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Participation and wind energy, a review of the Scottish and Andalusian strategy through content analysis

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STATEMENT OF ORIGINALITY

I hereby declare that this dissertation has been composed by me and is based on my own work'.

Signed: *Sara Albaladejo Vargas*

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ABSTRACT OF THESIS

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The shift from government to governance and the inclusion of new actors in the domain of renewable energy has been regarded to have the potential to create an active civil society, especially in the countryside, in a move away from a centralised state to small autonomous clusters. Renewable energy lends itself better for wider public involvement and even ownership than traditional fossil fuel power plants, as it can allow for smaller development and doesn't need the degree of centralisation for diffusion in the same way as carbon fuels. In a sense, Energy, a traditionally state matter, has been brought to a more popular ground due to the decentralised nature of the wind resources and wind power. However, this does not necessarily mean that citizens are now in control of wind power. They are, however, closer to the generation of energy. The interesting question to ask now is, how do institutional authorities accommodate to this shift? I have explored this theme focusing on the regions of Scotland and Andalusia (southern Spain), and attempted to analyse their most recent (public publication on summer 2014) executive strategy for Renewable Energy development until 2020. Mobilising the literature on public participation and wind energy and environmental policy, I have identified issues that arise in the process of institutionalisation of participation. On these issues, I have built a methodological framework to assess to what extent Scotland and Andalusia have recognized and integrated these issues, and how they have responded.

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List of acronyms and abbreviations

AACC	Autonomous communities (Spanish regional administrative authorities)
FIT	Feed-in-tariffs
NYMBY	Not in my backyard
RE(S)	Renewable Energy (Sources)
R&D	Research and Development
RO(S)	Renewables Obligation (Scotland)
SD	Sustainable Development

Part I

Review paper

1 Introduction

During the last decades, public participation in policy decision-making and implementation has been put forward by researchers and policy makers in Europe as a solution to the environmental, social and democratic crisis. Participation is said to bring, among other benefits, greater legitimacy and improved efficiency of policy implementation.

Public participation inscribes itself in the political and academic movement promoting sustainable development, which is most usually defined as “meeting the needs of present without compromising the ability of future generations to meet their needs”, quoting the Brundtland Report in 1987 (Giddings et al., 2002). Furthermore, the literature on sustainable development stresses the need for an approach that integrates social, environmental and economic values. Public participation, in the best of cases, would allow for more effective environmental management, the development of an active society, which both would generate economic wealth.

Calls for greater public involvement can be found everywhere, specially in the field of environmental policy and renewable energy (RE) (Rydin and Pennington, 2000), in particular because environmental issues are supposedly ‘better’ dealt with by people physically close to the problem —although this assumption is contested (Newig and Fritsch, 2009a; Rydin and Pennington, 2000).

However, positive and active civil involvement in environmental issues (the ideal system that Rydin and Pennington (2000) call collaborative environmental planning) will not emerge out of thin air. There are of course cases of (for example) successful community management of environmental resources (or wind power, the specific subject of this paper), but it is common ground in the field of sustainable development that, in order to achieve a more sustainable future and energy system, a transformation across and between the social, economic and political spheres is necessary (Devine-Wright, 2011; Giddings et al., 2002).

If civil society has the potential to be one of the driving factors of change, it is also important to take into account the framework in which it develops. In other words, the institutional structure that is going to establish the conditions for public participation —the *how* of participation— at least in first instance. Depending on the values rooted in institutional arrangements, the latter will

limit or encourage public participation in diverse ways (Wolsink, 2007).

1.1 Wind Energy in Europe

The development of renewable sources of energy (RES) has been established as a priority for European Union member states. Wind energy, thanks to its more advanced stage of development, occupies a central part in the RE strategy of many member states.

1.1.1 Scotland and Andalusia

This study will focus on Scotland and Andalusia, considered here as regions of the UK and Spain, respectively. Both Andalusia and Scotland have a high potential for wind power deployment: the European wind resource map estimates that 80% of Spanish territory has good wind resources (speed above 7 m/s, and power above 400 W/m²) (del Río and Unruh, 2007). Scotland has also an important capacity for wind energy generation (specially offshore wind, with a quarter of European capacity (Government, 2011)). Furthermore, both governments have actively been promoting the development of their respective wind resources. This means that wind farms are now a common sight around many areas of the country side in these two regions, and it also means that wind power has become a common topic of environmental debate.

In a sense, Energy, a traditionally statal matter, has been brought to a more popular ground due to the decentralised nature of the wind resources and wind power. However, this does not necessarily mean that the citizens are now in control of wind power. They are, however, closer to the generation of energy. The interesting question to ask now is, how do institutional authorities accommodate to this shift?

1.2 Public Participation and wind energy or (Public) Wind Power

Public participation is a complex matter, for variables of many kinds come into play to influence individual or collective decisions. As it has been said time and time again in the literature, the relationship between wind energy and public acceptance initially surprised politicians and developers due to the so-called gap between general positive view of wind energy and nonacceptance of specific wind projects, which generated the adoption of the now famous NYMBY (not in my backyard) term. A term that many many researchers have by now rejected (Van der Horst, 2007; Aitken, 2010*b*), which is not always the case for politicians (see examples in Devine-Wright, 2011).

Nonetheless, “public engagement” has become a popular catch-phrase in many sectors of policy making, but the ongoing construction of public participation in policy-making remains imperfect and accompanied by tensions, issues, and ambiguity. This is so because such a shift is indeed a process of transformation of both formal institutions (governments and other authorities) and implicit ones (values and traditions, the general lifestyle in sum).

Through exploration of the academic literature concerning participation and wind energy policy, I have identified two axes through which I will study two types of tensions generated by the inclusion of public participation in current institutional national structures: decentralisation vs. centralisation and effectiveness vs. legitimation.

I will develop on the literature on multilevel governance to deal with the topic of (de)centralisation and the literature on participation in policy making –with a focus on environmental policy– to assess the question of participation in terms of effectivity and legitimation.

1.3 Institutional design and civil society: Decentralisation, accessibility?

Participation doesn’t arise in an empty context. The programme for wind deployment adopted by the state, at whatever level, will at least at first determine “the path and the scale and the nature” (Rydin and Pennington, 2000) of participatory activity. The literature on social capital insists on the assumption that institutional design is of great importance in shaping incentive structures and thus determines to a good degree the nature of the action by citizens (Rydin and Pennington, 2000).

Thus, a real dialogue between citizens and the authorities will be shaped by the authorities first. A new social contract can evolve from such a dialogue concerning the nature of future energy systems, such as decentralisation or centralisation of generation of energy, the energy portfolio, the price to pay, and more. Devine-Wright (2011) proposes that such a dialogue can provide the basis for the ambitious targets in RES that some governments have. Furthermore, he argues, this kind of process cannot be limited to the local level, for large-scale projects concern more than the local community. Thus, a framework that is able to integrate a simultaneous consideration for both national and local levels is of utmost importance to ensure that whatever bottom up activities tend towards the same direction and complement each other.

“Such a process not only challenges existing ways of thinking about how public engagement occurs, it challenges assumptions

about where engagement should take place” Devine-Wright (2011) says.

Szarka (2006) argues that the “era” of small-scale financing and ownership by local communities of wind turbines seems to be ending, due to high costs of implementation and decreasing subsidies for wind power. Because of this, this path for civil involvement in renewable energy seems to be ending, and with it the potential of building social acceptance through small ownership. This situation, whether completely true or not, pushes the need to find for new ways to enhance community participation and stakeholder involvement.

In order to be able to undertake a meaningful analysis of I will mobilize the literature on multi-level governance to see how systems with several significant power levels are or should be able to work together. I will focus this part of my research on the issue of decentralisation, and how it allows for more accessibility than a centralised regime.

1.4 Choice of topic

The shift from government to governance and the inclusion of new actors in the domain of renewable energy has been regarded to have the potential to create an active civil society specially in the countryside, in a move away from a centralised state to small autonomous clusters. Renewable energy lends itself better for wider public involvement and even ownership than traditional fossil fuel power plants, as it can allow for smaller development and doesn’t need the degree of centralisation for diffusion in the same way as carbon fuels. (del Río and Burguillo, 2008)

In order to exploit the potential of participation, the analysis has to go both ways in a honest and open manner. For example, trust (in the sense of perceived fairness and openness) has been put forward as a key factor in the acceptance of local community to wind development projects by outsider developers (Aitken, 2010c). However, Aitken (2010b) states the need to go beyond that assumption and to push for a bilateral relationship in which greater trust is also placed in the members of the public. Academic studies about the relationship between the public and wind projects has already started to get over the limits of the NYMBY concept and the need to avoid opposition, and researchers point out the uncritical perspective under which public participation is framed (Aitken, 2010b; Devine-Wright, 2011; Ellis et al., 2007; Van der Horst, 2007).

However, it is important that governmental institutions also realize the limits to the current picture of public participation, and instead of finding ways to adapt public opinion to national goals, to consider that institutions can also actively adapt to what the people may want or need. Of course, the very defi-

dition of institution says that it is no easy task to change and that in any case it is a slow and gradual process. This does not mean, however, that they should be regarded with an uncritical eye, or considered to be superior to public participation.

To date, there remains work to do in order to assess the relationship between civil society and national and regional governments, specially concerning how the latter consider, frame and relate to public participation. Furthermore, as some researchers (Aitken, 2010*b*; Van der Horst, 2007) point out, public participation is to be taken into account with a critical mind both by policy makers and by academics, even and specially concerning wind energy. The exploitation of wind power is a way to a sustainable energy system, but it can't be done without thinking of social implications: participation is neither a threat (see examples in UK politics in Devine-Wright, 2011) nor an unquestionable good thing (for a critical analysis, see Rydin and Pennington, 2000). This study seeks to contribute to the question of governance and inclusion of civil society in renewable energy governance, but instead of looking at public participation itself (a topic widely explored already), to direct its attention to the framework in which it develops, what practices that framework promotes and how well it is able to adapt or integrate a series of different opinions or ways to do things.

1.5 Research framework

This research is loosely based in content analysis methodology such as presented by Krippendorff (1989) and Domas White and Marsh (2006). As the former develops, content analysis has been used in political studies to shed light into the kind of values expressed and attitudes held on particular issues by candidates to political posts and how these change depending on the circumstances or the audience. Traditionally, content analysis has usually been used especially to analyse the values found in the information communicated by the media.

However, applying content analysis methodology to official policy documents allows to overcome one of the weaknesses of this methodology, that is, that the form of the message is not going to change depending on the audience or the situation. Furthermore, such documents are produced at a national or regional level, and expected to be useful and valid for every public or private entity or person under their legislation. Thus, content analysis of pieces of legislation allows to explore what values are really held by the political authority. There are not many examples of this type of research, an exception being Maxwell and Granlund (2011) who analyse how conditions for participation for pupils with special needs are expressed in education policy documents in

Sweden and Scotland.

1.6 Aims and objectives

1.6.1 Aim

This dissertation aims to apprehend what values concerning public participation within wind power are present in renewable energy policy documents in the two regions of Andalusia and Scotland.

1.6.2 Objectives

The objectives of this work are:

1. To review the possible rationales for including participation in policy-making, and specially in matters relating to renewable energy.
2. To identify issues in the institutionalisation of participation within the development of wind energy.
3. To understand how the institutional framework implicitly establishes conditions for public participation.
4. Through a comparative perspective, to assess to what extent the two regions studied has identified and integrated issues and solutions to their the current executive framework.

1.7 Dissertation structure

This dissertation is divided into two parts, the first being a review paper, and the second, an experimental paper. The next section (section 2, Background) sets the general context of the two regions studied, Scotland and Andalusia, in terms of governmental structure. In particular, it will be interesting to compare what are the competences and devolved powers in each case, what degree of power does the region retain, and what is there left for local authorities.

The third section provides a literature review on the definition of public participation in relation with public policy formulation and implementation, and on the possible rationales for promoting it. Following that, some of the key issues and advantages of including public participation in decision making are exposed, especially in the field of environmental matters. The second part of the analysis looks at governmental structure, for different structures lend themselves differently to participation. Here, the literature on multi-level

governance becomes a useful tool to have a framework to explore how non-centralised governmental structures can work together, to combine local preferences with national targets.

The fourth and fifth sections, that open the experimental paper, contains a brief explanation of the strategy documents collected and the methodology and criteria used here. Follows an analysis of said documents based on the concepts and background developed in Part I.

2 Background: Wind energy in European governance

This dissertation focuses on the regions of Scotland and Andalusia. This chapter is intended to provide the context of the current governmental institutions that are competent in any way in wind power deployment.

The ever-increasing progression of renewable energy in many European states' energy portfolios is a very important part of national environmental politics, as energy produced from a renewable source allows for less dependence on fossil fuels. Moreover, it also contributes towards less dependence on countries that produce fossil fuels, starting a trend towards increased national energy autonomy.

This development of renewable energy has and is maturing in a social reality where the production of energy becomes a political matter for a wide range of non-elected actors too. In Europe in particular, where several countries carry an extensive program for the development and consolidation of renewable energies, participation in the form of localisation is often encouraged in European directives.

2.1 From European to local

The European Union sets directives for national governments to follow and adapt to the context of each country, both in terms of RE targets and in relation to Participatory governance in the EU has been defined as "the regular and guaranteed presence when making binding decisions of representatives of those collectivities that will be affected by the policy adopted" (Schmitter 2002, p. 56 in Newig and Koontz, 2014: , p. 258).

As mentioned before, the European Union has been one of the first and most enthusiastic supra-national institutions to promote public participation in policy-making (Newig and Fritsch, 2009*b*). The EU has identified and promoted the involvement of civil society in the political sphere it controls for a couple of decades now, signing in 1998 the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Newig and Koontz, 2014).

The EU is today a key institution that still continues to insist in the importance of participation and stakeholder involvement in the promotion of energy from renewable sources (Szarka, 2006). The current view of sustainable development promotes a three fronts approach, that is, that economic, environmental and social sustainability are not incompatible but complementary.

However, it is important to take into account that the EU, because of its very institutional structure does not fundamentally allow for direct public participa-

tion in the decision making stage of its projects. The 'fundamental democratic deficit' (Newig and Fritsch, 2009b) is indeed the fact that the EU constitutes such a technocratic organisation that the technicalities of RE directives are difficult to be influenced by citizens. Instead, this lack of decisional democracy tries to be compensated by trying to add legitimacy to policy implementation (Newig and Koontz, 2014). Thus, the sustainable development framework in the EU has pushed for an adoption of more horizontal policy links, instead of the usually vertical and sectoral way of policy making (Szarka, 2006). This change is of course still in the making, but examples can be found in the Water Framework Directive of 2000 or Air Quality Directives of 1996-2008 that try to approach policy implementation in a geographically relevant way (such as a river's basin, whatever administrative units it may cross), instead of adapting to existing administrative structures (Newig and Koontz, 2014).

Nonetheless, although there is a trend for increased decentralisation, traditional patterns of policy decision making are still present in the national management of wind power deployment.

2.2 Differences in sizes, competences and devolved powers of regional and local authorities

2.2.1 Regions

Scotland, which is considered in this paper as a British region, has a certain degree of independence and a series of devolved powers that allows it to govern on certain policy areas taking into account only a general British legislation framework.

Andalusia is one of the 18 Spanish regional authorities, called Autonomous Communities (AACC) which also enjoy a certain level of independence from the national government. For example, each of the AACC is free to establish their own criteria for wind power deployment projects.

Therefore, in this paper I will speak of national authorities for Spain and the UK, regional for Scotland and Andalusia, and local for any lower administrative authority.

2.2.2 The value & role of comparative analysis in renewable energy policy evaluation

Evaluation of national renewable energy outcomes can be examined through many ways, in terms of electricity generated per year, or in the number of projects already built or in development, or also the relative capacity compared with the total national demand, for example. Such figures are often presented

first things first in articles that seek to evaluate national progress in renewable energy. However, these national figures become truly insightful in relative terms, compared with other cases. Comparative studies allow for an account of different national developments and provide an additional level of renewable energy policy evaluation, in considering how other states are dealing with similar issues (see good examples in Jobert et al., 2007; Breukers and Wolsink, 2007).

2.2.3 Distribution of competences

Since a part of this analysis will look into the movement from a centralised state to a decentralised management of RE resources, it is fitting to have a look at the current institutional organisation in the two countries studied, in particular at the distribution of administrative competences concerning wind power development in each case. Although it is not within the scope of this work to analyse and compile every aspect of the planning and siting of wind farms, other authors have already looked at such administrative processes. The following tables have been adapted from articles that examine policy procedures for wind power deployment (Iglesias et al., 2011; Smith, 2007) and completed with additional literature reading (Aitken, 2010a).

	Spain (Iglesias et al., 2011)	UK (focus on Scotland) (Smith, 2007)
National	Electricity sector legislation FIT scheme Central registry of RES-E plants and pre-registry Indicative planning, renewable targets Binding planning: participation of the AACC Administrative authorisation for RES-E plants > 50MW	Renewables Obligation Network & market regulation Other support programs (LCB, R&D) Planning guidance Large investments
Regional	Regional legislation RES-E/wind energy planning Environmental and territorial planning competences Administrative authorisation for RES-E plants < 50MW Regional registry of RES-E plants	Regional targets & strategies (ROS) Regional Spatial Strategy, housing strategy RES: facilitate clusters and supply chains Authorisation for RES-E plants > 50MW Regional R&D and energy agencies Partnerships and networks
Local	Municipal land-use plans Building permits	Land use planning Local development frameworks Energy advice centers Supporting local initiatives Authorisation for RES-E plants < 50MW

Table 1: Devolved powers and competences for wind power deployment in Spain and the UK

2.2.4 Implications for the regional level

The national governments decide what system is adopted to promote RE. Spain chose to use feed-in-tariffs (FIT) which “involve an obligation on the part of electric utilities to purchase the electricity produced by renewable energy producers at a tariff determined by the public authorities and guaranteed for a specified period of time” (Menanteau et al., 2003).

In the case of Scotland, the main legislative tool for promoting the increase of the share of renewable energy in the electrical consumption is the Renewables Obligation, produced by the UK government. The RO works differently from FIT, and instead of providing subsidies to RE technologies, it marks a quota of RE production that energy suppliers have to meet. Scotland benefits from a special disposition called the Renewables Obligation Scotland (ROS), that works in parallel to similar legislation that is applicable in the rest of the UK. Furthermore, a system of FIT is in place to additionally support small scale (less than 5W in capacity) projects.

However, planning is a devolved matter that Scotland uses to be able to promote RE policies within the British framework. Entwistle et al. (2012) write that devolution “was conceived in distinctly dualist terms” in a way that allows Scotland to have the autonomy to pursue rather different policies than those in England. Such an example of different policies can be the target of electricity percentage coming from RES, which Scotland has set considerably higher above than the British goal for 2020. The case in Spain is quite similar, for AACC have set their own RE targets too, without trying to correlate it with national ones. This has resulted on some researchers noticing the lack of coordination between regional and national levels (Iglesias et al., 2011), which does not seem to be an issue for the Scottish case.

In Spain, regional governments are especially involved in two aspects: the planning of wind energy in their own territory and the procedures for authorisation of wind farms. AACC can legislate their own energy, environmental and territorial plans. They have their own RES-E registry, RES-E targets and specific plans and targets for wind energy (Iglesias et al., 2011). Wind energy is regarded as a strategic element of their regional development policy. The aggregation of the regional targets amounts to 44,000 MW whereas The National Renewable Energy Action Plan 2011–2020 (NREAP) envisages 38,000MW of wind energy installed in 2020 (Iglesias et al., 2011), which denotes a certain divergence and independence between national and regional authorities.

2.2.5 Implications for the local level

Although the authors of the articles used to produce the tables above have not used the same framework, one of the obvious implications from looking at table 1 is that local authorities in Spain have a much more restricted power on wind deployment than their equivalent in the UK. Furthermore, the national government of the UK has little to say concerning the authorisation of renewable energy developments, and instead the ministers of the Scottish government take in planning applications for developments with a total capacity of

more than 50 MW, leaving projects of less than that capacity to the decision of local authorities (Aitken, 2010*a*).

Furthermore, the local level in the UK is allowed to have a certain influence in the shaping of RE planning, with Energy advice centers or local development frameworks, and is not restricted to merely giving out building permits.

3 Literature review

There is a vast body of literature that explores public participation in every possible area of governmental policy, especially in Europe and the US, from theoretical frameworks to specific case-studies. This section attempts to provide a good understanding of “what, how and why” public participation. That is, after providing a definition of public participation, I will briefly explore the approaches and issues to it, to then move to a subsection discussing the possible rationales for including participation in environmental policy making. As mentioned in the introduction, the first axe of study concerns the stage of a project in which participation is included; therefore, I will focus on the concepts of input/output-oriented legitimacy.

3.1 Public engagement

Environmental policy in the last two decades has been characterised by a discourse that emphasizes participation and stakeholder involvement in order to encourage environmentally and socially sustainable development.

A varying degree of methods of public engagement is considered useful to promote legitimacy for changes brought into the traditional lifestyle in general, or for specific projects that alter the usual activities performed in a certain area. Additional advantages, such as access to an alternative source of local knowledge or helping to inform an active population are also put forward as an argument to reach for collaboration between several and different actors when handling environmental matters in particular.

In relation to wind energy deployment, participation from non-elected actors has increasingly been studied by researchers, most usually with the purpose of exploring and precisising how participation against a project can be a barrier and why, or instead how participation as involvement can have a positive effect in terms of efficacy for any given project. This is the case for wind energy in particular because it is, to date, the most developed and available to the market and thus very widespread. For this reason, populations have been confronted to many wind farm projects and have been actively or passively involved in different ways.

3.1.1 What? Defining participation

Public participation, involvement and engagement are terms that more or less refer to the same idea; that is, that the possibility for the people who elect the governmental body to be included directly in the policy-making.

I will firstly present the definition of participation given by Newig and Fritsch (2009b): “all forms of influence on the design of collectively binding agreements by persons and organisations that are not routinely in charge of these tasks”.

Looking at the topic at hand, namely wind power, I would like to extend the definition of public participation used in this study to include individual and/or community ownership of (obviously) small scale wind farms. This means, from a governmental point of view, to provide further incentives for localisation of energy generation owned by individuals or organisations from the community or area. The reason for including ownership as a form of participation comes from the assumption that decentralisation and localisation allow for increased accessibility for citizens. Thus, even if one small-scale wind project might not seem to make a big difference in absolute terms, it follows in turn the intention developed widely in the literature of connecting local efforts to global or national objectives.

3.1.1.1 Participation and Sustainable development Public participation will be considered here as part of an “interactive political citizenship,” (McKenna, 2011) “which sees citizens as active contributors to policy-making”. “The public” is in fact a whole sector by itself of the political life which exists outside governmental institutions *but*, McKenna (2011) argues that with the local government, the citizenry is able to maintain a relationship of partnership. Thus, the direction towards which participation should ideally tend goes slightly against Newig and Fritsch’s definition, as the purpose of social sustainable development is that citizens (taken in a collective sense) are regularly influencing some policy tasks.

Such an enthusiastic view of public participation acknowledges that there have been many cases of disillusion with citizen participation, due to several reasons, but among others because its interests were considered as petty and against the greater good, or because not enough people care about participating in environmental policies to mobilize a significant number of support. Nonetheless, these arguments become insignificant if we consider that a framework and tools for participation should be made available as soon as even just one person would want to take part in the policy making process. Of course, any such willingness to participate should be backed by other citizens sharing the same concern to be legitimate in any case. Be it as it may, there is a considerable number of studies that claim that citizens do get involved in policy-making if the tools to do so exist (Healey, 1998) for just as many studies that convey disillusion with citizen participation.

This paper will not proclaim the superiority of collaborative environmental

planning over traditional, more centralised and technocratic methods of environmental management. However, I will work with the assumption that social dialogue is indeed positive for social (and potentially environmental) sustainability and consequently, that the opportunity for real inclusion of non-elected individuals or organisations at a local level provides a beneficial base for building up a renewable energy system at a national level.

3.1.2 How? Approaches and issues

“Participation, however, is a very ambiguous concept and depends very much in practice on the method and process of its implementation.” (Jolivet and Heiskanen, 2010)

Renewable energy, as a relatively novel technology and initially developed by *national* authorities to comply to *national* targets, has encountered opposition from different angles. However, renewable energy technology is inscribed in the wider framework of sustainable development and, as mentioned before, SD is meant to be socially acceptable on top of being environmentally beneficial. Thus, there is a need for public debate and consensus over specific projects and long term goals. This is, as (1997) puts it, “part of the process of bringing technology under more direct social control”.

Of course, as happens often when more actors are involved, there can be costs in terms of delays, for example. To try and limit this, there can be found ways to establish methods of conflict resolution from the start, methods that are standardized in the sense that they can a “by default protocol” if nothing else is proposed by the relevant stakeholders. Again, as has been argued in this paper already, the governmental structure is the one that is able to set such frameworks, and thus has a responsibility to frame, but not limit, public participation. This point will be further explored in the next section and section 7 (discussion).

Among the issues raised concerning the social part of wind energy development are the following:

3.1.2.1 Issues:

- Lack of clarity of goals (Mitchell and Connor, 2004; Loring, 2007). It has been argued that a consensus between the relevant stakeholders, whether at a project scale or in relation to long term objectives need to be reached. However, how can a consensus be attained if there is no direction towards which to direct all relevant interests? The lack of clarity of goals in a sense limits public dialogue, for many voices without order get

nowhere. Furthermore, it has been argued that many passive supporters of wind energy tend not to manifest their opinion because they don't feel engaged (REF). Developers on the other part, also claim that a lack of explicit support is very important for them to feel secure to develop wind projects in the country or region (Lüthi and Prässler, 2011).

- Current support mechanisms are increasingly becoming beneficial to established companies only Mitchell and Connor (2004); *Wind Energy Handbook* (1997), there is no appropriate additional support for newcomers or small-scale owners. This creates a monopoly of power that can limit public dialogue, something that can easily happen if one party holds too much power.
- There are not clear mechanisms for consultation and conflict resolution. Furthermore, participation may be even avoided all together by politicians because of possible oppositional views. Opposition is considered as deviant and contrary to national goals, and thus to be ignored when possible or if not, convinced (Aitken, 2010b; Devine-Wright, 2011). Indeed, local knowledge and viewpoints –including those of objectors– should be engaged with and taken on board in the planning and development of renewable energy.
- The predominantly top-down policy style and the consequently possibly ineffective planning of wind-turbine siting. The facility siting literature has termed this phenomenon as the “engineer’s” and “planner’s fallacy” which can be detrimental for the success of the project even in cases where there is broad public support (Wolsink, 2000).

All of the above can result in a lack of trust, and even a vicious circle. Trust has been identified as a key issue in wind scheme planning and sitting, for if there is a perceived fairness and transparency in the process, there is a certain kind of opposition that wouldn't emerge (Aitken, 2010b). However, to have an institutionalized top-down, centralised approach generates distrust among the public, which in turn generates opposition to the process (not necessarily the technology), which in turn generates more distrust from the institution who will try to avoid further opposition (e.g., “by limiting opportunities to participate, remedying information deficits and addressing self-interested concerns” (Devine-Wright, 2011)), which in turn generates increased perceived deceit, which in turn... The concept of NYMBY denotes distrust and aversion from policy makers and developers, and is specially detrimental in that it can contribute to the generation of such vicious circles (Devine-Wright, 2011). Not only it is beneficial for the public to trust developers and planners, but the latter

should be able to trust the public to have valid opinions and therefore trust that open and transparent participation can produce beneficial outcomes whether or not participants are in favour of specific developments (Aitken, 2010b).

3.1.2.2 Approaches: Szarka (2006) states that small-scale financing or community ownership of grid-connected turbines are increasingly disappearing. Instead, other ways of enhancing community participation and stakeholder involvement need to be established widely. The following methods of public involvement have been identified by him:

1. *Empowerment of the community through decision making:* this can be taken to varying degrees, but it could be considered that the community votes on whether to proceed with a wind farm project or not (e.g. Awel Aman Tawe in Wales (Szarka, 2006)).
2. *Local community benefits:* a more direct economic approach, where the developer agrees to share a part of the profits generated from wind farms through the intermediary of a community trust. For example:

National Wind Power has provided £100,000 for a charitable trust to be used to support local schools, colleges, students, apprentices and training schemes in the area around its wind farm at Bryntitli in mid-Wales. It has also provided a £5,000 p.a. fund to support local environmental improvements in the area of the wind farm and has set up a community fund which will receive £5,000 p.a. for the benefit of local inhabitants *Wind Energy Handbook* (1997).

1. *Local taxation:* for example, in France, developers of wind farms, like any other company, pay a local business tax (called "taxe professionnelle"). Coming from large scale wind farm projects, this revenue can represent a considerable asset for small communes and can be used to finance community schemes in the locality (Szarka, 2006).
2. *Incentives to local energy consumption:* if there is a renewable energy generation plant in the locality, it only makes sense to make green energy available more easily or cheaply to local residents.
3. *Economic regeneration:* profits from wind farms are used to stimulate the general economy of the area. In an area in economic decline, this can be very alluring (Van der Horst, 2007).
4. *Environmental regeneration:* if there is possibility for improving the ecological quality of the surrounding area, profits from wind farms can add even more green development on top of renewable energy generation.

These methods allow for an array of different options to engage with the public when setting up a new wind project. Of course, not all of these need to be used for the same situation, and priority can be given to different ones depending on the specific context in which the project will take place. In an economically poor area, economic regeneration has enormous potential and is likely to foster acceptance by locals who, in this case, possibly don't attach much value to the environmental aspect of an area in decline (Van der Horst, 2007). In the case of the British countryside, however, where often social identity is linked to the environmental landscape (Toke et al., 2008), an emphasis on environmental regeneration and conservation methods can be applied.

3.2 Why engage with the public? Effectiveness and legitimization

"The literature has identified three predominant rationales, succinctly defined by Stirling as normative, substantive, and instrumental: 'Under a normative view, participation is just the right thing to do. From an instrumental perspective, it is a better way to achieve particular ends. In substantive terms, it leads to better ends'" (Stirling, 2005 in Devine-Wright, 2011: , p. 20.).

It is argued that European policy making lacks democratic legitimacy and implementation effectiveness (Newig and Fritsch, 2009b). Firstly, there is little democratic participation and accountability in terms of policy formulation and decision-making (the *input* side). Secondly, policies do not seem to be as effective as intended once implementation begins (the *output* side), particularly in the field of environmental policy (Newig and Fritsch, 2009b,a). Confronted with this situation, European policies attempt to follow the recent international tendency towards increased participation. Thus, the two main rationales for promoting participation are effectiveness and legitimization.

3.2.1 Effectiveness

Effectiveness relates to the implementation of a policy, and whether such policy fulfills its objectives. Thus, the role of participation in terms of effectiveness is to find the best way to adopt and implement a new policy.

Nadaï (2007) identifies the logic of perceived effectiveness by the state in action at the stage of planning a wind project, which, he argues, is based on a "rational framing" logic. Rational planning aims at optimizing social welfare based on a ex-ante spatial scheme framework and operates following the

administrative levels at which the welfare state manages the territorial organisation.

Rational planning is further characterized by hierarchical decision, based on certain social welfare indicators produced through a layered picture of the territory. This process offers a simplified representation of the territory, and thus allows for simpler policy process. However, from this description it comes clear that this top-down, “rational” method of planning does not taking into consideration social networks or local opposition. Thus, Nadaï (2007) argues that *nothing* in rational planning is adapted to solve siting issues.

Siting, on the other hand, relates to the locality, exactly where a specific project is to be implemented. Thus, it operates at a level where the territory becomes a “place”, where local social links exist. “Open consultation, participation and technologies for representing/sharing the spatial and social meaning of locality are the ways through which siting proceeds” (Nadaï, 2007). Through such procedures, Nadaï (2007) considers that siting explores and integrates social networks into renewable technology deployment, thus strengthening those links. However, this implies a considerable amount of work and time consuming policy processes. Nonetheless, this process would promote legitimacy of the project.

3.2.1.1 Local knowledge The uncovering and use of so-called local knowledge has also been put forward as a warrant of the effectiveness of participation at a local level. It has been said that planners and developers lack a special kind of knowledge that the people who live in an area, a kind of mixture between knowledge built from practical experience and the frame that people use to filter and give meaning to such experience (Healey, 1998).

Local knowledge is not necessarily a given even when there are methods for public consultation in place. Newig and Fritsch (2009a,b) attempt to prove several assumptions of environmental participatory literature, among which is the output in terms of environmental standards of decisions, and one of their findings is that locals have little “local knowledge” to offer in the 40 cases they have examined. Contrary to theory, individual citizens on average don’t have any specific information to offer compared to governmental agencies.

Although local participation does not provide increased knowledge, Newig and Fritsch (2009b,a) also find that (a pleasant surprise!) that participation does correlate positively with collective learning and high levels of information flow. This means that high levels of participation are likely to bring new and creative solutions, which should be backed by readiness and sharing of information. Not only that, but the manner the participation process is handled, concerning perceived representation and fairness, appear to further in-

fluence stakeholders to actually make a constructive cooperation. Thus, collective learning, as a very desirable element of effective policy, seems to be closely linked to the fairness of the process and high levels of information.

3.2.2 Legitimation

It is argued in the literature that wind projects with high levels of participatory involvement lead to more successful results, because engaging with the local community gives more legitimacy to the project (Loring, 2007). Of course, this needs to be done in a way that truly links policy with democratic values.

Participation through a democratic perspective is an end in itself, and is seen as being an inherently “good” value. Whether participation provokes opposition, or delays a wind project siting, “a policy which has involved a wider range of parties is assumed to operate with a greater level of consent and this is, by denition, more desirable” (Rydin and Pennington, 2000).

In addition, as has been argued before, the process of legitimization (and consequently collective learning) is more likely to foster the creation and establishment of supporting networks. Conversely, the absence of a perceived fair process is more likely to generate networks of opponents. Loring (2007) goes as far as to argue that, although a stable network of supporters is not necessarily related to project acceptance and succes, the lack of a stable network of opposition is fundamental for project success, although this is disputable and should depend on the power of such network. In her work, Loring (2007) also states that in many cases, opponent groups arose due to anger or distrust towards an outside company or individual that proposed a project that locals would not benefit from in any direct way. Thus, she observes that “*by encouraging local, cooperative ownership of projects, such as was done in the 1970s and 80s in Denmark and with some more recent examples in the UK8 governments may help promote further wind energy development.*” (Loring, 2007).

She concludes by acknowledging that efforts are being made in the UK through regional studies and local development plans (as seen in table 1 in the background section), and by pleading for further clear guidance by the national government to local authorities and developers (i.e. explicit targets and locations). This would indeed provide bilateral legitimization in that the national authority advocates the renewable energy cause and local authorities are given serious consideration of specific context.

3.2.3 Criticism about public participation in environmental policy

It is important to take into account that, within the literature on environmental policy, public participation is often considered as a manifest good thing. Public

participation is about opening up the process of policy making, but this might not be always desirable in terms of environmental benefits, contrary to what has been argued in the literature. Newig and Fritsch (2009a,b) have attempted to demonstrate that local participation does not significantly correlate with environmental benefits, but rather that it depends on the personal interests of the actors involved.

Furthermore, Rydin and Pennington (2000) also claim that participation in practice tends towards interest capture and bureaucratisation by certain groups of actors, and thus policy delivery in this case would also depend on their interests, and not necessarily improve the effectiveness of the policy.

3.2.4 Implications: Institutionalising participation

In summary, public participation means further chances of inclusivity in policy-making, whether in the stage of decision, implementation, or both. It has been argued in this section that different situations might call for different practices, in terms of methods or stages in which to engage with the public.

It has also been argued that, again depending on the situation, public participation does not necessarily lead to the “uncovering of local knowledge” which is said to provide a better sense of the issues existing in a particular place. However, even if there may be no such additional “explicit” knowledge, the more individuals included in a discussion can bring a constructive process of collective learning which can be clearly beneficial to find innovative and creative solutions that not only foster consensus but also win-win situations.

Society needs to be brought into active engagement in renewable projects because it can provide a chance of connecting local development with national or even global development, and such building of collective social capital is an aspect of sustainable development.

However, there remains the challenge of being an equilibrium between monopoly in decision making and excessive, unrestrained “participation”. The direction towards which to tend should be able to integrate participation in the form of constructive dialogue, with institutionalized methods so that every stakeholder can “voice” their opinion. This implicates the need for a conscious *distribution* of both benefits and issues, of analysing power relationships and final outcomes in order to identify who wins and who carries the burden and to build consensus over an open discussion of such issues.

In short, building public dialogue within renewable energy requires an approach which is ‘embedded in a wider balancing up process in which social and economic interests are also taken into consideration, and parties other than government parties are allowed to participate in the realisation and implemen-

tation of policy, such as businesses, non-governmental organisations and citizens' (Driessen and Glasbergen, 2002 in Szarka, 2006).

This logic inscribes itself in the call to a more sustainable energy system which promotes active public engagement at both local and larger scale of technology deployment, which implies a two-way process of participation. Sustainable development is significant because as Ratner mentions:

“the sustainability concept is meaningful, therefore, not because it provides an encompassing solution to different notions of what is good, but for the way it brings such differences into a common field of dispute, dialogue, and potential agreement as the basis of collective action” (Ratner, 2004 in Devine-Wright, 2011: p. 23).

As Szarka (2006: p. 3047) observes, this process requires the “freely consented *commitment* of social actors” (emphasis added). If one of the benefits of renewable energy technology is that it has more potential to local democratic control than traditional, large scale, centralised energy production, “routes to ‘democratisation’ becomes a core question, which opens a particular research agenda” (Szarka, 2006).

3.3 The power of institutions: Multi-governance theory

Democratisation is to be brought forward by every aspect of society, and that includes formal institutions at every level.

3.3.1 Institutionalism

This study is clearly influenced by institutionalism. The key assumption of the historical institutionalism perspective is that different economic and socio-political realities have shaped the institutional system in each country. In turn, those institutions, with their embedded attitudes, structures or conventions are what Toke et al. (2008) call “national traditions”, and that will shape and account for the evolution of the current policy making. Toke et al. (2008) make a comparison of non-technical factors that influence wind power deployment between six European countries. Different national traditions have shaped the system of planning, financial support, the role of landscape protection organizations, and of patterns of ownership. Although Andalusia and Scotland are part of recognized democracies, they are different in “the way they do things”. Their internal structure and administration are fundamentally different and because of this, the processes and consequences will be different for the projects.

Historical institutionalism also studies the possible non-intended effects of the continuous development of institutions, such as inefficiencies in the pol-

icy process that, because they have become part of the system, are difficult to change. Especially, the concept of path dependency grasps the consequences of a decision on the whole system's future development. This means that already functioning administrations with established practices have to incorporate new technologies, new knowledge and without much doubt, new relevant practices. Researches in the field of Science and Technology Studies find that the incorporation of new technologies into already existing systems can be problematic more importantly when they involve new kind of practices (Pinch and Bijker, 1987; David, 1997; Walker, 2000; Bijker and Law, 1992; Jacobsson and Bergek, 2004; Unruh, 2000). Moreover, as (del Río and Unruh, 2007) notes, the case of sustainable technologies is even more complex as it deals with an important amount of different relations towards different levels of governance, from the local to the global, with humankind in the middle.

3.3.2 From government to governance

Planning, authorisation and development of wind farms, and renewable energy power stations in general, raise the issue of overlapping competences between different levels of authority within a state. This is, in turn, one of the barriers that developers and authors quote as being harmful to wind projects (Lüthi and Prässler, 2011), because going through several administrations each with different requirements usually slows down the process of authorisation for a project. Environmental policy has specially been considered as a prime example of multi-level governance and even more so in the case of European countries, as European directives and the supranational level of the Commission add another level of governance and even may link bellow-national with supra-national levels (Bache and Flinders, 2004).

There is a wide body of literature that explores public participation in relationship with local wind projects or local authorities and environmental policies (Aitken, 2010*c,a*; Bell et al., 2005; Lawton and Macaulay, 2013; McKenna, 2011; Rydin and Pennington, 2000). However, there is a need to explore how that relationship can be taken seriously at a regional and national level, and large scale wind projects, not just community-owned small clusters.

For this study, I will reference the literature on multi-governance theories, a practice in political studies that aims at better understanding of the changing relationship between the different levels of governance, and the increasingly number of actors that are being included in the process of policy-making (Eckerberg and Joas, 2004; Stephenson, 2013). Smith (2007) argues that this shift has taken place only recently as a consequence of traditionally structures of government breaking the strict hierarchy on which they functioned until

now. This dynamic follows a global trend that is being increasingly noticed and studied, under the term of “glocal”. This neologism defines how global corporations adapt their products to local consumption (Wellman, 2004; Bestor, 2001). In this case, it is the meeting of global or supra-national projects with local communities.

For political governance, this means that traditional structures are giving way to ““more fluid”, problem-focused networks based at one level, but seeking to draw in help from other levels” (Smith, 2007). The whole administration won’t be involved in the project and different teams might work on different aspects of the projects. Following on that, Smith argues that this dynamic blurs the lines between national and regional areas of authority, for regional power seeks to increase its autonomy over their own development, especially in the context of a globalized worlds in which states do not hold the monopoly over international connections any longer, “rather than being sub-altern, sub-national administrative tiers transmitting policy and economic development priorities set from above” (Smith, 2007).

3.3.3 Participation in governance

For the past decade, participation has been increasingly put forward by academics as a way of reaching more democratic policy solutions, and of fostering an active and healthy civil society. Renewable energy presents a complex challenge to policy making because it questions the structural pillars on which it is based and calls for a rethinking of the current dynamics that shape national policy making. It is particularly interesting to apply the theories of multi-level governance to environmental policies, for this area of policy-making goes beyond, above and below statal domestic matters. It isn’t arguable anymore that the increasing development of renewable energy production is needed to build on a sustainable future and to face environmental degradation. However, while energy was until a couple of decades ago mostly a matter of national authority, and of centralised power plants, that trend that is starting to change now Walker (2000); Winskel (2002); *Wind Energy Handbook* (1997).

“If the actual manufacturing of components and the development and energy production from large scale projects is still a matter of large companies, it is important to consider actors from outside the public government or private corporations. The production of energy should now be moving towards a decentralised used of real time diffuse energy.” *Wind Energy Handbook* (1997)

In this sense, localism is an extended form of subsidiarity, and it enhances participation in a number of specific ways; community rights have been expanded

in terms of ownership of assets and the right to challenge local authority decisions (Lawton and Macaulay, 2013).

3.3.4 Multi-level governance and decentralization

Because the governance of wind energy in my case-studies involve different actors on different levels in relation to authority and responsibilities, I decided to use the multi-level governance theory (MLG) to frame my understanding. This theory aims at understanding how big and complex organizations are working while including different levels and different actors (that can be individuals or institutions) from within the organization and outside as well. It tries to provide a simple understanding of plurality and diverse participation from the subnational to the supranational level Stephenson (2013). Moreover, MLG implies a notion of equality between the activities of the different actors which deepens the dependency between the actors.

Although mutual dependency between political levels might be present in the ideal definition of MLG, it is often the case that reality does not matches to the theory. In practice, there exists a certain hierarchy in which the state is still seen as the main level. Instead, maybe a more adequate view is of a degree of independence from the state level (or the European Union level). Nonetheless, during the last decades, European states have seen number of their functions being decentralized to other actors (Stephenson, 2013). MLG does not necessarily provides the toolkit to understand of governance had come to be, but it is an essential theory to understand how governance exist today between different actors Stephenson (2013).

Multi-Governance theory has attracted some criticisms as exposed by Bache and Flinders (2004). One of those criticisms that will be most useful to bear in mind in this study, is that multi-governance theory gives too much power and autonomy to subnational actors, considering that the state is still an important gate-keeper and the main (but not the only) actor in creating and shaping policy. More concretely, in relation with the European Union, national channels of representation are still dominant — although that doesn't mean that there are not subnational organizations reaching out directly to supranational authorities. The reality of dynamics of domestic governance is complex and varies in each country. In this study, the state is still considered as a gate-keeper as this is still the case in a number of situations (allowing citizen based organizations, integrity of the territory, some cases of funding...).

Nevertheless, the some authors suggest that decentralization and messier view of MLG can promote not only dynamism but also increased diversity. The fluidity of the organizations is a modern view, put in contrast against the

Controller state	Facilitator state
Centralised regime	Decentralised regime
State as active manager	Institutional redesign
Citizen as consultee	Citizen active in implementation
Legitimation of policy process	Efficient policy delivery

Table 2: Approaches to public participation within environmental planning. (Adapted from Rydin and Pennington, 2000: p. 165)

more old hierarchical and pyramidal administration (Smith, 2007). MLG has been used extensively to analyse institutional arrangements in order to provide for accounts on how to achieve a better cohesion policy between the different levels of governance, or with the purpose to uncover formal and informal rules (such is the definition of “institution”) that may explain the cause of multi-level tensions.

The Committee of the Regions (as an enthusiastic promoter of MLG theory) considers MLG to mean co-ordinated action by the supranational institutions with national, regional and local authorities, based on partnership and aimed at drawing up and implementing EU policies (Warleigh, 1999 in Stephenson, 2013).

The next table illustrates the opposition of the role of the state between a centralised regime and a decentralised one. A controller state plays the main role in managing environmental planning, in terms of participation only organizes consultation sessions and seeks a legitimization of its policy-making (Rydin and Pennington, 2000). In sum, the state as the main actor of the negotiations (controller state) acts as a “by default” problem solver, where the state is more seen as a medium than the core-actor in the case of facilitator state.

However, the new MLG facilitator state is built on the previous controller state, in the latter parts of this work, I will try to see how this shows in the policy documents.

3.3.5 Participation and environmental policy

Retaining the authority to shape planning processes and determine which forms of participation are ‘legitimate’ or ‘relevant’ gives decision-makers considerable power to control both planning processes and outcomes, and this is directly counter to the notion of participation (Aitken, 2010a). There is a great number of published articles on study-cases that analyse the impact on wind-farm development of local opposition or support, and many conclude that opening the possibility to a degree of participation and information translates into a better accepted project and even an improved development of it at best.

Since the start of academic interest in participatory governance in environmental matters, many hypothesis have been formulated concerning the relationship between participation and environmental policy, many based on single or some case studies, and thus with little possibility for generalisation (Newig and Fritsch, 2009a).

Newig and Fritsch (2009a) tests several hypothesis concerning participation and environmental policy making, a study of great interest because it collects and tries to test them based on 49 case-studies in order to gain a certain level of possible generalisation. However, he finds that there is a strong positive correlation between environmental output quality and number of governance circles involved. This suggest a positive relationship, in which citizen participation organized in relevant governance circles, if working within a framework that provides for sufficient *direction* can indeed increase the quality of policy implementation.

One of the hypothesis considered by Newig is that a high number of horizontal and vertical, quasi-autonomous decision points is better able to adapt to external change than hierarchical modes of governance, leading to a more sustainable resource use (Newig and Fritsch, 2009a).

Part II

Experimental paper

4 Case studies

The previous section has developed a working framework with which to analyse public participation in a field of multi-level governance such as wind power. In the following two sections, I will expose the details of the selected data and the criteria used.

4.1 Documents analyzed

I have decided to study the most recent renewable energy strategy of the Scottish and Andalusian governments and how they adapt and integrate public participation. Thus, the documents selected for this study make up for the pathway set for the next years and are all available to the public.

The documents selected for this study are all available to the public, and have been found through personal online research, and also through major websites specialized in the wind energy sector, which direct the visitor to the relevant official documents. Mentions in the literature concerning renewable technologies in Spain and the UK about specific laws or relevant white papers have also been explored.

The government of Scotland provides a website (<http://www.scotland.gov.uk>) containing every official publication by the Scottish government, and so does the British government (<http://archive.defra.gov.uk>). The same can be said for the Spanish publications concerning renewable energy, which can be found at the website of the Ministry for Industry, Tourism and Trade (<http://www.minetur.gob.es>). Regional strategy publications for Andalusia have been found at the regional government's website (<http://www.juntadeandalucia.es/>) and also in the official branch specialized in energy (<https://www.agenciaandaluzadelaenergia.es>).

Because this study does not intend to make an historical evolution analysis, only the most recent pieces of legislation currently in use have been taken into account. In total, 9 documents have been collected and analyzed:

4.1.1 Spanish RE planning

The document that sets out Renewable Spanish policy for the next years is the "Plan for Renewable Energies"¹, active from 2011 to 2020, issued by the

¹Plan De Energías Renovables 2011-2020

Ministry for Industry, Tourism and Trade and the Institute for Diversification and Saving of Energy (IDAE) (Gobierno de España, 2011*a,b*).

Furthermore, each autonomous community has its own legislation applicable to wind energy, according to what was shown in table 1. As this case-study focuses on Andalusia, the relevant strategy document for this region is the “Andalusian Energy Strategy”², stretching from 2014 to 2020. As mentioned, said document is still being elaborated, and the copy consulted in this study is the second draft made available to the public.

4.1.2 British RE planning

In terms of national framework to work towards sustainable development, the only document consulted is the “The UK’s shared framework for sustainable development, One future – different paths” (HM Government, 2005), which establishes guidance applicable over all the British territory for sustainable development. Furthermore, the report to the European Commission on the “National Renewable Energy Action Plan for the United Kingdom” (Kingdom, 2009) has provided an additional source.

As mentioned in table 1, the Scottish government does not possess full authority over matters concerning the field of Energy regulation, but planning is a devolved power and is the main instrument used to promote RE in Scotland. Thus, “Scotland’s Third National Planning Framework”, the most recent planning framework will be analysed here.

Next, one of the main documents analysed is the “2020 Routemap for Renewable Energy in Scotland” (Government, 2011) which is an update and extension to the Scottish Renewables Action Plan 2009. To complement this document, the “Low Carbon Scotland: Meeting The Emissions Reduction Targets 2013-2027” has also been procuded (Government, 2013*b*).

As additional guidance, the Scottish government has produced strategies concerning community onshore wind energy innitiatives in particular and electricity generation in general: “Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments” (The Scottish Government, 2013*c*) and “Electricity Generation Policy Statement – 2013” (Government, 2013*a*).

²Documento Borrador Estrategia Energética de Andalucía 2014-2020

5 Methodology

Three of the four objectives expressed in the introduction have been treated in the previous sections, namely, to review the rationales for including public participation in development of renewable energy, to identify the implementation issues that arise from such a movement, and to argue for the importance of institutional structures in encouraging and framing participation.

The next section attempts to put theory into practice through a review of policy documents in Scotland and Andalusia. Mainly, I will try to find the issues highlighted in section 3 in said documents, examine if those issues have been identified, and if they have, whether solutions have been integrated.

5.1 Content analysis

Content analysis is a research method widely used in library and information science, but that has been used by researchers of sociology, management, politics and psychology. Content analysis is defined as “a research technique for making replicable and valid inferences from texts (...) to the contexts of their use” (Krippendorff, 2004, p. 18 in Domas White and Marsh, 2006: p. 27). I have loosely followed qualitative content analysis procedure in 1) formulating open questions, 2) sampling relevant data, 3) analysing the data in order to 4) draw conclusions incorporating the context, situation and the theoretical construct to give a composite picture of the phenomenon studied (Domas White and Marsh, 2006).

5.2 Criteria

The criteria used to analyse policy documents are in relation to the issues identified in section three, namely, lack of clarity of goals, lack of support for new players, lack of clear mechanisms for consultation, and an excessive top-down policy system that allows little consideration for local preferences. I would like to mobilize three dimensions of innovation developed by Leach et al. (2012) to add further depth to the evaluation of the issues raised.

Leach et al. (2012) write about the need for a connection between global efforts and grassroots movements in order to achieve the Sustainable Development Goals and face the crises in climate, food, energy and biodiversity. In order to do so, they propose three dimensions to transform innovation, what they call a transformation in “3D”: Direction, Diversity and Distribution. The authors also strongly refuse top-down, managerial approaches for their incapacity to deal with diverse and different contexts. Fix-all technology solutions are also dishonest, because they seem to take away individual and collective

responsibility for change to a sustainable lifestyle. Thus, the three dimensions to innovation carry a rather emphasized social approach that call for ambitious environmental goals and social inclusivity:

5.2.1 Against a lack of clarity of goals: Direction & Values

Firstly, what Leach et al. mean by Direction is that priorities must be set straight and clear. The direction of change is an ideal towards which to advance, and thus by definition must be ambitious. This dimension should be characterised by solid clarity on the “particular goals and principles driving policy and innovation” (Leach et al., 2012).

The fact that “direction” concerns ideals does not mean, however, that the principles driving policy should be left ambiguous, open or undiscussed, or merely included in general imperatives of growth or progress, but actively steered towards the environmental and social sustainability changes needed. However, it should also be said that different contexts will frame the details in different ways.

In the context of this dissertation, I will analyse the explicit discourse maintained in official government documents, and the direction and values expressed thus become an essential point to consider when assessing the lack or not of clarity of goals.

Direction will be valued in terms of ambitiousness of goals, and values will be assessed in terms of economic-environmental-social focus expressed.

5.2.2 Against the establishment of a monopoly: Support for smaller and new players

One of the raised issues is that established companies have greater control over the production and distribution of wind energy, and this can have the effect of increasing their voice in policy making and implementation due to their increased power. Although having big and stable companies is beneficial for the economic dimension of sustainable energy, it is important that they are not the only option available. Thus, it is important that the government provides support especially directed towards small scale and new players.

5.2.3 Against the lack for mechanism for consultation: Establishment of consultation agencies & explicit inclusion of the community

Leach et al. (2012) call for the need of taking seriously how the safe operating space is shared by different people or networks, and considering who gains

and who loses from particular policies that are to be implemented in an existing social space. In doing so, distribution must be integrated in the decision making procedure, to be able to assess issues of burden-sharing and to offer the possibility to anyone to voice their opinion, taking into account that different groups of people have different needs to do so. Thus, the establishment of consultation and knowledge sharing spaces and the explicit inclusion of the community will be used to assess the issue of distribution.

5.2.4 Against excessive top-down policy: Decentralisation, diversity of local frameworks

Finally, Leach et al. (2012) make a case for diversity, arguing that more diverse approaches and types of social and technological innovation is a very desirable outcome that leads to a more robust and resilient innovation pathway into future energy systems. Furthermore, diversity in approaches and implementation also resist the process of technology lock-in, and in doing so keeps the door open for creative forms of energy development (i.e. autonomous non-connected to the grid energy generation plants).

Not only that, but social and technological solutions that appear to be adequate from a national perspective often prove less viable and less beneficial depending on the specific context of each locality (Leach et al., 2012; Nadai, 2007), thus the need for decentralization. Diversity will then be analysed in terms of decentralisation.

6 Analysis

In this section, I will assess to what extent the issues identified in the literature on participation within renewable energy are present in practice in the formulated strategies of the Scottish and Andalusian government. To this end, I will look for evidence that such issues have been integrated and addressed. I will also look at the differences in approaches between the two regions, in order to be able to make an assessment in relative terms of the good practices deployed, and the issues that are still present and need to be addressed.

6.1 Direction & values

I have argued that national institutions are very important in shaping public participation, and thus that in order to move towards a sustainable energy system in which social, environmental and economic goals are integrated, the objectives communicated by the government need to be clear and ambitious. Furthermore, it is important to consider what priorities are set by the government and how ambitious they are. Is sustainable *economic* development the main target, predominant over everything else? Is environmental conservation given more importance?

Direction is evaluated in terms of ambitionness of objectives, while values will be determined in terms of environmental, economic or social preeminence.

6.1.1 Renewable energy targets

What are the targets for renewable energy expressed in regional strategies, and how ambitious are they compared to national targets?

The National Renewable Energy Action Plan for the United Kingdom reporting to the European Council (The United Kingdom, 2009) states that the target set by the EU for the UK is of 15% of energy consumption coming from renewable sources by 2020. This translates into 30% of electricity demand covered by renewable energy. Such a target is acknowledged and considered feasible through domestic action.

In comparison, the 2020 Routemap for Renewable Energy in Scotland (from now on, the 2020 Routemap) (The Scottish Government, 2011) sets the regional target to “at least” 30% of total energy demand by 2020, and moreover, to “the equivalent of all of Scotland’s electricity needs” is to be covered by energy of renewable source. This routemap represents a speed up of the initial Renewables Action Plan, which set out the target of 40% of electricity demand met by RE, and provides an update and an extension stating more ambitious goals and long term actions for a future sustainable energy system.

Compared with the very high Scottish goal of covering 100% of electricity demand with RE, Andalusia has more modest objectives for renewable energy consumption. Indeed, as observed by the Scottish Minister for Energy, Enterprise and Tourism (Government, 2011: p. 2), the Scottish target is one of the most demanding in the entire world. However, when looking more closely at objectives for RE in Andalusia, their 2013 target was for 27.7% of total energy consumption to be supplied by RE. This objective was even surpassed, achieving 29.4% a year before, in 2012 (de Andalucía, 2014: p. 22). In sum, the 2013 achieved objective of the Andalusian region was only 0.6% lower than Scotland's objective for 2020. Thus, Scotland does have ambitious and *conspicuous* RE targets, but Andalusia follows with a more than decent achieved goal. However, although it has achieved high objectives, Andalusia lacks in terms of perceived ambitiousness, as the energy system for 2020 is said to be based on "the progressive establishment of a low-carbon economy" (de Andalucía, 2014: p. 45). As argued before, it is not only important to be consistent in reaching RE goals, but the way such objectives are expressed is of considerable importance in terms of providing clear and enthusiastic leadership, which Scotland achieves.

6.1.1.1 Importance of onshore wind energy This study focuses on the role of onshore energy, so it is only appropriate to observe how this specific RE technology is considered in achieving the wider RE targets.

In the case of Scotland, it is acknowledged that onshore wind energy has and is providing a significant part in terms of current RE rates. In the future, however, it is assumed that onshore wind will be surpassed by far by offshore wind, tidal and wave power (for Scotland possesses "a quarter of Europe's tidal and offshore wind potential" (Government, 2011: p. 2). Nonetheless, onshore wind power is recognized as being one of the most used and appropriate RE technology for community projects, and will continue to be so in the future (Government, 2011: pp. 15, 18, 42).

In Andalusia onshore wind represents the most used RE technology and the one that has allowed for the great increase in RE generation in the past years, but is expected to be caught up by solar (both thermal and photovoltaic) in the next years. Unlike Scotland, there's no mention of community projects involving onshore wind, or community RE generation projects all together.

6.1.2 Promoted values: economy, society, the environment?

6.1.2.1 Scotland The main reason for the development of a renewable energy system put forward in the Scottish Routemap is *economic benefit and ener-*

getic security. Thus, the first detailed section of the program is titled “Securing the Benefits for Scotland” (Government, 2011) and details in what way renewables will make a beneficial contribution to Scotland:

“Up to 40,000 jobs and £30b investment to the Scottish economy; Significant displacement and reduction in carbon emissions; A strengthening of future energy security through the harnessing of sustainable indigenous resources; A transformational opportunity for local ownership and benefits” (The Scottish Government, 2011: p. 9)

It is thus interesting to note that development of RE is a means to achieve economic first and environmental security: “The prize is securing our future: for our economy, for our environment, and for generations to come.” (The Scottish Government, 2011: p. 11).

Moreover, in a rather contradicting way, when developing the planning framework of a low-carbon Scotland, the National Planning Framework refers to the predominance of Scottish oil and gas reserves in Europe, and to the economic benefits it provides to the region (Government, 2014: p. 30). Although it is understandable that the Scottish government might want to associate economic and environmental benefits, to quote revenues from fossil fuels in a section that talks about *low-carbon* development seems like a paradox.

6.1.2.2 Andalusia While the Scottish 2020 Routemap focuses heavily in economic benefits and energy security, the Andalusian Plan (Junta de Andalucía, 2007) seems to display *environmental* concerns first and foremost. The Andalusian Plan refers to the further development of renewable energy and the economical use of energy, in order to address the need to fight climate change (de Andalucía, 2014: p. 14). Furthermore, it relates to the more transformative definition of sustainable development saying that the future sustainability for Andalusia depends on the transformation to a “new energy culture” in which every actor need to play a part. The first (significantly) characteristic of this new energy culture is the important value in a rational (understood as economical and efficient) use of energy.

Furthermore, the Andalusian government established in the previous plan for Energy sustainability (de Andalucía, 2007), PANESER³ the objective of creating a “collective consciousness” that values energy as a precious and sparse good, inciting every citizen to behave in a proactive manner for the economical and efficient use of energy. The promotion of a transformation in lifestyle

³Plan Andaluze de Sostenibilidad Energética

and consideration of the environment by the people argued in some account of sustainable development, is thus reflected in Andalusian regional strategy.

6.2 Accessibility for new players

In Andalusia, the lack of competition is highlighted as an existing issue, due to the previously established structure in the electric sector (de Andalucía, 2014). The issue is identified, and it is said that it will be addressed in the present plan of the Energy Strategy (starting in June 2014). In Scotland, either there is no lack of competition, or it is not considered as an issue.

6.2.1 Community renewable energy

The Scottish 2020 Routemap presents four main objectives, namely the target for electricity demand, heat demand and overall energy demand coverage. The fourth objective explicitly includes and highlights community and locally-owned renewable energy as a desirable target and as a fully endorsed and supported development. The Routemap sets a new target of 500MW of community and locally owned RE, however, it does not provide this number in relative terms as with the rest of the figures presented (i.e. what is the community RE capacity at current, or what percentage increase 500MW represent from now). This absence of relative figures implies that the share of community-owned RE stations is not high enough to make an impact. Thus, this target becomes a rather *unclear goal*. Nonetheless, the report boasts on Scottish successful RE community schemes over the rest of the UK and enthusiastically promotes local economic benefits from the new system of Feed in Tariff.

“Scotland has led the way in the UK on community-owned energy schemes for the past decade with over 800 schemes supported from Unst to Moffat. With the advent of the Feed in Tariff and the Renewable Heat Incentive, the time is right to capitalise on this experience and transform the scale of local ownership, thus allowing communities and rural businesses to take advantage of the significant revenue streams that can accrue from this form of asset ownership.” (Government, 2011: p. 5)

Furthermore, a community loan fund “Community And Renewable Energy Scheme” (CARES) to support this kind of initiative was in the process of being launched at the time of writing this report in order to remove barriers to community ownership (The Scottish Government, 2011: p. 70). Local and community ownership has been recognized as being an asset to rural Scotland, as it generates the creation of networks, increases community resilience and provides

alternative sources of income: “Collectively, the potential benefits of community energy projects are nationally significant” (Government, 2014: p. 34).

6.2.2 Focus on the individual: own energy production and management

While renewable energy community schemes are ever present in Scottish strategy, little about it can be found in the Andalusian case. However, it has been surprising to find another approach to local ownership of RE generation, that places the emphasis on the *individual*. Thus, making the citizenry an active part of the Energy system, as the Andalusian strategy claims, will in this case go through the promotion of household production of energy, in order to become a partly or fully autonomous energy unit. At the same time, the spread of the “collective consciousness” mentioned previously in point 6. 1.2.2 is expected to lead to a decrease of household energy consumption through awareness of the value of energy making it more feasible that they can provide a significant of their energy use for themselves (de Andalucía, 2014: p. 60).

6.3 Mechanisms for consultation, conflict resolution and public engagement

Public engagement – renewable energy targets can not be met in the face of public opposition but only with the support and will of the Scottish public, gained through early and meaningful engagement on commercial schemes, and access to benefits – including the scope to develop community-owned schemes.

6.3.1 Consultation and public engagement

In Andalusia, there is an emphasis of consultation, and knowledge and practice exchange between public administration, private companies, and R&D centers and universities (de Andalucía, 2014: p. 49). There is however, little mention of citizen or community consultation concerning specific or general wind power projects. The second main objective for the future path towards 2020 in Andalusia is to follow European guidance in terms of governance (de Andalucía, 2014: p. 47), and include more actors into the active management of energy policies. As has been noticed in the previous subsection (6.2.2), this seems to mean individual involvement in implementation of RE and energy saving methods. Accordingly, public engagement takes the form of providing information about RE and about the governmental economic help available.

In Scotland, every document consulted refers to community involvement and public engagement at some point (Government, 2011, 2013*c,a,b*, 2014). Com-

munity and public consultation and involvement in decision making seems to be a key point of the Scottish strategy.

6.4 Promotion of diversity through decentralisation

6.4.1 Administrative trend towards localism

The role of local authorities in Andalusia seems to be rather significant in contributing to the regional will of promotion of RE and energy efficiency, but especially relating to European directives and advice: such localities are implementing 948 of local action measures identified in studies commissioned by the EU (de Andalucía, 2014: p. 20). Moreover, the actions for promotion of responsible energetic consumption taken by local authorities seem to relate to multi-level governance as they have established networks with other European municipalities (Mayors' Pact ⁴) (de Andalucía, 2014: p. 20), thus bypassing national and regional influence, and reflecting a certain independence of the local power.

This increase of local power is not something that generates conflict with the regional authority though, and the encouragement of decentralisation is one of the five programs for RE development for 2020 developed by the Andalusian government (de Andalucía, 2014: p. 63).

In the case of Scotland, local authorities are often considered in relation to less formal networks comparing to Andalusian local authorities. Thus, mentions of local authorities usually come with references to information networks, or local contexts, and their own local development plans (as seen in section 2, table 1). Local governments are said to have a "a pivotal role" in the road to a low carbon Scotland (Government, 2013b: p. 6)

⁴"Pacto de Alcaldes"

7 Discussion and conclusion

In this research, I have been able to analyse how the most recent strategy for the promotion of RE regards public participation, and how the related issues to the inclusion of non-elected, individual actors (i.e. not taken into account as part of a company or research center) have been integrated and addressed. Having already advance through the analysis using a comparative perspective, in this final section I will go into more depth concerning the found results in order to display their possible implications.

7.1 Implications

7.1.1 Direction and values

7.1.1.1 Direction I have argued that ambitious targets are a powerful tool for engaging with the public in an indirect way, and this is so because they become an obvious and noticeable declaration of intentions and a basis for good publicity. This way, the state (in this case, the regional government of Scotland) encourages a positive response, in the form of legitimisation of such ambitious RE targets, from its citizens. Thus, citizens feel engaged by those targets and the section of the population that has a favourable opinion towards RE will feel even more validated. In sum, unalloyed encouragement from the relevant authority towards a direction that is considered “good” will frame and encourage change and support from citizens.

The case of Scotland exemplifies this rationale: “100% covered by renewable energy” does sound extremely positive and engaging, and little does it matter that the exact figure is “100% of the equivalent of total electricity demand” which in turn represents 30% of total energy demand—which is still a significant target, only not that close to 100%.

On the other side, Andalusia claims to have achieved its target of more than 27.7% of final energy consumption covered by RE—almost the target set by Scotland *for 2020*— but very little publicizing of this value is expressed in the Strategy document.

Thus, I would argue that ambitious targets *and* their adequate promotion are necessary for the role of active and positive steering of sustainable development.

7.1.1.2 Values However, direction is not the only thing that engages citizens. It is also important to consider what are the *values* that frame the proposed direction. I would like to bring up the work done by the Public Interest Research Centre (Centre, 2013) on the importance of the kind of values used

to motivate people. They argue that when appealing to a particular value, “we also influence people’s social and environmental behaviour as a whole”. They clarify: “Appeals to self-interested goals—wealth, status and public image among them— can actually reduce our environmental concern” (Centre, 2013: p. 8). As argued before, the change towards a sustainable future (energy included) must be accompanied by a change in society, in a way that sustainable development is viewed as an end in itself, and not the means to continued economic growth.

“If we want people to care about the natural world and act to protect it, we must promote values that motivate them to do so—and think very carefully before encouraging self-interest.” (Centre, 2013: p. 8)

In this report, values are divided into intrinsic (i.e. benevolence, universalism and self direction) and extrinsic (i.e. achievement, power, security, tradition). The stimulation of extrinsic values suppresses intrinsic values, and with stimulation of any certain value, people are more likely to act on it.

According to my findings, the 2020 Scottish Routemap for RE (Government, 2011) justifies renewables development by the *economic* benefits it will bring and by the energy *security* provided. Thus, after taking into consideration the importance of values, it seems rather problematic that the Scottish path to a sustainable energy system is framed in *economic gains and security*, when it is intrinsic values that are needed to view sustainable development as an end in itself.

In contrast, the Andalusian plan for Energy Sustainability (Junta de Andalucía, 2014) insists several times in the creation of what they call a “new energy culture”, with a “collective consciousness” of the value of energy and a personal responsibility to manage energy in a sensible way. These concepts appeal to intrinsic values of universalism and benevolence, which set the path for social transformation needed for real sustainable development.

7.1.2 Accesibility

Accesibility refers to factors that facilitate the incorporation of new players into renewable energy generation. Regional authorities can promote through economic or information provision for small new RE projects.

RE community schemes is an extremely salient element in Scottish future RE strategy. Although maybe not contributing much in absolute terms, these community and local-owned projects are explicitly mentioned as key (The Scottish Government, 2011: p. 4). Seemingly, thanks to phenomena that will

not be addressed in this study, community projects have flourished in the Scottish context and the government is merrily encouraging them. A special support scheme is in place (FIT are available for wind farms of 5MW or less capacity (Government, 2011)) thus achieving a degree of accessibility that seems rather fair, at least as expressed in the Scottish official strategy.

In contrast, community schemes are completely out of place in Andalusia, and no mention of locally-owned wind farms can be found in the official strategy plan (de Andalucía, 2014). Instead, what the Andalusian government considers as new players are individual citizens. Thus the future plan of action in this region is to push citizens to acquire RE technology for their household and become themselves managers of at least a part of their consumed energy.

This can be considered as just another approach to accessibility, but it has been argued that it is beneficial and desirable to establish methods that foster the creation of networks of information and resources for the successful development of wind power generation (discussed in section 3.2, mobilising Nadaï (2007)). It can be hold however, that the promotion of the so-called “collective consciousness” discussed in the previous subsection can counter this individualising perspective and create a sense of collectivity. However, such policies are not yet put into practice at a wide scale, and are considered as future projects (de Andalucía, 2014). It will be interesting to see how they unfold.

7.1.3 Public engagement

Building on the previous point, it is rather clear that citizen engagement in the Andalusian region is considered mainly (exclusively even) to be appropriate in the implementation stage of RE technology deployment. Inclusion in the formulation stage seems to be reserved for public administration, private companies, and R&D centers and universities (de Andalucía, 2014: p. 49). The not explicit inclusion of the public in policy formulation is not justified or developed, and it is not mentioned if this is due to lack of resources or time. This approach can indicate a certain elitism in the governmental body of Andalusia.

Accordingly, Andalusia could certainly learn from the Scottish case, which often refers to the need for local consultation, public engagement and involvement concerning the deployment of specific wind farm projects by outsider developers. There is little more to say other than public consultation and engagement is one of the main priorities in the Scottish RE path to 2020. Whether this apparent intention actually has positive consequences in terms of constructive consensus building around wind projects, is another matter, and for another research.

7.1.4 Decentralisation

Finally, there is also little to say concerning the decentralisation process. I have argued for the benefits of decentralisation combined with strong regional leadership in terms of direction and values, and it does seem that both the Andalusian and the Scottish regions allow and promote a certain degree of decentralisation, each with their slight differences. One such difference is for example that the Andalusian government seems to put more emphasis in formal networks and institutions at a municipal level, while the Scottish government seems to place more value on informal or more invisible networks and practices.

7.2 Conclusion

This dissertation has sought to apprehend what values concerning public participation within wind power are present in the renewable energy regional strategies of Andalusia and Scotland.

This topic attracted my attention because wind energy is said to have a certain potential for decentralisation and increased citizen control than traditional energy sources and some other renewable energy technologies. And indeed, public participation in environmental policy has attracted the attention of many researchers and policy makers, and especially in the last decades, the concept of public involvement has found its way into political discourse. Thus I have wanted to explore what is the instance on this topic of Andalusia and Scotland, two regions personally meaningful to me, but which also share some features such as a broad promotion of renewable energy and similar governmental role.

The background on the two regions studied concerning their governmental power in relation to wind energy has been displayed in section 2, "background". Section 3 developed a literature review on participation in environmental policy and multi-level governance arrangements, in order to have theoretical tools to approach the research aim of this dissertation.

Section 4 simply presented the details of each case study and the specific data I would work with. Section 5 developed the methodology used to analyse the already mentioned topic, and attempted to translate the information gathered in the previous section into variables with which to work.

This paper was eventually meant to uncover explicit (and less explicit) values and attitudes expressed by the Andalusian and Scottish governments concerning wind power and public participation, in order to find similarities and differences, and to assess what the implications of such attitudes were. Hopefully, in section 6 and 7, I have also managed to convey what are the strengths

and weaknesses of each regional strategy understood through the research framework I have adopted.

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A Annex 1 - Consulted documents

A.1 British

1. Common Cause for Nature: A practical guide to values and frames in conservation (16 pages)

A.1.1 Scottish

1. 2020 Routemap for Renewable Energy in Scotland (124 pages)
2. Scotland's Third National Planning Framework (92 pages)
3. Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments (42 pages)
4. Electricity Generation Policy Statement – 2013 (52 pages)
5. Low Carbon Scotland: Meeting The Emissions Reduction Targets 2013-2027 (335 pages)

A.2 Spanish

1. Plan De Energías Renovables 2011-2020, Part I (542 pages)
2. Plan De Energías Renovables 2011-2020, Part II (370 pages)

A.2.1 Andalusian

1. Estrategia Energética de Andalucía 2014-2020 (91 pages)