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Windfarms, social acceptability, and the environmental divide in Greece

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Abstract

Through a case study of one onshore windfarm project in Greece at its initial permit-granting stage, this article explores how social (un) acceptability at the local level is formed, as well as how and which stakeholders form alliances (or ‘discourse coalitions’) at the local and national level. Focusing on the environmental movement, the article provides empirical evidence from desk-research and interviews to better understand the significant, yet ambiguous, role of environmental NGOs in the national wind-energy development. Amongst others, findings indicate that compared to mainstream multinational environmental NGO’s, national environmental organizations seem to adopt a more critical and active role in debates around wind-power development. Overall, the article argues that environmental NGOs may affect social acceptability in opposite directions (acceptance of technology but disapproval of certain wind energy installations). However, direct involvement in local debates (affecting ‘community acceptance’) seems to be mostly undertaken by national and local environmental NGO’s and geared towards objecting (protest) rather than advocating certain wind-energy projects.

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1. Introduction

Despite advancements in wind energy technology and the steep rise in wind power infrastructure over the last twenty years, Szarka's remark that "Wind energy generates not just electricity, but also strong views" (Szarka, 2004), remains remarkably relevant. The growing number of wind farms is accompanied by growing voices of concern over the very "greenness" of this source of renewable energy, particularly in terms of any anticipated negative impact on its surrounding social and natural environment. Sites of contention are typically examined under the concept of social (un) acceptability (Fournis & Fortin, 2017) and flesh out during the implementation of wind farm projects at a local level.

Seen as a homogenous actor, the environmental movement is often portrayed as a key agent in shaping the global wind energy market, contributing to the industry's growth (Sine & Lee, 2009; Vasi, 2011). Literature, however, has already indicated an "environmental controversy" (Warren et al., 2005) and "a split within 'green consciousness'" (Szarka, 2004) in supporting and realising the wind energy path. Empirical work consistently identifies environmental concerns over the effects of wind energy installations as important drivers behind social (un) acceptability for such energy paths, rendering self-interested and free-rider understandings of opposition to windfarm development, such as Not-In-My-Back-Yard (NIMBY), as oversimplistic and misleading (Barry et al., 2008; Fournis & Fortin, 2017; Szarka, 2004).

Regardless of the existing debates around wind farms, policy in Europe explicitly endeavours an energy (and also market) transition towards renewable energy that favours, amongst others, the wind energy sector. Concerns over climate change, coupled with energy security fears steaming from the latest geopolitical developments due to the war in Ukraine, have accelerated the adoption of green energy policy measures (e.g., the European Green Deal, and the REPowerEU plan). The recent framing of the deployment of the renewable energy market as "overriding public interest" (2022/2577 EU Council Regulation) raised a new circle of protest from certain environmental groups and relevant civil society organisations who are sceptical of the effect such presumption may have at the expense of environmental preservation.

Through a case study of one onshore windfarm project at its initial permit-granting stage, this article explores how social (un) acceptability at the local level is formed, how and which stakeholders form alliances, and how the environmental divide on the issue of wind energy interferes with opposition towards the development of windfarm projects.

2. Conceptual and empirical approaches to social acceptability²

Society has emerged as an important element, alongside technology (innovation) and economics (market), in attempts to investigate and understand wind farm development. The role of society in the formation and adoption of renewable energy technology is typically examined under the concept of social acceptance (for a review of the concept see Ellis and Ferraro, 2016; Fournis & Fortin, 2017; Wüstenhagen et al., 2007). Through the years, the concept has been criticised by several scholars for its conceptual weakness, particularly the normative top-down approach often associated in relevant research with the term "acceptance" [see for example Batel et al.'s (2013) argument on the qualitative difference between "social acceptance of" and "social support for" renewable energy]. Nonetheless, social acceptance as a concept still holds a

valuable heuristic trait and, lacking other adequate alternatives (Ferraro & Ellis, 2016) continues to provide the theoretical underpinnings for much research aiming to examine the social side of renewable energy technologies.

A widely cited analytical framework explaining the diffusion of wind energy technology is that of “the triangle of social acceptance of renewable energy innovation” proposed by Wüstenhagen et al. (2007). Under this framework, social acceptability is thought to be comprised of three distinctive, but also sometimes interdependent (Wüstenhagen et al., 2007), components. The first component, termed “socio-political acceptance”, refers to the broader social acceptance of wind power technologies and related policies by major social actors such as the public, key stakeholders and policymakers (Wüstenhagen et al., 2007). The second component, termed “market acceptance”, refers to the degree and shaping of acceptability of wind energy technology within the market by relevant economic actors such as consumers, investors, and businesses (Wüstenhagen et al., 2007). Finally, the third component, termed “community acceptance”, has a more localised character and refers to the “specific acceptance of siting decisions and renewable energy projects by local stakeholders, particularly residents and local authorities” (Wüstenhagen et al., 2007).

Building on Wüstenhagen et al.’s framework, Upham et al., (2015) also distinguish between 1. general acceptance, i.e., “acceptance at the country, state or regional level towards a particular energy supply technology” (p.104), and where “technology is typically considered in general and in aggregate” (p.104); 2. community acceptance, i.e., acceptance of an energy infrastructure or facility at the local level, where research seeks to “understand the reaction of communities [...] towards a particular, proposed energy infrastructure” (p. 104); and 3. market acceptance, i.e., acceptance of an energy application at the household and organization level, where research seeks to investigate “the reaction of actual and potential end-users and stakeholders (such as householders, investors or plant managers), towards particular demand and supply side energy applications”(p.104).

Of all three dimensions of social acceptability, community acceptance has perhaps gained more attention both in policy and research since it is typically considered a critical factor for evaluating the success of proposed wind energy projects. Acceptance from the side of the affected community is assumed to be essential at the initial stage of permit-granting procedures for renewable energy projects. Moreover, it has been observed, and argued, that social acceptance (or more accurately community acceptance) follows a U-path [³], reaching its lowest point during implementation (particularly at the planning phase) of a certain wind energy infrastructure (Gipe, 1995; Wolsink, 2007). Hence, it is at this local level that opposition and conflict develop, or at least come to the surface.

Concerning traditions within the research on social acceptance of renewable energy technologies (RET), in her recent overview of the literature Batel (2020) identifies three distinct waves that have been developed through the years. The first wave (1990s) of research reflects what she terms a “normative” approach in the study of social acceptance. Under this approach, opposition to renewable energy technology is viewed as something perhaps deviant (a NIMBY phenomenon) and an obstacle which research can help to overcome. The second wave (2000s) of research on social acceptance of renewable energy technologies reflects what Batel calls a “criticism” approach. Scholars began to criticize NIMBY explanations “while offering alternative frameworks that aimed to allow a better understanding of the factors associated with local opposition” (Batel, 2020, p.2). For example, Devine-Wright (2005) underscores the complexity of factors

(including physical, contextual, political, socioeconomic, and personal aspects) that shape public perceptions of wind energy development.

Finally, the third wave (2010s) of research adopts a rather “critical” approach to the study of social acceptance. Considering the broader socio-political and economic context within which opposition takes place, scholars begin to question the previously unchallenged normative stance of fostering social acceptance. This critical turn has also prompted reflection from researchers themselves to reconsider their very own role “in reproducing or otherwise contesting business as usual modes of most RET-related research funding, policy-making and other institutional practices” (Batel, 2020, p.3). In general, this third wave signifies an ideological shift from earlier conceptualizations of opposition that has also affected research at both theoretical (e.g., new theoretical frameworks such as energy colonialism) and methodological (e.g., using discourse analysis) levels (for a more detailed account see Batel, 2020, p.2-3).

One early study illustrating this critical shift is Barry et al.'s, (2008) rhetorical analysis of twelve policy texts about offshore wind energy in the United Kingdom. This research provided stimulating evidence on how different stakeholders contest issues related to wind farm development. For example, concerning the opposition, the study's findings suggest that key themes in the anti-wind farm discourse include a language of war (conflict and defence), issues of sacrifice and disempowerment, lack of trust (in government, regulatory processes, and windfarm developers), anti-colonial rhetoric, criticism on the industrialization and commercialization of the environment and a NIMBY rebuttal. Furthermore, Barry et al. (2008) also commented on the variation of discourses that exist on each side of the conflict. In their words: “There are not two homogenous and undifferentiated discourses of ‘pro’ and ‘anti’ facing one another; but a (not unlimited) variety of pro- and a variety of anti-windfarm discourses, linked together in, and under, what may be termed as a ‘discursive coalition’ (Barry et al., 2008, p. 92).

Szarka (2004) was the first to use the term “discourse coalitions” to describe the dynamics of conflict around wind energy technology and infrastructure. According to Szarka (2004), within the wind energy sector, there are three main categories of coalitions: the pro-wind coalition (typically observed at a national and international level), the dilemma and dissent coalition (typically observed at a national level), and the anti-wind protest (typically observed at a national and local level). Through an analysis of European and national policy as well as field research in Denmark, France and Britain, Szarka (2004) demonstrated that discourses regarding wind energy mainly rest upon scientific (climate change and environmentalist criticism on fossil and nuclear energy sources) and economic (energy security) rationality, as well as ethical responsibility (normative) claims.

Szarka's study provided a useful framework to explain polarisation in the wind energy debate. Concerning exploring social acceptability, Szarka's theoretical framework seems to contribute at least in two different ways; first, it overcomes a strict dichotomy between acceptance and unacceptance by reminding us that there are (at least) three different positions to debates on windfarm energy development (i.e., pro, against and dilemma). Second, it provides a means to identify and explore the way and extent to which different stakeholders contribute to the shaping of social acceptability at various levels (socio-political, community and market).

Overall, social acceptability appears to be a key theme in the research agenda on renewable energy in Europe (Krupnik et

al., 2022). Existing studies on acceptance predominantly focus on explaining attitudes (through surveys) and not actual community response (Giordano et al., 2018). This gap is partly filled by an increasing number of studies drawing on social movement theories to understand local events of contention (Giordano et al., 2018). Elucidating how local support and opposition are formed becomes particularly important when the need to accelerate energy transition and enhance community engagement collides with an increasing recognition of the innate negative externalities of renewable energy technology, affecting the social and natural environment (as discussed in the next section).

3. Wind energy and environmental NGO's

It is nowadays widely recognised that the – so-called – environmental movement has had a critical (positive) role in the wind energy industry's emergence and growth. One notable attempt to explain the various ways in which the environmental movement contributed to the development of the wind energy industry comes from Vasi, (2011). Besides technological (innovation) and economic (market) factors, Vasi (2011) argues that the wind energy industry of any given country is also greatly influenced by interactions between the environmental movement (including activists, organisations, and institutes), the social context (political allies, public opinion, and mass media) and available natural resources. Additionally, Vasi (2011) proposes a model to illustrate the impact of the environmental movement on the wind energy sector and identifies three main 'pathways' through which environmental organisations and activists influence the wind energy industry. The first pathway involves contributing to the adoption of renewable energy policies, which can be pursued through interaction with policymakers. The second pathway involves the stimulation of demand for renewable energy, which can be achieved through interaction with energy consumers. Finally, the third pathway involves changing the electricity sector's rationale by interacting with energy sector actors such as those running utilities. Influencing international agreements (such as Kyoto) is potentially a fourth pathway according to Vasi (2011), but it may well be integrated into the first identified pathway which deals with policymaking.

While Vasi's model does provide interesting insights, one important limitation is that it explains only one-way interactions between environmental NGOs and the wind industry. In contrast, Szarka's (2004) study on discourse coalitions presented earlier illustrates how business stakeholders (e.g., developers, turbine manufacturers etc.) and civil society representatives (e.g., international NGOs) form 'alliances', and how such advocacy coalition strategy "contributed to the lobby's success in gaining government support" (Szarka, 2004, p.328). Similarly, when examining the role of NGOs in influencing the biofuel markets in Europe, Pilgrim and Harvey (2010) explained how both industry and certain international environmental organisations may actively choose to form alliances and exploit political opportunities in – what they termed as – 'politically instituted markets' (i.e., markets heavily influenced by policy, such as carbon offset-trading markets, nuclear and renewable energy, biofuels etc.).

Another limitation observed in Vasi's model is that it somehow treats the environmental movement as a rather homogenous entity which uncritically supports wind energy technology. While this pro-wind energy stance of environmentalists in their efforts to mitigate climate change might have been a reasonably accurate account (Hasselmann et al., 2003), particularly in the early years of wind energy development, certain environmentalists raise several concerns

over the negative effects of this particular technology.

Warren et al. (2005) used the term “green on green” to describe the opposition of certain environmentalists to what is widely considered ‘green’ energy technology. They characterised this phenomenon as “a new kind of environmental controversy” arguing that it “divides environmentalists of different persuasions who attach contrasting priority to global and local concerns” (p. 853). From a different perspective, Spellman (2015) talked about the “renewable energy paradox” to describe the (assumed) widespread acceptance of renewable energy technology by environmentalists (acceptance at the theoretical level), and simultaneously their disapproval during the development and implementation of renewable energy projects (unacceptance at the application level).

For Szarka (2004) this “split within ‘green consciousness’”, where “pro-wind advocates claim they are ‘saving the planet’ and anti-wind advocates argue they are saving the environment” (p. 326) seems puzzling. Although he draws parallels with the conflict witnessed between the ‘Fundis’ and the ‘Realos’ within the German Green Party (Szarka, 2004), he does not make any clear suggestions on why this conflict occurs.

Voigt et al.’s (2019) explanation perhaps appears more plausible. The argument goes something like this: renewable energy might be seen as a climate change mitigation strategy, but at the same time it carries with it negative impacts on biodiversity conservation. Voigt et al. (2019) termed this trade-off between producing wind energy and sustaining biodiversity ‘a green-green dilemma’ (see also Straka et al. 2020). More than a decade ago, Jackson (2011) also observed this tension by highlighting the disparity between policies related to biodiversity conservation and those related to renewable energy (as one solution to climate change).

Diverse opinions on environmentalism are not something new. One major tension certainly exists between the Conservation approach and the Preservation approach (Norton, 1986). Sometimes environmental NGOs take conflicting sides on the debates around wind energy; the extent to which their position is affected by their ‘philosophical’ stance towards environmentalism (i.e., whether they lean towards the conservation or the preservation of the natural environment) is something to be investigated.

4. Research design and methodology

The present study aims to provide empirical evidence on the processes through which social (and particularly, community) opposition to large-scale wind energy infrastructure is formed. Therefore, the study set the following three research questions: a. how social (un) acceptability at the community level is formed; b. how and which stakeholders form alliances; and c. is there a ‘green-green’ dilemma in Greece, and how does this interfere with the shaping of opposition at the local (community) level?

To address these questions, this research adopted a case study methodology and focused on a proposed investment plan for the construction of a wind farm in a rural mountain area close to a small village (of approx. 250 residents) in Peloponnese⁴, Greece. This approach facilitated the deeper exploration of the processes through which opposition to

such investment plans is being formed.

Data used in this article were collected through desk research (published documents and grey literature), participant observation and qualitative in-depth interviewing. For the interviews, sampling was purposeful and aimed to collect views from as many categories of stakeholders (in the examined case study) as possible. A total of eleven semi-structured interviews were conducted between October 2021 and July 2022 (either face-to-face or remotely through a video conferencing platform) with one representative from the following four main stakeholders' categories: a. Wind Industry, b. Civil Society, c. Local and National Government, and d. Science (see Table 1). Interviewees are anonymised; citing from interviews indicates only the category or entity (organisations, groups) when deemed necessary.

Table 1. List of stakeholders participating in the study through interviews

<i>Stakeholders' category</i>	<i>Entity</i>	<i>Abbreviation for citing purposes</i>	<i>Declared position for the specific investment plan</i>
<i>Wind industry</i>	Windfarm Developer	WD	in favour
	Hellenic Wind Energy Association	HWEA	-
<i>Civil society</i>	National Environmental Organization	NEO	against
	Think Tank	ETT	-
	Local Anti-windfarm Group	LAG	against
	Regional Anti-windfarm Group	RAG	against
<i>Local and national government</i>	City Council	CC	against
	Municipality	MC	against
	Member of the Parliament	MP	against
<i>Science</i>	Academia (Environmental Economics)	AEE	-
	Academia (mechanical engineering)	AME	-

Interviews were conducted as part of a wider research project applying a sociological perspective in the examination of Foreign Direct Investment in Greece. Before its implementation, the research project was screened and gained approval by the Research Ethics Committee of the Greek National Centre for Social Research (EKKE).

5. Findings and Discussion

This section presents the main research findings in the following order: first, we provide a detailed description the how opposition began and what the first steps in organizing community resistance. Then we examine the various actors

forming coalitions and alliancing that help frame the debate both at the meso and macro level. Finally, we take a closer look at the environmental NGOs in Greece and examine reasons that may sometimes lead them to stand on opposite sides.

5.1. Community resistance in the making

5.1.1. The discovery

It all started when they put a wind mast on top of the mountain, above the village. It was visible from the village. At one kilometre distance. They erected an eighty-meter-high construction, an iron construction, with the help of a helicopter. The local cultural association took a photo and uploaded it on Facebook... (LAG representative)

One issue that was repeatedly and negatively commented on by opponents of the proposed investment project dealt with the way the local community became aware of the developer's plans. The fact that the local community (including local authority) had not been informed about construction plans in their area before witnessing the relevant preparation work⁵ was perceived as both a matter of poor practice on behalf of the developer and a serious gap in national policy and procedures. Soon after the 'discovery', regional media illustrated the story and unrest started to spread.

Public engagement is widely acknowledged in academic writing and policy as an important parameter for the diffusion of renewable energy. Most often, engagement is sought through 'invited participation', i.e. institutionalized participation that relies on fixed procedures (Cuppen, 2018). Literature has already revealed certain shortcomings of such an approach, such as the exclusion of non-local stakeholders (Pesch, 2019), calling for more deliberative approaches to project development (Jones & Eiser, 2010). In practice, however, this type of invited participation typically informs local stakeholders rather than facilitates a dialogue with them, intending to raise community consensus about already fixed proposals for wind energy projects. It is thus not surprising for communities faced with such public engagement approaches, to be skeptical and perceive such strategies as instances of procedural bias.

The exact timing when the community could or should be involved has also been questioned in the literature. In their study, Colvin et al. (2016) illustrated how engaging the community at the very early stages, i.e., when the developer is not in a position to provide more concrete information (e.g. scale, timeframe, impact) about the proposed development, could negatively affect the consultation process by causing uncertainly speculation, misinformation and rumours in the community. Nonetheless, in the case study examined here, it was evident that failure to engage and particularly inform the community about the perspective development plans on time and before discovering these plans by themselves created a negative reaction which later escalated into a full-blown opposition. According to Jones and Eiser (2010, p. 3116) "the weight of evidence now firmly points to the importance of early, sustained, and reciprocal interactions", although "it is still commonplace for some developers to employ prescriptive, 'top-down' planning approaches.

5.1.2. First steps to resistance

The first response from the local community to the plans for a windfarm development close to their village was organized a few days later in the form of a public meeting: "People came and talked about what is to come, what are wind turbines, etc. Almost the whole village was there. And that's where the proposal to set up a struggle committee came in." (LAG representative).

The meeting was organised by the local cultural association, the local farmers association and the environmental association of a nearby by-town. Representatives of non-local groups and associations, such as from a grassroots anti-windfarm group operating at the regional level, were also invited to inform locals about wind energy and wind farms. At the time, residents of this small mountain village seemed to have had little knowledge about the potential costs and benefits of the particular renewable energy technology. Except for concerns over the possible negative effects on the environment, which were raised by environmentalists attending the meeting, the proposed plans also raised fears over possible negative effects on their local economy by a change in land use (i.e., locals use the area for grazing their livestock and beekeeping).

Under those circumstances, and the spreading anxiety amongst the community, the decision to oppose the proposed development and to organize a 'committee' to coordinate resistance was agreed upon at that meeting. Within the next months, this newly formed local anti-windfarm group [LAG] made efforts to communicate the widespread local disapproval of the proposed project through several avenues such as writing letters of objection to all levels of government authorities, mobilizing individuals to take part at the related public consultation run by the Ministry of Energy, organizing rallies and attracting allies.

An indication of their rather successful attempts to publicize their opposition and draw support to their cause can be seen at their rally held on the 11th of October 2021⁶. One feature of the rally that researchers found ingenious was that it was held on the outskirts of the closest city (almost 40 km or an hour's drive away from the village). This decision facilitated the participation of several prominent voices at the rally, including an MP from the SYRIZA party and the City Mayor. Other speakers in that rally included representatives from the village's farmers association, several cultural and environmental associations operating in different parts of the region, and finally the Association of Greek Mountaineers. Speakers highlighted different dimensions of the issue; for example, the (left-leaning) City Mayor stressed the impact of wind farms on the local economy and brought forward criticism about the imperialism of multinational wind energy businesses and the capitalistic ideology that sustains windfarm development. On a different take, the SYRIZA MP spoke about the alternative of achieving a more 'just' energy transition through co-production and 'energy communities'. Representatives of environmental and other associations also stressed the environmental dimension and especially the fact that the area is part of the European network of Natura 2000. Approximately 70 individuals attended the rally.

Objections to the proposed wind farm installation made it to the Greek Parliament when MPs from four different political parties ('New Democracy', 'Syriza', 'MeRA25' 'Greek Solution') posed questions to the Ministry of Environment and Energy and the Ministry of Development and Investment, challenging the proposed development. The MP OF MeRA25 even characterized this project as one of the most "blatant cases of absurd placement of wind farms within special protection zones".

5.2. Setting (framing) the debate: Coalitions and alliances at the meso and macro level

Upham et al. (2015) argue that social acceptance of energy technology can be analysed on three different levels, namely a. the macro level (general, policy or country level); b. the meso level (community, town or other geographically defined level); and c. the micro level (individual entity level, including households and organizations). All three levels interact and affect each other; community acceptance of wind energy infrastructures is influenced both by individual actors and institutions operating at the macro level.

Inspired by Szarka's (2004) framework of discourse, we can identify the actors involved in the debate around the proposed wind energy infrastructure in Greece as belonging to one of the following three categories of coalitions (see Table 2):

Table 2. Coalitions and actors involved in the debate around the proposed wind energy infrastructure in Greece

<i>Coalitions</i>	<i>Actors</i>
Advocacy coalition	Developer, Hellenic Wind Energy Association (HWEA), Center for Renewable Energy Sources (CRES), Companies, European Union, Government and state bodies, affiliated media, academic science groups (predominantly within the mechanical engineering discipline)
Coalition of dilemma	Stakeholders generally advocate wind-energy technology but also criticise the associated disadvantages arising from unregulated RES development planning (e.g. International Environmental Organizations, and environmental think tanks).
Protest coalition	Local and regional anti-windfarm groups, certain national and local Environmental and Cultural organizations and initiatives, Local and Regional Government, certain Parliamentary representatives, opposing media (mainly local), academic research groups (e.g. the Biodiversity Conservation Lab at the University of Ioannina)

The above categorization differs from what Szarka (2004) initially proposed in that it frames the debate around a particular proposed wind-energy infrastructure, and not around wind-energy technology in general. This facilitates the exploration of the dynamics of the debate at both the meso and macro level, hence includes actors who both actively and passively contribute to the local debate. One limitation, however, of such a twist is that the identification of involved actors is to some extent context-specific (i.e. the analysis cannot be applied at the national level similar to Szarka's (2004) study). Nonetheless, such limitation is not considered significant since the aim of the study is to understand social acceptance at the community level and not at the general or national level.

Accordingly, the protest coalition proposed here does not imply that all actors are utterly against wind-energy technology, but that they are actively against the investment project at stake. In fact, during research, we have not been able to identify any actors who are positioned against wind-energy technology unconditionally. A relative anecdote that occurred during the research and portrays this intention to not condemn overall the wind-energy technology, comes from the fact that the regional anti-windfarm group added at the end of its title the words "in Natura sites", to clarify their non-objection to wind-energy:

The name change was made very recently [...] to make it a little clearer and not to appear to the public that we are green energy deniers [...] we see that this fight is unequal, so we thought that we should put Natura sites on our title in terms of

“at least, let’s save Natura. (RAG representative)

Concerning the formation and growth of community opposition to the proposed development plan, data collected through interviews and desk research suggest that the role of the regional anti-windfarm grassroots group was critical. In particular, this regional grassroots group has provided residents with vital resources, including consulting and sharing know-how on organizing and running a local anti-windfarm campaign, educating and sharing technical knowledge on procedures, disseminating scientific knowledge on the negative impacts of wind farms, as well as sharing social capital by linking locals through their already established networks with other significant actors.

The coalition of dilemma mostly represents stakeholders who typically do not actively engage in local debates, and mainly includes international environmental organisations operating in Greece, as well as a national environmental think tank which aims to facilitate discussion amongst the two opposite sides of the debate to develop common ground. The fact that environmental NGOs do not always join forces in relevant policy interventions is indicative of the tension amongst environmental NGOs over the wind-energy development in Greece (this is discussed in more detail in the next section). Furthermore, looking at the different discourses around the local debate it became apparent that the main narrative of the advocacy and dilemma coalitions is about climate change, while the protest’s coalition reflects issues of concern about biodiversity and local economic development. In particular, the choice of siting and especially the management of NATURA sites are major issues of controversy.

One important contextual dimension to understanding social acceptance is the location of the siting. When a large wind farm project is to be located near a residential area then ‘community acceptance’ or ‘local’ opposition is easily conceived. This is not the case, however, when the proposed setting of a wind project is at a remote area such as, for example, a rock island. But even in such cases, where a local community is difficult to be perceived, protest coalitions could still be formed from various civil society organizations. In the case study examined in this paper, the opposition was not only voiced by the residents, but it was also backed up by a significant number of people who use the area for recreational reasons (i.e. who either have their holiday homes in the area or engage with certain nature sports such as hiking, trekking and mountaineering), or environmentalists who are generally thought to care about nature.

5.3. Taking sides: the environmental divide in Greece

Normally, organizations that care about the environment and species and nature reserves should all be on the same side. Unfortunately, this has not happened so far. Some organizations, I think, are reviewing the issues in a slightly different light. I hope so. So that in the next instance, we will act more collectively. That is, with higher participation. Whatever that means. (NEO representative)

During desk research it became evident that environmental NGOs operating in Greece adopt different approaches to the issue of wind energy development. Mainstream multinational organisations (such as Greenpeace and WWF) appear to be in favour of adopting RES technologies in general and are somewhat more flexible (or passive) with the issue of installing large-scale wind power stations in various parts of the country. On the contrary, other environmental organizations (e.g.

Hellenic Ornithological Society, Arcturos, Callisto) adopt a more critical and active role in the debates around wind-power development of the country through actions such as, for example, campaigning, filing court appeals at national and European level, and in some cases even liaising with local communities to aid resist certain development projects.

This observation was later confirmed by the interviewees. The following passages illustrate how a certain environmental NGO that is openly critical of wind-energy development in Greece, is being perceived by the two opposite sides:

The Hellenic Ornithological Society is the most extreme and serious organization because I consider it serious, but I also consider it extreme, if you look at the International Ornithological Society, BirdLife International, it has nothing to do with the Hellenic Ornithological Society. If you even look at the course of the Ornithological Society in Greece, the ornithological has become radicalized in the last five years So what is the environmental [movement]? If we are talking about something fragmented, it is primarily the environmental movement. [...] (HWEA representative)

The Hellenic Ornithological Society, for example, is clear in its position [in the debate]. No to renewables. Yes, only if the location is clear [e.g., not including Natura2000 sites] and we deal with the impacts [...] There are some other large environmental organizations, which are more hyper thematic on the other side, i.e. we must first address the issue of climate change and the climate crisis also through renewables, at a cost that is known [...] (NEO representative)

Some explanations of the observed divergence in approaches were also provided by some interviews. Setting aside accusations of corruption, which were mentioned from both sides (i.e. both advocate and protest coalitions), some more plausible accounts given in the interviews included the following: a. international NGOs operating in Greece are not completely autonomous and independent in terms of formulating a political strategy at the national level, and b. by adopting more “radical” stance they may alienate part of their audience, which is large and diverse.

Whatever the reasons may be behind this divide of environmental NGOs, with regards to social acceptability three comments can be made: firstly, though their general discourse environmental NGOs may affect social acceptability in opposite directions (acceptance of technology but disapproval of certain wind energy installations); secondly, environmental NGOs may get involved in local debates, but this is often the case to object (protest) rather than advocate certain wind-energy projects; and thirdly, environmental NGOs may have an even more important role when a ‘local’ community does not exist.

6. Conclusions

Social acceptability is a complex and multidimensional concept. This article contributed to the understanding of community acceptability by providing a detailed description of how local opposition to a wind-energy investment project in Greece was formed. The examined case study facilitated the mapping of the three main coalitions found in such social conflict. It also provided empirical evidence to better understand the significant and at the same time ambiguous, role of environmental NGO's in the national wind-energy development.

With the wind-power controversy still ongoing, new offshore and airborne wind-energy technologies are being pursued.

Such technologies might help mitigate several negative externalities associated with social unacceptance, such as aesthetics, noise, and changes in land use. ‘Local’ community opposition might also not be as relevant. Perhaps then the role of environmental SMOs will be even more important in terms of scrutinizing and moderating perspective energy paths.

Even so, while the environmental movement is and will probably continue to be a central protagonist in the wind-power controversy, the local community probably remains a key agent to any local change. Or, in the words of the regional anti-windfarm group representative:

If the local community does not act, no single collectivity will save it [...] no matter what we do as "foreigners", we will not achieve anything. That is, if society itself, the local one, does not take action, it makes no sense. (RAG representative)

Footnotes

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² Following Fournis & Fortin (2017) recommendations, this paper uses the term “social acceptability” rather than “social acceptance” when needed to acknowledge and emphasise the dynamic character of the concept, i.e., when referring to it mainly as a process (acceptability) rather than a simple outcome/result (acceptance).

³ While a decline in social acceptance during the proposal and implementation phase of a wind energy infrastructure has not been contested within literature (at least yet), Devine-Wright (2005) does raise concerns over the assumption that negative public perception towards a wind energy infrastructure always improves over time.

⁴ The exact location of the proposed wind energy investment is not explicitly mentioned here, to preserve the anonymity of interviewees participating in this study.

⁵ At the time, the proposed project had already been granted a Production License (which in practice constitutes “a project feasibility approval” (Papastamatiou et al., 2018), and was preparing for the licensing milestone which is the Environmental Impact Assessment (EIA).

⁶ The information used here come from the fieldnotes of one member of the research team who attended the rally.

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