postponed anymore.

Information disclosure (e.g. access and consultation of policy documents or monitoring reports) is largely recognised as a crucial factor basing upon participation can be considered responsible and aware. Communication on risk assessment and monitoring of energy projects are identified as crucial aspects to increase acceptance and trust, by providing to the public the evidence of the proper management and maintenance of the facility, as well as the correctness of companies' behaviour and adequate appraisal. In fact, information and communication on risk assessment and monitoring can be considered a means through which increase the trust citizens have on firms and politics. Some stakeholders and experts advocate the need for implementing action to provide scientific and objective information to educate the citizens in light of a conceptualisation of them as uninformed/misinformed, irrational and emotional. Anyway, many environmentalists, experts, and political institutional actors criticise this conceptualisation of the public and the consequent approach often-adopted by institutions: the decide-announce-defend model on decision-making and planning. In this vein, upstream/preliminary engagement in the context of energy decisions (e.g. project design/siting or

planning processes) are advocated as fundamental to improve the quality and legitimacy of decisions by preliminary considering and discussing the different options/alternatives, identify/elaborate through co-production solutions based on the best available knowledge and responding to different concerns over implementation (see Lund, 2014). With regard to public participation in the elaboration of the regional energy plan, many interviewees and participants remarked their appreciation for the participatory path undertaken by the Region. The activation of open and inclusive public consultations, preliminary to the elaboration of the plan, is indeed appreciated by almost all the actors, recognising in the institutional (change in) practice two positive aspects: the preliminary engagement, allowing participants to have a voice and influence in the elaboration of the plan, and the inclusive engagement, recognising and including the voice of minority groups often 'not recognised and not invited to participate'. These two aspects have a considerable effect on participants, perceiving a greater political efficacy, and in some way restoring trust or prompting a change in the representation of regional politics and Institution. Most of the interviewees recognised that a change occurs in the Region willingness to listen and construct together. This is highlighted in the recognition, consideration, and inclusion of diverse normative appraisals and interests at stake in elaborating the regional strategy.

It might be said that participation and planning in the context of the regional energy plan has in some way prompted a positive evaluation of institutional change and practices, and the overall quality and legitimacy of participation and the final outcome (see Dietz & Stern, 2008). Indeed, many interviewees recognise that the planning process has addressed public concerns, considered new information, generated new ideas and knowledge, and provided outcome reflecting a broader range of points of view on the situation. About legitimacy, the participatory planning provided to different societal actors and groups a new perspective on the Region (increased trust). Moreover, the decision and the process leading to them are recognised as sufficiently fair and leading to acceptable outcomes even if actors do not fully agree with (some of) the recommendation of action. Nevertheless, many shadows, doubts, and criticisms remain. Despite the diffused belief that something has changed in positive in institutional participation and decision-making processes, many actors introduce polemical representations. In fact, preliminary involvement, inclusive decision-making processes are greatly valued and appreciated by different actors, that however pointed out that more dialogue and participation is necessary, conceiving participation as a process - not isolated events - requiring more sharing and constructive and continuative dialogue in all the circular phases of decision-making and planning (i.e. from assessment to implementation, monitoring, and adjustment). Dialogue and

participation are widely represented as something that should be continuously undertaken, cultivating its potential to create the necessary support for implementation and offer significant knowledge to adjust/reorient strategies and plans. Further criticisms and limits of the participatory institutional approach can be identified in the lack of binding and clear rules for participation, and some features of invited participation regarding groups' segmentation, separate management, and the consequently limited dialogue among actors and of moments dedicated to providing access to knowledge and dialogue with experts (see also Cuppen, 2018; Cuppen et al., 2010; Chilvers & Longhurst, 2014; Smith et al., 2005). These factors are recognised as constraining the potential of participation. Because of the lack of binding rules for participation, 'best practices' for preliminary involvement and the recognition and inclusion of diverse publics are represented by several active citizens as too much based on the personal discretion of the persons in charge, rather than institutional standard. It can be argued that while the participatory and planning process are represented as improved and increasing the quality and legitimacy of decisions, the criteria of capacity/learning is not fully satisfied. The fact is that by do not providing moments of information disclosure and access to knowledge, participants are not more informed on the various issues at stake, while limiting dialogue, actors are not fully aware or more informed about the perspective of others. By limiting the dialogue between actors and do not constructing a preliminary pathway of information and knowledge provision and co-production, the participatory path has not built or increased the capacities, mutual understanding and trust, or changed the opinions of the diverse actors involved by prompting mutual learning. In this regard, as Smith and colleagues (2010) remarked about socio-technical system change, governance activities contributing to increasing the adaptive capacity of a system aims to provide the capitals and competences to transform the (socio-technical) regime. Access to information and expertise, and deliberation among actors are indeed recognised as essential for the identification of institutional barriers to the implementation of technological change, the design of adequate regulation to overcome obstacles and contribute in identifying and elaborating measures for radical change (Lund, 2014).

That said, the regional energy plan is well-receipted by different actors agreeing and sharing the scenario and objectives for the regional energy transition. It can be argued that consultations influenced and defined the regional strategy and that actors conceive the plan as more acceptable, perceiving also the final outcome and decision as co-produced, considering, valuing and including the input of participants. The majority of participants indeed, defined the plan as improved, more acceptable, pragmatic, concrete, fitting or adequate to the context. Many

environmentalists conceive the plan as more acceptable, relying more on energy efficiency and saving and foreseeing the increase of RETs critically regulating their deployment in small and medium-size plants distributed in the territory and close to consumption sites. However, other actors, among them some experts and economic stakeholders, do not fully agree with or share the recommendation for action. Criticisms regard the assumed rationale of the Region, which listening citizens and aiming to avoid and/or minimise conflicts and restore trust decided to slow down RETs deployment and diffusion, simply postponing the problem to future targets. On the other hand, despite a positive evaluation, small and large economic stakeholders question the economic feasibility of the plan, complaining the introduction of excessive actions and priorities compared to available resources, something that is brought back to the will of the Region to listen and provide adequate answers to the concerns expressed by different publics, and orienting the plan in that direction. In this context, the plan is represented as ambiguous, a literary exercise of planners, to denote the distance between what is written and what will be effectively realised and implemented. These doubts on the implementation of the plan, embedded in the tension between discourse and action, are widely diffused in the group of economic stakeholders. Indeed, they questioned the efficacy of a strategy aiming once again to distributed generation of small-size plants despite the recognition of the many critical issues that in the past has constrained its implementation.

Furthermore, environmentalists, as well as some expert and political-institutional respondent, claimed that the weight of economic interests and lobbies still have a strong influence in the final decision, with economic interest prevailing over a precautional and environmentally sensitive approach. About this, in many across the environmentalist and expert groups complained an incomplete regulation, which affects (or better mediate) the overall evaluation of the plan. Environmentalists and competent authorities complained about the incomplete assessment and identification of unsuitable areas subject to hydrogeological risks, the incomplete assessment and regulation for forest biomass deployment, or the need of updating the regional law for territorial government. The Region is charged of accusations coming from competent subjects and environmentalists of promoting an intensive exploitation of the forest residual biomass for energy purpose. In this regard, several competent subjects for the forest sector highlighted the lack of a comprehensive assessment of biomass scenario and targets, characterised by: the neglect of multiple eco-systemic services the forest provides (e.g. hydrogeological stability, carbon capture and storage); the elaboration of quantitative objectives on forest biomass based only on a quantitative mapping of resources and neglecting local and scientific knowledge available; an orientation of institutional action contrary to the principle of

precaution; and postponing the critical issues highlighted to future regulatory arrangements and implementation tools. Furthermore, many environmentalists highlighted that without a regional law for the territorial government, consistent with the context and historical period, regulation for RETs deployment is partial and incomplete, constraining the potential for the sustainable implementation of the strategy. In this regard, it is possible to highlight the tension between the vision and approach of citizens and that of the Regional Institution. The approach and vision proposed by citizens for regulating the territorial government are represented as having an organic sight and aiming to an overall sustainability and change in the way common natural resources are managed, preserved and valued. On the contrary, the view and approach of the Regional Administration are represented as not far-sighted and organic on natural resources management. In this context, many actors across the groups highlighted the need of regulatory and institutional arrangements to enhance the procedural and distributional fairness of RETs development, a form of social contract and agreement among parties for evaluating how environmental burdens are distributed, fairly re-distributing costs and benefits, and so doing develop a viable and acceptable pathway for the development of RETs benefitting local communities/territories and responding to the social utility principle. Among the benefits discussed appear compensation, community or municipality energy, redevelopment and recovery of abandoned areas, micro-grids and locally-based system to supply communities (villages, districts, neighborhoods) at favourable prices. In this regard, some interviewee stressed that framing these benefits according to the current political-legal concept of compensation involves many critical issues. Among them, the conceptualization of compensation by the public as a form of bribery of local communities, which objectifies the damage for the community affected, or the assumed effects of compensation in influencing those undecided or tolerating the project at play, but not those opposing, and potentially creating a community dispute and divide. It is for all these reasons that regulatory mechanisms are required to regulate the management of regional natural resources, participation and the evaluation and re-distribution of costs and benefits.

For what concerns the vision and preference for socio-technical configurations of RETs, the analysis underlined different aspects at stake in promoting and/or hindering the social acceptance of RETs and related policies. With regard to the scenario and strategy for energy system change, some principles emerge with strength as a guide for the regional energy transition. Among them, the demand for planning and assess the interventions and RET development orienting them to the principles of conservation, precaution, preventive action, territorial fit/adequacy, and social/public utility in the management and use of common goods

or natural resources. Further, other crucial aspects concern the shared concern for defining a long-term strategy and road-map for decarbonization, the high priority of energy efficiency and saving, and the energy vision for the regional context as oriented to enhance and achieve a regional independence based upon territorial self-sufficiencies (e.g. districts, valleys). These principles and guiding vision are linked with proposed socio-technical configurations, and regulatory arrangements conceived as highly required to accompany energy system change. In many pointed out the agreement on some of the regional choices, such as that on distributed generation with more locally-based solutions (e.g. micro-grids, community energy, users efficiency systems) and a more active role of citizens as prosumers. However, it is in this context that is possible to find a tension between the perspective and discourse conveyed by environmentalists and those of economic actors - both large industrial investors and small entrepreneurs. While the environmentalists (and some competent and political subject) agree on the development of distributed generation close to consumption sites and through small-size power plants in self-production and self-consumption for household or companies (also to avoid speculative behaviours), economic stakeholders consider the promotion of this socio-technical configuration for RETs as economically not feasible and not adequately incentivised at the national level. In this regard, distributed generation of small-size power plants does not achieve the socio-political and economic acceptance by key economic actors. A further dispute involving environmentalists and economic stakeholders concerns the vision on how to reach self-sufficiency. In this context, environmentalists push for localised energy systems favouring storage solutions at the household/company and infrastructural level rather than HV powerlines crossing the region. In this vein they demand - together with further actors - small power plants and investments in innovations (PV tiles, vertical and micro-wind, geothermic) to solve or minimise environmental impacts and favour community/public acceptance. As a matter of fact, environmentalists advocated storage solutions as the main engine to reach territorial self-sufficiency and fully engage actors in localised systems for energy production and distribution. This preference is connected to the representation of the HV powerline project as something responding to old logics about increases in energy demand, which nowadays is argued as disconfirmed by a drastic drop in consumption due to the economic crisis, and which renders the project useless in the eyes of civil society.

On the other hand, many economic and political stakeholders claim the necessity of investments and adequate political action to solve the many problems of the transmission grid (both HV and MW) affecting the region, in order to integrate the forecasted increase of RETs, transport energy

across Italy (particularly from the south to the north), and enhance the security and stability of electricity supply to safeguard productive processes and avoid damages for companies.

For what concerns the preferences and acceptance on RETs, perceived as fitting with the regional energy project and scenario, solar energy, PV and solar thermal panels are recognised by almost all the actors as the best available source and technologies for the national and regional context. It is possible in this context to notice an overall agreement on the crucial role of PV and solar energy for the regional energy strategy. This role is advocated in accordance with the regional contextual features and needs, that is no more disfiguring rural landscape, consuming fertile soil and threatening local environment and economies. The source and technology are widely represented as not fully exploited, with a further potential deployment integrated with built environment both at the household and community level and accompanied by storage solutions. In fact, several interviewees stressed the potential of developing and siting further PV systems - serving community and organizational contexts (villages, districts, companies etc.) – redeveloping and valorising abandoned industrial areas and transforming a territorial and economic loss in a resource for the siting of RETs.

While solar energy, PV and solar-thermal technologies are strongly advocated as the essence and future of regional and Italian energy transition, on the contrary, hydroelectric energy, which represents the historical RES for the region and central Italy, is represented as having no future. The further development of hydroelectric is represented as very limited and constrained by climatic conditions (scarce water), and as a threat for the local environment: biodiversity, minimal vital flow and deterioration of watercourses, and coastal erosion. It is in this context that many actors advocated the need to find alternative solutions for hydroelectric, such as hydroelectric pumping for storage.

For what concerns the wind energy, a tension is evident between different actors and even within the environmentalism. Indeed, some experts and economic stakeholders, as well as very few environmental NGOs or political actors, represent wind power as the technology with the greatest potential and least impact compared to other RETs (hydroelectric and biomasses), minimising the related impacts on landscape and biodiversity, and even asking change in landscape protection for its deployment. On the other side, most environmentalists and competent authorities advocated no future for wind energy in the region, and the need to find an alternative solution because of the lacking conditions for its deployment (insufficient windiness), or the presence of these conditions coinciding within or close to protected and highly valued areas. Wind energy represents a motive of tension or fractures even within environmentalism, with few environmental NGOs claiming the necessity of wind energy for

facing climate change and global environmental challenges. This reveals the presence of the so-called 'green on green' controversy over wind power, already documented by Warren et al. (2000). However, the majority of environmentalists agree in avoid the compromising on landscape preservation or disrespecting current regulation intended to protect the environmental, cultural and architectonic heritage.

Last, bioenergies represent the most debated RES, with biomass and biogas technologies at the heart of many disputes and protests in the region across time. The analysis of the trajectory of biomasses and biogas has shown that while many concerns have been addressed during the planning process, many issues remain open and new concerns arise. As a matter of fact, the regional plan has given an answer to the demands and concerns pertaining procedural and distributional justice, such as: realising authorizations and incentives favouring real farming activities and not distorting the agriculture internal market; limiting land consumption and the unethical use of dedicated energy crops; promoting small-size plants in self-production or self-consumption - at the service of local companies or communities - and calibrated on the company energy demand or actual availability of raw materials deriving from productive processes.

However, by shifting from dedicated energy crops to waste or residual materials - from agriculture, animal farming, forest management or wood industry - many concerns over the intensive exploitation of the forest arise. This highlights that despite the change, the approach of the Region is still perceived and represented as oriented to intensive exploitation of common natural resources, and less oriented to the stated principles of precaution, sustainability, social utility or preventive action - by providing a comprehensive assessment of the forest socio-ecological system and of the impacts related to the plan implementation. This represents the most critical aspect of biomasses from forest management. Nevertheless, many actors are concerned about the relative abandon and lack of management suffering inner and mountain areas, also considering the crucial role these territories play in managing a large part of the regional natural resources and securing the territory. The management of the forest is in this regard represented as having a double valence: securing, managing and maintaining the territory, facing and minimising the risks of environmental hazards (e.g. hydrogeological instability and flooding), and at the same time providing waste materials and transform them in resources for energy generation in line with the philosophy of circular economy. However, the study reveals an overall intolerance over biomass and biogas plants. In fact, biomasses are often contested by citizens and environmentalists, represented as polluting activities, unhealthy and high-impact facilities - independently from their size -, and sometimes viewed as or compared to incinerators. In this regard, it is worth to notice that many of the health concerns and

discourses on bioenergies related to emissions, as well as the objectification of biomass facilities as incinerators, are anchored to territorial/geographical belongings and experience. Indeed, in this regard, it can be argued that the concentration of high-impact and polluting facilities (thermoelectric, incinerator, refinery) in some provincial areas of the region coincide with group experience influencing the anchoring to interpret and make sense of new technologies. The experience of high impact energy facilities adopting similar productive processes (i.e. combustion, the case with biomasses), the concentration of environmental impacts, and the diffused concerns about pollution, are crucial components of the way citizens of these areas made sense of and represented bioenergies, especially if we consider the relative lack of preliminary information and communication with local communities and authorities. However, it should be remarked that many parts of the region are characterised by a history of pollution deriving from the diffused industry and its chaotic development, as well as a history of overbuilding and high soil consumption. All these territorial features and group memories still play a crucial role in the current energy transition. Indeed, these experiences provide the ground for a generalised distrust towards firms, aggravated and confirmed by the recent development of the ‘renewable/green energy economy’, perceived and represented as an evolution and adaptation of unsustainable economies, and object of investors, looking for new rewarding markets. As a matter of fact, intolerance and deep-seated distrust remain at play. It is in this regard that many of the observations of public consultations as well as the discourse of some interviewees stress the need and vital role of comprehensive assessment (energy life-cycle and technology lifetime), constant monitoring (e.g. of supply, of emissions or waste disposal), and adequate mitigation measures (e.g. composting of digestate) in promoting a greater acceptance by providing the proof of the proper maintenance of the facility productive cycle and of ethical and competent behaviours of firms.

To conclude, many issues remain still open and object of the dispute. Among them, the most critical concerns the perceived common trend of intensive exploitation of natural resources (e.g. the forest), added to the incomplete regulation and lack of necessary institutional arrangements (e.g. forest plans, law for the territorial government, cost-benefits distribution and environmental equalization, siting in areas at hydrogeological risk). All issues that if not adequately addressed may undermine the overall sustainability, acceptability and consequent implementation of the regional energy transition.

CHAPTER 7 – DISCUSSION

7.1. Discussion of results, concluding remarks and research implications

Worldwide governments are fully committed in taking action to reach the goal of Paris Agreement – of limiting the planet warming well below 2 C° above pre-industrial levels and pursue efforts for 1,5 C° - requiring an unprecedented reconfiguration in the energy sector that generates around two thirds of global greenhouse gasses' emissions (IEA, 2016). This requires a radical transformation of current societies towards a sustainable and low-carbon future; a transformation that involves what we consume, the technologies we adopt, and the forms of social organization we deploy for production and consumption. The transition from fossil fuels towards renewable energy sources involves several challenges pertaining the energy-society relation. The challenges posed by climate change, energy poverty and energy security urgently require an alternative approach that relies on renewable energy sources (RES) and technologies (RET) and that is based on more decentralised energy solutions and changes in the energy infrastructure paradigm (Goldthau, 2014). This approach coincides with a complex reorganisation of the territories (Adil & Ko, 2016; Kellet, 2007; Brondi et al., 2014). In fact, the adoption of RES requires careful consideration of their relationship with the territory, and more generally with the local scale (Bagliani, Dansero & Putilli, 2010; Miller et al., 2013), as for instance in identifying energy-saving measures, energy technologies and sources that better fit to a given place in light of its many features - ecological, socio-political, economic, and infrastructural elements (Brandoni & Polonara, 2012). In this regard, the requirement for decentralised renewable energy systems is generating organizational forms in which local actors may and should play a crucial role, promoting the introduction of governance practices that involve the various publics in environmental management. As a matter of fact, energy policies and energy system changes will mostly not be implemented when they do not consider appropriately the values, concerns, and will of stakeholders and the publics that may be affected or interested by energy policies and specific projects materialising in the territories. This requires decisions around energy system change that acknowledge and address opinions, interests and concerns of different social groups to achieve social acceptance and support for an effective implementation (Wüstenhagen, Wolsink and Burer, 2007; Batel, Devine-Wright & Tangeland, 2013). In this regard, stakeholder participation is considered necessary and important in strategic energy planning at different levels, requiring effective involvement and interactions engaging a diverse range of stakeholders, enabling the inclusion of various kinds

of knowledge and experience, which may support successful implementation in later stages (Fenton et al., 2015; 2016).

To fully understand the transition towards renewable and low-carbon energy systems, this should be assumed as a process at the crossroad of techno-scientific (Bauer, 1995) and legal innovations (Castro, 2012; Castro & Batel, 2008), and “connect analyses of the macro processes involved in social change with the micro-processes shaping, materialising and contesting it, in communication and discourse (Batel & Castro, 2009)” (Batel & Devine-Wright, 2015, p.3). It is with this inspiration that this thesis aimed to give a contribution.

In this direction, the general purpose of this research was to analyse, with a multi-level and longitudinal approach social acceptability and public engagement about energy policy formulation and implementation and territorialisation of RETs for energy system change. It does so by attempting to adopt a more relational and critical perspective about social acceptance literature and theories of socio-technical system change and fill the research gaps identified. Among these: the scarcity of territorial and relational sensitivity of theories for socio-technical system change; the overemphasis of social acceptance literature on the local and individual level of analysis (e.g. attitudes, perception, preference), on community/public acceptance (i.e. opposition of local communities to the siting and construction of RETs), or on the socio-political acceptance at the national level (opinion of key actors about policies and technologies); the lack of studies combining the analysis of institutional relations, formalized arenas and practices (e.g. EIA and SEA) and those taking place outside institutions (e.g. social conflicts, protest, and advocacy in the public sphere), or connecting multiple scales and levels of analysis (e.g. regional and local), and thus approaching social acceptance of RETs as a dynamic and complex process involving the interaction between legal-political, public, and techno-scientific spheres, examining the historicity and territorialisation of RETs and of people’s relations with them and with actors promoting or mediating their deployment across time; the scarcity of studies on social acceptance of energy system change rather than the implementation of single RETs; the scarcity of studies able to include, map and deepen the diversity and heterogeneity of perspectives and positionings at stake (i.e. the different publics) and questioning the artificial segmentation of groups basing upon presupposition on convergent sets of interests, opinions and values often-undertaken both by researchers and policy-makers (Cuppen, 2018; Chilvers & Longhurst, 2016).

To do this the research took a regional context as study case, considered the most appropriate scale and level of analysis to examine the interaction and tensions between societal actors and

scales of governance, between top-down planned and bottom-up emergent change ambitions and projects.

In this respect, the research combines and triangulates three studies involving different types of data sources and methods for data elicitation/collection and analysis.

The first study, a longitudinal analysis (2011-2017) of public debate about the implementation of energy policies and the territorialisation of RETs, comprises naturalistic data and natural documents from interactional settings in the public, political and mediatic spheres to investigate the historicity of RETs in the regional context and the consequent emergence of competing meanings, values, interests and understandings associated with RETs deployment and related policies. The study provides discursive evidence on the multiple motives basing upon diffused social conflict and protest take shape in the region, showing that people responses to RET were motivated by different factors: a lack of/scarse involvement and recognition of local authorities and communities, the inadequate consideration and evaluation of RET impacts and fit with place materiality and symbolic meanings. Further, simplification of bureaucracy on authorization procedures, the lack of regulation and guidelines setting the conditions for RET deployment, and windfall/raining incentives (i.e. distributed without criteria) had a major role in determining the conditions for diffused social conflict and protest. A protest that is based on the shared belief of an extremely unjust distribution of costs/impacts and benefits/advantages between communities of relevance, hosting the power plants and represented as facing multiple negative externalities, and the private investors collecting public funds through generous subsidies by exploiting local resources and common goods. The study provides evidence on how the opposition to RETs is connected to place-based meanings, values and constraints influencing the perceived unfit of RETs with the regional territory and prompting emotional responses of disruption and discontinuity with cultural traditions, place-based identity and memory, and the diffused perception of RETs territorialisation as a physical aggression and depredation of common natural resources. Renewables are indeed often represented as physical aggressions eviscerating, devastating, tearing, massacring, disfiguring the territories, and discourses about the materialization of RETs are often associated to military and war metaphors such as invasion, aggression, colonization and to predatory and wild animal behaviours. These discourses are linked to the exploitation of common goods (landscape, land, water) recognised as finished resources and value to defend. Concerning place-related impacts, a widely shared and used argument refers to the rural/countryside industrialization and agricultural land consumption derived from PV, biogas and wind energy.

In this way, RET development is perceived as an ecological modernization and label for industries acting contrary to the valued and essentialised representations of the rural and agricultural landscape and territory (see also Batel et al., 2015). The PV expansion in the rural hills, the wind farms in the mountains and protected areas, and the biogas grabbing agricultural land are all connected in public discourse to the concerns on land and landscape. In this regard, the regional (rural and agricultural) landscape is re-presented drawing on valued representations highlighting its symbolic meanings connected to the regional history, identity, culture, traditions and broader memory, but also pragmatically to the materiality of regional economy - which is historically grounded and recently reinforced as – based on agriculture and tourism. The re-presenting of land and landscape has the function of connecting the more abstract common of landscape to the intrinsic materiality embedded in costs and impacts on local economies and territories, in producing advantages only for private subjects, totally disconnected from the existing local economies, and not caring about these externalities (e.g. grabbing and consuming fertile land and influencing agriculture sector or ruining the hilly rural and mountain landscapes affecting tourism economy).

Moreover, the study sheds light on aspects that concern: the role of institutional practices (e.g. assessment, information disclosure, monitoring, involvement, land use regulation, authorisations) in determining the conditions for opposition to RETs based on conceptualisations of them involving a high perception of risks and costs for human health or for local economies (i.e. biogas and PV on the ground) and diffused distrust towards politics and firms; the institutional conflicts and tensions, which depends on the interaction and relations between different scales of energy governance and the policy scenarios proposed (e.g. local authorities vs regional authorities or national), and the effects and consequences of national and regional decisions at the local level; and the role of media in conflict enactment - and legitimisation of protesters voice - as the site for the argumentative battle where different actors strategically represent and position self and others according to their strategic interests. As a matter of facts, many of place-based concerns and conceptualisations of RETs are connected to group and geographically-based experiences and memories involving historical problems affecting the regional energy territory, namely the overbuilding and soil consumption for biogas and PV RETs, the widespread pollution deriving from the diffused industry for biomasses and biogas RETs.

The analysis reveals that the citizens' protest reached a greater space and consensus in the public sphere, supported by local media, environmental NGOs and different local authorities, and coinciding with a discourse structuration (see Hajer, 1995) forcing actors to take the

arguments and representations conveyed by protesters as starting point for their argumentation and justification. This enlightened the use of defensive rhetoric and multiple positionings and resistances of political actors taking shape in the forms of disclaimer and language variability of discourse (yes..but; however; despite this). This highlights the uncertainty, the perceived risks of co-optation and ambivalence of politicians' behaviour and positioning that are at this point at the forefront of arguments of protest.

In this regard, for what concern the 'relational/social side' of RET development, the mutual recognition and treatment of actors, the analysis reveals interesting aspects regarding the construction of socially valued identities and their use to legitimise or undermine certain versions of reality through defensive and offensive rhetoric (Potter, 1996a – see Table 29) summarising the representational dynamics of self and others and providing evidence on the interplay of anticipations and expectations shaping interactions and relations among actors).

Actors	Citizens & opposition groups	Local politics	RET entrepreneurs/firms	Regional politics
	Substitutes of politics & democratic response	Active, sensitive, determined because of bad top-down decisions	Ethical & respectful of the law	Caught on the counterattack
	Place inhabitants co-responsible decisions	Not contrary to RET but in the frontline to defend citizens' health & environment	Investors bringing workplace	We made mistakes but we reacted
Self	Unity is strength: networking & sharing	Disillusioned and without power	Farmers oppose speculation contrary to agriculture identity	Making introspection to reorganize
	Place guardians/responsible	Needs citizens not generalizing		Good politics listening and mediating
	Partisans but not ideological Not contrary to technologies but..			
	NIMBY (selfish and emotional)	Promoters & defenders of speculation	Speculators	Promoters/defenders speculation
	Terrorists & Not neutral		Green economy usual suspects	Paladins for pressures
	Parochial attitudes & damage		Dishonest	Hostile & impermeable
Other	Ideological and ready to political career		Exploiters, colonizers, land-grabbers	Corrupted
	Uninformed & ignorants		Invaders & aggressors	Lacking or incapable
			Predators	
			Uncaring of citizens' rights	
			Polluters	

Table 29. Representations of self and others of the diverse actors and use of offensive and defensive rhetoric

The longitudinal analysis of the public sphere constitutes a preliminary reconstruction and examination of the regional path, and an account on the historicity and territorialisation processes of RETs in the regional context. Most important, this analysis provides the ground for the second and third studies, and for a better understanding and in-depth examination of the regional trajectory that follows, and particularly of institutional re-configuration and arrangements. The moment of institutional change become itself a contested social object, a

moment of greater tensions and struggle over meanings where old and new meanings and practices coexist, and where different interests and belief systems struggle in their claim for recognition and authority to fully construct the regional energy project and sustain group interests and conceptualizations.

The second and third study composing the research involve the collection and analysis of natural documents (public consultations' documents on the regional energy planning) and episodic narrative interviews with 22 key informants - integrating policy, market, expert and civil society actors - representing heterogeneous perspectives. The analysis of these materials offers a cross-validation of previous findings and new relevant elements.

The analysis of discourses related to the geographical, spatial, or territorial aspects at stake in the transformation of energy systems corroborates the strong relevance of historical problems for current energy transition as found in the previous study (overbuilding and industrialization in using land and consuming soil, as well as in polluting throughout the region). Further critical aspects for the current energy transition are identified in the unbalanced relation between the coast - represented as completely overbuilt, consumed, and largely affected by environmental burdens, concentrating most of the environmental impacts and polluting activities in the region (diffused industries, energy and transport infrastructures and large-scale facilities) - and inner rural and mountain areas - recognised and represented as: the asset, brand, and crucial resource for the regional economy based on agriculture and tourism, on land and landscape; the cultural and environmental heritage and source of regional identity, memory and tradition; abandoned and not managed areas although they host most of the common resources (water, land, landscape, natural areas, etc.) recognised as value to defend and not be exploited or sold to the best offer.

For what concerns the historicity of RETs, the analysis reveals that the previous regional energy plan of 2005 was considered innovative and courageous, aiming to deploy RETs adopting the model of distributed generation, in line with the diffused industries, and attempting to prompt energy districts. However, the planning process has been characterised by a technocratic path and decision-making, without public participation, looking only at economic and technological aspects of RETs and overlooking many environmental and social aspects/impacts at play. This is recognised as a factor that greatly limited the development of renewable energies foreseen in the plan, together with multiple changes in the scenario: windfall generous national incentives for PV and the relative regional and national lack of government of change determining the uncontrolled RETs deployment and diffusion and coinciding with the representation of distributed generation as a multiplication of territorial impacts and unfair distribution of costs.

The regional path is widely recognised as lacking the planning, regulation and management of change, with the diffusion of PV panels across the regional hills, subtracting the rural and agricultural fertile land, affecting the (idealised and essentialised) landscape and consuming the further (already scarce) soil.

Incentives are widely recognised as too high, windfall (with no control), means for speculative gains, and badly distributed, advantaging private investors and threatening/disadvantaging local economies and communities. A further crucial event and turning point is introduced with a regional law for authorization on RETs excluding the EIA for power plants under the threshold of 1 MW. By excluding powerplants from the EIA, the law is contested as illegal and illegitimate, not respecting EU directives or national laws, excluding citizens and not evaluating neither the cumulation of impacts in the siting areas nor the distance from human settlements, or the social impacts involved (e.g. dedicated crops for biogas distorting agricultural sector). As it was for the PV expansion, also in this case, investments in biogas technology are represented as a speculation that again exploits common resources (public money of incentives, land) at the advantage of private companies and at the expense of local communities and economies. The lack of communication, information and participation, as well as assessment, control and monitoring on the RET facilities by competent authorities, largely influenced the development of biogas facilities and consequent public responses and conceptualizations. In the first period of deployment, biogas is often represented as unhealthy and an evolution of the thermoelectric and incinerator technologies, especially in those areas and territories that are most affected by pollution and large-scale and high-impact facilities and infrastructures. The discourse and representation of biogas is across time symbolically cultivated, refined and conveyed by different protesters' groups throughout the region, involving multiple criticisms and injustices revealing the territorial unfit and damage of the socio-technical configurations of biogas promoted (a speculation, exploiting local resources, advantaging investors and damaging local communities). At this point, more than acceptance it is possible to talk of a diffused raw intolerance towards biomasses and biogas. The years that follow are characterised by a tension spreading in all the national context between 'opening-up or closing-down the debate'. In this regard, an overall sharing seems to emerge in considering national politics, and in some way even regional one, as often imposing top-down change ambitions and projects, without having a dialogue with and feedback from the territory.

About this last point, territories (local residents and politics) are often conceptualised as irrational, emotional, lacking knowledge or misinformed, instrumentalised/manipulated, populists, demagogic.

To summarise and put it clear, the local communities are conceived as a barrier to overcome, a block to the development of RETs and the achievement of the public good. On the contrary, local communities are often advocated as a crucial collective actor, having a fundamental role to play in current sustainable and democratic transition, expression of local knowledge, values, needs, concerns that should be at the core of the regional strategy. In this regard, the public-experts, public-regional politics, public-firms relationships are unveiled in their being characterised by negative anticipations and expectations of the public, especially by experts and firms, and negative expectations about experts, firms and regional politics' intention and behaviour by locals. Delegitimization and misrecognition of experts' position and knowledge, the profound distrust on the ethic and competence of firms and politics, the conceptualizations of the territory as an unsurmountable barrier, seem often at play in knowledge encounters shaping the (lack of) interaction between actors. This reveals the perception of a social climate and anticipation of interactions as hostile and shaped by stereotypes and prejudices.

In the context of institutionalised participation, almost all the actors complain the overtime lack of adequate institutional actions respecting the Aarhus Convention – i.e. information, participation and access to environmental justice – stressing the necessity of establishing a dialogue with local communities to overcome the critical issues of distributed generation from RES. Information disclosure and communication on risk assessment and monitoring of energy projects are identified as necessary to increase acceptance and trust, by providing to the public the evidence of the proper management and maintenance of the facility, as well as correctness of companies' behaviour.

Anyway, several actors complained the often adopted decide-announce-defend model on decision-making and planning, basing on a representation of local communities reflecting a deficit model of public and a conceptualization of them as an obstacle to the achievement of societal priorities.

In this vein, upstream/preliminary engagement in the context of energy decisions (e.g. project design/siting or planning processes) are advocated as fundamental to improve the quality and legitimacy of decisions, allowing participants to have a voice and influence in the elaboration of the plan, and the inclusive engagement, in recognising and including the voice of minority groups often 'not recognised and not invited to participate'.

In this regard, the planning process for the regional energy and environmental plan 2020 is recognized as having addressed many of the public concerns, considered new information, generated new ideas and knowledge, and provided outcome reflecting a broader range of points of view on the situation. The decision and the process leading to them are recognised by

different actors as fair and leading to acceptable outcomes even if actors do not fully agree with (some of) the recommendation of action.

However, more dialogue and participation are considered necessary, conceiving participation as a process that requires more sharing, constructive and continuative dialogue in all the circular phases of decision-making and planning (i.e. from assessment to implementation, monitoring and adjustment). Further criticisms constraining the potential of the participatory institutional approach can be identified in the lack of binding and clear rules for participation, the invited participation segmenting and consulting separately groups according to assume shared interests, and the lack of moments of preliminary information, knowledge provision and construction through dialogue among subjects. By limiting the dialogue between actors, and do not constructing a preliminary pathway of information and knowledge provision and co-production, the participatory path has not built or increased the capacities, mutual understanding and trust, or changed the opinions of the diverse actors involved. Access to information and expertise, and deliberation among actors are something that should be carefully considered by the Regional Administration. That said, the regional energy plan is well-received by different actors agreeing on and sharing the scenario and objectives for the regional energy transition. The plan is conceived as more acceptable and shared, improved, pragmatic, concrete, fitting or adequate to the context, with actors perceiving the outcome and decision as built together. Relying more on energy efficiency and saving and foreseeing the increase of RETs critically regulating their deployment in small and medium-size plants distributed in the territory, close to consumption sites, and in self-production and self-consumption configuration, the plan is almost acceptable for environmentalists. However, other actors do not fully agree with or share the recommendations for action, which postpone the problem of RET generation to future targets to avoid or minimise conflict, and with economic actors questioning the economic feasibility of the plan - because of excessive actions and priorities foreseen with scarce resources, or because promoting anti-economic configurations of RETs. Tensions between representational projects cultivated in different groups are at play, and distributed generation of small power plants does not achieve the socio-political and economic acceptance by small and large local entrepreneurs.

This highlights how an excessive focus on achieving community/public acceptance without putting in place deliberative moments including diverse actors may undermine the socio-political and economic acceptance of energy policies and technologies.

Furthermore, several actors across groups complained an uncomplete regulation, which affects or mediates the overall evaluation of the plan. Environmentalists and competent authorities

complained the uncomplete assessment and identification of unsuitable siting areas subject to hydrogeological risks, the uncomplete assessment and regulation for forest biomass deployment, or the need of updating the regional law for territorial government. The Region is charged of accusations of promoting an intensive exploitation of the forest residual biomass for energy purpose. Without a regional law for territorial government, consistent with the context and historical period, regulation for RETs deployment is argued as partial and uncomplete, constraining the potential for the sustainable implementation of the strategy. Many actors across groups highlighted the need of regulatory and institutional arrangements to enhance the procedural and distributional fairness of RET development, a form of social contract and agreement among parties for evaluating how environmental burdens are distributed, fairly redistributing costs and benefits, and so doing develop a viable and acceptable pathway for the development of RETs benefitting local communities/territories and responding to the social utility and precautionary principles. Regarding the vision and preferences for socio-technical configurations of RETs, the analysis remarks that different aspects are at stake in promoting or hindering the social acceptance of RETs and related policies. Some principles emerge with strength as guiding visions for regional energy transition, such as the demand for planning and assess the change ambitions and projects orienting them to the principles of conservation, precaution, preventive action, territorial fits and adequacy with the given place-based meanings and conditions, and social/public utility in the management and use of common goods or local natural resources. The demand for far-sighted and careful sustainability policies, the definition of a long-term roadmap for decarbonization of energy systems, prioritising energy efficiency and saving, and devoted to increase and enhance the regional energy independences with territorial self-sufficiencies, are all emphasised as crucial aspects in defining the regional project for energy transition. In many pointed out the acceptability of major changes in the regional energy strategy, such as distributed generation of small-size plants and more locally-based solutions (micro-grids, community/municipality energy). For what concerns the socio-political acceptance of RETs for the regional transition path, all the actors see solar energy, PV and solar-thermal as the best available source and technologies fitting with the context and represented as the future of the Region and entire Country energy transition. This overall agreement for the deployment of PV relates to discourses representing the further potential for PV diffusion integrated in built environments, at different levels and benefitting local communities, companies and citizens. This integration of PV in built environments reflects the shared belief about the necessity of finding solutions and making available the space for siting energy infrastructures (Wolsink, 2018b), considering territorial features representing constrains

and resources: soil scarcity, rural landscape high value, diffused presence of large abandoned/disused industrial areas and buildings deriving from diffused industrialization and overbuilding economy. On the contrary, hydroelectric is considered by most of actors having no future, or very limited further development, because of the climatic conditions determining scarcity of the water source, and the negative externalities it involves for local environments. Wind energy represents a very disputed theme, showing the so-called ‘green-on-green controversy’ (Warren et al., 2005) with polarised positionings crossing multiple groups. Experts/competent subjects, environmentalists, political authorities are divided and have opposing view about it. Some consider wind power as a stable and well-developed technology with the greatest potential for production and minor impacts. These views minimise the related impacts often advocated by the majority of environmentalists about landscape and biodiversity, and strongly demand the deployment of wind power. On the contrary, others advocate no future for wind power in the region, claiming the identification of alternative solutions. The trajectory of bioenergies has showed that while many concerns have been addressed in the new regional energy plan, many critical issues remain open and even new concerns arise.

The regional planning process has addressed many of public concerns on distributional, procedural and recognition nature, such as incentivising and favouring small power plants at the service of local companies, banning the use of crops and favouring that of waste deriving from productive process as supply of raw material, and facilities calibrated to the availability of raw materials or the energy demand of the company. Nevertheless, by shifting from dedicated crops to waste and residual material deriving also from forest management determined the raise of many concerns about intensive exploitation of the forest and deforestation. This is relevant as highlights a diffused concern that although the improvements and institutionalization of many issues claimed by protesters, the approach of the Institution is not entirely re-configured or aligned to the meanings and concerns underlying the protest and opposition to bioenergies and RETs in general. The approach of the Region is still perceived and represented as oriented to the intensive exploitation of common natural resources and less to the principles – often conceived as guiding principles to orient the regional energy project – of precaution, sustainability, social utility, or preventive action by not undertaking a comprehensive assessment of forest socio-ecological system and the multiple functions it provides beyond energy production, and the impacts that are related to the implementation of the plan. The study highlights that the deployment of biomasses for energy production is far from having reached acceptance, and that having addressed many of the concerns of protesters does not secure an increased acceptability. Many issues are at play in shaping the overall acceptance or support

for bioenergy development. As a matter of fact, the study findings highlight an intolerance over biomass and biogas plants, often contested and represented as polluting high-impact activities, unhealthy, sometimes objectified as advanced incinerators. It should be bear in mind that many parts of the region are characterised by an history of pollution deriving from the ‘chaotic development of widespread industries’, of overbuilding and significant soil consumption. These territorial features and memories still play a fundamental role in determining the kind of conceptualization and public responses towards RETs. This provides the ground also for a generalised distrust towards firms, confirmed and aggravated by the development of the green economy as an evolution of unsustainable economies, and object of predators looking for new rewarding markets. Intolerance and deep-seated trust remain well-grounded and difficult to address. However, this analysis remarked a viable pathway for institutional change and practice to significantly address these concerns. The region seems to have faced in the last decade a pathway of de-alignment and re-alignment (see Geels & Schot, 2007; 2010), with landscape change forces (e.g. national incentives policies) increasing regime problems (land use from overbuilding, pollution and concentration from high-impact facilities and widespread industries), that pushed the Region to a re-alignment and institutionalization (e.g. through regulation and participatory pathways) of a new socio-technical regime (e.g. distributed generation with small plants in self-production and self-consumption, integrated RETs in built environments, using waste and residual materials promoting a circular economy). However, this re-alignment or institutional change is now at the heart of disputes, does not reaching an overall acceptance from different publics regarding the three dimensions of acceptance.

Many issues remain still open and, on the deck, to increase the socio-political acceptance of RETs and related policies by key stakeholders (citizens, businesses, competent authorities), the socio-economic acceptance of RETs configurations for large and small investors, or the public/community acceptance (siting decision, participation, distribution of benefits). Moreover, while the institutional participatory pathways have addressed many critical issues, enhancing the timely recognition and inclusion of different normative appraisals in planning and decision-making, and enhancing the overall quality and legitimacy of the plan - by listening, considering and including the voice, interests, concerns and demands of various actors in the final decision – this remains constrained by different factors, requiring the regulation and adoption of different engagement mechanisms for deliberative and preliminary participation.

As a matter of fact, the lack of regulation and rules of implementation for up-stream and deliberative engagement, the institutional habit of undertaking invited participation and a separate management of groups segmented according to assumed converging views, the limited

dialogue among actors, and of moments of knowledge provision and co-production are critical issues that should be carefully addressed to enhance the quality and legitimacy of decision-making processes and effective decisions, and build the necessary capacities of societal actors to transform the regime. To conclude, the analysis shows that despite the appreciable attempt of institutional re-configuration many issues remain still open and object of the dispute, and that if not adequately addressed may undermine the overall sustainability, acceptability and implementation of the regional energy strategy.

Altogether, the findings of the study corroborate previous literature of social acceptance, but most importantly, they stress how adopting a longitudinal and historical approach to social acceptance combined with an analysis of the relational and spatial/territorial aspects at stake may provide several insights concerning theoretical, methodological and applied (policy) implications. To conclude, the research has different theoretical and methodological implications that derive from its own rationale of filling the gaps present in social acceptance and socio-technical system change literature.

By adopting a perspective sensitive to different scales of governance, the spatial/geographical, processual and social/relational dimensions of energy transition, and by keeping into account the techno-scientific, legal-political and public spheres over time, the research stresses few weak points and possible directions for social acceptance research.

First, the focus on single technologies (individual attitudes, perception, representations of a given RET or project) or on the technological dimension alone presents a partial reading that may undermine to grasp the multiple factors conducing to acceptance, support, intolerance, apathy, or to put it simply, public responses to RETs (Batel et al., 2013).

Despite significant, the contribution of studies focusing on the acceptance of single RETs tells use half of the story, especially in those cases of political decisions aiming to distributed generation of small-scale rather than large-scale facilities.

Looking also at socio-political acceptance about energy system as a whole or by focusing on the broader RETs deployment in context, research can be able to underline the territorial, socio-cultural, socio-political and socio-economic features at play in energy transition involving different RETs, and that influence the overall acceptability of RETs and related policies.

In this case, this is fully demonstrated by the diffused territorial concerns for soil consumption determined by PV panels and biogas plants diffusion, or spoiled landscape by wind power and PV panels, and pollution determined by biogas and biomass plants.

All events, technologies, and impacts that summed together were fundamental in shaping acceptability to different RETs, which despite their differences are all strongly linked together

in people's conceptualisation and responses (i.e. referring to the umbrella term of green economy).

Adopting a perspective sensitive to time and the history of the place allowed to understand that citizens' concerns and conceptualizations are territorially and culturally grounded in memories and experiences deriving from the effects of unsustainable economies (overbuilding and soil consumption and widespread polluting industries), which are now aggravated from the development of green economy. Careful attention to space, places and territoriality of energy system change has the potential to reveal not only situated environmental concerns, but also crucial information on how people make sense of new technologies anchoring this with old knowledge and place-related meanings and contingencies (e.g. pollution, incinerators).

As a matter of fact, the renewable energy industry is often perceived and represented in a continuum with these economic activities, as a follow-up of unsustainable economies and new market for unethical investors. These experiences, added to the more recent experiences with RETs deployment provide the ground for a diffused distrust towards firms and politics, about their ethic and competence, and for anticipation and expectations about their intention and behaviour.

In this direction, I assume that the findings of the study case transcends the regional borders and may also -even if partially - apply to other regions in the national context, which to a large extent is characterised by similar characteristics (e.g. high soil consumption rates, diffused pollution problems, high value of agriculture and tourism economies) and with regions that, despite differences in RES distribution or policy scenarios, have been largely influenced by the same landscape pressures (e.g. incentives, lack of regulation and not strategic and far-sighted policies at the national level). This is evident in the continuous references and link with other regions people made in conceptualising and evaluating the impacts of different RETs (e.g. Lombardia, Puglia, Basilicata, Piemonte, Emilia-Romagna). Negative experiences of and differences with other regions are indeed often reported throughout the data sets to anchor and interpret new technologies basing on territorial features and comparisons (see also Pellizzone et al., 2015).

Furthermore, an excessive focus on the local dimension and on community/public acceptance may bring both researchers and decision-makers to lose the sight of the 'social acceptance problem' and conduce to unproductive outcomes.

The limit of focusing on public/community acceptance is well-evidenced also in this research. Indeed, the research has tried to provide an account about the three dimensions of acceptance by paying attention to polyvocality – or heterogeneity of perspectives, even in those groups

often-assumed as having the same sets of interests, ideas, values and understanding. In doing so, the research has enlightened the diversity of perspectives and interests at stake and revealed that although the Region addressed many concerns of the public (i.e. public acceptance) the final decision did not reach the socio-political and economic acceptance of a plethora of actors involving experts, economic and political stakeholders, something that potentially may undermine the economic and technical feasibility of the strategy. This can be seen also as the result of an institutional approach that privileged during the re-configuration phase the avoiding and minimisation of conflicts (with the public, and between actors assumed having different interests) and the undertaking of invited participation processes characterized by separated auditions limiting the dialogue among actors, and hindering the possibilities of mutual understanding, restored trust, and knowledge production to identify implementation barriers and related measures to overcome them. This poses a serious problem not only for policy-makers and planners, but also for applied research aiming to provide useful evidence to inform decision-making processes and develop evidence-based policies and decisions.

Moreover, reasoning in terms of energy system change means having to do with practical real-world problems for RETs deployment, such as how to identify and make available space, natural resources and fit with local conditions (i.e. social, ecological, economic, institutional) to pursue wider political objectives and targets often not adequately considered in social acceptance research.

In this direction, research focusing on preference and support for energy mix/portfolios or energy scenarios in national or regional contexts, seems a promising field of research-action to inform policy-making and advance public engagement deliberative practices (see e.g. Pidgeon et al., 2014). In this regard, as highlighted by Grifoni et al. (2014), combining public hearings, to inform and discuss the issue at stake, with participatory tools based on scenarios to develop visions for sustainable transformation and to identify measures to overcome obstacles may be a solution to enhance quality and legitimacy of decisions as well as building capacities in actors involved.

Furthermore, by focusing on polyvocality and recognizing the possible tensions across scales, the research provided further evidence on the heterogeneity of groups and perspectives dealing with socio-political, community and economic acceptance, enlightening the often-overlooked institutional conflicts, both vertical - such as between Regional/National and Local Authorities - as well as horizontal - such as between Environmental competent authorities and Regional politics - in social acceptance research.

Neglecting the institutional dimension of RETs deployment means neglect how (power) relations and institutional practices are intertwined with public conceptualisations and responses to RETs projects, as well as neglect that the essence of social acceptance concerns also changes and arrangements in institutional practices (information, assessment, decision-making, monitoring, regulation) which are object of contestation and struggles.

On the other hand, another crucial aspect that is relevant for social acceptance research lies in the recognition of the value of social conflicts. As many other authors underlined (see e.g. Cuppen, 2018; Mannarini, 2014), conflict should be conceived as the essence of dialogical relations, functional - rather than dysfunctional - in bringing to light divergent normative appraisals and thus having normative, substantial and instrumental value for energy transition. Conflicts are sites of knowledge production and emergence of new meanings, interests, and values that concur in the evaluation of new technologies and policies in context. In recognize this, both decision-makers and researchers should pay more attention to and value more social conflicts and find constructive ways to deal with conflict understanding and management.

As Laurian (2004) underlined, while few citizens attend formal public meetings, many others find alternative ways to participate. In this respect, Bidwell (2016, p.4) puts it that thinking through participation in renewable energy decisions requires all of us (being researchers, policy-makers, or experts) to 'step outside our comfort zone' and develop and experiment with different models of participation and – I add – different methods for data collection and analysis. In this regard, a methodological challenge consists on connecting institutional and public arenas by means of analyses combining naturalistic data, natural documents and data elicited by researchers to enlightening the multiplicity of perspectives involved, and research designs developing procedures to capture and analyse concerns expressed through informal channels of communication (e.g. social media, online news, petitions).

To conclude, the findings make the point for more culturally-situated, historical and territorially grounded research to investigate the relations between change and stability in energy system change, what (psychosocial) factors support or hinder change, and what kind of resistances are involved. Societal psychology is well-equipped in dealing with the analysis of the socio-cultural and relational dimensions of energy system change, and more importantly has the potential of placing itself across disciplines and theoretical frameworks concerned with the analysis of societal dynamics and structures, as well as with the analysis of individual-based factors and processes. In this regard, social acceptance research should pay much more attention to actors' meta-knowledge, beyond actors' knowledge/attitude/representation about the research object and reveals the anticipation and expectations at play in conceiving the other, and how these

influence social and political relations, interactions and the cognitive outcome of knowledge encounter. Being able to unveil the relational side can fruitfully reveal what are the (societal) resistances at play and how to deal with to enhance deliberative governance on energy futures.

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ACKNOWLEDGEMENTS

At the end of this path I feel I have to thank all the people who have contributed in different ways during my PhD.

I would like to thank my supervisor, Paolo Cottone, for his continuous support, help and for letting me express my curiosity and desire for knowledge allowing me to experiment with a theoretical and methodological ‘eclecticism’ that despite the innumerable difficulties make me satisfied.

My thank goes also to the two research groups that hosted me in these years providing the opportunity to engage with invaluable knowledge and research experience.

First, to the ACCESI (Analisi socio-Costruttivista delle Comunità per l’Energia Sostenibile Italiane) project research group, and particularly Mauro and Sonia, for their valuable advice, support and research collaboration across these years.

Second, to the Pa.S.T.I.S. (Padova Science, Technology and Innovation Studies) group carrying on the TIPS project (Techno-scientific Issues in the Public Sphere), and particularly to Federico for having welcomed me into the group, giving the opportunity to experience interdisciplinary dialogue, understanding and collaboration.

Special thanks go also to the professors of the PhD program for believing in us (PhD students) giving their support and guide in our own initiatives to engage in interdisciplinary dialogue by means of PhD conference organization and book editing.

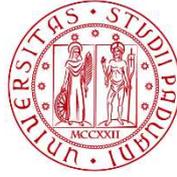
My thank goes also to my colleagues and friends of the PhD course, for having shared with me joys, anxiety, and many other PhD stuff. I was lucky in meeting them and I feel that we all benefitted of these relations in personal and professional terms. It is thanks to them that I feel interdisciplinary dialogue as possible and inspiring.

I would also like to acknowledge all the participants who have kindly given their time to participate in this research. In this regard a special thank goes to Sviluppo Marche, and particularly to Lucia and Barbara, who sometimes acted as mediators for the interview study, and for hosting me in the H2020 EMPOWERING project (Empowering local public authorities to build integrated sustainable energy policies - grant agreement N. 695944) as a researcher and trainer. It was a really inspiring opportunity.

About this, I should also acknowledge the H2020 SHAPE energy project (Social Sciences and Humanities for Advancing Policy in European Energy – grant agreement N. 731264) for funding the PhD placement within the EMPOWERING project, and for creating this opportunity for PhD students bringing and integrating social sciences and humanities’ knowledge into H2020 energy project.

I feel I am in debt also with Paula Castro and Susana Batel, for hosting me in Lisbon and providing their very critical comments and suggestions about the study presented in the fifth chapter.

Last, but not least, a heartfelt thanks go to my Francy, for loving, supporting and enduring me everyday since ten years, to my family for trusting and supporting me along my entire life no matter what my life decisions were, and to my best friends for rendering everything more easy and fun and for remaining the same good friends in the last 15 years.



UNIVERSITÀ
DEGLI STUDI
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Head Office: Università degli Studi di Padova

Department of Philosophy, Sociology, Education and Applied Psychology

**Ph.D. COURSE IN: Social Sciences: Interactions, Communication, and
Cultural Constructions**

SERIES XXXI

**Public engagement and social acceptability
in energy system change:
A socio-psychological analysis of a regional case study**

Thesis written with the financial contribution of the University of Padua

Coordinator: Prof. Devi Sacchetto

Supervisor: Prof. Paolo Francesco Cottone

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