

Drivers for Socially Inclusive Deployment of Wind Energy

Successful strategies to increase community-based social acceptance of wind energy are deeply connected with the local context and the conditions under which the opposition to wind energy projects arises. These conditions can differ significantly. While measures for overcoming barriers to socially-inclusive wind energy deployment take on different shapes across Europe, a few key factors are instrumental in “driving” acceptance, across the board.

The WinWind project has carried out a comparative analysis of 10 case studies across Europe and has investigated the level of impact and significance of a variety of specific drivers encountered in overcoming barriers to social acceptance.

WinWind considers a “driver” to be a factor, applicable and/or present in multiple contexts, which positively influences the social, or community acceptance of wind energy projects.

Through the analysis of the selected best practices, WinWind has identified 14 drivers for social/local acceptance of wind energy (see table). The most impactful drivers identified revolve around three central elements: procedural participation, financial participation and trust.

Wind energy projects often have to face societal, economic, and environmental challenges that hinder their deployment. At the same time, these barriers can quickly turn into opportunities when a solution according to local needs and context can be found with the community.



Image: Unsplash/ taz-b-k

Category	Driver	Number
Technical Characteristics	Technological Innovation	4
Environment	Landscape	9
Environment	Biodiversity	8
Environment	GHG emissions	4
Financial Participation	Effect on local economy	18
Financial Participation	Active financial participation	8
Financial Participation	Passive financial participation	17
Individual characteristics	Identification and ownership	7
Procedural participation	Transparent communication	20
Procedural participation	Formal procedural participation	14
Procedural participation	Informal procedural participation	17
Market	Security of supply	7
Governance	Political leadership	14
Trust	Credibility/trust	13

Table: Most frequent drivers of acceptance encountered in the WinWind best practices analysed. The table shows the main driver categories, identified by the project, as well as the overall significance of certain drivers across the different best practice cases. The significance of individual drivers is rated in the “number” column. The higher the number, the bigger the significance of the driver across a variety of cases and its potential contribution to raising social acceptance.

Economic Drivers

Positive impact on local economy

Socially inclusive wind energy projects can generate substantial regional or local added value: from tax revenues for municipalities, to increased activity for local businesses and growing local employment.

Thuringia Wind Energy Service Unit



Image: Servicestelle Windenergie Thüringen

The Unit supports land owners and affected municipalities as early as possible in the process by providing advisory services free of charge. The Unit de facto facilitates the acceptance of wind energy by ensuring widespread access to information, and by encouraging the development of benefit sharing mechanisms. In Thuringia approximately 3000 new jobs have been created in the wind sector between 2014 and 2018. While job growth can be more accounted to effective state planning, the Service Unit is considered to have an indirect effect on job creation.

- ⇒ The creation of local employment is one of the most effective ways (ahead of improvements to local infrastructure) to rapidly increase social acceptance, and developers should be required to demonstrate the maximal local benefit of the project for the community.

Sardinia Tax Cuts and Landscape Commitments



Image: ENEA

In a highly participatory approach the developer, local authority and the local community have come together to ensure that 2% of gross annual revenue for every kilowatt hour fed into the network is given to the local municipality. This has enabled more than 20 types of local social interventions. Citizens were able to decide directly on the allocation of funds.

- ⇒ The prospect of financing community projects of local interest with a percentage of the revenues generated by a wind energy project is highly attractive for the local community.

Citizens' participation

Active engagement of citizens in both the ownership and financing of wind energy can be key to obtain the necessary buy-in. This participation can be enabled through various legal forms of citizens' participation.

Som Energia Cooperative



Image: Som Energia

With over 50,000 members Som Energia is the first and now largest energy cooperative in Spain. The key for success is that Som Energia provides a 100% guarantee that the energy which members purchase comes from renewable energy production facilities.

- ⇒ Citizens and communities' can participate directly and exercise their right to choose what type of energy they consumer and purchase and favour their local sustainable production.

- ⇒ Citizens can also benefit indirectly from the establishment of wind energy projects, for example through land lease payments for local residents, or through special electricity tariffs.

Community foundations and local trusts are an efficient solution for enabling revenue to be channelled to the local community.

- ⇒ Favourable regulatory frameworks and financial incentives that facilitate direct participation of citizens in energy production, consumption and distribution are critical to foster acceptance.

- ⇒ Local governments are acting as informer, mediator and financial stakeholder, but need to be enabled to take up this role.

Community Wind Farms in Schleswig-Holstein



Image: Bürgerwindpark Neuenkirchen

In the case of three community wind farms in Schleswig-Holstein, which are mainly in the ownership of local farmers, land owners and citizens land lease pooling models were developed allowing also land owners, whose land was not identified for turbine installations to benefit from land lease payments. In one case a system was set up to feed 1% of the annual remuneration to a local non-profit organization. In the other cases a community foundation was developed to support energy-saving measures for the local community and other measures.

Societal Drivers

Political leadership and commitment

Local leaders as well as the local political commitments and motivations in achieving social acceptance are essential.

Mayors and “local champions” act as change agents, mediators and visionaries for socially-inclusive wind energy deployment. They have an important role in gathering together opponents and proponents of wind energy to engage in constructive dialogue. Having a local leader push for a project has proven to be instrumental for overcoming potential set-backs and securing investment.



In the Polish town of Kiselice the mayor had a clear vision for a better future for the local economy and residents. The mayor acted not only as local leader, but also a mediator between developers and residents, becoming instrumental in finding ways to finance, implement and internationally promote the local wind projects.

- ⇒ Engagement of local leaders and buy-in from the opposition can guarantee that wind energy projects become part of an overarching strategy of the local authority towards a more sustainable energy future. This guarantees not only better integration of policies and measures but also the possibility to work with the overall community towards a common goal.

Trust and credibility

A high degree of trust between all stakeholders involved is an essential basis. The effectiveness of measures which increase credibility of developers, but also of local governments should not be underestimated.

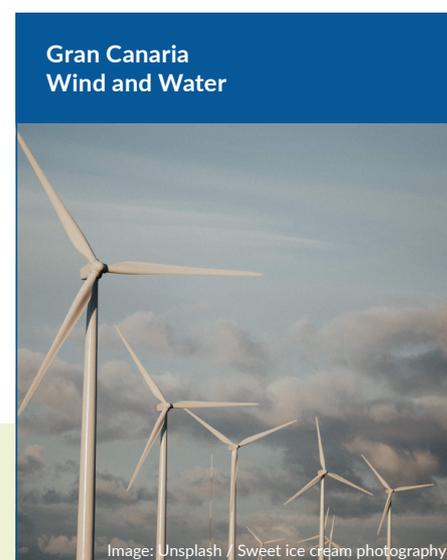
- ⇒ Voluntary commitments, codes of conduct and labeling initiatives go a long way in supporting good cooperation and exchanges between the local community and project developers.
- ⇒ Local municipalities should proactively engage with, and invest some of their own resources into wind energy developments as a way of leading by example and demonstrating trust in particular project.



In the the Italian region of Abruzzo, a voluntary code of conduct agreed among developers, sets out key considerations and principles to be respected for the development of local wind projects. This served as a reassurance to the local community that many of their concerns would not be ignored. The repowering process could be carried out smoothly and resulted in the old wind turbines, each between 0.6-0.7 MW, having been replaced with new turbines with a capacity between of 2-4 MW each.

Transparent communication

Transparent communication between the project developers, the local authority and other stakeholders is a key precondition for a successful project. It should be based around the provision of readily available, objective and reliable information on implications, benefits and costs of a wind energy project.



In Gran Canaria, where electricity from a wind farm powers a desalination plant, the developers and local authority used existing educational institutions to build understanding and explain the need for the wind farm. Schools were provided with a multitude of materials, such as posters and assignments, in order to allow young children to research and engage further with the wind farms.

- ⇒ From the very beginning of a project, information should be transparently and objectively disseminated. The enthusiasm of well-informed citizens is likely to have a highly positive effect on project development.
- ⇒ Project developers should provide clear and non-jargon information. Such information and dissemination should be required from developers as a condition for obtaining permits for development.

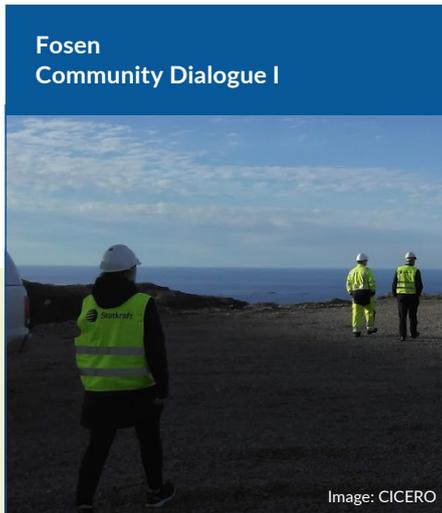
Effective participation: formal and informal ways of engagement

Providing the opportunity to citizens and relevant stakeholders to engage is essential. This is often prescribed by statutory regulations, but it is also a great opportunity to increase societal buy-in and ensure a smooth wind farm planning procedure and development process.

Citizens must be informed in a timely manner regarding the siting procedure and their opportunities voicing any concerns. It is imperative to promote “genuine” and “systematic” participation. In practice this means that citizens must feel that they have the chance to influence actual policy making.

Participation going beyond the formal requirements of statutory participation to also include voluntary processes can be an effective tool to raise acceptance.

- ⇒ The most appropriate form of enabling informal participation of citizens depends on the local contexts and specifically on the availability of financial and human resources to carry out additional dialogues.
- ⇒ As informal dialogues provide the opportunity for continuous dialogue between concerned citizens and public authorities and developers, they should be carried out as often as possible.



In the Norwegian town of Fosen the regulator effectively merged the consultation process for four wind projects and considered their advantages and disadvantages against each other. The concession process has included several opportunities for affected parties to provide feedback through public hearings, which have been announced in several newspapers and to affected municipalities, regional authorities, local and regional interest groups, as well as ministries and directorates at national level.



In addition to several rounds of public hearings, the national permitting authority NVE arranged about 30 public meetings, and approximately 35 meetings were held with local and regional authorities. The purpose of those meetings was to give the public an arena for expressing its views and to address which areas should be investigated to decide whether a project is feasible.



Environmental Drivers

Neutral or positive impact on landscape

Protecting the local landscape, both its physical and socio-cultural value, from negative impact caused by wind farm development is essential. Whether these impacts are real or perceived, they can drive vast opposition to wind energy, and as such, need to be addressed thoroughly.

Proactive Landscape Planning I



Image: Dainis Ramans

In the biosphere reserve of North Vidzeme in Latvia the local community was able to object to the development of wind energy in specific areas by being included in public consultations and participating in a public survey (among the inhabitants residing in the area) about what should be considered as a characteristic "Latvian" landscape. This has resulted in an effective planning process in which socio-cultural values have been effectively integrated.

- ⇒ Measures which minimise the impacts of wind farms on the landscape are more successful at driving social acceptance than those which compensate for the negative impact.
- ⇒ Policy must set up frameworks, which either encourage or favour developers, who minimise impacts to the landscape – as opposed to those who propose carry out alternative compensatory activities in the broader landscape.

Positive or neutral impact on biodiversity/wildlife

Activities undertaken to protect local wildlife and biodiversity, both its physical and socio-cultural value, from potential negative impact of wind projects are very important drivers of social acceptance.

Proactive Landscape Planning II



Image: Dainis Ramans

To mitigate the potential risks created by wind farms to birds and bats in the biosphere reserve of North Vidzeme in Latvia, an assessment instrument for mapping the risks and identifying the risk territories was developed. This is an effective measure for providing adequate and unbiased information which ultimately results in less conflict between wind energy developers, the public and/or environmental NGOs.

- ⇒ More stringent requirements relevant to the site-specific conditions should be in place going beyond existing regulations on Environmental Impact Assessments.
- ⇒ Assessment instruments should be used to map local risks and to specify the least damaging territories in the region for wind energy development.

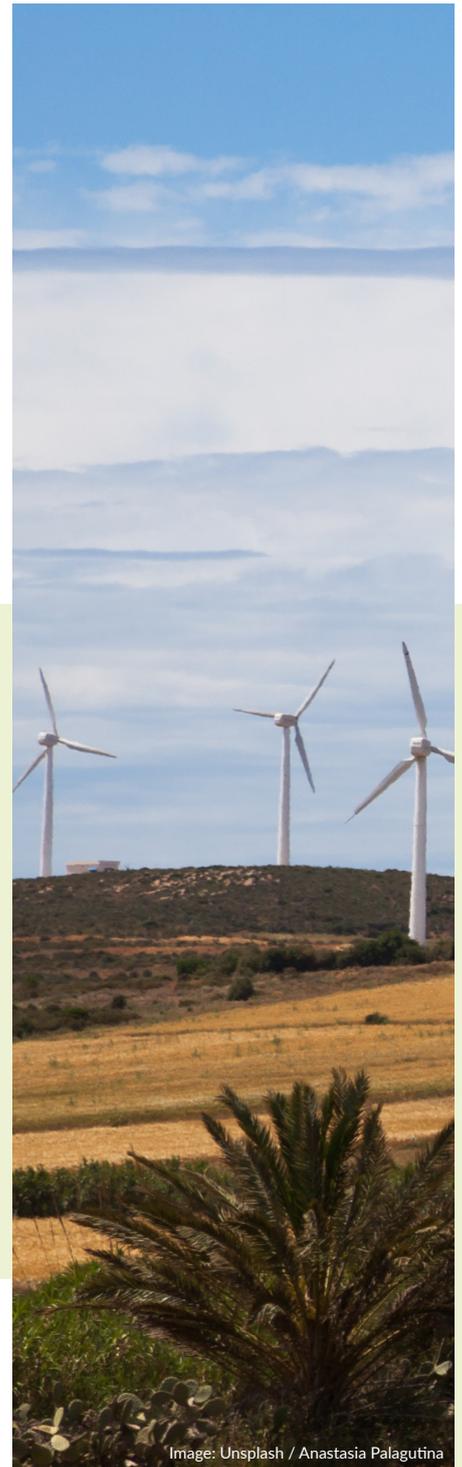


Image: Unsplash / Anastasia Palagutina

Many drivers – one goal

Drivers of social acceptance do have a certain universal application despite the fact that their significance and impact differs in relation to the specific context. It is important to consider that no best practice measure works as a result of just one single isolated driver. In the end it is the combination of drivers, most relevant to each context and community, that makes wind energy projects more socially acceptable.

- **Feeling part of the process:** While the combination of drivers is key, drivers related to positive effects on the local economy as well as procedural and active or passive financial participation appear to be most significant to raising social acceptance. Particularly the latter often correlates with higher degrees of personal ownership, another important driver for social acceptance.

- **Mix & Match:** The relationship between the individual drivers is not always clear, and it is highly dependant on the local context. Particularly trust appears to be not specifically dependent on (financial) participation and can also be facilitated by other drivers such as effective formal and informal participation and strong leadership.
- **Driven by context:** while the drivers presented have proven to be effective across the board, more drivers can be charted across the analysed best practices. These drivers, while being extremely impactful, can only relate to a small number of cases with specific contexts. For example, in situations where wind energy may significantly contribute to securing the supply of an important resource such as clean water or energy (e.g. on islands), the major driver appears to be necessity to access cheaper and cleaner energy.

Reference & more information

on the sources:

Maleki-Dizaj, P., del Bufalo N. (2019) Synthesis & comparative analysis of best practice case studies for promoting the social acceptance of wind energy. Deliverable 4.3 of the WinWind project.

Authors

ICLEI Local Governments for Sustainability

Giorgia Rambelli and Arthur Hinsch



July 2019



WinWind has received funding from European Union's Horizon 2020 Research and Innovation programme under Grant Agreement N° 764717

Project Partners



WinWind has received funding from European Union's Horizon 2020 Research and Innovation programme under Grant Agreement N° 764717. The sole responsibility for any errors or omissions made lies with the consortium. The content does not necessarily reflect the opinion of the European Commission. The European Commission is also not responsible for any use that may be made of the information contained therein.



- 🐦 Twitter: @winwind_eu
- 🌐 LinkedIn: WinWind Project
- 📷 Flickr: WinWind Project
- ✉️ Sign up for the WinWind Newsletter on

www.winwind-project.eu