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Community Engagement and Fair Benefit Sharing of Renewable Energy Projects

Presenting Policies and Practices across Europe and Guidelines for Developers

Contents

Key Takeaways

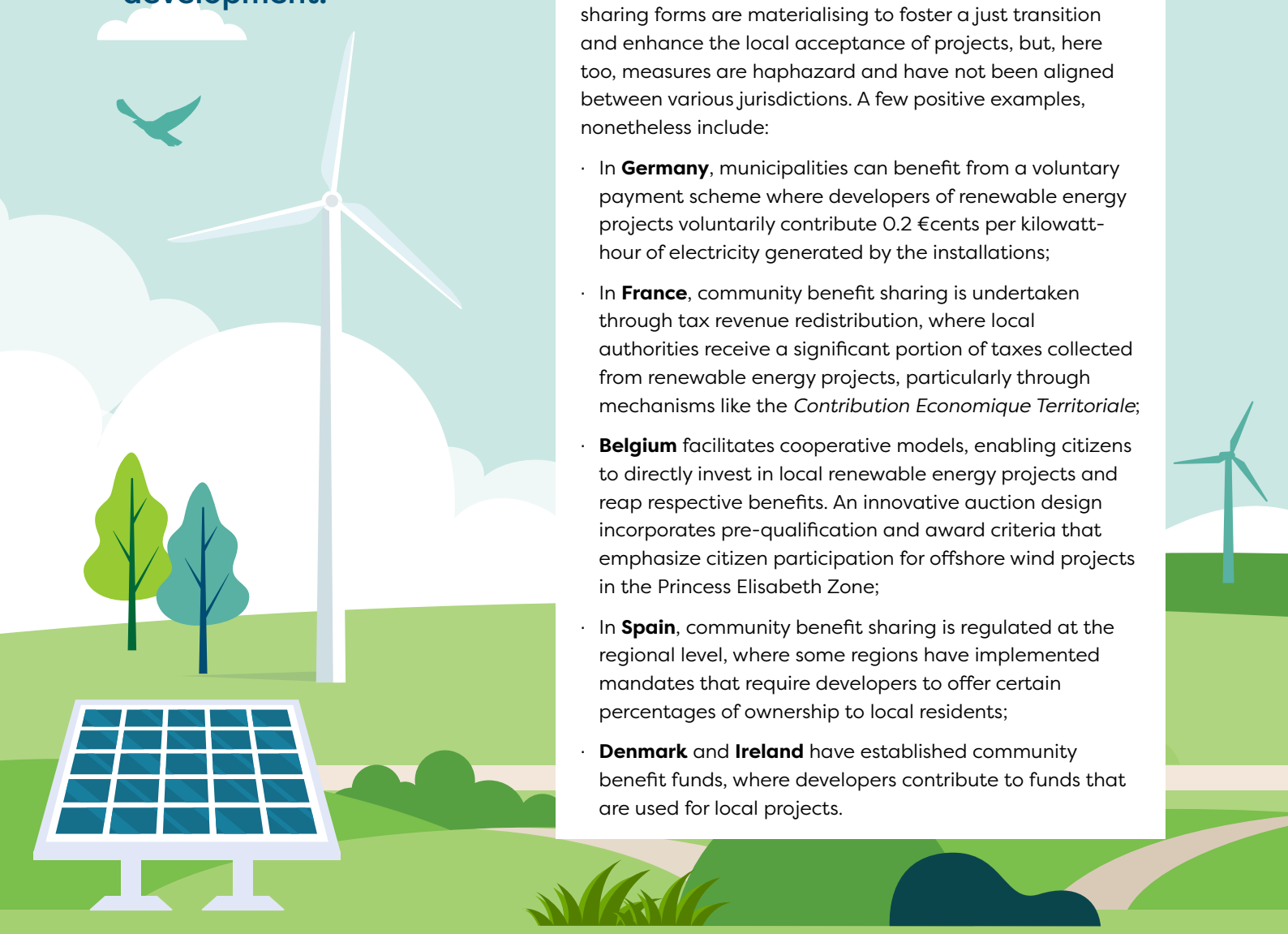
Europe's success to accelerate the rollout of renewable energy and grid development hinges on effectively engaging local communities hosting renewable energy infrastructure and sharing the benefits investors, developers, and operators reap from project development.

Accelerating the permitting processes for renewable energy projects are high on the EU's policy agenda, especially under the new Clean Industrial Deal[1]. Public support can facilitate the completion of these projects, but opposition can (and has) severely delayed permitting, indicating a need to adopt more inclusive and just community engagement and benefit sharing practices within the sector.

The Community engagement led by developers often only fulfills the bare minimum in terms of regulatory requirements, with few initiatives extending beyond mere compliance to foster genuine, meaningful public participation. Some may introduce further measures to enable the swift completion of projects, but such practices are the outliers and have not been included in regulatory frameworks.

Research findings suggest that a diverse set of benefit sharing forms are materialising to foster a just transition and enhance the local acceptance of projects, but, here too, measures are haphazard and have not been aligned between various jurisdictions. A few positive examples, nonetheless include:

- In **Germany**, municipalities can benefit from a voluntary payment scheme where developers of renewable energy projects voluntarily contribute 0.2 €cents per kilowatt-hour of electricity generated by the installations;
- In **France**, community benefit sharing is undertaken through tax revenue redistribution, where local authorities receive a significant portion of taxes collected from renewable energy projects, particularly through mechanisms like the *Contribution Economique Territoriale*;
- **Belgium** facilitates cooperative models, enabling citizens to directly invest in local renewable energy projects and reap respective benefits. An innovative auction design incorporates pre-qualification and award criteria that emphasize citizen participation for offshore wind projects in the Princess Elisabeth Zone;
- In **Spain**, community benefit sharing is regulated at the regional level, where some regions have implemented mandates that require developers to offer certain percentages of ownership to local residents;
- **Denmark** and **Ireland** have established community benefit funds, where developers contribute to funds that are used for local projects.



1 https://commission.europa.eu/document/download/9db1c5c8-9e82-467b-ab6a-905feeb4b6b0_en

Jurisdictions with regulated and responsible business practices show great potential for successful community engagement and benefit sharing, but these remain the exceptions rather than the norm. This is due to the absence of a comprehensive and mandatory framework at the European level that can be uniformly applied across the board while offering enough flexibility to tailor measures to regional and local needs. This inconsistency creates an uneven playing field, where the implementation of such practices is often left to the discretion of developers, while local communities have limited leverage in such settings. Consequently, the effectiveness and justness of community engagement and benefit sharing can vary dramatically across projects, regions, and countries, potentially undermining public trust and support in the EU's energy transition as a whole.

This variability underscores the critical need for establishing EU-wide minimum standards that unify and standardize practices across Member States, ensuring the basis for consistent, fair, and effective community engagement and benefit sharing practices.

To address these inconsistencies, the following report introduces a set of key performance indicators (KPIs) that begin to capture the justness of community engagement and benefit sharing of renewable energy projects. KPIs are designed to assess the performance of developers and ensure transparency, consistency, and accountability in renewable energy, grid, and potentially other projects related to the energy transition.

Effective measures, as demonstrated by the good practice examples assessed against these KPIs, improve the public perception of renewable energy projects and garner support for their completion, facilitating smoother project implementation, while fostering a sense of ownership and pride among communities involved in the energy transition. Streamlined permitting that incorporates robust community engagement and benefit sharing can mitigate delays and foster stronger public support, which is pivotal for the success of renewable energy projects. Meaningful public participation can strengthen local democracy and not least, a fairer distribution of benefits contribute to development of the local economy.

Establishing EU-wide minimum standards and implementing effective KPIs are essential steps toward achieving a secure, resilient, and just renewable energy future in Europe.

Introduction

Accelerating the development of renewable energy is a high priority within the EU. While the ambition to deliver a "just transition" is frequently discussed, it remains far from fully realised. A just transition entails socio-economic transformation to address climate change, "whilst reducing inequalities in the most affected regions and ensuring the costs and benefits of the transition are spread fairly"[2].

Despite widespread agreement on its necessity, the implementation of a just transition in renewable energy deployment varies significantly, often resulting in uneven engagement and benefit sharing across local communities. Those that host renewable energy infrastructure near their homes may reap some shared societal benefits from these installations (e.g. clean air or contributions to climate change mitigation), but they can be still disproportionately burdened by direct impacts or inconvenienced as "hosts" when compared to others with limited financial or other compensation and participation, igniting dissatisfaction and opposition.

The acceleration of permitting renewables may be firmly on the EU's political agenda[3], but challenges remain to the growing social and political support for these projects. De-risking, improving project design, facilitating a just transition, providing educational opportunities and raising awareness, and developing long-term relationships[4] between project developers and locals can further boost public support for renewable growth. Community energy initiatives, including community-owned renewable projects and shared ownership arrangements, represent some of the most transformative models for delivering significant socio-economic benefits to local communities[5]. They are the gold standard, empowering citizens, fostering local ownership, and advancing a just and fair energy transition. However, they may not always be feasible due to financial or technical constraints or the unique circumstances of specific projects or communities.

Recognizing these constraints, this report seeks to complement efforts to mainstream energy communities and shared ownership arrangements as integral components of a just, fair, and democratic energy transition. By learning from their successes and exploring other models of community benefit sharing for renewable energy projects, the report provides actionable insights and tools to enhance fairness and support for renewable energy initiatives and related infrastructure, regardless of ownership structures.

This report and guidelines aim to accelerate renewable energy and grid development that is inclusive, both in actively engaging local communities in developments occurring in their vicinity and equitably distributing the derived benefits. It provides a framework to establish common, inclusive, and effective community engagement strategies and benefit-sharing practices in support of accelerating the deployment of solar, wind, and grid infrastructure while ensuring a just and fair energy transition towards a fully renewable and climate neutral Europe.

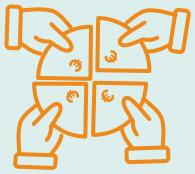
2 https://caneurope.org/socially-just-transition/
3 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52025DC0079
4 https://www.nature.org/content/dam/tnc/nature/en/documents/Enabling_a_Community-Powered_Energy_Transition.pdf
5 Research conducted in Germany and France show that locally financed and controlled renewable energy projects deliver 2 to 8 times more return to the local economy than private developer-led projects.https://energie-partagee.org/ressource/etude-retombees-eco-2/ and https://www.rescoop.eu/uploads/rescoop/downloads/RWS_Wind_CDW.pdf

By analysing EU-level and national legal frameworks, this report conveys what some have critiqued: **there are few stringent, enforceable mechanisms in-place that ensure local community engagement and sharing the benefits of renewable energy projects.** Decisions often remain at the discretion of project developers or operators. While some forward-thinking actors recognise that engaging local communities and sharing project benefits is key to success, such practices gathered and discussed in the following tends to be the exception rather than the norm.

The primary objective behind developing these guidelines has been to establish a set of key performance indicators (KPIs) against which the performance of developers can be measured. We aim to provide evidence-based operationalisable tools for project developers, local authorities, non-governmental organisations, and civil society to assess projects. **Community engagement and benefit-sharing are essential to ensure the materialization of a just transition that enjoys broad-based support[6], but as this report indicates standardised laws, practices, and guidelines are scarce, leading project developers to pursue these essential forms of justice in a haphazard manner, if at all.** That is, "much of the community engagement and benefit sharing has, so far, been delivered in an unsystematic manner, with considerable variation between companies and jurisdictions in terms of minimum requirements, resourcing, standard practices, transparency, and monitoring"[7].

Developing a shared understanding of terminology used in this report is essential, leading us to propose **working concepts for 'community engagement' and 'benefit sharing'.** These are purposefully articulated vaguely, so as to ensure their applicability to various contexts and allow for room to adapt them as this nascent topic develops.

Community engagement entails the process through which the developer and/or operator of a renewable energy installation (e.g. solar photovoltaic power plant or wind turbine) initiates and sustains meaningful dialogue with local communities that the given installation effects during the project's entire lifetime. Local community should be interpreted in the broadest sense to include actors ranging from residents to municipalities, civil society organisations, and businesses. And, meaningful dialogue entails proactive and responsive communication that shapes the decisions the developer and operator takes in relation to the project.



Benefit sharing is the process through which the developer or operator that is set to reap monetary and other gains from a renewable energy installation (e.g. solar photovoltaic power plant or wind turbine) redistributes these in a just manner. These may entail adhering to taxation laws stipulated in the region, but should go beyond this, redistributing wealth with locals that host the given installation. Locals, here too, should be interpreted in the broadest sense to include actors ranging from residents to municipalities, civil society organisations, and businesses.

6 https://caneurope.org/content/uploads/2023/10/Fairer-and-Faster-permitting_CAN-Europe-Briefing.pdf
7 https://www.nature.org/content/dam/tnc/nature/en/documents/Enabling_a_Community-Powered_Energy_Transition.pdf, p. 7.

In the following, we convey the results of research that we designed and carried out to better understand how fairness[8] and justice[9] materialises in the energy transition by tracing community engagement and benefit-sharing frameworks and practices. Our focus will primarily be on distributional justice through benefit sharing (e.g. the redistribution of income related to projects) and procedural justice[10] by, among others, engaging communities throughout project development. We explore these by mapping and addressing:

Just Distribution of Benefits and Negative Impacts: Renewable energy projects must adhere to principles that ensure the fair distribution of economic benefits, such as the redistribution of income related to projects, while minimising and addressing negative impacts affecting communities and biodiversity i.e. *distributional justice.*

Inclusive and Transparent Processes: Local communities must have meaningful opportunities to shape projects by which they are impacted. This includes providing clear and accessible information, fostering open dialogue, and ensuring decisions reflect community priorities i.e. *procedural justice.*

We recognise that fair distribution through benefit-sharing mechanisms and inclusive processes through meaningful community engagement cannot be implemented in isolation. Executing a just transition hinges on the materialisation of justice in its complexity while requiring the recognition and addressment of structural inequities, power imbalances, and the marginalization of disadvantaged groups which are crucial to building trust and achieving a transition that benefits all.

Accordingly, we conducted research to better understand the general legal-technical framework for community engagement as well as benefit sharing within the EU. **Spoiler alert: it is scarce.** We provide a brief overview of the EU-level context in section two on the subject matter and provide a handful of examples in cases where these considerations have already materialised to varying degrees. To provide further breadth, the report zooms in on **five national cases – France, Germany, Italy, Poland, and Spain** – which offer illustrative examples on the state-of-play in key European contexts in section three.

Drawing on this research, the primary output of this project is a set of key performance indicators (KPIs) that can guide the community engagement and benefit sharing of renewable energy project developers in Europe and beyond. Section four introduces these in a bid to launch a discussion on the matter, as we anticipate a need to tailor these to specific local contexts. Finally, section five draws conclusions and makes policy recommendations.

8 https://www.sciencedirect.com/science/article/pii/S1462901112001773.
9 https://www.sciencedirect.com/science/article/pii/S0301421517301593; https://www.nature.com/articles/nenergy201624.
10 See: https://www.sciencedirect.com/science/article/pii/S0306261913010337.

European Practices

European legal context

The pursuit of a just transition has been one of the top priorities on the EU's political agenda, enshrined into key policy and legislative acts, ranging from the European Green Deal (EGD)[11] to the Revised Renewable Energy Directive (RED III)[12]. Local engagement and the benefits of renewable energy projects are, however, uneven, and drive resistance to developments. Opposition from locals is widespread, with illustrative cases ranging from the Netherlands where "18% of Dutch municipalities have either cancelled, delayed or put wind projects on hold over the past few years"[13] to protests in Spain[14].

The Aarhus Convention[15] and both the Strategic Environmental Assessment[16] and Environmental Impact Assessment Directive[17] establish provisions related to public participation and access to justice, but the energy transition requires not only their implementation but further action that expands the spirit of an inclusive and just transition[18].

This is especially pertinent as the EU aims to meet its legally binding 2030 targets introduced in RED III, which, if anything, should be the bare minimum. Far greater ambition is required to align the EU with the Paris Agreement's 1.5°C[19] and the rationale to execute an accelerated energy transition has been underscored by Russia's full-scale invasion of Ukraine jeopardising the bloc's access to energy and worsening the energy price crisis.

Accelerating renewable energy deployment in Europe at the required speed and scale necessitates strong social and political support, which hinges on effectively engaging local communities. It has been linked to the success of renewable energy deployment irrespective of technology and is a mainstay of policy papers addressing offshore[20] and onshore wind[21] alongside solar power[22]. What is more, the matter goes beyond energy production with the recently launched 'Pact for Engagement' which was a part of the Action Plan on Grids[23]. This calls on EU Member States, EU-level and national regulators, project promoters, and civil society to work together towards early, regular, and meaningful public participation in grid development projects and to reflect upon the views, ideas, or concerns of local communities.

Introducing legally binding EU-level legal acts on community engagement and benefit sharing is challenging, given the diverse contexts that necessitate different forms of engagement as well as immense differences between, for instance, tax regimes that play a formative role in the benefit sharing project developers and operators pursue. EU policy[24] and the guidance of EU co-legislators regularly emphasises the need for local engagement, but these are not binding and practices and standards across Europe vary on a broad scale. **There is a need to further elaborate the key principles and establish baseline common standards with clear guidelines on what constitutes "fair" community engagement and benefit sharing.**

13 https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en
14 https://eur-lex.europa.eu/eli/dir/2023/2413/oj. More specifically, Article 15d(2) states that Member States shall promote public acceptance of renewable energy projects by means of direct and indirect participation of local communities in projects in renewables acceleration areas
15 https://www.energymonitor.ai/tech/renewables/weekly-data-onshore-wind-plans-in-one-fifth-of-dutch-municipalities-affected-by-protests/, n.p.
16 https://renewablesnow.com/news/anti-renewables-protesters-from-rural-spain-descend-on-madrid-757820/
17 United Nations Economic Commission for Europe Convention on access to information, public participation in decision-making and access to justice in environmental matters, signed in Aarhus on 25 June 1998, link: https://unece.org/DAM/env/pp/documents/cep43e.pdf
18 https://environment.ec.europa.eu/law-and-governance/environmental-assessments/strategic-environmental-assessment_en
19 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011L0092
20 See e.g. https://caneurope.org/content/uploads/2024/02/CAN-Europe-contribution_RAAs-guidance_23022024.pdf
21 CAN Europe supports an EU binding target for the share of energy from renewable sources in gross final energy consumption of at least 50% by 2030 and 100% by 2040 infirmed by the civil society's Paris Agreement Compatible Energy Scenario. See: https://caneurope.org/content/uploads/2024/09/PARIS-AGREEMENT-COMPATIBLE-SCENARIO-2024.pdf
22 https://www.europarl.europa.eu/doceo/document/TA-9-2022-0032_EN.pdf; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0741
23 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023DC0669
24 https://eur-lex.europa.eu/resource.html?uri=cellar:516a902d-d7a0-11ec-a95f-01aa75ed71a1.0001.02/DOC_1&format=PDF

Establishing baseline common standards, with clear criteria and metrics for **consistency, transparency, accountability, and leveling the playing field** is essential to ensure these principles are effectively implemented across the board and materialise in national, regional, and local frameworks.

There is no EU-wide framework on the matter, but it is not all doom and gloom, as practices are mushrooming that offer examples of progressive action undertaken by various stakeholders. Developers and local leaders are well-aware of the need to facilitate communication and share the benefits of projects for harmonious project development and growth, leading for many bottom-up instances that are instructive for the sector more broadly.

European Consensus on Fast & Fair Renewables & Grids

The ***Fast and Fair Principles for Renewables & Grids***[25] provide the first European-wide cross-sectoral consensus with a framework for facilitating renewable energy and grid projects that are perceived as fair for all.

Developed in collaboration with stakeholders from civil society, local government, commercial and non-profit industry, and informed by the experiences of municipalities in multiple countries, the **principles** cover a range of factors, such as stakeholder participation in planning, nature positivity, transparency, and creating local value through local projects. The principles are truly a game changer, credibly uniting sectors behind the common goal of achieving a fast and fair deployment of renewables and grids.

5 Key Principles

1. **Local Projects — Local Influence:** The endorsing organisations agree that early, continuous, and meaningful engagement of all relevant local stakeholders is essential. Doing so increases local perceived fairness and results in smoother realisation of new RES and electricity grid infrastructure
2. **Local Projects — Local Value:** There should be tangible, appropriate, and proportionate community benefit opportunities in conformance with national and regional legislation as well as with the aims of the local communities involved. This is to increase public support, promote a sense of identification and pride with new infrastructure and to ensure that local communities benefit from such projects.
3. **Transparency:** A transparent use, communication and governance of additional revenue and of the overall process, in accordance with national and regional legislation, brought by the new infrastructure is essential. Spatial planning and permitting authorities should be aware and highlight different options and good practices for benefit schemes, so that their implementation is ensured in a transparent manner.
4. **Nature-Positive:** the installation of RES and grids, like any infrastructure, has an impact on nature and biodiversity, but such impact can be minimized and mitigated, and the impact can be an overall positive one. If done in a coordinated manner, therefore, RES and electricity grids have the potential to effectively address the twin climate and biodiversity crises, and their deployment should go hand-in-hand with nature protection and restoration.
5. **Empowering Community-led Initiatives:** A level-playing field between all actors on the renewable energy market is instrumental. To share in the local value creation from renewables development, market actors with less administrative and financial capacities (e.g. citizen and renewable energy community-led initiatives) need special support to allow them to develop their own projects and to access the grid on an equal footing with professional actors.

25 https://fastandfairenergy.eu/

2.2. Learning from real-world cases

The lack of EU-level or national regulations on community engagement and benefit sharing[26] places the matter in the hands of local authorities and project developers. Generally, our findings suggest that this has led enterprises to prioritise their bottom lines in most cases, which is also reflected in the tenders announced by authorities[27]. However, this approach has its limits as project developers have long recognised the risks involved with developing projects without involving locals. Approaches to community engagement vary by jurisdiction and mandatory action tends to be included in environmental impact assessments, but their efficacy is frequently problematized[28] and poor execution can have far-reaching consequences well beyond the given project, tarnishing the image of the sector and undermining the energy transition broadly speaking.

Developers and operators increasingly engage with communities as they plan and construct installations to enable the smooth execution of projects. In a similar vein, benefit sharing is increasingly focal to growing the acceptance of projects. The ability to initiate steps is not always in the hands of developers, as respective local regulations, tax regimes, and numerous other factors confine their action, but cases below illustrate that they can introduce measures that support just outcomes. In the following, we discuss positive legal acts, guidelines, and cases that have emerged throughout Europe.

2.2.1. Community engagement

Community engagement throughout Europe varies on a broad scale, but numerous commonalities prevail and have changed little over time.

The **UK's government recently revised its 2014 Best Practice Guidance**[30] that reflects a set of voluntary core principles that continues to be applicable and is corroborated by the cases discussed below. It offers an early attempt to guide relations between project planners and the local community in a quickly growing wind sector sector in the mid-2010s. The Guidance identifies a need to (1) develop a plan, (2) start early, (3) identify the community, (4) reach the whole community, (5) provide feedback and follow up with community members, (6) sustain engagement, and finally (7) engage during repowering, decommissions, and lifetime extensions.

Community engagement thus begins with the developers conceiving a plan on how to engage locals. A plethora of blueprints are available as state bodies[31], industry associations[32], non-governmental organisations[33] have since published guidelines, which can then be adapted to the given context. Launching community engagement early on is essential and should generally be initiated prior to developers taking executive decisions – in some cases this could begin as early as the site selection.

Identifying and aiming to reach a broad segment of the given community is also a recurring best practice. This entails that project developers build an understanding of the social groups within a given community and begin a discussion with all of these by drawing on various channels, ranging from the digital to print. A recurring finding in the literature is a need to engage marginalised and underprivileged factions of society, be those indigenous people or low-income households – an approach cited as a positive example for instance in mining operations[34].

26 https://www.sciencedirect.com/science/article/abs/pii/S2214629620303790
27 https://www.nature.org/content/dam/tnc/nature/en/documents/Enabling_a_Community-Powered_Energy_Transition.pdf
28 https://thenorthernreview.ca/index.php/nr/article/view/392
29 https://assets.publishing.service.gov.uk/media/61b87e3b8fa8f50384489ccb/community-engagement-and-benefits-from-onshore-wind.pdf
30 https://wisepower-project.eu/wp-content/uploads/DECC_Community_engagement_guidance_-06-10-14.pdf
31 See e.g.: https://www.ucc.ie/en/media/research/environmentalresearchinstitute/documents/CommunityEngagementinWindEnergy.pdf
32 See e.g. https://windeurope.org/wp-content/uploads/files/policy/position-papers/20200702-WindEurope-position-paper-wind-industry-commitments-on-community-engagement.pdf or https://nedzero.nl/en/about-nedzero/association/code-of-conduct-for-acceptance-participation-for-onshore-wind-energy
33 https://caneurope.org/content/uploads/2024/04/Rooftop-Solar-PV-Report-Update_April-2024.pdf
34 https://www.sciencedirect.com/science/article/abs/pii/S0301420718305993; https://www.sciencedirect.com/science/article/pii/S2214629617302700

Communication should be multidirectional, allowing for locals to provide feedback and input to the project developer or operator, which the latter considers as opposed to merely abiding by rules or regulations. The last leg of community engagement is its sustainment throughout the course of the project, as the installation is an infrastructure that is integrated into a local community and shapes social relations throughout its lifetime. Accordingly, the dialogue initiated early-on should be maintained. Various arms of the UK government have since issued similar guidelines[35], but the simplicity and enduring principles captured by the Guidance indicates that the matter is relatively "simple", but its wide-scale adoption is yet to materialise.

The Sustainable Energy Authority of Ireland recently published a similar set of guidelines to that of the UK's, **inviting project developers to consider the community they engage, the tools to this end, key principles that they can apply, input to develop community engagement plans, in addition to providing references** and further resources for project owners and developers[36]. Ireland's approach is deeply rooted in Best Practice Principles issued by the Irish Wind Energy Association[37] as early as 2013, which was followed by government-issued guidelines and best practices published nearly a decade ago[38] and approaches applicable to the development of solar photovoltaic projects[39]. The electricity transmission system operator, EirGrid not only applied these principles, but has taken to refine them through innovative approaches ranging from citizen assemblies to various forums[40].

Ireland's renewable sector also saw rapid growth[41] which was coupled with high policy ambitions[42] and these measures reflect an early attempt to shape the way in which developers interacted with locals, and prescribing a few principles that would underpin an amicable relation between stakeholders involved. Ireland policy documents also align with the key principles set forth in the UK's, suggesting that community engagement comprises a few simple principles, but the challenge is tailoring them to the given context and stringently applying them.

35 https://assets.publishing.service.gov.uk/media/61b87e3b8fa8f50384489ccb/community-engagement-and-benefits-from-onshore-wind.pdf
36 https://www.seai.ie/sites/default/files/publications/community-renewables-stakeholder-and-community-engagement_0.pdf
37 https://windenergyireland.com/images/files/9660bd0afdf6072c39.pdf
38 https://assets.gov.ie/109110/b419a104-e6df-4a3e-a7ef-172166932bee.pdf
39 https://files.bregroup.com/bre-co-uk-file-library-copy/filelibrary/pdf/Brochures/BRE-NSC_Good-Practice-Guide.pdf
40 https://cms.eirgrid.ie/sites/default/files/publications/Shaping_Our_Electricity_Future_EirGrid_Consultation_and_Engagement_Report.pdf
41 https://www.sciencedirect.com/science/article/pii/S2214629622002651
42 https://www.iea.org/reports/energy-policies-of-iea-countries-ireland-2019-review

Table 1: Overview of community engagement

Country	Policy/Case[43]	Key Principles
UK	Community Engagement and Bene-fits from Onshore Wind Developments	Develop a plan; initiative and maintain contact with a broad base
IE	Irish Wind Energy Association: Best Practice Principles	Constructive dialogue; identify key social groups; assist locals with questions and is-sues
IE	Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement	Broadly accessible information; compliance; emphasis on benefits and communication on negative impacts
NL	Research drawing on a number of RES installations	Building trust
NO	Fosen Vind's projects: Storheia and Roan	Emphasize engagement with marginalised communities (e.g. indigenous groups)
FI, SE	National legal frameworks	Emphasise benefits to locals during commu-nity engagement
UK	Vattenfall: Pen y Cymoedd Wind Farm	Communication via multiple channels
DE	WPD Onshore: Lauterstein Wind Farm	Communication via website, print, and in-person meetings with experts
UK	Sandy Knowe Wind farm	Informal communication launched three years prior to formal communication
UK	Loch na Cathrach pumped storage hydro	Communication strategy through various channels that facilitate outreach and empha-size community benefits
CZ	Projects in the Pardubice region	Involve third party to mediate and organise communication
EU	Pact for Engagement	Meaningful communication and engage-ment; transparency; long-term commitments in grid development

The Netherlands' case highlights trust as a key enabler of an energy transition supported by locals[44]. This resonates with the UK's and Ireland's approaches, as guidance is geared to building trust through open, engaging, and transparent communication, but project developers must undertake a balancing act between incorporating local positions and pursuing their core objectives[45]. Nonetheless, top-down approaches to project implementation are less likely to succeed[46] and distrust will undermine their swift completion[47,48]. Findings suggest "that either having high trust in the responsible energy company or being able to influence major decisions regarding the solar panel project enhanced project acceptability in the Netherlands"[49].

The matter is underscored in **Norway's case as well, where the success of both onshore and offshore wind projects hinges on engaging all communities**[50] to avoid "green colonialism"[51]. Accordingly, in cases, such as Finland or Sweden, where it is relatively easy for locals to appeal projects, transparent communication initiated early in a renewable energy project's lifecycle is essential as is the need to underscore how locals will benefit from the project[52], see below.

43 Note that these policies are discussed above and below where the reader can find references to them as well.
44 https://pure.rug.nl/ws/portalfiles/portal/78913632/1_s2.0_S2214629618310363_main.pdf
45 https://www.sciencedirect.com/science/article/pii/S2214629619301719#sec0024
46 https://www.sciencedirect.com/science/article/pii/S1364032105001255?casa_token=iwpOMgSZFH4AAAAA:jis7RIziywpkz2d4vEUC9bwLq8Skhr49oRKfQTbEctwfZcrz8bNb9fskvu9DF9BG9Nehox8_Lg
47 https://www.sciencedirect.com/science/article/abs/pii/S1364032114002305?via%3Dihub
48 To add further nuance, bottom-up projects also require top-down ambition and support. In the Netherlands there is an overarching ambition to produce 35 TWh from wind and solar. All 30 energy regions (new clusters of municipalities) had to formulate goals they can deliver, contributing to the overarching ambition. They were supported by the national government in this process with knowledge and financial instruments. At the moment, however, the local energy transition is stagnating due to the decrease in support from the national and provincial governments. A notable example is the ban on new solar photovoltaic plants, because elected government officials claim that these threaten agriculture, nature, and is an eyesore in the landscape. This kills local projects despite these being bottom-up and generally supported endeavours.
49 https://www.sciencedirect.com/science/article/abs/pii/S2214629618310363, p. 140.
50 https://debatesindigenas.org/en/2022/10/01/green-colonialism-wind-energy-and-climate-justice-in-sapmi/
51 https://helda.helsinki.fi/server/api/core/bitstreams/26db91eb-be44-41fc-b5f1-9fa4e3bf2e09/content
52 https://www.sccale203050.eu/how-to-deal-with-local-opposition-to-renewable-energy-projects/

An illustrative case is the **Vattenfall-led Pen y Cymoedd Wind Farm** (228 MW)[53] in the UK, where executives began community engagement during the pre-application phase and **relied on various tools to reach the community ranging from freepost forms, local events, and workshops to advertising on local buses**. Experience shows that providing information online is essential and a way to provide up-to-date information as developers progress with the respective project, but complementing this with outreach via other outlets and means is just as crucial[54]. Vattenfall also initiated outreach via newsletters, organised a public exhibition and visits to the construction sites, facilitated the education of students, and established a Construction Committee composed of local representatives. Smaller projects, such as Wpd's Lauterstein wind farm (44 MW)[55] can benefit from various forms of outreach, which led company officials in this case to launch a website and organise public meetings that engaged locals and allowed the latter to pose questions to project engineers.

The **Sandy Knowe wind farm in Scotland** also offers a case for good and sustained community engagement, during which developers initiated informal engagement as early as 2012, followed by formal engagement in 2015, while the project was only completed in 2016. It has also **used multiple channels to engage locals** ranging from a liaison group to public exhibitions, a website, direct engagements, and editorial content in the local media[56] – engagement which the developer has sustained as the operator applied for an extension[57].

Early and thorough community engagement tends to be interwoven with highlighting the benefits that a project can deliver, as the winner of the 2024 Scottish Green Energy Awards 'Community Engagement' winner Loch na Cathrach pumped storage hydro scheme illustrates[58]. Upon Statkraft acquiring the asset, it launched a comprehensive outreach programme to locals through numerous media outlets that offered means for locals to engage with project experts[59]. The company gathered feedback that it subsequently included in its plans in addition to which it disseminated information on the findings of a Skills Report it commissioned by the University of the Highlands and Islands to underscore employment opportunities and potential synergies with local businesses.

An example of a **well-executed public inquiry** was done in the Tuscany Region by AGSM Verona S.p.A with regard to the **Monte Giogo di Villore wind farm** project under construction in the municipalities of Vicchio and Dicomano. Citizens, committees, associations, and local administrations strongly opposed the construction of the power plant initially. Through the online public inquiry held during the COVID-19 pandemic, citizens, associations, and administrations participated in long meetings that helped overcome bureaucratic obstacles in a widely acceptable manner, producing a final report of over 150 pages outlining the results of discussions and facilitating the completion of the project by including the local community's perspective.

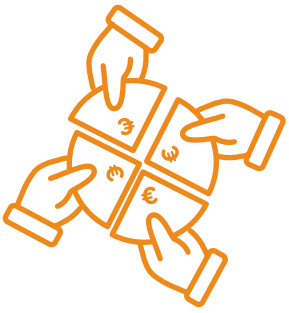
53 https://www.power-technology.com/projects/pen-y-cymoedd-wind-farm-south-wales/?cf-view
54 See, for instance, Scotland's National Standards for Community Engagement: https://static1.squarespace.com/static/60b74b3ad7fb3972cfe271b0/t/612ce339dff85a247d7864fd/1630331714162/NSfCE+online_October.pdf
55 https://www.power-technology.com/marketdata/power-plant-profile-lauterstein-wind-farm-germany/
56 https://www.erguk.energy/app/uploads/2023/09/220117-KOB-Sandy-Knowe-Extension-PAC-2022-RPT-final-PDF.pdf
57 https://www.erguk.energy/app/uploads/2023/09/36405_R3_V1_-Sandy-Knowe-Wind-Farm-Extension-Planning-Statement_FINAL.pdf
58 https://www.statkraft.co.uk/newsroom/2024/statkrafts-loch-na-cathrach-wins-at-scottish-green-energy-awards/
59 https://projects.statkraft.co.uk/globalassets/0/.uk/0--projects/hydro/red-john/project-documents/loch-na-cathrach-event-report-march-2024.pdf

Examples in Central and Eastern European regions are also emerging. **The Participation Factory in Czechia**, for instance, is a third party seeking to facilitate engagement between project developers and locals. They were recently tasked to initiated and support dialogue on projects in the vicinity of two villages, Anenská Studánka and Vojtěchov, in the Pardubice region[60]. Their structured approach has helped dissipate myths on the negative impacts of projects among locals, while providing developers with feedback that they could include in their planning processes. **Czech NOHO is also a noteworthy example of early and through community engagement**, in addition to which it has emphasised benefit sharing by enabling citizens to acquire shares in projects and support access to preferentially priced electricity[61].

The innovative **Tilos project in Greece** involved the installation of a single wind turbine, PV and storage systems in the island of Tilos. The **hybrid plant's operation allowed for the reduction of fuel costs for electricity generation** by approximately €510,000, while producing enough energy to fully cover the electricity needs of the island. Importantly, local residents, as well as the Municipality, were actively involved during the creation of the project, learning about its benefits and contributing with feedback. Residents were also advised on how to optimise their energy consumption, including by consuming more during day time hours.

Lastly, **projects need not be limited to renewable energy producing installations, but similar principles could be applied to develop the electricity grid** and have indeed been followed by network operators in some cases. The European Commission's 'Pact for Engagement' compiles principles that emphasise meaningful communication and engagement, transparency, long-term commitments, and the willingness to engage throughout the project's entire lifespan with locals as essential to success[63]. Research has shown that early engagement in **Ireland has been focal to developments pursued by Eirgrid**[64], Ireland's TSO, which the network operator has been key to articulate and pursue in practice[65]. **Belgium's Elia** has also emphasised community engagement, a key element of which was the sheer ambition to answer queries in a timely and adequate manner[66].

2.2.2. Benefit sharing



Engaging a community is inextricably intertwined with sharing the benefits of a given project, as the act of redistribution is not a gesture of good will or social responsibility[67] **but an essential tool that involves locals and garners support for the endeavour**[68], as the case of the NOHO or Loch na Cathrach indicate above. In principle, this may relate to good communication on their facilitating the green transition, but the benefits that private enterprises reap from projects suggests that distributional justice requires that some of this wealth is shared with host communities.

The form of benefit sharing varies as is the case with community engagement, but it does not require complex mechanisms rather the systemic application of simple principles. The 'Community Engagement for Onshore Wind Developments: Best Practice Guidance for England'[69] issued by the UK government in 2021 offers an excellent blueprint in identifying **five key pillars on benefit sharing: (1) early engagement, (2) consultations on benefits, (3) benefit funds, (4) in-kind benefits, (5) shared ownership**.

60 https://participationfactory.com/en/participation-and-renewable-energy-sources-the-case-of-wind-power/
61 https://www.nohoenergy.cz/pro-obcany
62 https://eunice-group.com/eunice-group-the-successful-results-of-the-three-year-operation-of-the-hybrid-energy-system-in-tilos-island/
63 https://energy.ec.europa.eu/document/download/65ffb0ca-928e-4746-adac-74c8f918c7f3_en?filename=Pact%20for%20Engagement%202023.pdf
64 https://www.sciencedirect.com/science/article/pii/S2214629624004699
65 https://cms.eirgrid.ie/sites/default/files/publications/EirGrid-Public-Engagement-Strategy.pdf
66 https://www.elia.be/en/sustainability/participation-communautaire
67 https://communityenergyscotland.org.uk/wp-content/uploads/2024/12/New-Standards-for-Community-Benefit-Funds-Dec-2024.pdf
68 https://www.sciencedirect.com/science/article/pii/S030142151730109X
69 https://assets.publishing.service.gov.uk/media/61b87e3b8fa8f50384489ccb/community-engagement-and-benefits-from-onshore-wind.pdf

Early engagement and consultations on benefits are what link community engagement and benefit sharing, as projects that we have identified to set good precedents feature the early and transparent communication from project developers on how locals will benefit from the endeavour.

Nadara's 'Sustainable Communities Forum', OnPath Energy's 'Kype Muir Extension', or ScottishPower Renewables' 'Barhill' projects that were shortlisted for the The Scottish Green Energy Awards 2024's Best Engagement Award[70] **all emphasised not only engagement but also the benefits** that these projects delivered to local communities.

Typically, even the redistribution of a small share of revenue can garner local support, as indicated by the case of Norrbotten, a county in northern Sweden[71], but recent findings in the Netherlands suggest that it is increasingly important to include locals in deciding the form of the benefit sharing otherwise measures can become counterproductive[72]. A host of tools ranging from modelling[73] to focus groups and surveys[74] can be deployed to identify and propose schemes that can garner broad based support for projects.

In addition to selecting specific benefit sharing schemes in an inclusive manner, the mode of implementation is also essential to its success. The World Bank highlights seven lessons: (1) commitment from the top, (2) early planning, (3) mission orientation, (4) inclusive redistribution, (5) transparency and accountability, (6) robust monitoring and reporting, and that (7) partnerships are key to success[75]. These lessons seem fairly evident in-light of what had been underscored above, but this also brings us full circle in that successful benefit sharing hinges on sustained community engagement throughout the renewable energy project's operations.

That is, **communication between renewable operators, developers, and local governments on the benefits that the community will reap is an essential component of generating "buy-in" towards the project, but the success of this hinges on general trust in those both providing the funds and the institutions that govern the framework of distribution**. The matter has been shown in other fields, such as approaches to revenue recycling[76], but applies here too: benefit schemes need to be based on trust and transparency. In the following, we briefly survey three prominent and successful models of benefit sharing: benefit funds, in-kind benefits, and shared ownership.

Communication is an essential component of generating "buy-in"

70 https://www.scottishrenewables.com/events/231-sgea24/categories
71 See e.g. https://www.sciencedirect.com/science/article/abs/pii/S136403211500235X
72 https://www.sciencedirect.com/science/article/pii/S0264837722003714
73 See e.g. https://www.sciencedirect.com/science/article/pii/S0140988324003402
74 See e.g. Sapphire Wind Farm, New South Wales, CWP Renewables, link: https://cleanenergycouncil.org.au/cec/media/background/resources/a-guide-to-benefit-sharing-options-for-renewable-energy-projects-2019.pdf, p. 38.
75 https://documents1.worldbank.org/curated/en/207441627059166610/pdf/Discussion-Paper.pdf
76 https://www.sciencedirect.com/science/article/pii/S0921800923002586

Table 2: Overview of benefit sharing schemes

Type	Country	Scheme
Benefit fund	DK	Green Fund Scheme: lump sum (€1,700–22,000)
Benefit fund	IE	Electricity grid operator launched a regional community bene-fit fund
Benefit fund	UK	Scotland's electricity grid operator launched a regional com-munity benefit fund
Payout	DE (Brandenburg)	Yearly payout of €10,000 between neighbouring municipali-ties
Payout	DE	§6 of the Renewable Energy Sources Act (0.2 €cents per kWh), which can add up to approx. €35,000–45,000 per year
Payout	IE	Renewable Electricity Support Scheme: €2 per MWh (0.2 €cents per kWh) paid into a benefit fund
Payout	DK	Annual bonus paid to locals: DKK 5,000 [€670] near wind turbines and approx. DKK 2,000 [€270] near solar PV plants
Payout	DE	Arzfeld, Germany wind project: payout to locals based on a solidarity agreement
In-kind	GR	South Evia project: Developed flood prevention infrastructure
In-kind	LT	Vydmantai project: constructed local sports facilities[77]
In-kind	SE	Glötesvålen wind farm: contributed to local tourism enhancing measures
Ownership	DK	2008 Renewable Energy Act mandates that local communities be offered a 20% ownership stake in wind energy projects (e.g. Samsø Island)
Ownership	BE	Locals can purchase ownership in offshore wind projects
Ownership	ES	Locals must be provided the opportunity to purchase up to 20% of the project and become shareholders
Ownership	NL	Bond purchases in Windpark Fryslân and Westermeerwind wind parks
Local economy	GR	South Evia project: contracted local businesses and created local short- and long-term jobs

Benefit Funds

Benefit funds are rising in popularity as states now mandate project developers to contribute to local causes. These typically pool resources, be that through lump sum contributions or regular payouts from the renewable energy project operator and distribute this within the local community for various causes.

An oft-cited example is **Denmark's 'Green Fund Scheme'**[78], which requires renewable energy plant owners to make a lump sum contribution in the range of €1,700–22,000[79] for wind projects to a fund administered by the respective municipality.

Scotland has also developed a forward-looking framework to facilitate the distribution of revenue through community benefit funds, and has identified simple principles to follow in their introduction: (1) reliable, regular, and predictable over a sustained period (e.g. project lifetime), (2) proportional and fair when considering the size and type of project, and (3) spending decided and overseen by the community through democratic, transparent, and simple governance structures for the benefit of the whole community[80].

The **German federal state of Brandenburg requires wind turbine operators to distribute €10,000 per year** among municipalities within a 3 km radius of the installation[81], and these funds are then allocated to the local community.

77 This is considered a welcome development in-and-of-itself, but one that is dwarfed when considering the revenues, leading NGOs, for instance, to push for a €2 per MWh payout to locals.
78 https://ens.dk/en/our-responsibilities/onshore-wind-power/promoting-onshore-wind-power
79 https://stateofgreen.com/en/news/from-nimby-to-pimby/; https://issuu.com/stateofgreen/docs/sog_wind_energy_2023_digi?fr=xKAE9_zJGAA&submissionGuid=c68ca440-e8ad-43b0-8d77-87b9cbfddcbb
80 https://communityenergyscotland.org.uk/wp-content/uploads/2024/12/New-Standards-for-Community-Benefit-Funds-Dec-2024.pdf
81 https://bravors.brandenburg.de/gesetze/bbgwindabgg

In similar vein, **Ireland** has also been a leader in introducing regulations that mandate renewable energy developers and operators that receive support from the Renewable Electricity Support Scheme (RESS) to contribute to a benefit fund at a rate of €2 per MWh[82]. Funds are then spent locally on endeavours that align with sustainability goals, as is the case with the Galway Wind Park Community fund from which 151 communities received a total of €155,000 for various community-led initiatives[83].

Payouts

Payouts may also be channeled to those impacted by the renewable energy power plant(s). **Denmark, for instance, requires project owners to pay an annual bonus to those living in the vicinity equal to 4–8 times the height of a wind turbine or within 200 metres** for those living near solar photovoltaic plants[84]. The sum of this varies, but is an addition to the Green Pool administered by the municipality.

Developers have also applied the approach even if this was not legally mandated, as was the case with the **ABO Wind-led project in Arzfeld, Germany**. Here, the 65 local citizens that owned the sites used for the construction of the wind power plants were compensated in addition to which every village in the municipality receives payments based on a solidarity agreement[85]. The approach is fairly novel in Germany, but has been shown to sway locals in their acceptance of wind projects[86].

A long-running successful benefit sharing renewable energy project is the **Tocco Casauria Wind Farm in Abruzzo, Italy**. Initially, two small 300 kW wind turbines were installed, with the investor signing an agreement to share financial benefits with the local community[87]. This approach gave the project strong local support, which resulted in the expansion of the project to 5 turbines, further increasing the benefits provided to the community. The wind farm generated an annual profit of nearly €170,000 since 2010. Instead of reducing electricity bills – which legal restrictions prevent – the local government reduced local taxes. Furthermore, these funds were reinvested into public services, providing subsidies for street cleaning, school meals, street lighting, and even local wellness facilities.

Finally, **compensation schemes are not necessarily limited to power generation units but can include electricity grid developments**. Ireland's electricity network operator[88], for instance, introduced a scheme similar to those discussed above, as did Scotland's operator which launched a regional community benefit fund[89]. These examples foreshadow the need of electricity transmission system and distribution system operators to also develop and apply benefit sharing schemes as the grid's capacity will have to be expanded with the energy transition's progression.

In-kind Benefits

In-kind benefits can span literally any-and-everything and the examples that feature in this report indeed range from emergency flood defense projects[90] to upgrading sport facilities[91]. This form of benefit sharing tends to be entirely based on the discretion of the developer and decisions are taken based on negotiations with local leaders, making communication and transparency especially pertinent. It is essential that the developer map and understand what is beneficial for locals, as success stories indicate that the in-kind contributions either responded to the direct needs of locals (e.g. a hospital) or it was able to underpin new operations that contributed to the well-being of citizens.

82 https://www.seai.ie/grants/community-grants/community-benefit-funds
83 https://www.sserenewables.com/news-and-views/2024/05/2024-galway-wind-park-community-fund-opens-for-applications/
84 https://unisonenergy.dk/en/projekt-hadsten-nord/hadsten-nord-naboregler/
85 https://www.vestas.com/en/media/company-news/2018/vestas-secures-first-order-from-german-auction-round-fo-c2963422
86 https://www.sciencedirect.com/science/article/pii/S0301421522001495#bib2
87 https://www.bbc.com/news/world-europe-11832559
88 https://cms.eirgrid.ie/sites/default/files/publications/EirGrid-Community-Benefit-Policy-Brochure%20June%202023.pdf
89 https://www.ssen-transmission.co.uk/information-centre/community-benefit-fund/regional-community-benefit-fund/
90 https://eletaen.gr/wp-content/uploads/2018/09/2018-06-25-wf-local-benefits-in-s-evia-greece.pdf
91 https://ignitisrenewables.com/ignitis-renewables-is-granting-financial-support-to-communities-from-modern-lighting-solutions-to-upgraded-sports-stadium/

Even so, results can be mixed, such as the **Glötesvålen wind farm in Sweden** which provided funds towards local access to fibre optic cables and thus high speed communication while also contributing to boosting local tourism based on the village council's decision[92]. However, this came at the cost of altering what had been good grazing areas for indigenous peoples[93]. Thus, dialogue is crucial when providing locals with in-kind benefits to allow for them to make the most of these in the long-term. Moreover, one needs to be critical of these contributions and assess them in relation to the overall value, revenue, and profits the developer reaps from the project so as not to overstate their relative contribution to the local community.

Shared ownership

Finally, **ownership structures constitute the third broad group of benefit sharing and is both essential to a just transition but also a complex matter**. The latter stems from developers' reluctance to cede control over assets but involving the local community can enable the swift execution of projects through higher acceptance. In parallel, a just transition entails empowering through ownership and the distribution of wealth[94].

Some states have promoted the shared ownership of assets, such as **Denmark**, whose 2008 Renewable Energy Act mandates that **local communities be offered a 20% ownership stake in wind energy projects**[95]. The model was successfully tested throughout the country and some cases, such as fully renewable energy-powered **Samsø Island**, divided ownership between investors, municipal government, and local cooperatives[96]. The scheme was, however, discontinued and replaced by the above-mentioned financial compensation scheme for those living in the vicinity of installations.

Similarly, an alliance between **Belgian energy cooperatives** has established the framework for citizens to co-invest in offshore renewable energy projects and thereby also gain access to electricity at a stable price[97]. This has been enabled by Belgium incorporating both pre-qualification[98] and award[99] criteria for citizen participation in its Princess Elisabeth Zone offshore wind auction. The endeavour seeks to offer 20% of wind farms for local ownership when tendering in the Princess Elisabeth Zone and plans to supply 20% of the electricity generated to local citizens[100].

Locals need not necessarily participate in the governance of projects, but their role can be held to that of shareholders. For instance, wind projects **Windpark Fryslân and Westermeerwind** were financed by issuing bonds that only locals could purchase with a 7.5% coupon[101] in the Netherlands. Interest for both projects was quite large, as bond issuance was significantly oversubscribed. The approach has materialised in a host of other contexts, including the **Balearic Islands in Spain** and **France** (see below), and responds to the need to make the energy transition inclusive by promoting citizens to shareholders.

In **Greece**, Public Power Corporation, the largest electric power company, has announced the issuance of the first social bond in Europe by an energy group. This first social bond is expected to be available in the third quarter of 2025 and exclusively to the residents of Western Macedonia. It is a 5 million euro bond, with a guarantee of coverage by PPC and a fixed rate of 8%. The nominal value of each Bond will be set at an indicative value of €100 to enable as many residents as possible to participate. This particular initiative aims to generate socio-economic shared value for the local community, allowing residents to directly participate in investments and benefit from the returns of renewable energy projects.[102]

92 https://www.ltz.se/2016-04-23/vindkraftspengar-ger-rabatt-pa-fiber-och-billigare-kaffe
93 https://www.sapmi.se/wp-content/uploads/2024/05/Delrapport-Kumulativa-effekter.pdf
94 https://www.tandfonline.com/doi/full/10.1080/09644016.2017.1387294
95 https://www.wri.org/update/sustained-portfolio-policies-have-transformed-denmarks-power-sector
96 https://www.wri.org/research/unlocking-renewable-energy-future-how-government-action-can-drive-private-investment
97 https://www.rescoop.eu/news-and-events/press/belgian-government-wants-significant-citizen-participation-in-offshore-wind-energy
98 Minimum 1% of project CAPEX open to citizen participation (penalty if not met) and
99 10% of points for increased share of citizen participation (goal 4%, max 25%), possible via renewable energy communities or financial shares
100 https://www.thenews.coop/belgian-government-wants-citizen-participation-in-offshore-wind-energy/
101 https://www.startgreen.nl/en/nieuws/enorme-belangstelling-particuliere-beleggers-voor-windpark-westermeerwind/; https://elwindoffshore.eu/regional-activities/elwind-team-together-with-municipal-representatives-explore-the-renewable-energy-sector-in-the-netherlands/
102 https://e-ptolemeos.gr/g-stassis-dei-prasinos-energeiakos-kai-technologikos-komvos-i-d-makedonia

Benefits for the local economy

Stimulating the local economy is a key additional form of benefit sharing alongside the three broad forms discussed above. This tends to take one of two forms: engaging local companies and creating jobs. The challenge with job creation in the energy transition is that many of these are temporary and low skilled (typically limited to assembly work)[103], but there are initiatives by developers to create permanent jobs to boost the local economy.

Nonetheless, the general tendency is that renewable projects drive immense local job creation during construction, which then peters out. The 500 MW **Saint-Brieuc Offshore Wind Energy Project in France** illustrates the matter, which **created 2,000 jobs during its construction phase, but expectations were that only 140 long-term positions would sustain** in the long-term[104]. These are still not negligible, but it underscores the need for open and transparent communication on how many and what sort of jobs a project will entail for locals as well as a general reconsideration of the narrative on the quality and quantity of green jobs.

2.3. To conclude this section

Taking a bird's-eye view of community engagement and benefit-sharing in Europe reveals that while the foundations for a just transition are emerging, their impact remains limited and their application sporadic. Core principles concerning these issues have been articulated and promoted by governments, industry organizations, and other stakeholders. However, without systematically applied guidelines, common standards, and enforcement mechanisms, these principles often fall short of achieving widespread, consistent, and effective implementation.

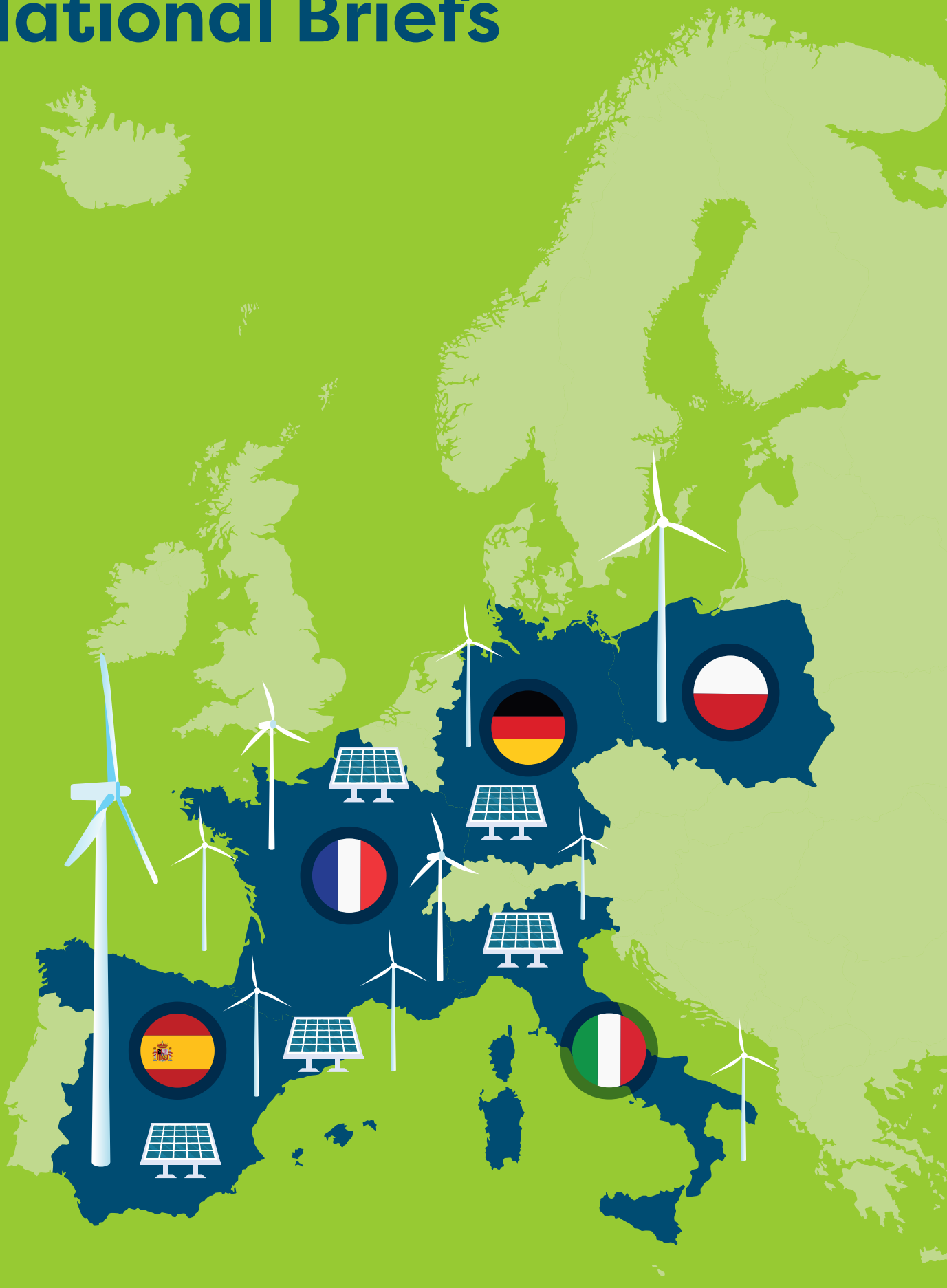
Positive examples are nonetheless abundant, as project developers have led community engagement and benefit sharing on ethical and pragmatic grounds. Examples share commonalities, prominent among them being early engagement to build trust and address concerns well before project launch, and transparency through clear, accessible, and practical information about project impacts and benefits. Successful initiatives also prioritize meaningful consultation well in advance, moving beyond "Decide / Announce / Defend" to enable two-way communication which also incorporates community insights into project design.

Project developers pursuing successful community engagement tend to define and include diverse stakeholders, ensuring marginalized groups are heard through diverse methods such as digital tools and in-person engagement. Another critical factor is leveraging local knowledge by involving civil society organizations and community representatives to align projects with local contexts and needs. Throughout the project lifecycle, maintaining a continuous feedback loop and relationship with the community is key to strengthening trust and fostering long-term partnerships.

There is also a direct link between engaging communities and communicating the benefits they will reap from a given project. Distributional justice hinges on both sharing the benefit and doing so in a transparent manner for causes that are determined by locals to the benefit of locals. Developing fair, long-term benefit-sharing plans and implementing various schemes, such as community ownership models or investment opportunities, ensures that benefits align with local aspirations, fostering pride and support for the project. Together, these factors provide a clear pathway toward a just and fair energy transition, where the benefits of renewables can be shared broadly and fairly.

103 https://theecologist.org/2021/jun/15/what-green-jobs-are-they-talking-about
104 https://www.evwind.es/2012/04/11/technip-awarded-500-mw-saint-brieuc-offshore-wind-energy-project/17689

National Briefs



Germany

Executive Summary

Community engagement and local participation in decision making processes has been defined in national German law and further defined in the respective federal states' legislation. Public participation in renewable energy planning takes place formally through official planning processes. Although the formal public involvement process is extensive, the complexity of technical data and understaffed local planning authorities pose challenges and new institutions have been introduced to facilitate community engagement and mediate between various parties involved. Benefit sharing is mainly regulated by Germany's Renewable Energy Law, which allows for voluntary payments from developers to municipalities, supported by additional state laws in regions like Mecklenburg-Vorpommern and Brandenburg and Nordrhein-Westfalen. These local provisions may allow residents to participate in RE projects, e.g. to have priority in purchasing shares in projects, fostering local acceptance and direct economic benefits. Nevertheless, debates persist over the adequacy and fairness of these payments.

Introduction

The following brief provides an overview of community engagement and benefit sharing practices in relation to renewable energy projects in Germany. The country's federal structure makes for an interesting case, as the federal states (i.e. *Bundesländer*) are primarily responsible for factors and practices shaping community engagement and benefit sharing. Best practices can be identified on a local and state level, but there are practical issues that should be addressed to enable a comprehensive regulatory framework. The brief is based on the analysis of the scholarly and so-called grey literature, which we followed with stakeholder interviews[105] to validate and expound findings.

A patchy but forming community engagement framework

Community engagement and local participation in decision-making processes was defined in national German law and is included in federal state legislation e.g. in Saxony (SächsGVBl[106]). The matter has been formalised in detail with regard to wind energy planning, where it is included in local and regional planning procedures, such as land-use plans, zoning plans, and regional planning processes managed at the municipal and state levels. Areas within a community that are suitable for wind energy are identified and allocated through these processes and public participation is legally mandated as the project unfolds, usually in two stages[107]:

- In the initial phase, a draft plan is presented to the public for feedback, allowing citizens to obtain an understanding of the project and provide suggestions. This input is then reviewed, and the draft is revised accordingly.
- In the second phase, the revised plan draft is open for further comments. These submissions are reviewed and, if substantial changes are necessary, the plan may be redrafted and made available for further comment. Once finalised, the plan is sent to a higher administrative authority for approval.

105 Interview: Christian Grauvogel, Koop Wind, Director, 08.11.2024; Ralf Malpert, Servicestelle Wind Steinfurt, Energieland e.V.2050. Interview on 27.11.2024.
106 https://www.revosax.sachsen.de/vorschrift/17907#p4a
107 https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/Planung/FA_Wind_Kurzinformation_Planverfahren_01-2022.pdf

Once the plan is approved, developers have to secure the access to the land and can then apply for permits to install wind turbines in designated wind energy areas. If a plan lacks exclusion zones or does not meet minimum area targets, developers may apply for permits outside the designated areas as well[108]. Specific rules apply to repowering projects, enabling their development in non-designated areas until 2030[109].

The permitting process follows the provisions of the Federal Immission Control Act (BImSchG[110]), combining all related permit processes into one that is managed by a competent authority. This unified approach covers all aspects of public law, from environmental aspects to building regulations and the type of the turbine. German state law defines a competent authority at the state, district or municipal level, the jurisdictions and roles of which depend on project capacities and varies between states. In Baden-Württemberg, for instance, there are four Regional Government Offices (Regierungspräsidien) involved with respective procedures[111]. The so-called formal procedure at the national level (§10 BImSchG) stipulates the inclusion of the public, where everyone can review submitted documentation and raise objections, either in writing or electronically. If deemed necessary by the permitting authority, a public hearing is held to discuss these objections. Following this, the authority makes a final decision on the permit.

For ground-mounted photovoltaics, a simplified process is followed, as they only require a building permit (BauGB[112]) and no immission protection authorisation. The details on the building permit process are designed and passed by the respective federal states' legislature. Public participation is expected in the first stage, when zones dedicated to the installation of PV power plants are defined as (§3 BauGB, 2023). Thus, ground-mounted solar PV installation developers must also engage the community, but permitting steps are less complex when compared to onshore wind.

Community engagement during the permitting process is governed by federal states. They draft and approve land use plans at which stage every resident can raise their concerns and objections. Alongside private individuals, associations and organisations can also take part in the planning process. Local authorities can also use independent mediators, or even local offices established to enhance community engagement (e.g., Energieland 2050, see below). Their role is to present the local authorities' plan for land use and try to reach consensus among different stakeholders. New institutions have also emerged to this end, such as a **"Future workshop" (*Zukunftswerkstatt*) and "Citizens' Dialogue" (*Bürgerdialog*)**[113].

One of the long established and successful examples of community engagement agency is the Service Unit Wind Energy in the district of Steinfurt (*Servicestelle Wind*). Two Local Action Groups, Steinfurter Land e.V and Tecklenburger Land e.V., established this as a part of "Energieland 2050" and it also covers a range of activities requiring engagement from the development of solar energy to hydrogen projects and climate adaptation[114]. It provides citizens, municipalities and project developers with comprehensive, independent and free advice as well as technical support. It serves as a central contact, networking, and consultation point for all relevant actors and stakeholders.

108 As of January 2025, the Greens, SPD and CDU/CSU parliamentary groups in the Bundestag have agreed on a federal legislative solution. By amending the Federal Immission Control Act, it will no longer be possible to apply for a preliminary decision for onshore wind outside designated areas. Open applications for preliminary decisions outside the future wind energy areas of regional planning will no longer be processed. Source: https://www1.wdr.de/nachrichten/landespolitik/windraeder-nrw-uebergangsregel-gerettet-100.html.

109 https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/Planung/FA_Wind_Kurzinformation_Planverfahren_01-2022.pdf

110 https://www.gesetze-im-internet.de/bimschg/BJNR007210974.html

111 https://um.baden-wuerttemberg.de/de/presse-service/publikation/did/leitfaden-genehmigungs-und-anzeigeverfahren-nach-dem-bundes-immissionsschutzgesetz/

112 https://www.gesetze-im-internet.de/bbaug/BJNR003410960.html

113 https://doi.org/10.5281/zenodo.12784555&sa=D&source=docs&ust=1738941423815691&usg=AOvVaw0MF8c5i8jjZcNjH3vdAjAX

114 https://www.energieland2050.de/

The Service Unit accompanies the process of promoting the development of wind energy in the district of Steinfurt by engaging municipal and district authorities, landowners, farmers, nature conservation organisations and municipal multi-utility companies to support a balanced and environmentally friendly expansion of wind energy. It is primarily characterised by a proactive, dialogue-oriented and integrated approach, which promoted transparent planning, fair procedural and financial participation of citizens and communities, combined with confidence-building measures to limit social conflict over wind energy development in the district.

The "Citizens' Energy Summit" and the "Wind Round Table" also enable dialogue between stakeholders. Both conferences gather all relevant stakeholders to stimulate dialogue[115]. The objective of these events is to encourage wind developers, while convincing citizens and municipalities that the installation and operation of a wind park will create added value in the region. Furthermore, the Service Unit prepares the template contracts in relation to the Renewable Energy Law and addressing benefit sharing (§6 EEG) as well as negotiates a solution aligned with the newly established **"Citizens' Energy Law North Rhine-Westfalia" (Bürgerenergiegesetz NRW – BürgEnG**[117]) (see below for further detail).

The German wind industry suggests that the formal process of community engagement in the planning process does not suffice, as it focuses on specific steps of permitting and does not allow a more comprehensive and inclusive public engagement[118]. Project developers are also encouraged to engage as early as possible in an informal consultation with local administrations and other stakeholders. Affected residents should be actively and voluntarily engaged in advance and in parallel to the formal process[119]. An issue related to engagement is the level of technical expertise needed to understand land-use plans. The complex technical data makes it hard even for professionals to follow planning, let alone local residents[120]. A further issue flagged by the wind industry is that local and regional planning authorities are understaffed. There are no dedicated personnel or resources for renewable energy planning and promoting community engagement[121]. Initiatives, such as Energieland2050, are seen as a remedy, but its impact is yet to be tested.

Practices, norms, or rules for benefit sharing

Benefit sharing related to renewable energy sources is aligned with Germany's Renewable Energy Law (§6 EEG, 2024). More specifically, for onshore wind energy installations and ground-mounted systems, **the municipalities within the 2.5 km radius of towers are eligible to receive 0.2 €cents per kWh for the quantity of electricity fed into the grid**[122]. If there are areas within this radius that do not belong to a municipality (municipality-free areas), the district responsible for these areas under state law is eligible[123]. As this is a voluntary commitment, §22b(6) also provides the federal states the power to issue further provisions on public participation and benefit sharing, increasing public acceptance (see below). In any case, renewable energy developers can be reimbursed by their respective grid operator for the sum paid to the local authorities, only if they have received EEG support for the underlying electricity volumes[124]. This is seen as a precautionary measure to prevent payments from being considered bribery for constructing the given project.

115 Malpert, Ralf, Servicestelle Wind Steinfurt, Energieland e.V.2050. Interview on 27.11.2024.
116 https://www.gesetze-im-internet.de/eeg_2014/BJNR106610014.html
117 https://recht.nrw.de/lmi/owa/br_vbl_detail_text?anw_nr=6&vd_id=21407&sg=0
118 https://www.windindustrie-in-deutschland.de/publikationen/aktuell/broschuere-gemeinsam-gewinnen-windenergie-vor-ort
119 Ibid.
120 Grauvogel, Christian. Koop Wind, Director. Interview on 08.11.2024.
121 ibid.
122 For onshore wind plants with a capacity above 1,000 kW, a further funding option can be applied according to with number 7.2 of Annex 2 EEG.
123 If several municipalities or districts are affected, the installation operators must offer payment to all of these in the case of onshore wind turbines.
124 This means that renewable energy projects under (e.g. a PPA) cannot reclaim this sum, see: https://www.windindustrie-in-deutschland.de/fachartikel/in-3-schritten-zur-rechtssicheren-beteiligung-von-kommunen

Beyond EEG provisions, some states enacted their own legislation on benefit sharing. One example is that of **Mecklenburg-Vorpommern with its *Bürger- und Gemeindebeteiligungsgesetz* (BüGembeteilG)**, where law ensures compensation from onshore wind developers to the local community (within 5 km of the installation). BüGem-beteilG stipulates two options[125] (Ministerium für Energie, Infrastruktur und Landesentwicklung Mecklenburg-Vorpommern 2016):

- At least 10% of the shares of the project must be held by the entitled municipalities and at least another 10% must be offered for sale to eligible residents. The purchase price of a share may not exceed €500. If this is declined by the local community, the developer can offer reduced electricity tariffs.
- The developer can offer an annual compensation payment and reduced electricity prices to eligible residents. However, this is optional. Municipalities may only use compensation for voluntary expenditure and not fulfill any financial obligations. However, they are not free to use the funds as they wish, but solely to increase the public acceptance of renewable energy.

Another example is that of **Brandenburg, where the *Windenergieanlagenabgabengesetz* (BbgWindAbgG)** entered into force in 2019. For all onshore wind projects, subject to the provisions of BImSchG and constructed after 2019, a yearly flat-rate levy of €10,000 per wind turbine is imposed on the developer. Funds will be distributed by the community located within a radius of 3 km from the onshore wind site to enhance the social acceptance of projects and not to fulfill any other financial obligations (e.g. operating costs of the municipality).

North Rhine-Westfalia recently introduced the BürgEnG (2023), which ensures resident participation in new projects. Investors, project developers, operators are mandated to present an offer and negotiate with local communities on citizen benefits and participation, the form of which can vary. For example, both entrepreneurial or financial participation through investment arrangements, reduced local electricity tariffs, or flat-rate payments to residents are viable options. In case the parties do not come to an agreement, locals can opt to receive 0.2 €cents per kWh and become equity investors (Substitute participation). If this path is voted against, then the local community may demand an "equalisation levy" of 0.8 €cents per kWh. Thus, North Rhine-Westfalia adds to the options and types of benefit sharing available to local communities.

The impact of benefit sharing regulations has been monitored and according to the local authority survey, 85% of local authorities are aware that there is a regulation on financial participation by local authorities. 59% claimed that they were basically satisfied with the system, but only 26 % are satisfied with its implementation. The main reasons for this are the voluntary nature of the scheme, the level of participation, which is perceived as (too) low, and the communication to the local authorities, which in some cases could be improved[126]. In addition, there is the fear that project developers will use the voluntary levy as leverage vis-à-vis local authorities to increase project acceptance.

On the other hand, federal states may introduce legislation imposing an additional (obligatory) levy adding to the patchwork of multi-layered rules and regulations governing not only benefit sharing but also community engagement. Overall, the additional levy may hamper the rapid deployment of renewable energy broadly speaking, with wind energy being of utmost concern[127]. Furthermore, there is no clear definition where the levy revenues should be directed and the administrative burden linked to paying the levy also remains unaddressed[128]. In any case, the introduction of a mandatory levy coupled with a participatory process on participation models (citizens' energy cooperatives, direct shares, electricity tariffs, etc.) and the local use of the corresponding revenues will strengthen the acceptance of new projects and can be deemed essential for distributional justice[129].

125 https://www.regierung-mv.de/serviceassistent/download?id=1579050
126 https://www.fachagentur-windenergie.de/fileadmin/files/Veroeffentlichungen/Beteiligung/FA_Wind_Solar_Kommunalbefragung_Paragraph_6_eeg.pdf.
127 For that reason, there are discussion of introducing a maximum cap on §6 EEG at 0.3 €cents per kWh.
128 Christian Grauvogel
129 Ibid.

Benefit sharing is also contingent on the economic situation of each state. So, a local resident in North Rhein-Westfalia in West Germany is likely to have a higher level of disposable income allowing them to purchase a share in a neighboring wind energy project worth €1,000, for instance, but this is less likely to be the case in Sachsen, in East Germany, where local communities tend to have a considerably lower capital. Therefore, benefit sharing options should be adapted to each respective socio-economic situation[120].

The NIMBY (Not In my Backyard) issue also must be underscored in the German context. Local financial participation can be seen as a lever for acceptance, but this applies to a limited extent to people who are fundamentally opposed to wind power. More specifically, only 40% are in favour of constructing new wind turbines in an area where there are currently no turbines. The acceptance rate is increased to 60% in areas where wind turbines are already located. NIMBY and public resistance is also fuelled by specific political parties e.g., the far-right party "Alternative für Deutschland" that are clearly against the deployment of wind power[131].

Offering ownership to locals is increasingly popular in various European contexts, but wind project developers are wary of the model in Germany as it reduces their control over their endeavors and reduces profitability. However, the matter remains to be tested and explored, as participative ownership structures are also assumed to higher social acceptance that can enable smoother execution, reduced costs, and increased profits[132].

Conclusion

Germany's renewable energy planning processes for wind and solar projects emphasise public participation and local involvement. National laws address the issue to some extent, but the matter is largely controlled by states that mandate structured public consultation stages. Citizens and organizations can provide feedback on land-use and zoning plans, contributing to transparent decision-making. This structured participation takes place in phases: an initial draft presentation for comments, followed by a revision phase. Some regions have dedicated agencies like the Service Unit Wind Energy in Steinfurt, which supports community engagement and transparency, reducing social conflict. Although the formal public involvement process is extensive, the complexity of technical data and understaffed local planning authorities pose challenges. Informal consultations, encouraged to promote early community engagement, aim to complement these processes, fostering trust between developers and local communities.

In terms of benefit sharing, Germany's Renewable Energy Law (§6 EEG) allows municipalities near wind and solar installations to receive a voluntary payment of 0.2 €cents per kWh of generated electricity. This framework encourages renewable energy developers and local authorities to negotiate benefit sharing agreements, supported by additional state laws in regions like Mecklenburg-Vorpommern and Brandenburg. These local provisions may include compensation payments or the option for residents to purchase shares in projects at subsidised rates, fostering local acceptance and providing direct economic benefits. However, debates persist over the adequacy and fairness of these payments, particularly as regional socioeconomic differences affect residents' ability to participate financially. Some critics fear that developers may use the voluntary levy as a tool to leverage local authorities, while developers express concerns that higher levies could slow renewable energy expansion.

130 Ibid.
131 Diermeier, Matthias / Fischer, Andreas / Mertens, Armin, 2025, Weniger Gegenwind vor Ort: Akzeptanz des Windausbaus, IW-Kurzbericht, Nr. 8, Köln
132 Ralf Malpert.

Spain

Executive Summary

Spain's renewable energy sector is expanding rapidly, but inconsistent practices are evident with regard to community engagement and benefit sharing. While some regions, such as Navarra and Catalonia, have implemented mediation and dialogue initiatives to foster collaboration, others face unaddressed challenges pertinent to land expropriation and limited community involvement. Benefit sharing mechanisms are generally limited to taxes and levies on renewable energy projects, in addition to which wind project developers can be obligated to enable resident ownership in some contexts. The latter have been introduced in regions, including the Balearic Islands, Catalonia, the Canary Islands and Navarra. The government is also considering the introduction of non-monetary evaluation criteria in renewable energy tenders (both for grid access and for remuneration), which would add to the mechanisms that ensure a just transition. Developers have also offered in-kind benefits to locals, ranging from job creation to infrastructure development. Challenges nonetheless remain, including the need for binding guidelines, measures to ensure stakeholder trust, and tailored approaches to address the unique needs of each territory. By addressing these gaps, Spain can maintain the energy transition's momentum and ensure that it is just.

Introduction

Spain's renewable energy sector is undergoing rapid growth, but the lack of binding national legislation on community engagement and benefit-sharing has created challenges to ensure the involvement of local communities and the just redistribution of wealth from renewable energy projects. While some regions have taken proactive steps to foster collaboration and equitable outcomes, practices vary widely, often leaving communities with limited influence over projects by which they are directly affected. Despite these challenges, innovative initiatives and best practices in some regions demonstrate the potential for meaningful community involvement and just benefit sharing. Research for this national case study was based on available literature (scholarly, reports, news articles, etc.) and interviews[133].

Community Engagement

Spain has a fragmented renewable energy regulatory framework. The constitutional division of competencies between the National State and the Autonomous Communities underpins this fragmentation. The seventeen Autonomous Communities have power over the legislative and administrative framework on renewable energy, despite the National State playing a structural role in the industry by laying the groundwork for mining and energy policy. Autonomous Communities are of exceptional importance with regard to community engagement given their authority to issue environmental authorizations for plants with an installed capacity below 50 MW or binding environmental reports for larger installations. Furthermore, their involvement further extends to other permits required for renewable energy projects, underlining their importance in the process[134]. Each Autonomous Community's municipalities are also quite important[135], largely due to their role in issuing urban planning permits.

133 Interviewees: Ismael Morales, Responsible of Climate Policies, Fundación Renovables, 08.11.2024; Jaume Moya, Eudemon Project, (written interview), 08.11.2024.
134 The administrative permits are requested at the National level (Mnisterio para la Transición Ecológica y el Reto DemográficoMinistry for Ecological Transition and Demographic Challenge) for installations with an installed capacity above 50 MW.
135 https://www.eclareon.com/wp-content/uploads/2023/12/RES-Simplify_National-Report_ES.pdf

There is no official legislation in Spain that specifically requires or promotes community engagement in renewable energy projects. The public consultation included in the environmental assessment is the only available channel of input for the public, but this is designed to gather the input from those directly impacted in the municipal area (§§ articles 33 to 44, Law 21/2013[136]). Raising questions or flagging issues, however, does not ensure that input will be accepted or that it will have any impact on the renewable project[137]. Meanwhile, RDL 20/2022[138] exempted renewable energy projects that have an installed capacity over 50 MW and are overseen by the National Government from the environmental assessment since 2022, except those that impact Natura 2000 areas or the sea (fast-track permitting). The government suspended mandatory public engagement and consultations in such cases, preventing the participation of society. Spanish environmental NGOs, including Greenpeace, Amigos de la Tierra, Ecologistas en Acción, SEO Birdlife and WWF opposed the regulation (in force until 31 December 2024), arguing that it obstructed public participation, while it didn't have a drastic positive effect on accelerating renewable energy permitting[139]. Civil society's pressure contributed to the phase-out of the fast-tracking environmental permitting in such a manner.

The issue of land expropriation without community engagement is also of paramount importance. There are specific examples where land expropriation took place without prior notice in accordance with the provisions of Law 24/2013 on the Electricity Sector[140]. One example is that of the solar photovoltaic park in Lucainena, Almeria in Andalusia. A sum was offered to landowners as compensation, but construction began in November 2022 without notice that construction would entail the expropriation of land for evacuation lines in relation to the project. All appeals filed by those affected were denied in that same month and they received a notice of expropriation on 27 July 2023[141]. A similar example is that of the Zumajo I & II projects (sub-50 MW power plants) in Jaén and Córdoba, where the projects were declared public utility by the Andalusian Government. This entailed forced expropriation and the cutting of some 100,000 olive trees, severely affecting the local community that depends upon olive cultivation[142].

There may be no binding legal tools to ensure just community engagement, but a number of guidelines have been introduced[143,144]. The issue is that these guidelines are non-binding and subject entirely to the project developer's discretion. Key guidelines include organizing meetings; talks; visits to existing plants with affected municipalities, provincial councils, and various stakeholders; aiming for transparency; and early community participation. These guidelines also underscore the importance of the promoter in explaining and familiarising the project with local citizens, technicians, and public administration representatives[145].

The importance of mediation is underscored in guidelines. This can extend beyond project developer-resident interactions to include relations between developers themselves. Conflicts may ensue when two parties wish to proceed with a similar project in the same area and have already committed resources. Finding a solution, such as agreeing to the development of one project or pooling resources to execute a joint endeavour, can be facilitated by hiring an independent mediator to reduce losses for all parties. This can also encourage the more effective use of local resources. The mediator need not be a single individual; in fact, regional mediators for renewable energy installations could be established in advance and include various experts (see the case of France). Impartial mediators can also help de-escalate conflict between developers and civil society organizations, such as nature conservation groups that seek to prevent negative effects on species and ecosystems.

136 https://www.boe.es/buscar/act.php?id=BOE-A-2013-12913&p=20230614&tn=2
137 Ismael Morales
138 https://www.boe.es/buscar/act.php?id=BOE-A-2022-22685
139 https://es.greenpeace.org/es/sala-de-prensa/comunicados/los-principales-grupos-ecologistas-reclaman-al-gobierno-que-retire-definitivamente-la-peligrosa-tramitacion-ambiental-expres-de-renovables/
140 https://www.boe.es/buscar/act.php?id=BOE-A-2013-13645
141 https://es.greenpeace.org/es/sala-de-prensa/informes/renovables-respetuosas-con-las-personas-y-la-biodiversidad-buenas-y-malas-practicas-en-la-implementacion-de-proyectos-fotovoltaicos-y-eolicos-en-suelo
142 https://revistajaraysedal.es/agricultores-andaluces-expropiados-100000-olivos-planta-fotovoltaica/.
143 Ibid.
144 https://www.unef.es/en/sello-sostenibilidad
145 Ismael Morales

Their role may include:

- Organizing visits, discussions, and meetings with the impacted localities and especially with potentially impacted economic sectors;
- Establishing local and community forums to choose sites;
- Establishing a website for the project's public participation.

Alternatively, the resolution of such problems can fall under the jurisdiction of authorities that can help mediate respective social conflict[146].

The efficacy of these tools and guidelines can be illustrated through **two best practice examples in the Navarra Autonomous Community and in Alt Penedès, Catalonia**, where authorities invoked mediators to facilitate dialogue as opposed to becoming directly involved and taking sides in both cases. The Directorate General of Industry, Energy, and Strategic Projects of Navarra started a mediation process between the spring and the fall of 2021 to establish a communication channel between the public, private interests, academic actors, and civil society, to foster dialogue. Participants included government departments, municipalities, private energy companies, associations, NGOs, and universities. The mediation helped identify common goals, such as decarbonization and climate change mitigation, and facilitated the development of joint proposals, including the update of Navarra's Energy Plan. Additionally, the process clarified administrative procedures, improving understanding among stakeholders about project application processes and the role of public participation. It ultimately reduced potential conflicts and promoted cooperation[147].

Mediation in the **Alt Penedès' case** relied on the Eudemon initiative (November 2021 to July 23) and conferences, workshops, and a public survey. As an outcome, stakeholders published a document on 'territorial consensuses', which covered common points of agreement, and launched a county-level Core Group. The Alt Penedès Group is composed of around fifteen people who participate as individuals (not as representatives) and relate to thirteen different entities (associations, platforms, unions, cooperatives, and municipalities) from different sectors (environmental-landscape, agricultural, social-cultural, administrative, business-cooperative). The Group's objective is to support the development of energy communities, mediate disputes pertaining to renewable installations, promote knowledge and awareness regarding the energy transition, as well as carry out communication and citizen engagement initiatives. In any case, it offers a starting point, but its operation is contingent upon specific factors, such as commitment of the members, expertise, and funding[148].

The non-binding nature of community engagement has rendered these subject to the project developer's discretion, with approaches quite varied and with significant caveats. Alongside the positive cases discussed above, community engagement is usually limited to cases where the project developer has an internal compliance policy[149].

The widescale use of community engagement has, however, faced a number hurdles, as EDS-SDSN Spain[150] shows:

- Cost increases and longer project development periods[151];
- Need for extensive stakeholder mapping, especially on a local level identifying the needs and preferences of the local actors;
- Ensuring trust between stakeholders;
- Intervention of professionals in socio-ecology, conflict prevention, and mediation;
- The particularities of the territories imply the need for ad hoc actions in each case[152].

146 Ibid.
147 https://reds-sdsn.es/wp/wp-content/uploads/2023/04/Renovables-y-Territorio-REDS.pdf
148 https://www.centresostenibilitat.cat/wp-content/uploads/2023/10/Eud_ENG_July23.pdf
149 Ismael Morales
150 https://reds-sdsn.es/wp/wp-content/uploads/2024/05/Hoja-de-Ruta-Renovables-con-el-Territorio_FINAL.pdf
151 Community engagement activities might be more time-consuming, but they can be carried out in parallel with the permitting process (or even prior to it) with the result of less local resistance.
152 Here the need for an early and meaningful public engagement process should be underlined.

Nevertheless, successful community engagement generally improves the permitting process and helps meet the needs of communities affected by photovoltaic or wind power plants. The negative public perceptions that multinational corporations and investment funds are harming the environment and exploiting it for purely economic purposes can and should be avoided[153], which is partially supported by community engagement, while it also offers an important tool to underscore the importance and benefits of energy cooperatives.

Benefit sharing

As in the case of community engagement, there are no provisions on a national level regarding benefit sharing. The Ministry for Ecological Transition and the Demographic Challenge[154] aspires to introduce Environmental sustainability, resilience, and local economic development as new award criteria for renewable energy auctions, but this is yet to materialise. Moreover, guidelines issued by Greenpeace[155] and UNEF[156], among others, can ensure the proliferation of just practices.

In the meantime, **decisions over benefit sharing lie within the jurisdiction of the Autonomous Communities and tend to fall within one of two categories: levies and in-kind provisions.** Levies are imposed on wind energy project developers and, in most cases, revenues are channeled to local communities. The **Autonomous Communities of Galicia, Valencia, Castilla y Leon y Castilla la Mancha and, more recently, Aragón** have introduced such taxes, while there is pressure from stakeholders in Catalonia to take action[157].

The level and approach of the levy varies depending on the Autonomous Community. For instance, Galicia, Castilla y Leon and Castilla la Mancha impose it on the number of wind turbines[158] (Law 8/2009[159])), Valencia introduced it based on the installed capacity[160] (€2.5 per MW), while Aragón on the tower height and rotor radius (Law 2/2024[161]). Autonomous Communities consider those levies as measures aimed to increase local acceptance and a mode of benefit sharing, because they specifically aim at providing compensatory payments to the municipalities affected by the installation of a wind turbine. However, their introduction has been highly contested and legally disputed by project developers, given that it adds to their costs[162,163].

The second group of benefit-sharing options is not strictly profit-sharing, but rather social participation in investment and, therefore, entails socialising the capital of a plant. Providing the **opportunity for citizens to participate in corporate renewable energy projects is mandatory at the regional level in some areas (Navarre, Catalonia, and the Balearic Islands)**.

In the Balearic Islands, the Climate Change and Energy Transition Law 10/2019, § 49[164], at least 20% of ownership must be offered to local residents or businesses, with an extension to neighbouring municipalities if local interest does not reach the 20% threshold, for renewable projects with an installed capacity of 5 MW or more.

153 Ismael Morales
154 https://www.miteco.gob.es/es/energia/participacion/2024/detalle-participacion-publica-k-677.html#:~:text=Consulta%20p%C3%BAblica%20previa%20para%20la%20modificaci%C3%B3n%20del%20R%C3%A9gimen%20Econ%C3%B3mico%20de%20Energ%C3%ADas%20Renovables
155 https://es.greenpeace.org/es/sala-de-prensa/informes/renovables-respetuosas-con-las-personas-y-la-biodiversidad-buenas-y-malas-practicas-en-la-implementacion-de-proyectos-fotovoltaicos-y-eolicos-en-suelo/
156 https://www.unef.es/en/sello-sostenibilidad
157 https://en.renovablesverdes.com/the-small-Catalan-municipalities-ask-for-a-wind-canon/
158 https://www.elbierzodigital.com/arcas-junta-ingresan-30-millones-canon-eolico-castilla-leon/
159 https://www.atriga.gal/informacion-tributaria/tributos/canon-eolico/normativa-asociada/-/asset_publisher/9EtUaQVpeRdz/content/lei-8-2009-do-22-de-decembro-pola-que-se-regula-o-aproveitamento-eolico-en-galicia-e-se-crean-o-canon-eolico-e-o-fondo-de-compensacion-ambiental
160 https://www.elperiodicomediterraneo.com/comarcas/2020/07/12/supremo-obliga-eolicas-pagar-canon-40777232.html
161 https://www.boe.es/diario_boe/txt.php?id=BOE-A-2024-11538
162 https://en.renovablesverdes.com/the-small-Catalan-municipalities-ask-for-a-wind-canon/
163 https://www.elperiodicomediterraneo.com/comarcas/2020/07/12/supremo-obliga-eolicas-pagar-canon-40777232.html
164 https://www.boe.es/buscar/act.php?id=BOE-A-2019-5579

To improve participation, the government of the Balearic Islands proposed to create three types of social participation options: participation in the company as a financial product, participation in the plant through a physical link to the property, and the establishment and participation of local energy communities. This last option enables access to favourable priced energy (self-consumption) and the participation of public bodies as well[165].

In **Catalonia**, Decree Law 24/2021[166] requires promoters of onshore wind farms above 10 MW and photovoltaic plants above 5 MW on rural land to offer at least 20% of project ownership or financing to local residents and businesses prior to the project's specifics being publicly announced, with individual participation capped at 10%.

Apart from financial participation, there are numerous cases where project developers cooperated with local authorities and local stakeholders to increase benefit-sharing through non-monetary means. Aspects such as local development and creation of new jobs in the community have been highlighted and implemented throughout the whole project cycle[167]. For example, the construction of the **solar photovoltaic plant in Talayuela (Cáceres)** employed 262 locals out of 900 people[168]. Additionally, 29% of the personnel employed were locals (more that 330 persons) during the construction of the **wind farm of Parque eólico Tico Wind (Villar de los Navarros, Aragón)**. In addition, the project developer, Endesa, has facilitated the training of more than 1,500 people through courses related to the prevention of occupational risks, solar panel assembly and Operation and Maintenance (O&M) courses for its plants[169].

A further example is the **ACCIONA's project in the municipality of Barásoain, Navarre**. The Barásoain Experimental Wind Farm, is the first wind power plant combined with electricity storage. In addition, the Barásoain wind turbine assembly plant is located nearby. **ACCIONA's Energy division has 549 employees in Navarre, plus another 150 people in charge of the operation and maintenance of its wind farms.** The municipality has since been awarded the Eolo 2019 Prize for Rural Integration of Wind Power in Spain, granted by the Spanish Wind Energy Association (AEE)[170]. This speaks to the point that it is essential for the sector to create long-term good jobs in support of regional development.

A project in the tiny village of **Muras, Lugo, Galicia[171], offers a case, where local authorities were able to turn a destructive endeavour into a good case**. The twenty wind farms (381 wind turbines, 198 MW) initially caused destruction by damaging Natura 2000 areas and the developers expropriating land, but has since been altered and now the Muras City Council has been able to use the EUR 900,000 from the Property and Real Estate Tax to improve the well-being of citizens through: aid for the payment of electricity bills for SMEs and households, especially the most vulnerable; promote births; improve social services; and develop the water supply network. The cases in Cedillo and Muras show that benefits of projects can and should be shared with locals, but it is also essential that authorities remain vigilant and expect benefits proportional to the scale and revenue of the given project.

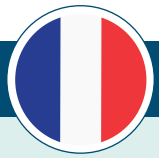
165 https://reds-sdsn.es/wp/wp-content/uploads/2023/04/Renovables-y-Territorio-REDS.pdf
166 https://www.boe.es/ccaa/dogc/2021/8531/f00001-00012.pdf
167 For an extensive list: https://reds-sdsn.es/hoja-de-ruta-renovables-con-el-territorio/
168 https://www.proyectos.statkraft.es/talayuela/
169 https://www.diariodelaltoaragon.es/noticias/aragon/2021/09/29/mas-de-330-trabajadores-en-la-construccion-de-tico-wind-1522690-daa.html
170 https://barasoain.net/wp-content/uploads/2019/05/Premio-Integración-Rural-de-la-Eólica-a-Barasoain-.pdf
171 https://es.greenpeace.org/es/sala-de-prensa/informes/renovables-respetuosas-con-las-personas-y-la-biodiversidad-buenas-y-malas-practicas-en-la-implementacion-de-proyectos-fotovoltaicos-y-eolicos-en-suelo/

Conclusion

Spain's renewable energy sector faces significant challenges in promoting community engagement and equitable benefit sharing. This has led to inconsistent practices, with some projects bypassing public consultation and others facing opposition due to land expropriation and limited community participation. However, regional initiatives, such as those in Navarre and Catalonia, demonstrate the potential for mediation and dialogue to bridge gaps between developers, local authorities, and residents. These efforts highlight the importance of trust, transparency and inclusive decision-making processes to ensure that renewable energy projects are aligned with community needs and priorities.

Sharing the benefits of renewable energy projects is not regulated across the board but has been addressed in some regions. Levies on wind energy in certain cases have created a vital stream of revenues for Autonomous Communities, but these have been heavily contested by project developers. Furthermore, mandatory citizen participation in renewable energy ownership, as seen in the Balearic Islands and Catalonia, offer models for ensuring that local communities receive tangible benefits from renewable energy developments. In addition, project developers have demonstrated how job creation, training programmes and financial savings for residents can foster local support and socio-economic development; albeit, in-kind benefits should always be assessed against the scale of the project to ensure just redistribution. Government ambition to weigh non-monetary aspects in the evaluation of tenders is a step in the right direction as would the more systemic application of guidelines and best practices.

France



Executive Summary

France has improved its legislative and regulatory framework to promote community involvement and benefit sharing in renewable energy projects. Key developments include the creation of regional energy committees, the introduction of *acceleration zones* that draw on local input, as well as the growing popularity of certification schemes and the inclusion of community engagement into association charters. These measures are underpinned by the Climate and Resilience Law (2021[172]) and the Renewable Energy Acceleration Law (2023[173]), which empower communes to take the lead in renewable energy planning and benefit sharing. Moreover, the means that enable financial and governance-related participation of locals in renewable energy projects have also proliferated in recent years. Nevertheless, challenges such as administrative resource gaps, the need to incentivize community engagement, operationalise benefit sharing, and the under-representation of certain renewable energy technologies (primarily onshore wind) still need to be addressed.

Introduction

France has made progress on the community engagement and benefit sharing aspects of renewable energy projects. As legislative acts to accelerate the energy transition proliferated, they have increasingly incorporated measures that include and respond to input provided by locals in addition to which benefit sharing has taken various forms, including financial incentives and support for participatory governance models. The latter have been in place for several years. This report provides an overview of the community engagement and benefit sharing frameworks in France, highlighting the relative progress that country has achieved in a European context, but also discussing the challenges that sustain. It draws on the analysis of available scholarship and reports, alongside interviews with relevant stakeholders[174].

Community Engagement: increasingly mandated

The French state introduced legal measures to enhance community engagement in recent years. Community engagement is pronounced in identifying *acceleration zones*, but also features strongly through various committees and bodies in other areas. **The first noteworthy legal measure was Law No 2021-1104 on Climate and Resilience**[175], which established:

- Regional Energy Committees: these committees, which include local elected officials, are tasked with promoting dialogue, particularly with communes, on regional energy-related issues;
- Regional Renewable Energy Development Targets: regional targets for renewable energy expansion will be set by decree, based on proposals from regional energy committees and in consultation with the relevant regional councils. Targets must align with national legislative objectives;
- Common Monitoring Tools: a standardised methodology and shared indicators will be established to enable joint tracking of the implementation of regional renewable energy development goals;
- Alignment of Regional Plans: regions are required to align their own regional planning documents with the regional climate and renewable targets within six months of the decree defining these objectives being published.

172 https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000043956924
173 https://www.legifrance.gouv.fr/loda/id/JORFTEXT000047294244/2024-11-18/
174 Interviewees: Marion Richard, Énergie Partagée, 06.12.2024; Camille Lorpin, Project Manager European cooperation and innovation at Enercoop, 03.12.2024.
175 https://www.ecologie.gouv.fr/sites/default/files/documents/Guide_Elus_AOUT2023_Planification_energies_renouvelables.pdf

More recently, Art.15 of Law No 2023-175[176] on the acceleration of renewable energy production raised local and regional renewable energy planning on the political agenda. Communes can now designate acceleration zones for renewable energy projects, but a key requisite for this is to hold a consultation with residents[177]. They can tailor these zones to suit the unique characteristics and renewable energy potential of the respective area. Once defined at a local level, the acceleration zones are monitored at a higher, regional administrative level. If the sum of the acceleration zones is enough to attain the regional renewable energy targets, then local authorities are allowed to proceed in identifying exclusion zones.[178]

Challenges have appeared in defining acceleration zones[179]. In November 2024, 637,000 acceleration zones were registered by 10,500 municipalities/communes, which represented 1/3 of municipalities/communes, covering 110,000 km2, or 19% of the national surface area[180]. These numbers are somewhat underwhelming, but communes are engaged with the matter[181]. The challenge is the lack of personnel. More specifically, there is a shortfall of 0.6 full-time equivalents (FTE) in positions at the intermunicipal level to ensure the deployment of renewable energies by 2025 and between 5–10 FTEs at the regional level. And that's not counting the additional needs arising from the application of the law on renewable energies[182]. Thus, community engagement is indirectly hampered by the insufficient administrative capacities that could organise the undertaking. The "Les Générateurs" network, co-funded by ADEME[183], helps fill the gap in administrative capacities. However, the advisors are not enough (70 across France, for 40 FTEs), and requests from communes are rapidly increasing.

Project committees, as defined by Decree no. 2023-1245, expand the scope of the actors involved in planning related to renewable energy projects. They include the project developer, communes, EPCI[184], and TSO/DSO representatives, which must meet at least once before the first authorization application to discuss the project's objectives, characteristics, socio-economic impacts, cost estimates, capacity, and environmental and land use impacts[185].

An emphasis on community engagement has expanded to beyond legal requirements as project developers increasingly seek to obtain labels and participate in charters. For example, the **ADEME-supported label "Énergie Partagée" assesses projects according to fifteen criteria** divided into five areas: local interest, local dynamics, ethical and socially responsible finance, shared governance, and ecology[186]. 392 projects have acquired the label with a cumulative capacity of 791 MW and production of 1.555 GWh/ year[187], indicating that the label is sought by a rising number of developers and operators.

Another example is the **charter approved by AMORCE[188] and France Renouvelables**[189] in November 2022, which **introduces high standards and guarantees greater synergy between local authorities** and developers and/or operators. This extends to all phases of a wind energy project development, and it underscores the importance of engaging locals in a manner that ensures open, complete, and continuous communication on the renewable energy project, collaboration between stakeholders, and the promotion of local supply chain[190].

176 https://www.legifrance.gouv.fr/loda/id/JORFTEXT000047294244/2024-11-18/
177 Requirements on this are lacking and are limited to consultation with the public in accordance with the procedures they freely determine.
178 In case the regional renewable energy targets are not attained, then communes are obliged to define additional acceleration zones with the support of the Departments (départements) and the Regions.
179 A further issue with acceleration zones is a clear preference from communes towards solar photovoltaics, while onshore wind is underrepresented, included in only 1,500 acceleration zones. Revisions for further onshore wind deployment will be mandated by the regional authorities.
180 https://amorce.asso.fr/actualite/deuxieme-anniversaire-des-zones-d-acceleration-des-enr-ou-en-sommes-nous"
181 https://cler.org/zones-acceleration-energies-renouvelables/
182 Ibid.
183 Agence de la transition écologique - the French ecological Transition Agency.
184 EPCI - "établissement public de coopération intercommunale" is an administrative structure that brings together several municipalities in order to exercise some of their powers jointly. For more, see: https://www.collectivites-locales.gouv.fr/institutions/les-epci
185 https://www.banquedesterritoires.fr/energies-renouvelables-le-decret-sur-le-fonctionnement-des-comites-de-projet-est-paru
186 https://energie-partagee.org/wp-content/uploads/2021/10/Guide-Labellisation-Energie-Partagee-web-pages.pdf?_gl=1*2ext3h*_up*MQ..*_ga*MTIxNjI5Njg4NC4xNzMzNDc0NDk0*_ga_0QR66DZCGL*MTczMzQ3NDQ5My4xLjAuMTczMzQ3NDQ5My4wLjAuMA
187 https://energie-partagee.org/decouvrir/energie-citoyenne/chiffres-cles/?_gl=1*1ddxgc8*_up*MQ..*_ga*MTYzMjcyODcwNi4xNzMzNDc3MTU4*_ga_0QR66DZCGL*MTczMzQ3NzE1OC4xLjAuMTczMzQ3NzE1OC4wLjAuMA
188 AMORCE is the national association of local authorities, associations and companies for the management of waste, energy and heating networks. For more, see: https://amorce.asso.fr/
189 France renouvelables is the association representing renewable electrical energies in France. For more see: https://www.france-renouvelables.fr/
190 https://amorce.asso.fr/documents/1216/download

Benefit sharing: taxation is gradually complemented

Benefit sharing in France is largely available through local authorities receiving tax revenues and financially participating in renewable energy projects that they host. Wind power plants are generally subject to three different taxes[191]:

- *Contribution Economique Territoriale* (CET) composed of:
  - The corporate real estate tax (*cotisation foncière des entreprises* – CFE), based on the rental value of the land,
  - The company value-added contribution (*cotisation sur la valeur ajoutée des entreprises* – CVAE) based on the project developer's turnover;
- Property tax (*taxe foncière sur les propriétés bâties*);
- Flat tax on network infrastructure companies (*impôt forfaitaire sur les entreprises du réseau – IFER*).

Of the three tax forms, IFER is the most relevant in terms of local redistribution, since it is allocated between the commune, the Department (*département*) – the administrative authority above the local community but below the region – and the EPCI. The 2022 IFER rate for wind power was set at €7,820 per MW of electricity generation capacity installed from 01/01/2022 onwards[192], with communes and EPCI receiving approximately 70% of the tax and the Department the remaining 30%[193].

A further legal tool enabling redistributional justice is the law on the acceleration of renewable energy production (Art. 93 of Law No 2023-175), which stipulates that winners of renewable energy tenders will have to finance projects related to energy transition and biodiversity protection, with the amount of funding defined by decree. 85% of the funds will be directed to the communes/EPCI for energy transition related activities, while the remaining 15% to biodiversity conservation actions. One of the main challenges however is that the government has not yet issued a decree on the exact level of what the developer must provide for local causes. The Regulatory Commission of Energie (Commission de régulation de l'énergie – CRE) proposed a levy varying from €83.13 per MWh for ground-mounted photovoltaics and €86.94 per MWh for onshore wind to €101.24 per MWh for rooftop photovoltaics[194], but this has not yet been implemented. The lack of clarity adversely impacts project developers due to the ensuing market instability and the communes which could benefit from redistributed funds.

Financial participation in projects is also gaining traction in France, where communes hosting renewable energy projects participate through lease agreements and by investing in projects. Locals can lease land to project developers and they can further increase their involvement by investing capital in the renewable energy[195]. They can do so by the project being incorporated as a public limited company or as participants of a simplified joint-stock company.

The state has also been keen to support local involvement through direct support and by designing tenders accordingly. Projects that feature local investment were eligible for further financial support from the *Ministère de la Transition écologique, de l'Énergie, du Climat et de la Prévention des risques* (MTE) until 2020. MTE provided an additional €1 per MWh in support if communes provided 10% of the project financing, and the subsidies grew to €3 per MWh if this rate reached 40%[196]. This scheme has since been replaced by one that rewards tendering projects with up to 5 points (out of 100) based on their ownership and financing is structured, with crowdfunded projects eligible for 2 points and those with shared governance for even more[197].

191 https://energie-fr-de.eu/fr/manifestations/lecteur/conference-en-ligne-sur-le-developpement-eolien-terrestre-et-lacceptabilite.html
192 https://www.france-renouvelables.fr/wp-content/uploads/2023/10/Wind-Observatory-2023.pdf
193 Ibid.
194 https://www.cre.fr/fileadmin/Documents/Deliberations/import/24011_2024-04_Avis_Decret_Partage_Valeur.pdf
195 https://www.legifrance.gouv.fr/codes/texte_lc/LEGITEXT000006070633/
196 https://energie-fr-de.eu/fr/manifestations/lecteur/conference-en-ligne-sur-le-developpement-eolien-terrestre-et-lacceptabilite.html
197 https://www.ecologie.gouv.fr/politiques-publiques/energies-renouvelables-citoyennes#feuille-de-route-pour-favoriser-le-developpement-des-enr-citoyennes-1

A best practice on benefit sharing is the Centrales Villageoises initiative that was launched in 2011 and established as an association in 2018. It offers a model for **developing citizen-led, community-owned renewable energy projects**, primarily focusing on solar photovoltaics. It fosters local collaboration and engagement while promoting sustainable energy production and territorial value sharing. The Association is currently active in 73 territories, having installed more than 520 PV plants with more than 7,300 shareholders and €16 million invested[198]. It underscores the importance of engaging communities quite broadly and ensuring that benefits can be redistributed locally, which hinges on having local citizens, municipalities, and companies as shareholders.

Conclusion

France's ambition to integrate community engagement and benefit sharing into renewable energy planning and project execution highlight the critical role of communes and citizens in driving the energy transition. Measures, such as the creation of regional energy committees and involving locals in planning acceleration zones, provide local actors with the ability to shape project outcomes. In doing so, state measures help align renewable energy development with regional and national goals. Meanwhile, further tools, such as certification schemes and the AMORCE/France Renouvelables Charter aims to provide the means for a well-defined engagement between locals and project developers. Mechanisms such as tax revenue sharing and participatory financing ensure tangible benefits for host communities as well. The evolving framework represents a step forward, but challenges such as administrative resource gaps, the need to incentivize community engagement, operationalise benefit sharing, and the under-representation of certain renewable energy technologies (primarily onshore wind) still need to be addressed.

198 https://www.centralesvillageoises.fr/centrales-villageoises-local-citizen-owned-energy-communities

Italy

Executive Summary

Italy's renewable energy expansion continues, but persistent gaps remain in community engagement and benefit-sharing. While recent legislative reforms (Legislative Decree 190/2024) have introduced a more comprehensive regulatory framework for the development of renewable energy power plants, even formalising "revenue-sharing" mechanisms (e.g. territorial compensation) between project developers and municipalities, community involvement remains secondary and is largely limited to procedural participation. Moreover, too much discretion still rests with project developers and municipalities regarding benefit-sharing, leaving communities with limited direct involvement or control over how benefits are distributed. Public participation remains largely procedural and confined to early-stage project permitting, falling short of enabling continuous, meaningful engagement. For Italy to deliver a fair and inclusive energy transition, the recently approved regulatory framework must be strengthened to guarantee systematic community engagement, ensure fair benefit-sharing, and help secure local support for the renewables rollout.

Introduction

Italy' renewable energy sector has seen dynamic growth, but the current regulatory framework, despite being heavily modified recently (Legislative Decree 190/2024), still requires significant development to enable a just transition. Lawmakers introduced several measures in recent years to address critical gaps and facilitate inclusive decarbonisation, but they often remain fragmented solutions that require further action. Community engagement in renewable energy projects is limited, as public participation is largely restricted to initial project phases and offers minimal opportunities for continuous engagement. It is also restrictive in its scope, as it primarily applies to large projects. The benefit sharing mechanism in effect was only recently formalized, whereas it was previously considered optional, resulting in inconsistent practices and limited benefits for local communities. To explore these caveats in-depth the following analysis draws on scholarly and policy literature, the legal framework governing renewable energy in Italy, interviews and essential insights and revisions by the experts[199].

An evolving but limited community engagement framework

Community engagement with regard to renewable energy projects in Italy is significant if the projects are subject to a "Screening for Environmental Impact Assessment" or directly to "Environmental Impact Assessment" (EIA). In these cases, community engagement is primarily governed by the Environmental Code (Legislative Decree No. 152/20061)[200] and related regional regulations. Further relevant legal acts include the Consolidated Act on Renewables (Legislative Decree 190/2024, *Testo Unico delle Rinnovabili*)[201], the National Recovery and Resilience Plan, and the new Public Procurement Code (*Codice degli Appalti*) Legislative Decree 36/2023[202]. The Environmental Code provides that participation through EIA procedures should materialise in one of three forms: **public debate, public inquiry, or in a documentary form**.

199 Interviewees: Attilio Piattelli, President of Coordinamento FREE (Coordination of Renewable Sources and Energy Efficiency), 31.01.2025; Anonymous, Expert, Enel, 10.12.2024: insights and revisions by Katiuscia Eroe from Legambiente, Silvia Lazzari and Mariagrazia Midulla from WWF Italia, and renewable energy expert Tommaso Polci

200 https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:2006-04-03;152

201 https://www.normattiva.it/esporta/attoCompleto?atto.dataPubblicazioneGazzetta=2024-12-12&atto.codiceRedazionale=24G00205

202 https://www.normattiva.it/esporta/attoCompleto?atto.dataPubblicazioneGazzetta=2023-03-31&atto.codiceRedazionale=23G00044

While the first two instruments are rarely used, documentary participation is always applied to projects subject to EIA or Screening. Meanwhile, public debate established by the new **Public Procurement Code** is only mandatory for industrial plants, settlements, and energy infrastructures involving total investments exceeding €300 million, excluding VAT, for the entire set of contracts involved, making its applicability relatively rare. Public debates cannot exceed 120 days, depending on the significance of the project. Requests for initiating a public debate can be made inter alia by the Presidency of the Council or ministers directly involved in the project; the regional, provincial, or municipal council concerned; one or more municipal councils or a union of municipalities representing a defined number citizens[203]. That being said, cases with regard to renewable energy projects are regulated by acts tailored to the sector.

Even when initiating **participatory processes through public inquiries**, the results are not always positive. For example, even when requests are submitted to the Ministry, they are not always granted, as illustrated by the Sardinia case and the Mistral offshore wind farm. In this case, the Municipality of Alghero requested a public inquiry during the EIA process due to significant controversy and local opposition. However, the Ministry (MASE) rejected the request, arguing that sufficient input had already been gathered through 35 observations from citizens, public bodies, and associations, and that the ongoing EIA would be decisive. Yet, the EIA and public inquiry processes should be complementary, not exclusive. A transparent and formal public participation process could have provided a more nuanced project assessment and help address unfounded opposition to the endeavour.

A successful example is **the public inquiry carried out by the Tuscany Region for the Monte Giogo di Villore wind farm project**, now under construction in the municipalities of Vicchio and Dicomano, proposed by AGSM Verona S.p.A. In this case, citizens, committees, associations, and local administrations strongly opposed the construction of the plant. Through the public inquiry – conducted online due to the pandemic of Covid-19 – citizens, associations, and administrations participated in long meetings that overcame non-bureaucratic obstacles, producing a final report of over 150 pages outlining the regulations, results, minutes, and all discussed elements.

Documentary participation is regulated by Articles 19 and 24 of the **Environmental Code**, with specifics dependent on whether a Screening or an EIA is applicable. Both procedures may fall under the competence of the state (Ministry of Environment and Energy Security) or the regions and autonomous provinces, depending on the size and technology of the project. The competent authorities are mandated to ensure transparency and facilitate public involvement by publishing preliminary environmental studies and related documentation, notifying stakeholders, and making all procedural documents accessible to the public. The key objective is to identify potential environmental impacts, propose mitigation strategies, and incorporate stakeholder input.

An EIA also enables public participation at multiple stages of project development by granting access to environmental studies and related documents, submitting written or electronic observations during a 30-day consultation period, and reviewing final decisions, including the reasoning provided by authorities. Stakeholders can submit observations through digital platforms, such as the so-called "Citizen Space"[204] managed by the Ministry or by presenting a written document to the relevant authority. There are no specific guidelines on how these should be written, leaving it free to interpretation. Additionally, no summary on these inputs and responses that could highlight which observations were addressed and accepted by the Ministry are published, limiting one's ability to discern the impact of local feedback. However, these procedures are mandatory only for utility-scale renewable energy projects, limiting their scope.

203 at least 100,000 citizens; at least 100,000 voting citizens from the affected area; at least one-third of citizens from islands with more than 10,000 inhabitants or mountain municipalities.
204 https://va.mite.gov.it/it-IT/comunicazione/cittadino

Other forms of participation are provided in the **Strategic Environmental Assessment** (SEA)[205], which does not apply to individual projects but to plans and programmes with potential environmental impacts, including regional energy plans.

A recent change in the overarching legal framework was introduced through the **Consolidated Act on Renewables** (Legislative Decree 190/2024, *Testo Unico delle Rinnovabili*) that came into force in December 2024 to simplify administrative procedures for renewable energy projects. This defines three permitting pathways based on project characteristics (Article 6):

- Free Build Approval (*Attività Libera*): applies to small-scale projects that do not require special permits;
- Simplified Authorisation Procedure (*Procedura Autorizzativa Semplificata*, PAS): applies to medium-scale projects;
- Single Authorisation Process (*Autorizzazione Unica*, AU): applies to large-scale renewable energy projects that require regional approval, public consultation and environmental assessment.

The goal of the Consolidated Act is to streamline authorisation procedures for renewable energy projects, emphasising the designation of suitable areas for development. This aims to accelerate the development of renewables, but it only provides limited provisions for citizen participation in decision-making by engaging them during the planning stage and it has a limited impact on small- and medium-sized installations. Thus, the primary community engagement mechanisms remain linked to the environmental assessment where public consultation is mandated. **Projects undergoing the Single Authorization Process within this framework are subject to other participation mechanisms**, as the procedure takes place through Service Conferences (*Conferenze dei Servizi*), during which environmental associations and interested parties can submit comments and review the project, but this features a lower degree of publicity.

Finally, regional regulations may also provide further participation options, such as those in Tuscany (Law No. 69/2007, "Rules for promoting participation in the formulation of regional and local policies"), Emilia Romagna (Law No. 3/2010), and Umbria (Law No. 14/2010). However, the regional nature of these limits the impact of these laws to the given jurisdiction, which also introduces complexity for developers unfamiliar with the given region-specific requirements.

A key limitation of the Italian framework is that public participation is largely restricted to initial project development phases, limiting meaningful local feedback. Another challenge arises from the overlapping responsibilities of regional and national authorities. This multi-layered governance structure leads to confusion and delays, complicating community engagement efforts. In practice, community engagement often stops at regulatory compliance, with project developers left to decide whether to go beyond minimum legal requirements. While some companies propose additional engagement measures, few are designed to foster genuine public participation or open, constructive dialogue. Approaches also vary widely—from closed-door meetings with experts, associations, or municipal representatives, to occasional public meetings with local communities.

Environmental assessment frameworks (e.g. EIA or SEA) may offer procedural participation, other legislative acts[206] can further enhance community involvement into the project design and operation phase, particularly through Renewable Energy Communities (RECs). These acts provide a legal basis to go beyond the measures required by environmental assessments and granting communities an active role in shaping projects and benefiting from them, rather than limiting participation to feedback during permitting stages (i.e. those discussed above)[207].

205 Articles 6–14 of the Environmental Code

206 Legislative Decree No. 199/2021 and Legislative Decree No. 28/2011, amongst others.

207 For instance, Legislative Decree No. 28/2011 mandates the creation of an IT portal managed by the Manager of Energy Services (Gestore dei Servizi Energetici, GSE) to provide information on renewable energy incentives and support local authorities in promoting renewable energy projects. Legislative Decree No. 199/2021 enables the legal framework to promote self-consumption, empowering citizens to generate, share, and benefit from renewable energy; shaping projects in their vicinity.

Environmental organisations play a significant role in fostering proactive community engagement. For example, Legambiente, one of Italy's most active environmental groups, has been instrumental in mediating between developers and communities to ensure projects are aligned with local needs, advocating for regulatory improvements that promote energy-sharing mechanisms and citizen participation, as well as providing public education to counteract misinformation and resistance to renewable energy. However, the role of environmental groups is not mandatory, so their impact largely depends on regional engagement strategies and project-specific negotiations.

Benefit sharing

Italy's approach to benefit-sharing in renewable energy projects is evolving. Benefit sharing schemes were purely voluntary measures undertaken by project developers until recently, but lawmakers have begun to introduce acts that formalise these processes and provide mostly monetary benefits to local municipalities.

Before the recent legal update, provisions related to environmental compensation from renewable energy projects[208] left discretionary room for the application of such compensatory measures. Benefit sharing relied on voluntary initiatives in which some companies offered voluntary compensation to municipalities, usually equalling approximately 3% of annual revenue. The sum and the allocation of the compensation was however not discussed with the local population, unless this was specifically initiated by the municipality or the company. Beyond the sum regularly being seen as too small by locals when considering the profits investors acquired from projects, benefits were frequently earmarked for the construction or restoration of roads, the renovation of buildings, but rarely provided benefits to the local population directly or allowed them to become stakeholders in the endeavour, through measures, such as reductions in energy costs, investment in the plants, and so on.

Lawmakers have since introduce measures to facilitate benefit sharing, most prominent of which was addressed in the recent **Consolidated Act on Renewables** (Legislative Decree No. 190/2024) that came into effect on 30 December 2024. The regulation not only made environmental compensation payments by operators mandatory, but also extended this obligation from utility-scale plants under the "Single Authorization" regime to smaller ones – those with an installed capacity exceeding 1 MW – authorised through the Simplified Authorization Procedure (*Procedura Abilitativa Semplificata*, PAS). For these latter projects, compensation is between 2%–3% of the annual revenue generated by the renewable energy plant, while, for the former, the compensation amount is not specified but subject to negotiation between the developer and impacted municipalities. These new legal provisions create a more predictable and transparent framework for benefit sharing. However, key challenges persist: municipalities remain the primary recipients of benefits with no formal mechanism for direct community involvement and compensation sums tend to be seen as inadequate by locals.

205 Articles 6–14 of the Environmental Code
206 Legislative Decree No. 199/2021 and Legislative Decree No. 28/2011, amongst others.
207 For instance, Legislative Decree No. 28/2011 mandates the creation of an IT portal managed by the Manager of Energy Services (Gestore dei Servizi Energetici, GSE) to provide information on renewable energy incentives and support local authorities in promoting renewable energy projects. Legislative Decree No. 199/2021 enables the legal framework to promote self-consumption, empowering citizens to generate, share, and benefit from renewable energy; shaping projects in their vicinity.
208 Article 12 of Legislative Decree No. 387/2003 and detailed in Annex 2 of the Ministry of Economic Development's Guidelines from 2010

A practice that is becoming more widespread is that of **equity participation in projects**. For example, the 54 MW **wind farm built by RWE in San Severo**, in the province of Foggia offers a case in point. The installation, which consists of 12 turbines, totalling 4.5 MW, has seen the direct involvement of citizens, who have had the opportunity to invest in the installation with amounts between €250 and €5000, obtaining a guaranteed annual yield of up to 9% gross over a period of 24 months. In total, the shared investment reached €200 thousand.

In a similar vein, the **photovoltaic solar plant built in Trino** (Vercelli) drew investment from locals. The installation consists of approximately 160,000 double-sided photovoltaic modules adding up to 87 MW coupled with a storage system of lithium ion batteries (BESS) of 25 MW. Citizens of the given municipality became involved through the Renewable Choice programme, which promotes an active and concrete participation of local communities in the development of renewable energies.

The Collective Wind Turbine of the èNostra Cooperative

The **cooperative èNostra** has pioneered innovative models of participation and benefit sharing in renewable energy development, specifically through collective RES plants. Members of the cooperative, located across Italy, **contribute financially to the construction of renewable energy installations and, in return, benefit from a fixed and significantly reduced electricity tariff** for 12 years.

One example is the **Gubbio Wind Turbine, built through collective investment of €2.2 million by 900 of èNostra's members**. The plant, which began operating in 2021, has an installed capacity of 900 kW and generates approximately 2 GWh per year. èNostra has also worked to establish a Renewable Energy Community (REC) in Gubbio, where the plant is located. The REC aims to distribute the turbine's energy to local citizens who will jointly benefit from state subsidies and reinvest savings into local social projects. The REC, still under development, has involved the Municipality of Gubbio, local associations, businesses, and community members. To date, around 10 public meetings have been held, each attracting 30–50 active participants.

This case illustrates how coupling a collective plant with the formation of a REC can combine national-level participation with local benefit sharing, engaging hundreds of people who will directly benefit from the project for years to come. The experience highlights how RECs can serve as key tools to enhance community benefit sharing.

Conclusion

Italy's approach to community engagement and sharing the benefits developers reap from renewable energy projects is evolving but is far from complete. The renewable sector incumbents have generally developed projects through a top-down approach, whereby the developer proposes the project, applies for authorisation, and only then does public consultation begin. And, they typically end shortly thereafter, limiting locals' involvement during later phases of development. Community involvement is largely limited to the Environmental Impact Assessment, providing a narrow window for public input, and the approach tends to reflect a consultation process rather than community engagement which allows meaningful dialogue and leads to change in the project developer's approach or the parameters of the power plant.

The lack of a comprehensive legal framework for benefit sharing and the limited opportunities for public participation inhibit the materialisation of a just transition. New legislation offers a small step forward by formalising the compensation for municipalities, but this still falls short of a comprehensive and just regulatory framework. Large margins are still left to the goodwill of project developers in the distribution of benefits, and to the municipalities' ability to identify the needs of their communities. Compensation is not always perceived as just; thereby, failing to meet local expectations and eroding local support for new renewable projects. These significant gaps highlight the need for broader public participation mechanisms to ensure that renewable energy projects make a meaningful contribution to local development and garner genuine community support.

Poland

Executive Summary

In Poland, public participation in renewable energy projects remains limited due to both restrictive legislation and a general lack of public awareness regarding involvement opportunities. Public involvement is primarily limited to mandatory public consultations, which are organized to fulfil legal requirements, particularly those related to the Environmental Impact Assessment (EIA) procedure. Polish regulations mandate the inclusion of multiple stakeholders in projects based on size and location, but active citizen participation remains low. Typically, companies and local authorities take the lead, while citizens, still unfamiliar with their potential role, have yet to adopt a more proactive stance. Benefit-sharing in renewable energy projects is also minimal and regulation to change this is lacking. Although proposed amendments to the Wind Power Investments Act include provisions for benefit-sharing, these have yet to be fully implemented. In practice, any benefit-sharing measures depend on the voluntary initiatives of developers, with their success largely influenced by the engagement of local authorities.

Introduction

This report explores how renewable energy project developers in Poland engage local communities and share the benefit of renewable energy projects. It evaluates the extent to which project developers interact with and involve local communities in their endeavours, identifying any regulatory requirements or voluntary practices aimed at fostering community involvement. Understanding these dynamics is crucial for the continued expansion of Poland's renewable energy sector and the materialisation of a just transition.

The report shows that public involvement in renewable energy projects in Poland remains constrained by limited legislative requirements and low public awareness. Participation is generally limited to obligatory public consultations, primarily designed to fulfil regulatory requirements rather than encourage meaningful community engagement. Although some policies mandate multi-stakeholder inclusion, citizens remain largely passive participants, while companies and local authorities dominate decision-making. Extended community engagement efforts, such as awareness campaigns or voluntary consultations, are rare and typically initiated by private investors or forward-thinking municipalities.

Benefit-sharing mechanisms are similarly underdeveloped. No specific regulations ensure that local communities benefit from renewable energy projects and the only existing proposal – the amendment of the Wind Power Investments Act – remains bogged down in the legislative process and still needs to be implemented. Consequently, most benefit-sharing initiatives rely on the voluntary actions of developers and the involvement of proactive local governments.

This report examines the extent of community engagement and benefit-sharing in Poland's renewable energy sector. It analyses existing policies, voluntary practices, and regulatory challenges that impact local participation by drawing on a combination of the academic and grey literature review, the analysis of the legal framework, and semi-structured interviews with key stakeholders conducted between 2–7 November 2024[209].

209 Interviewees: Anonymous, Expert, One of the four largest DSOs in Poland, 02.11.2024; Anna Dyląg, Ph.D. Eng., International Projects Expert at National Energy Conservation Agency S.A. (KAPE), 05.11.2024; Bartłomiej Kupiec, Lawyer and climate policy analyst, currently at Clean Air Task Force, Lecturer at University of Information Technology and Management in Rzeszów, 04.11.2024; Monika Jaszcza, specialist in civic energy and energy cooperatives, Polish Green Network, 07.11.2024; Anna Frączyk, Lawyer, Public Finance, Energy Markets and Competition at ClientEarth, 07.11.2024.

Community Engagement

Renewable energy developers primarily engage local authorities and businesses, with minimal outreach to residents. Local authorities play a critical role in securing land and facilitating communication with local Distribution System Operators (DSOs). Engagement efforts are often reactive, aiming to prevent opposition rather than fostering genuine participation. Although community engagement initially aims to prevent potential opposition that could delay or even halt the RES project, it is often seen as a time-consuming process, potentially obstructing RES projects by raising awareness to their sheer existence[210]. Legislative shortcomings hinder citizen involvement in renewable energy projects. Developers lack incentives to involve the public, as engagement may provoke opposition. Residents often associate new projects with declining property values and limited personal benefits, further discouraging participation.

The legal framework governing community engagement in Poland is patchy. The Renewable Energy Act (1997)[211] and the Energy Law (1997)[212] provide the broad legal basis for Poland's energy energy sector. However, these laws do not impose explicit obligations for community involvement in RES project development. The Public Consultations and Referendums Act (1987)[213] encourages developers to engage locals, but does not mandate specific participation mechanisms. It only encourages developers to inform and engage with locals, making its impact quite limited. Public participation in decision-making is, however, required for projects undergoing an EIA, regulated by the Environmental Protection and Public Participation Act (2008)[214]. An environmental decision (based on an EIA) must be obtained for some RES installations based on their size, location, and presumed environmental impacts. For instance, this applies to solar photovoltaic projects, if more than half a hectare of their area overlaps with nature conservation or protection zones as well as those which require two hectares from other classified areas.

Environmental decisions, issued by relevant authorities[215], assess project impact and set regulatory requirements. Public consultations allow communities to provide input on EIA reports. However, an environmental decision can sometimes be granted without an EIA, depending on the decision of authorities. A requirement for a positive decision is to abide by the "the good neighbourhood principle", introduced into Polish law by the Act on Spatial Planning and Development (2003)[216]. Authorities apply this when assessing areas for which there is no local spatial development plan. The Act allows local authorities to ensure that new developments are compatible with the character and function of neighbouring areas and buildings, but its application is inconsistent. Its 2019 amendment[217] in particular clarified that the principle does not automatically apply to renewable energy installations, leading to varied interpretations by local authorities. Local authorities can enforce this rule to reject a new RES investment, but they can also choose to ignore it.

Public consultations are typically held late in project cycles to fulfil regulatory obligations rather than encourage dialogue. Low citizen interest further reduces meaningful participation. However, ignoring public sentiment can backfire, as illustrated by the energy cooperative in the municipality of Lądek Zdrój[218]. The former mayor of Lądek Zdrój built a PV farm that allowed the municipality to become almost completely self-sufficient in electricity generation. However, the residents opposed this project. Although the installation was built and positively impacted local electricity balance, residents' opposition forced the mayor to withdraw from a re-election bid.

210 Anna Dylqg
211 https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20230001436/U/D20231436Lj.pdf
212 https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20240000266/U/D20240266Lj.pdf
213 https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19870140083/O/D19870083.pdf
214 https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20081991227/U/D20081227Lj.pdf
215 Typically the Regional Directorate for Environmental Protection (Regionalna Dyrekcja Ochrony Środowiska – RDOŚ) or, in some cases, by local government authorities.
216 https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20030800717/U/D20030717Lj.pdf
217 https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20180001945/U/D20181945Lj.pdf
218 Roman Kaczmarczyk

This example highlights a key theme of RES projects in Poland: local leaders or private developers can initiate and implement projects with little or no requirement for public approval. Broad citizen involvement in RES projects is thus understood to complicate decision-making. Larger membership numbers can make it challenging to satisfy all stakeholders, increasing the likelihood of opposition to project developments or changes.[219] From the organisational efficiency perspective, it would be better if citizens had their own representation or were pooled by an aggregator who would collectively manage their interests when faced with RES projects.

Although **no formal regulations outline community engagement best practices, some RES project developers voluntarily adopt guidelines** modelled after international standards, drawing inspiration from best practices in other countries. An example of this is the **BIODAR Energy Cooperative in Ustronie Morskie**. During its formation, the local municipality organised a competition with prizes to name the newly established cooperative, increasing engagement and paving the way for higher acceptance.[220]

Community energy remains the most promising form of community engagement in Poland. The Ministry of Development and Technology (MRiT) supported initiatives, such as collective prosumers, to promote social engagement in RES projects. A pilot project was launched in Ryki, Lubelskie Voivodeship, where the first collective prosumer installation in a multifamily building was completed in 2023. These efforts were aimed to familiarise Polish citizens with the concept of the collective prosumer and popularise knowledge on this subject through the practical experience of the pilot project.[221] However, low public interest hindered its success. The government sought to address this issue by introducing a legal form of "residential prosumer", which was largely based on the ideas and regulations associated with "collective prosumers". This approach only increased existing over-regulation and created confusion. Thus, the legal tools remain a work-in-progress but offer promise to increase community engagement.

Benefit sharing

Benefit sharing in Poland's renewable energy sector remains underdeveloped. Given the lack of RES projects that successfully engaged citizens in Poland, most examples of benefit sharing come from voluntary measures taken by project developers. The only form of benefit-sharing proposed by the national regulator is access to more conveniently priced electricity, but this regulation is still awaiting implementation. Most benefit-sharing initiatives are voluntary, driven by developers offering access to lower electricity prices or incentives that enhance local approval.[222] **Some municipalities, such as Kisielice, have successfully implemented benefit-sharing measures.** The town leveraged wind and biomass projects to achieve energy self-sufficiency, reinvesting revenue into public infrastructure.[223] However, such initiatives remain exceptions rather than the norm, as developers are not legally required to redistribute economic gains. Low public awareness of environmental and economic benefits further inhibits participation. Negative experiences, such as grid connection denials due to infrastructure constraints, have undermined confidence in renewable energy initiatives. Addressing these concerns requires stronger community engagement and tangible benefits for residents.

Poland's benefit-sharing schemes may be expanded with changes in the Wind Power Investments Act (2016)[224] and the expansion of energy communities. The former legal Act's Amendment is to take effect on 2 July 2025, mandating wind project developers allocate 10% of installed capacity to local communities as virtual prosumers. However, its implementation was already delayed, raising concerns over further postponements.

222 Anna Frączyk
223 https://ekonomiaspoleczna.pl/kisielice-pierwsza-polska-gmina-samowystarczalna-energetycznie/
224 https://legislacja.gov.pl/projekt/12389803. For the process, see: https://www.sejm.gov.pl/sejm10.nsf/PrzebiegProc.xsp?nr=1130.

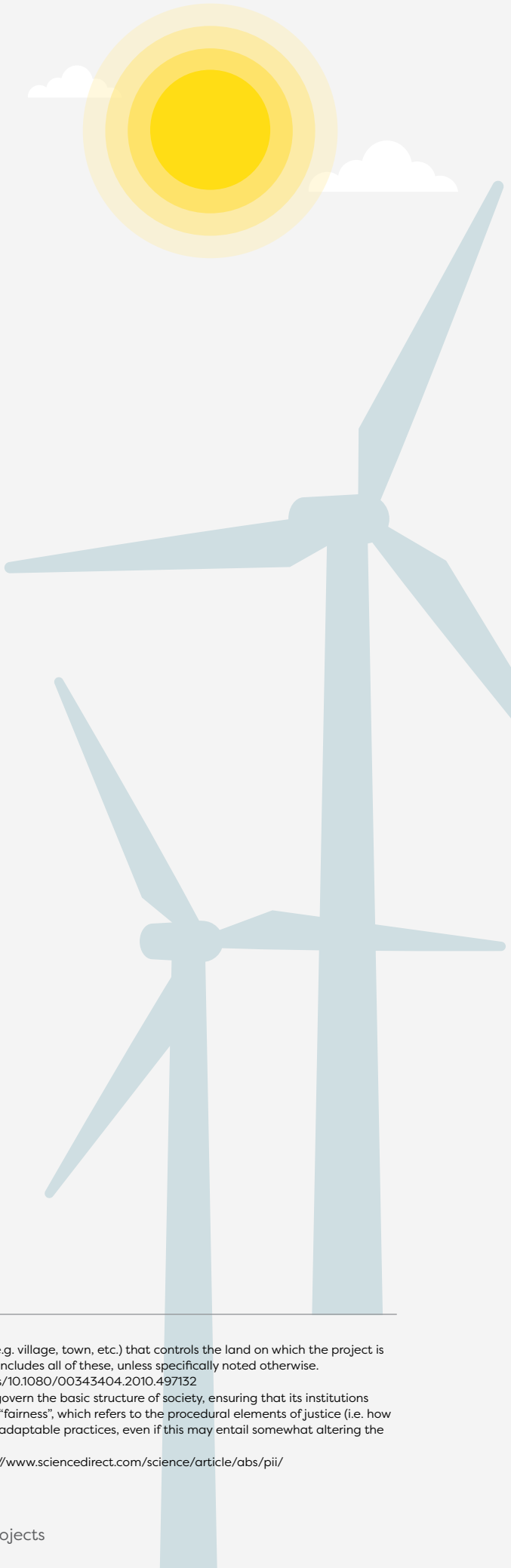
Conclusion

Poland's renewable energy sector continues to expand, but community involvement remains minimal due to weak regulatory frameworks. Renewable energy projects are driven by private developers and local authorities, with limited direct participation from residents. The absence of clear regulations on engagement and benefit-sharing results in inconsistent practices, often reducing community involvement to a symbolic, compliance-driven exercise. While some voluntary initiatives promote local benefits, there is no legal obligation for developers to share economic gains. The proposed Wind Power Act amendment may improve benefit-sharing, but delays raise doubts about its timely implementation. Strengthening legislative clarity, simplifying regulations, and incentivising proactive community engagement are essential to fostering a more inclusive renewable energy transition in Poland.

Guidelines: KPIs and Checklist

Introduction

Establishing common, inclusive, and effective community engagement and benefit sharing practices is crucial to the successful acceleration of renewable energy and grid projects. Developers may deploy community engagement strategies[225], but these are not always meaningful, effective, or are limited in their scope. Benefits shared with locals[226] also tend to be limited[227].



We propose 14+1 key performance indicators (KPIs) to trace the justness[228] of community engagement and benefit sharing with regard to renewable energy projects.

These guidelines can help project developers gauge their activities on a voluntary basis as well as provide civil society and public bodies metrics to assess the activities of said developers. The fourteen KPIs apply to project developers, as they are considerations over which these actors have agency, while the +1 reflects on the local benefits a project may entail, namely locally redistributed taxes, but is generally beyond the influence of the project developer. We present these KPIs below in the order of project development.

KPIs are intended as a method for renewable energy projects to set a positive example and uphold high standards. Accordingly, they offer a point-of-departure, but context is bound to shape their applicability as well as the mode of their enforcement. The social, political, and economic situation of communities vary on a broad scale, which alters the applicability and relative weight one may assign to specific KPIs[229]. It is essential to mold expectations to the context, the scale of the project, and the capacities of the developer to avoid pitfalls, ranging from investments perpetuating inequities to placing a disproportionate burden on smaller enterprises. Furthermore, developers are welcome to add further nuance and set positive examples by providing even more granular data, such as the gender-related impact of their activities. Our objective is to capture the positive examples and urge developers to follow these to ensure the sustained momentum of a just energy transition.

225 See e.g.: https://www.sciencedirect.com/science/article/pii/S2214629624002974

226 Our focus is on the "local" community, which we understand as the settlement or community (e.g. village, town, etc.) that controls the land on which the project is developed. If the given project borders multiple communities, then our understanding of local includes all of these, unless specifically noted otherwise.

227 The benefits of this have been long understood, see e.g.: https://www.tandfonline.com/doi/abs/10.1080/00343404.2010.497132

228 We rely on the Rawlsian concept of "justice" and "justness", which includes the principles that govern the basic structure of society, ensuring that its institutions create a fair distribution of rights, opportunities, and resources. In this sense, it is broader than "fairness", which refers to the procedural elements of justice (i.e. how basic principles of justice are chosen). Our emphasis is on developing impartial and universally adaptable practices, even if this may entail somewhat altering the content of our proposals to the given context.

229 See e.g. https://www.sciencedirect.com/science/article/abs/pii/S0960148117304068 or https://www.sciencedirect.com/science/article/abs/pii/S0301421520300525

Key Performance Indicators:

Community engagement

1. Person days spent on understanding context and community

Understanding the context in which one develops a project is essential to its success. Project developers should build a knowledge of cultural, economic, social, and political relations through research[230], which can take on many forms, ranging from desktop research to fieldwork, including surveys, focus groups, workshops and deep interviews. Measuring resources allocated to this objective is challenging, but counting the person days spent on researching the broader socio-political and community-specific relations can support just practices. Developers are encouraged to publish an overview of the tasks they undertook and respective results.
[Metric: person days & person days as % of planned installed generation capacity, pMW]

Application of the KPI
Good performance: One person assigned ("community manager") as a key contact point; at least 30% of their time during the planning and building phase allocated to community issues (>0.3 FTE); focus on conducting research and sharing outcomes.
Excellent performance: One full-time person (1 FTE) assigned ("community manager") as a key contact point during the planning and construction phases; publication of comprehensive research and proactive approach to initiating community events.
Example of excellent performance: *The Rivoli Veronese Wind Farm had two employees of AGSM that worked a total of 200 days over 5 years, focusing on investigations and consultations with local authorities and local residents. They allocated 200 person-days (25 person-days per MW; 4% pMW) to the matter.*

2. Number of actors engaged

A seemingly straightforward measure of community engagement is mapping how many local actors the developer has engaged. This can be understood quite broadly and include in-person meetings through town hall meetings to written exchanges. A criteria in this case is that the engagement would have to be *meaningful*[231] to ensure sustainability [232] This is an inherently subjective and qualitative characterisation but points to the need to not only speak to many people, but answer their questions and address their concerns as well[233]. Developers should monitor outreach during all project phases with an aim to engage a substantial portion of the community as early as possible. Outreach should naturally be considered and evaluated in relation to the size of the project and the population density in its vicinity, among others.
[Metric: number of people & number of people as % of those living near the installation]

Application of the KPI
Good performance: The developer engaged 40+ people (0.5% of residents); documented interactions; meaningful responses to concerns.
Excellent performance: The developer engaged 300+ people (1% of residents); meticulously documented interactions, mapped actors, proactively incorporated feedback, and empowered a community advisory panel in decision-making.
Example of excellent performance: *The Rivoli Veronese Wind Farm engaged 1,000 people in total (80% of people living close to the plant – in the respective municipality – were involved and 20% from surrounding municipalities).*

230 https://www.nature.org/content/dam/tnc/nature/en/documents/Enabling_a_Community-Powered_Energy_Transition.pdf
231 Article 6 and 7 of Aarhus Convention (ACCC - ACCC/C/2013/98 paragraphs 94-96).
232 https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1475-682X.2004.00079.x
233 https://www.osti.gov/biblio/1996557

3. Type of actors engaged in project development

Renewable energy project development impacts a variegated number of actors[234], all of which should be engaged in an open and meaningful manner[235]. A best practice in the UK has been for the project developer to draft a community engagement plan, which also includes the identification of key stakeholders that it will engage[236]. It is crucial to move beyond engagement with owners of the land that the developer seeks to acquire and facilitate dialogue with others, including, but not limited to:

i) Households and landowners directly impacted (e.g. land acquisition)
ii) Households and landowners neighbouring the installation
iii) Local authorities
iv) Local political leaders
v) Community leaders
vi) The general public
vii) Local businesses that may be affected by the endeavour (e.g. construction firms, agriculture sector, fishers, tourism)
viii) Public utility
ix) Grid operator
x) Local renewable energy communities/cooperatives
xi) NGOs / environmental groups
xii) Young people through e.g. local youth organisations

[Metric: N/A – checklist]

Application of the KPI

Good performance: Engaged majority of key actor groups, but not all.

Excellent performance: Engaged all relevant actor types with detailed background information and a map of involved actors.

Example of good performance: *Hertz50 (German TSO) conducted four focused meetings with key stakeholders prior to the permitting process of the Südharz grid connection project. To ensure comprehensive public engagement, each subproject underwent an early public participation phase involving the Länder-AG and the Planungsforum. Additionally, a mobile information van toured over seventeen locations within the project area, providing citizens with detailed project information and addressing their inquiries. Furthermore, localized meetings, such as the one in Töttleben, were organized to provide in-depth project background and context to residents. As a whole, the company has engaged a wide range of stakeholders, including landowners, local authorities, environmental agencies and political representatives to ensure diverse input.*[237]

234 https://www.sciencedirect.com/science/article/pii/S2214629622002535
235 https://www.nrel.gov/docs/fy22osti/82937.pdf
236 https://assets.publishing.service.gov.uk/media/61b87e3b8fa8f50384489ccb/community-engagement-and-benefits-from-onshore-wind.pdf
237 50Hertz, 2022. Abschnitt Süd: 50Hertz im Dialog zu Korridorvarianten bei Töttleben. Available at: https://www.50hertz.com/de/News/Details/12403/abschnitt-sued-50hertz-im-dialog-zu-korridorvarianten-bei-toettleben

4. Outreach and benefits delivered to vulnerable communities

Engaging the most vulnerable community groups is essential for a just energy transition. Mapping steps developers took in collaboration with local governments to reach low income households, various genders equally, ethnic peoples, young/elderly groups, indigenous communities, etc. conveys their commitment to pursue inclusive dialogue. Developers should also convey how vulnerable groups directly benefit from the project (e.g. lower energy prices, ownership, etc.).

[Metric: brief description of steps taken to identify vulnerable community groups and how project will benefit them]

Application of the KPI
Good performance: Description of identified and engaged key vulnerable groups; account of engagement forms and the number of those engaged (e.g. 200 households).
Excellent performance: Strong focus on vulnerable groups, reflected in well-documented activities, with significant benefit allocation (e.g. 15% of benefits) to vulnerable groups; publication of quantified benefits per person.
Example of good performance: *Los Naranjos y las Corchas solar PV photovoltaic park in Carmona and La Rinconada (Spain), actively engaged vulnerable social groups by empowering individuals with disabilities, as users of the Carmona Day Occupational Center for people with disabilities assembled the screws for anchoring the solar panels from their homes during the COVID-19 pandemic. Furthermore, the promoter (Endesa) supported the Occupational Center by donating pallets and other construction materials for recycling and transformation into furniture. The project also collaborated with local organizations; during the operation and maintenance phase, Fundacion TAS, a recipient of composting training, assisted with weeding and composting*[238]*.*

Engaging the most vulnerable community groups is essential for a just energy transition

238 https://www.diariodesevilla.es/andalucia/Endesa-proyectos-socialmente-sostenibles_0_1560444320.html

5. Number of consultation sessions during the planning phase

Engaging the public during planning is of utmost importance. Involving members of the local community from the onset of the project can help parties compromise and avoid misunderstandings. Consultations should be organised at the onset of the project and in close cooperation with civil society organisations and local governments to increase community participation. This is especially pertinent when they directly affect indigenous or disadvantaged communities or take place near protected or heritage sites[239]. Accordingly, sessions should be disseminated via multiple platforms and well in advance of irreversible decisions.

[Metric: number of sessions (in-person and online)]

Application of the KPI
Good performance: Several consultations offered beyond the legal minimum with reasonable attendance; sessions well in advance of major decisions.
Excellent performance: >3 consultations per year (or >2 for small projects); frequent meetings in a "hot phase" of a project; meetings well-documented, announced >10 days prior, feature broad attendance, and include the early involvement of locals.
Example of good performance: *The Parc Solaire de l'Espace du Génie (France) organised three consultation sessions. The first aimed to present the project to the public in its initial phase. The second gave a more comprehensive overview of the project, taking into account environmental factors. It was also explained how citizens could acquire shares of the project. The last session was held during the inauguration of the park, where an awareness campaign was carried out to demonstrate that this solar PV park belongs to the local population. These sessions were paired with public information meetings, co-creation workshops, information stands, and post-screening discussions.*

Engaging the public during planning is of utmost importance.

239 https://documents.worldbank.org/en/publication/documents-reports/documentdetail/436351574916190205/improving-the-investment-climate-for-renewable-energy-through-benefit-sharing-risk-management-and-local-community-engagement

6. Establishing an online platform for communication

Continuous information dissemination is essential to empower locals and allow them to understand changes taking place in their vicinity. Creating an online platform that provides regular updates on the project parameters and access to key documents (e.g. environmental impact assessment, project planning documents) should be undertaken by developers. The specific form of this depends on the context, ranging from websites to social media platforms, depending on the size of the endeavour alongside the number of affected locals and their typical online behaviour. Online communication should not, however, be a substitute for in-person engagement[240].

[Metric: yes/no & indication on the type of platform]

Application of the KPI
Good performance: Online platform available with regular information updates and featuring a response time of < 1 week.
Excellent performance: Online platform with moderated forum for questions and discussions with a response time of < 3 working days; developer has implemented accessibility requirements.
Examples of good performance: *50Hertz, the German Transmission System Operator (TSO), established a dedicated website for the Südharz grid connection project, which also features a citizen hotline for inquiries[241].* *EDPR, the developer, set up an online communication platform for the Margonin wind farm (Poland). Information about the project was available on the EDPR website[242], where key documents such as EIA reports and project-related announcements were shared and through which local communities could contact the company, ask questions, and submit complaints.*

Note: For smaller projects or developers with limited resources (≤3MW), the online platform requirements should be adjusted. Basic information and updates are essential, while interactive features like forums are encouraged but not strictly required. The key focus remains on providing timely and relevant information through means that are broadly accessible to locals.

7. Is there a mediator involved in community engagement?

The asymmetrical power relations between project developers and locals, based on different access to resources (e.g. financial) and knowledge necessitates a mediator that can enable unbiased exchange.

[Metric: yes/no]

Application of the KPI
Good performance: Mediator available for specific incidents (e.g., disputes, challenging consultations).
Excellent performance: Mediator available regularly; detailed description of involvement; and, outcomes shared.
Examples of excellent performance: *L'Institut de Formation et de Recherche en Education à l'Environnement led the mediation process in the Andilly-les-Marais Wind Farm (France), which can be seen as a well-executed community-driven renewable energy project that balances technical feasibility with strong local engagement.*

240 For a discussion on the drawbacks, see: https://www.sciencedirect.com/science/article/pii/S0040162524006371
241 50Hertz, 2025. Netzanbindung Südharz. Available at: https://www.50hertz.com/de/Netz/Netzausbau/ProjekteanLand/NetzanbindungSuedharz/
242 The website's link is: www.edprenovaveis.com/Sustainability/EDPRintheCommunity/PoloniaSustainability/Margonin, but this is no longer available. Currently, only the website run by the local authorities is available: https://samorzad.gov.pl/web/gmina-margonin/farma-wiatrowa.

8. Adding up the information requests made and responded to by the company

Not all exchanges will be in-person as developers are bound to receive written questions, suggestions, and feedback. Developers should be transparent in the flow of information and publish the number of queries they receive, response rates, and response times.

[Metric: number of queries, % responded to, & average response time]

Application of the KPI
Good performance: Documented queries and responses with >10 queries (adjusted for project size) that reflect reasonable response times.
Excellent performance: A transparent system is available, reflecting a >90% response rate and a response time of less than a week; >20 queries for large projects; user feedback on response satisfaction.
Examples of good performance: *In the Andilly-les-Marais Wind Farm project (France), 80% of the 179 requests received in total have already been processed by Valorem (independent energy operator in France) in the Annual Monitoring Committee on 13 February 2024.*

Note: Minimum query thresholds may be adjusted based on project size and complexity. For smaller projects generating fewer queries, the threshold may be lowered to reflect realistic engagement levels.

9. Number of locally proposed ideas implemented

Community engagement should be harnessed, and ideas proposed by locals need to be counted and shared. Insights will typically improve the project's acceptance and signal the company's receptiveness to feedback. Developers should also publish the number of implemented ideas and their relative portion to the overall number of ideas.

[Metric: number of ideas considered, number of ideas implemented & implemented ideas as % of total considered ideas]

Application of the KPI
Good performance: The developer communicated the total number of ideas received from the community. At least three specific, locally proposed ideas were implemented and described, outlining their impact on the project.
Excellent performance: The developer communicated the total number of ideas received from the community. At least 5 significant ideas implemented (e.g. turbine number, layout changes) with a clear definition of what "significant" entailed.
Examples of excellent performance: *In the Rivoli Veronese Wind Farm project (Italy) the local community was involved in choosing between two different design solutions for the layout of the wind plant project. Also local actors had a deep involvement in the project. Centro Nazionale Carabinieri Biodiversità of Peri led efforts to restore arid meadows and protect orchids, while Legambiente (NGO) supported the area's valorisation by creating educational trails and a guided visit program to raise awareness about the geological, historical, and environmental features of the site.*

Note: The definition of "significant" ideas may require further development. The number of implemented ideas should be considered in relation to the overall number of ideas proposed by the community.

10. Role of local enterprises[243] and investors

a. Number of local firms engaged

Track the engagement of local firms engaged. Firms can vary on broad spectrum given the various services that may arise in relation to developing a renewable energy project[244], ranging from financial and legal services to construction firms.

[Metric: number of local firms]

Application of the KPI
Good performance: >2 local firms engaged; firms named and described; > €10K subcontracting.
Excellent performance: >5 firms engaged; detailed contribution and benefits explained; > €10K subcontracting.
Examples of good performance: *In the Parco solare Casei Gerola project (Italy), Bioenergy Casei Gerola S.r.l. (subsidiary of Enel Green Power) has been responsible for the planning and operational phases of the project, while Associazione Helpcode has been in charge of schools' participation in the project.*

Note: The number of engaged local firms and amount subcontracted should be considered relative to the project's size.

b. Locally sourced technology and resources

A key component of the EU's emerging industrial plan is for the green transition to rely on local technology, resources, manufacturing capacities, and services, or European, at the least[245]. Sourcing locally produced components ranging from the installation mounts of solar photovoltaics or wind turbines alongside services (e.g. legal or consultancy) ensures local jobs, taxes, and a number of further benefits that project developers can support through their procurement choices, making this an essential aspect to monitor and publish.

[Metric: value of locally sourced goods and services]

Application of the KPI
Good performance: >2% of project value locally sourced.
Excellent performance: >5% of project value locally sourced, indication of substantial local economic impact.
Examples of excellent performance: *In the Potęgowo Wind Farm project (Poland), 81 turbines were supplied by General Electric and 17 turbines from Vestas, both of which have established manufacturing and service operations within Poland. Local sourcing of materials and services was prioritised, involving Polish companies in the supply chain, supporting the regional economy. In quantitative terms, it represented approximately 25–30% of total investment.*

Note: Thresholds may evolve with experience depending on project size.

243 It is not always possible to involve local enterprises and/or account for locally sourced materials, products, or services, which project developers are welcome to indicate and communicate. With this they can provide valuable insights on barriers to increasing the involvement of local enterprises.
244 https://www.nrel.gov/docs/fy13osti/57963.pdf
245 https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan_en

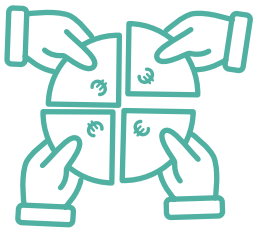
c. Number of local investors and funders

Follow the involvement of locals as financiers of projects. Crowdfunding is in vogue and locals can also be presented the opportunity to finance projects (e.g. debt issuance), which engages the local community.

[Metric: number of local investors & local finance's share in funding]

Application of the KPI
Good performance: >3% of capital expenditure goes to locals or more than 30 local investors
Excellent performance: >10% of capital expenditure goes to locals; or more than 100 investors; a transparent methodology detailing the allocation of funds, the specific amounts received by each beneficiary, and the rationale for these allocations.
Examples of good performance: *In the Parco Solare Casei Gerola (Italy), the total amount of €150,000 was financed by 36 local investors, representing 3.5% of the total CAPEX of the project.*

Key Performance Indicators: Benefit sharing



11. Monetary benefits reaped by locals

a. Lump sum compensation paid to locals

Developers should provide local communities with monetary benefits to ensure distributional justice and enhance communities' receptiveness to projects at the onset of project development. Such actions should be paired with checks and balances which limit corruption. The sums provided to local communities, be that through direct payouts to citizens or by establishing local funds for local causes (e.g. to finance sustainability projects), and its relative size to the project's estimated capital expenditure should be published. Alternatively, providing a fixed payout per megawatt of installed capacity also offers an accepted form of benefit sharing[246].

[Metric: monetary value & as a % of the project's capital expenditure]

Application of the KPI
Good performance: >0.5% of capital expenditure goes to locals.
Excellent performance: A minimum of 1% of the capital expenditure is directed towards local citizens, accompanied by a clear and transparent methodology outlining who receives funds and the rationale of the allocation mechanisms.
Example of good performance: *For the grid connection's development in Südharz (Germany), the German TSO 50Hertz foresees a compensatory payment of €14,000 per km (contingent on size) paid out to locals. In general, €20,000–€30,000 per km are provided as compensation, totalling €1.5 million–€2.25 million, some 1% of the capital expenditure[247]. In previous projects, this money is paid into the operational budgets of local councils, from where it is used for public parks, social and youth welfare projects, libraries, and a number of other projects that aim to serve the community.*

246 https://assets.cleanenergycouncil.org.au/documents/advocacy-initiatives/community-engagement/guide-to-benefit-sharing-options-for-renewable-energy-projects.pdf

247 Assuming costs of €1.5m per km (no total costs of project given in case study)

b. Regular payouts to locals

As project owners receive a regular stream of income from the project, so should locals (where possible). The form of this can vary on a broad scale, from regular (e.g. annual payouts) to the municipality receiving income from a community benefit fund. The latter scheme has grown in popularity, with findings suggesting that transparency and oversight is essential to their successful functioning and broad-based acceptance[248]. Project developers/operators/owners and/or municipalities can publish payout data as the payouts occur as well as by discounting future payout estimates.

[Metric: monetary value as a % of the project's capital expenditure or payment per kWh or turbine installed]

Application of the KPI
Good performance: Annual payments of up to 0.15 €ct/kWh; or up to €10 thousand per turbine; or up to 2% of annual revenues; or payments beyond minimum value required by law[249].
Excellent performance: Annual payments of > 0.15 €ct/kWh; or > €10 thousand per turbine; or >2% of annual revenues; only if it exceeds the legal minimum requirement.
Example of excellent performance: *The Scottish Community Coalition proposed that the UK Government should set a minimum level of community benefit which developers must meet or exceed. This inflation-proof benchmark should include a 'floor' (sum per MW of installed capacity) plus a 'ramp' (additional payments linked to revenue). For onshore wind, the floor should be £7.3k/MW (€8.4 per MW), per year. The ramp payments should bring total community benefit up to at least 2.5% of revenue, when this is not met by the floor payment alone.*

12. Local ownership and control

a. Local ownership

Providing locals with the opportunity to become owners of assets is essential in increasing their participation in the energy transition. Track the relative portion of assets offered for local ownership, irrespective of its form (e.g. joint venture model, split ownership model, vote distribution, financial stake etc.[250]) is indicative of inclusivity. The spectrum for ownership is quite broad, ranging from energy communities to providing locals with the opportunity to hold a financial stake. This KPI begins to capture whether local ownership is possible and how distributed this ownership is.

[Metric: % of the asset & number of locals/local entities]

Application of the KPI
Good performance: Local ownership >5% with several locals involved (30 or more).
Excellent performance: Local ownership >20% with large number of locals involved (>100 but depending on population); even more favourable projects with >50% and up to 100% local ownership (energy communities).
Example of excellent performance: *The Andilly-les-Marais Wind Farm project initially involved the commune of Andilly les Marais, the Aunis Atlantique intercommunality, and the association A Nous l'Energie !renouvelable et solidaire 17 (France), but these three local entities withdrew at the end of 2022 enabling the establishment of a local citizen-owned cooperative, COOPEC (Coopérative de Production d'Energies Citoyennes en Aunis Atlantique). COOPEC subsequently acquired 31% of the park's capital and secured majority control of the PEAM (Parc Eolien d'Andilly-les-Marais) company with 3 out of 5 decision-making votes.*

248 See, for instance, Scotland's case for best practices: https://communityenergyscotland.org.uk/wp-content/uploads/2025/01/New-Standards-for-Community-Benefit-Funds-Dec-2024.pdf. And, oversight can be maintained through public registries, see e.g.: https://cbfnationalregister.seai.ie/home.

249 These values are based on German legislation in certain regions (e.g. Brandenburg): € 10,000 per turbine to be paid annually to local municipalities. Assuming a 3.5 MW turbine with 2000 full load hours leads to 7000 MWh/a, remunerated at 7 €ct/kWh (current max. auction price) leads to €490,000 of revenue. € 10,000 per turbine translates to 2% of the revenue or 0.14 ct/kWh

250 https://www.dcslegal.com/news-insights/community-benefit-schemes-and-ownership-renewable-energy-projects/

b. Local control

Local control is also essential as the governance structure of the project and the asset can allow the participation of locals. Forms of control are quite varied and can range from energy communities with a one share one vote structure (as the most inclusive case) to ownership that does not grant all asset owners voting shares (the least inclusive case). This KPI captures the inclusivity of the given asset.

[Metric: description of governance structure & % of locals with voting rights]

Application of the KPI
Good performance: Local shareholders have a voting right of sorts (e.g. as group vote).
Excellent performance: One-share, one vote applied; energy cooperatives or similar arrangements.
Example of excellent performance: *In the Bürgerwindpark Simmerath project (Germany), the Municipality of Simmerath is a shareholder on behalf of all residents of Simmerath and holds a profit share in the project. Nonetheless, the most inclusive model is typically exemplified by local energy cooperatives across Europe which operate on a "one person, one vote" principle. This democratic structure ensures that local citizens have a direct say in the project's governance and benefits. To avoid being unfairly selective by naming only a few, we highlight REScoop.eu, the European federation of energy communities, as it embraces a vast network of such inclusive initiatives. REScoop.eu represents a growing network of 2,500 such energy communities and their two million members, all applying cooperative principles to drive a more participatory energy future.*

Local control is also essential as the governance structure of the project and the asset can allow the participation of locals.

13. In-kind benefits

a. Number and monetary value of in-kind projects

Project developers can increase acceptance and contribute to fair redistribution by providing non-monetary goods and services to communities. The KPI measures the number and the monetary value of such contributions. These can be seen as important gestures of goodwill where there are no formal requirements to locally redistribute revenue from a renewable project or they may even complement such payments.

[Metric: number & monetary value & monetary value as a % of the project's capital expenditure]

Application of the KPI
Good performance: 0.1 –0.2% of capital expenditure[251].
Excellent performance: >0.3% of capital expenditure.
Example of excellent performance: *The (estimated) monetary value of in-kind projects generated by Los Naranjos y las Corchas 100 MW solar PV park (Spain) amounts to around €900,000 (estimated as 0.9% of capital expenditure) broken down into the following categories:* *- Training: €50,000* *- Donation of building elements: ~ €100,000* *- Primary sector: ~ €400,000* *- Sustainable tourism: ~ €10,000*

b. Cost savings for local residents and companies

Developing a renewable energy project can provide benefits to local households and businesses through preferred access to locally generated electricity. Tracking the savings locals reap from such arrangements can demonstrate benefit sharing potential of renewable energy projects.

[Metric: monetary value of local savings]

Application of the KPI
Good performance: Reduced electricity bills for all local residents, average savings per household at least €100 per annum.
Excellent performance: Clear methodology shown of how businesses and households benefit in total from reduced electricity prices. Total of overall annual value of savings of all participating households and businesses is tracked and calculated. Savings reach at least 0.2 €ct/kWh generated (not consumed!); bill reduced by > €200 per annum per household. Important to provide numbers of total spending to avoid greenwashing.
Example of excellent performance: *An average family of 4 members that resides in the municipality of Simmerath where the Bürgerwindpark Simmerath wind farm was installed has a tax relief (e.g., business tax, property tax) of €600 per year (in total €2.3 million).*

251 Calculation based on German law using the following assumptions: 3.5 MW wind turbine, CAPEX €1000/kW -> CAPEX €3.5 m; in-kind of €10 thousand per turbine -> 0.35%.

14. Local job creation[252]

a. Local jobs created during the construction phase

Creating jobs during project development is essential, but it is widely understood that most jobs will emerge in relation to the construction and installation of renewable energy power plants. Tracking the number of local good jobs during this period is essential to not only benefit sharing but also engaging locals and involving them in the green transition[253]. The challenge is to reflect that many jobs are temporary[254] and offer opportunities to a limited demographic[255], leading us to propose that the person months of employment offered to locals be tracked with possible indication of gender balances.

[Metric: person months]

Application of the KPI
Good performance: At least jobs equal to 12 local person months created; some evidence of indirect jobs is given.[256]
Excellent performance: > 24 person months allocated to local direct jobs during construction phase, transparently described.
Example of excellent performance: *In Los Naranjos y las Corchas solar PV park project (Spain) local hiring was prioritized, establishing a local worker pool for recruitment. During the 14-month construction phase (February 2020 – April 2021), 29 local individuals were employed out of a total of 175 jobs created.*

b. Long-term local jobs created

Creating long-term jobs is essential for a just transition, which should be gathered and published by project developers or operators. A long-term job in this case should be understood as a position established and filled by a local for at least two years.

[Metric: number of positions]

Application of the KPI
Good performance: At least one permanent local job created with the project.
Excellent performance: Several permanent local jobs created, or >0.5 local jobs per MW in O&M in the case of large wind farms or jobs are clearly described and transparently allocatable to local persons.
Example of excellent performance: *In the Los Naranjos y las Corchas 100 MW solar PV park projects (Spain), 5 local full-time jobs were created that directly relate to the management of the plant: 1 plant supervisor who is basically Enel's own staff, 3 people from the O&M contractor, and 1 person involved with administrative support. In addition, there are a number of services that are provided by local companies: cleaning of buildings, clearing and firebreaks, environmental monitoring.*

252 It is not always possible to create local jobs, which project developers are welcome to indicate and communicate. With this they can provide valuable insights on barriers to increasing local employment.
253 See e.g. https://caneurope.org/how_to_maximise_social_benefits/
254 https://theecologist.org/2021/jun/15/what-green-jobs-are-they-talking-about
255 https://www.sciencedirect.com/science/article/abs/pii/S0140988320303959
256 "Wind power plant average direct and indirect job creation is about 11 jobs/MW, and 3 jobs/MW for operation and maintenance" https://www.mdpi.com/2071-1050/12/1/45

+1. Tax contributions to the local economy

Projects deliver a long-term stream of revenue for shareholders of projects, parts of which will be taxed by the national/federal or regional governments (e.g. Lander in Germany or Autonomous Communities of Spain), but one should track how much of this revenue is paid in local municipal taxes. Measuring absolute contributions and tracking its relative portion to the income of the given endeavour is essential to monitoring whether it supports distributional justice. The developer may not have influence over this, but providing this data reflects how local governments influence distributional justice.

[Metric: monetary value & % of income]

Application of the KPI

Good performance: Local taxes are transparent. No tax evasion: In cases where taxes could be in theory paid somewhere else (e.g. at the headquarters location), it is made clear that provisions were established to ensure taxes are paid locally (e.g. project developer on purpose created a local subsidiary to pay local taxes).
Note: Promoters should show that they do pay taxes and they do not avoid them, i.e. scoring is mainly on transparency, but absolute values are also important even though it is difficult to define thresholds.

Excellent performance: As paying taxes is a legal obligation, there cannot be an "excellent performance in doing so.

Example of good performance: *The Los Naranjos y las Corchas (Spain) 100 MW solar PV park project operators paid out some €2,2 million in local taxes during the construction phase in addition to €220,000 per year subsequently. A detailed breakdown of the tax contribution was given:*
Construction phase (total: ~€2.2 Mio.):
- Urban planning licence fee: ~ €80,000 (local)
- Tax on Construction, Installations and Works- ICIO: ~€1.3 million (local)
- Urban planning fee: ~ €0.9 million (local)
- Business opening licence: ~€5,000 (national)

Operation and maintenance phase (total: ~€220,000/year):
- Tax on Economic Activities (IAE): ~ €100,000/year (local)
- Real Estate Tax (IBI): ~€120,000k/year (local)

Projects deliver a long-term stream of revenue for shareholders of projects

Concluding thoughts on how to operationalise the KPIs

Identifying aspects of community engagement and benefit sharing in relation to renewable energy projects that help capture the justness of a transition is an inherently complex endeavour as the broad range of the KPIs indicates above. These offer a point of departure for civil society organisations, developers, and public bodies to track activities with which they can contribute to a just transition. Thereby, allowing them to establish room for improvement and design action accordingly. That being said, the KPIs compress the complexity of the world into single metrics, which can and should be interpreted by taking contextual factors into account; only by expounding upon them and tailoring them to the given project and its socio-ecological setting can one develop a comprehensive understanding on how certain facets of a just transition are materialising.

We proposed these KPIs bearing in mind that gathering data may be challenging in many cases, but the objective is to shape discourse and practices within the renewable energy sector, while holding stakeholders to high standards. The importance of this stems from a need to take sweeping action while fostering collaboration and building trust among stakeholders, including policymakers, local communities, and the public, to ensure broad political and societal support, paving the way towards long-term success. We do not expect that renewable sector incumbents can control all of these KPIs, given the relevant competencies and jurisdiction of tax authorities, regulators, or other bodies. Accordingly, these should be considered as ways organisations can measure what is possible and signal to public bodies what is not in an open and transparent manner, with the intended outcome being dialogue that supports just practices in the sector. Meanwhile, these provide NGOs with a set of operable tools with which they can hold other stakeholders to high standards and thereby support a just, inclusive transition.

Recommendations:
The three ‘C’s - *Communication, context, and competence*

The studies we carried out informed a set of key performance indicators (KPIs), which were then tested against carefully selected specific projects to explore their applicability and substantiate a set of recommendations that can support a just transition. After all, the aim of this exercise has been translating findings into actionable propositions that speak to stakeholders involved with renewable energy projects and help them to improve prevailing practices. Some general recommendations are made below, before moving on to stakeholder-specific points.

Recommendations are specifically tailored to project developers and operators given their decisive role in shaping the courses of projects and, thereby, their decision to engage locals and share benefits is elemental for a just transition. We also provide targeted input for policy makers and regulators due to their focal role in developing the overarching framework and mediation as well as recommendations directed at EU-level policy makers, given their role in shaping the overarching framework of the EU's transition. Finally, we have included recommendations for civil society organisations, as they are able to mediate between actors and locals as well as oversee whether actors follow the KPIs proposed above.

We identified three key themes in our work that help to structure our recommendations: **communication, context, and competence – *the three Cs***. All three have been fundamental to already published recommendations and guidelines as well as to the exemplary set of projects that we assessed. They may seem trivial to some, but there is still a lag in their widespread application.

Stakeholders who engage in **open, honest, and continuous communication** that goes beyond the currently defined minimum requirements (e.g. those required by environmental impact assessments as well as urban planning- or energy-related regulations) are **much more likely to succeed in their endeavours**. Project developers need to communicate their plans and the means by which they intend to achieve them early enough to allow affected stakeholders sufficient time to respond, provide comprehensive information, and subsequently process the feedback received in a manner that meaningfully integrates feedback.

Civil society organisations can act as mediators between communities, developers, and governments, facilitating dialogue to ensure that all voices are heard and integrated into project planning and implementation. Authorities need to establish a clear policy and regulatory framework and engage with local people and developers on an ongoing basis to identify changes that may be needed, gradually refining the requirements within this framework through an iterative process, to foster inclusion. Dialogue between these three groups is essential to facilitate a just transition.

A central, yet unsurprising finding which emerged in most of the discussions was the need to consider the **context-specificity of projects and to weigh up the trade-offs** between various considerations. More specifically, expectations towards projects should be fundamentally shaped by their particular characteristics as well as their respective contexts, including factors, such as pre-existing levels of community engagement or social capital, the primary citizen concerns, whether the area is rural or urban, the prevailing socio-economic issues identified within the locality, and the specific environmental characteristics, including the presence of sensitive ecosystems, potentially endangered species, and other ecological factors, alongside other social, political, and legal confines.

Taking contextual factors into account is elemental to the success of endeavours. We incorporated these in the KPIs, through considerations that emphasise the need for project developers to familiarise themselves with the context, engage with locals, and involve a wide range of stakeholders. Finally, the form of benefit sharing relies on considering the specific context, whether in terms of existing fiscal regimes or in-kind compensation needs of the given local community, also taking into account the specific social and economic needs of the given community.

There is a rising number of positive examples and tried and tested mechanisms that can guide the actions of project developers and operators, state bodies (including authorities and municipalities), and NGOs. This report begins to gather and assess selected good and bad practices, and **we encourage actors to begin to allocate resources to develop competencies and share those** that help improve the two key facets of a just transition explored throughout this report. Some cross-fertilisation is taking place as policies – corporate and public – on community engagement and benefit sharing proliferate. Moreover, the general endeavour to monitor and track the KPIs and related considerations is a question of competence, as it requires actors to gather and share data on projects. Improving community engagement and increasing benefit sharing hinges on the stakeholder groups building capacities and allocating the resources necessary to enable greater transparency and the adoption of best practices that enable a just transition.

Recommendations for project developers and operators

Communication

- **Build trust, don't just tick boxes.** Recommendations and success stories emphasise the importance of trust between developer and community. KPIs begin to capture this, but developers need to remain attentive to local needs.
- **Listen to the community.** Evidence suggests that constructive dialogue that takes account of locals' ideas and suggestions can help facilitate project completion. Engagement plans and dedicated professionals' help build trust through accountability.
- **Ask for help.** Community engagement facilitators increase in number across Europe. They can help organise community engagement.
- **Engagement and benefit sharing go hand-in-hand.** Community outreach and gaining support for projects can be facilitated by underscoring local benefits.

Context

- **Invest in understanding the context.** Conducting context-specific research and developing an understanding of local socio-ecological dynamics aid successful project implementation.
- **Shared ownership can be a good option.** Enabling local stakeholdership streamlines and enables project development – energy communities offer a replicable model.
- **Prioritise local procurement, supply chains and long-term partnerships with local institutions.** Seek opportunities to source goods and services from local businesses, while collaborating with local schools, universities, and community organizations to support educational initiatives, cultural events, and other community development projects. This can stimulate the local economy and make a broader positive impact.

Competence

- **Build capacity.** Project developers and operators should allocate resources to building essential capacities, ranging from appointed professionals to communication campaigns.
- **Share best practices.** Practices should be tailored to contexts, but commonalities allow for these to be shared between various actors and thereby the good practices can be replicated.
- **Enhance transparency.** Project developers and operators should disclose essential data ranging from ownership structures (e.g. local participation) through in-kind and local monetary benefits to tax contributions to foster accountability and strengthen community relationships; thereby, ensuring a just energy transition.

Recommendations for policymakers and regulators

Communication

- **Policymakers, authorities, municipalities, and local governments should actively cultivate their role as intermediaries** by clearly defining their role as such, establishing dedicated bodies facilitating mediation, implementing robust communication procedures and investing in partnership capacity. Municipalities and local governments should be enabled and equipped through appropriate frameworks to set aside sufficient resources for effective communication with citizens.
- **Data publication requirements.** Authorities should mandate businesses to publish data on community engagement and benefit sharing as a part of a transparency policy that enables trust and justice.
- **Institutionalise community engagement.** Public bodies should gradually move beyond current minimums and establish robust frameworks that mandate comprehensive and long-term community engagement, also requiring the tracking and reporting of information requests, response rates, and consultation sessions. Crucially, they must also continuously monitor the impact of these enhanced engagement practices, adapting legislation and regulations to reflect evolving community needs to ensure equitable outcomes.
- **Facilitate regular public reporting.** Authorities should develop the tools and means to enable regular reporting through various means (e.g. local newsletters, community portals, and public meetings) on how revenues from renewable projects are spent within the community.

Context

- **Require community engagement plans.** Policymakers and regulators should consider mandating or incentivizing developers to submit comprehensive community engagement plans as a prerequisite for project approval, ensuring these plans demonstrate a thorough understanding of the local context through documented research and outline robust consultation processes that guarantee meaningful and inclusive participation from affected community members.
- **Introduce benefit sharing schemes.** Authorities should carefully consider their particular context (e.g. taxation schemes, renewable energy potential, social preferences) and start to introduce local benefit-sharing schemes. Green funds and direct payments, amongst others, offer tools that benefit the local community and can be matched to needs, and existing schemes can be tested and gradually scaled up.
- **Integrate community-focused non-price criteria into renewable energy auctions and public procurement.** Policymakers and regulators should consider the inclusion of non-price criteria in renewable energy auctions and public procurement that specifically address community engagement and benefit sharing. Authorities should also promote direct citizen participation, for example through financial participation or involving locals in project governance. A share of the project's capital expenditure (CAPEX) could be opened for citizen investment or reserved for renewable energy communities as in the case of Belgium's offshore wind auction.
- **Promote local ownership in renewable energy projects.** Policymakers and regulators should develop regulations that actively promote local ownership and control in renewable energy projects.
- **Create local value through local projects.** Authorities should further incentivise cooperation with local businesses and workers in the development, construction, and maintenance of renewable energy projects. Work with developers to set up community benefit agreements that directly support local economic needs.
- **Policies and regulations should be applied to energy infrastructure in general.** Public bodies' role in the oversight of community engagement and benefit sharing should extend beyond renewable energy projects to include grids or batteries, amongst others, recognizing that these also significantly impact local communities and require robust engagement frameworks.

Competence

- **Develop mediation skills.** Developing public authorities', especially local governments', capacities to mediate between various actors or establishing dedicated agencies requires skills that many institutions still need to develop. Municipalities, in particular, must be equipped to enable, facilitate and mediate. Undertaking these roles requires further resources and investment in the capacity building of public officials, including renewable energy- and community-engagement related training.
- **Share and build on best practices.** National studies show that the EU, national, and regional community engagement frameworks are emerging. This provides a broad pool of replicable practices that policymakers (at all levels) can draw on and adapt to their specific context. Accordingly, these should be shared among policy-makers and public officials, creating platforms for knowledge sharing and collaboration among developers, communities, and regulators.
- **Design guidelines for inclusive stakeholder engagement.** Policymakers must provide detailed stakeholder engagement guidelines that address barriers to participation as well as provide a blueprint for open communication, inclusive consultations, and measurable community-specific benefits. Policymakers should also support developers with resources and training to ensure the effective implementation of guidelines.

Recommendations for the European Commission:

1. **Strengthen the upcoming Citizens Energy Package** to enhance citizens' participation in the energy transition and bolster the social dimension of the Energy Union by
   a. Incorporating explicit measures to ensure fair community engagement and benefit-sharing by introducing a framework to establish common European standards, featuring concrete criteria to promote consistency and maintain a level playing field across the EU.
   b. Leveraging developed Key Performance Indicators (KPIs) as a foundational reference for these standards.

2. **Share best practices and develop guidance to support Member States to include non-price criteria that address community engagement and benefit sharing in renewable energy auctions and public procurement:** Such criteria can take the developed KPIs of this report as reference and include[257]:
   - Community Engagement Plans: A comprehensive Community Engagement plan submitted by the developer, outlining how they will gather and integrate local feedback, address concerns and emphasize the broader benefits of the project (e.g. energy security, fair energy prices, financial benefits, job creation, skills development, etc.)
   - Direct citizen participation through shared financial participation or shared governance (see the example of Belgium, p. 19). A share of the project's CAPEX could be opened for citizens' financial participation or renewable energy community access.
   - Direct financial benefits for citizens, such as through a community investment fund, which is locally managed and distributed.
   - Support for the local economy by indicating local businesses and workers that the developer intends to engage.

257 https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_NZIA_IA.pdf

Recommendations for civil society organisations

Communication

- **Push for transparency.** The largest obstacle we encountered was the lack of data. Project developers and operators need to be persuaded to publish data, and this can be facilitated by highlighting that it tends to reflect positively on their projects.
- **Monitor and focus on the good and the bad.** Most project developers already pursue community engagement and, albeit to a lesser extent, benefit sharing. These can be monitored in a structured way by drawing on the KPIs provided, specifically focusing on metrics that demonstrate the breadth and depth of stakeholder involvement, such as the range of actors engaged, the diversity of engagement types, and the frequency of consultation sessions and published regularly.,
- **Identify actors and levers of influence change.** While KPIs are measured against projects, developers may not always control decisions or processes impacting their operations. Effective action may involve pressuring national or regional authorities or working with local governments for clear and coherent standards and rules, particularly in cases like benefit sharing, often linked to taxation.
- **Advocate for robust benefit-sharing mechanisms.** NGOs should actively track the implementation of benefit sharing policies and advocate for robust benefit sharing mechanisms, rigorously scrutinizing metrics related to monetary compensation, local ownership opportunities, and the creation of local employment, focusing on ensuring that benefits reach vulnerable groups.

Context

- **Tailor the KPIs and their assessment to the specific project.** KPIs should be assessed while considering the particularities of the given project, including factors such as technology, location, or size. For instance, the execution of a smaller project in a remote location may not require as much engagement as a larger project located near a densely populated area. Accordingly, the publication of KPIs and the scoring of projects should be accompanied by qualitative descriptions of the specific context.
- **Assess in-kind benefits critically.** While infrastructure or other services provided by project developers and operators can be of benefit to the local community, they should be assessed based on the needs of the community and compared to potential revenue.
- **Energy communities provide examples worth following.** Energy communities and cooperatives offer positive examples of project development. It is worth highlighting shortcomings by contrasting bad practices with good local examples of bottom-up community-led efforts.

Competence

- **Seek local good practices to draw on.** NGOs should combine insights from established best practices, such as those compiled in this report, with relevant local examples. By drawing on both global and context-specific practices, NGOs can strengthen their arguments and develop more operationalizable approaches that resonate with local stakeholders.
- **Share best practices.** In many cases, community engagement and benefit sharing practices are project- or location-specific. These need to be shared as a wide range of communities look to implement measures and state authorities develop regional and national frameworks.
- **Build technical competence in renewable energy.** Recognizing that civil society organisations operate with limited resources and need adequate funding, it is vital for CSOs to develop expertise in key areas such as project permitting processes, environmental impact assessments, zoning, energy regulation, and relevant legal frameworks. Acquiring this expertise enables CSOs to engage more effectively with developers and regulators, ensuring that renewable energy projects are not only environmentally sound but also aligned with community interests.

Case Studies: Applying KPIs to Real-World Cases

Rivoli Veronese Wind Farm (Italy)

GOOD PRACTICE

Introduction

The Rivoli Veronese Wind Farm, located in the municipality of Rivoli Veronese within the Verona Province in the Veneto region, is owned and operated by AGSM AIM Energia (AGSM)[258]. This renewable energy (RE) project has been operational since March 2013 and consists of four wind turbines, each with an installed capacity of 2 MW, totalling 8 MW. In 2023, the wind farm produced 14 GWh of electricity[259]. The project covers an area of 7.1hectares[260] and helps avoid around 7,000 tonnes of CO_2 emissions annually[261].

The project development included extensive community engagement activities to ensure that local stakeholders were actively involved throughout the process. First of all, efforts were made to involve the local NGO office of Legambiente[262]. Secondly, an educational park was created near the turbines to promote sustainable tourism and provide educational opportunities about the wind farm and the surrounding area[263]. Additionally, AGSM has implemented a benefit-sharing scheme that includes a lower electricity tariff for the local community[264], as well as the creation of the Rivoli Bonds, an innovative financial initiative which provided a lucrative investment opportunity for residents and fostered a sense of community ownership in the local RE project[265].

Source: AGSM internal archives

Table 1: Assessment of the Rivoli Veronese Wind Farm project against the KPIs on community engagement and benefit sharing

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	Two employees of AGSM worked a total of 200 days over 5 years, focusing on investigations and consultations with local authorities and local residents.	200 person-days (25 per-son-days per MW; 4% pMW)
2	Number of actors engaged	Around 1,000 people were engaged, including par-ticipants in public assemblies, local environmental groups (Legambiente), other specialised professionals on biodiversity conservation such as the Centro Nazionale Carabinieri Biodiversità (CNCB) of Peri, and the local administration.	1,000 people in total (80% of people living close to the plant were involved, meaning as part of the closer municipality, and 20% from the municipali-ties in the surroundings)

258 AGSM public website. Available at: https://www.agsmaim.it/
259 AGSM Sustainability Report 2023. Available at: https://www.agsmaim.it/documents/43075/767112/DNF_2023_20240828.pdf
260 AGSM public website – Ecoenergia. Available at: https://www.agsmperte.it/ecoenergia/
261 Studio di impatto ambientale: Impianto Eolico di Monte Mesa, Comune di Rivoli Veronese (VR), AGSM SPA – Verona. Available at: https://www.eib.org/attachments/pipeline/20120352_nts1_it.pdf
262 Report Legambiente: Parchi del Vento. Available at: https://www.legambiente.it/comunicati-stampa/parchi-del-vento-la-prima-guida-turistica-dedicata-ai-parchi-eolici-italiani/
263 Visite guidate all'impianto di Rivoli Veronese, AGSM public website. Available at: https://www.agsmaim.it/visite-guidate
264 M. Galbusera, Investire Oggi, Agsm lancia mini bond per investire nell'eolico, 2013. Available at: https://www.investireoggi.it/agsm-lancia-mini-bond-per-investire-nelleolico/
265 AGSM website - Presentati gli Affi Bond: l'impianto eolico come investimento del cittadino. Available at: https://www.agsmperte.it/presentati-gli-affi-bond-limpianto-eolico-come-investimento-del-cittadino/

No.	Criterion	Brief description	Quantitative assessment
3	Type of actors engaged in project development		Households and landowners directly impacted and near the planned location of turbines, authorities, political leaders, community leaders, the general public, businesses of local nature that may be affected by the project (e.g. construction firms, agriculture sector, fishers, tourism), public utility, grid operator, and NGOs, including environmental groups
4	Outreach and benefits delivered to vulnerable communities		Residents have the opportunity to purchase the energy produced by the wind farm at these wholesale prices, which are typically reserved for large consumers and do not include AGSM services fees (estimated at a 30-40% price reduction for local residents)
5	Number of consultation sessions during the planning phase	Two public assemblies with the joint presence of AGSM and the municipal council.	2 face-to-face sessions
6	Establishing an online platform for communication	No online platform has been established for communication.	No
7	Is there a mediator involved in community engagement?	The local government facilitates transparent and unbiased dialogue between the wind park develop-ers and residents, ensuring that all stakeholders are able to actively participate in discussions and have their concerns addressed.	Yes
8	Adding up the information requests made and responded to by the company	No paper communications were received, but more than 10 e-mail inquiries through the local authority due to mediation.	Number of queries: <10 requests for information % responded: 100% Average response time: within 30 calendar days
9	Number of locally proposed ideas implemented	The local community was involved in choosing between two different design solutions for the lay-out of the wind plant project. The CNCB led ef-forts to restore arid meadows and protect orchids, while Legambiente supported the area's valorisation by creating educational trails and a guided visit program to raise awareness about the geological, historical, and environmental features of the site.	Number of ideas considered: approx. 10 proposals Number of ideas implemented: approx. 10 proposals Implemented ideas as % of total considered ideas: 90%
10	Role of local enterprises and investors:		
	a. Number of local firms engaged	Number of local firms engaged	-
	b. Locally sourced technology and resources		N/A
	c. Number of local investors and funders	The Rivoli Bonds initiative was specifically targeted at the approx. 700 families residing in the area, allowing them to invest amounts ranging from EUR 1,000 to EUR 30,000. The initiative required the participation of at least 200 residents and aimed to raise a minimum of EUR 1 million, representing 50% of the total bond issue.	Potentially 700 families could have invested in the project (a minimum of 200 investors was needed to issue the bonds)

No.	Criterion	Brief description	Quantitative assessment
11	Monetary benefits reaped by locals		
	a. Lump sum compensation paid to locals	No lump-sum compensation paid to locals.	-
	b. Regular payouts to locals	The bond offered a 6.5% p.a. interest rate over a seven-year term, with an early redemption option.	6.5% of the annual interest on the investment made
12	Local ownership and control	While the bond initiative allowed residents to invest in the wind farm, the ownership structure remained with AGSM.	
	a. Local ownership		-
	b. Local control		-
13	In-kind benefits		
	a. Number of monetary value of in-kind projects	EUR 100,000 for the creation of an environmental educational trail within the wind farm, equipped with cycle paths, benches and refreshment points.	Number: 1 Monetary value: EUR 100,000 Monetary value as a % of the project's capital expenditure: approx. 0.01%
	b. Cost savings for local residents and companies	Local residents have the opportunity to purchase the energy produced by the wind farm at wholesale market prices (Prezzo Unico Nazionale, PUN), without AGSM fees. Based on a typical PUN price range and standard retail prices, residents could expect to pay around 30-40% less on their electricity compared to traditional utility rates, depending on the specific conditions of the wholesale prices (PUN) during each period. The monetary value of the local savings is not publicly available.	N/A
14	Local job creation	No local jobs were created during the construction phase, nor during operation and maintenance (O&M).	
	a. Local jobs created during the construction phase		-
	b. Long-term local jobs created		-
+1	Tax contributions to the local economy	No direct tax contribution to the local economy (i.e., no direct compensation).	-

Source: eclareon, 2025 based on questionnaire filled in by AGSM employees in March 2025 and based on publicly available information

Overall assessment and concluding thoughts

The Rivoli Veronese Wind Farm has made significant progress in community engagement since the planning phase, involving around 1,000 people. A benefit-sharing mechanism has been implemented, which has resulted in reduced electricity prices for local residents, allowing them to purchase energy at rates normally reserved for large consumers, reducing their overall electricity expenditures. Moreover, the issue of the Rivoli Bonds allowed the 700 families in the Rivoli Veronese area to invest in the wind farm through bonds with an interest rate of 6.5% over a seven-year period. Finally, the project has contributed to local tourism through the development of cycle paths and an educational trail within the wind farm, and the organisation of guided tours directly promoted by AGSM, increasing the attractiveness of the area and promoting sustainable practices[266].

The project received an overall positive rating against the listed KPIs, in particular the high level of community participation in consultations and the implementation of local ideas, such as the decision on the design of the wind farm. On the other hand, it faced limited involvement of local companies and investors due to the need for specialised expertise in wind farm construction. Despite these limitations, the project's environmental education initiatives and contributions to sustainable tourism provide significant non-financial benefits to the local community, and it has become a popular destination for local families and tourists.

266 AGSM public website. Visite guidate al parco eolico di Rivoli Veronese. Available at: https://www.agsmaim.it/visite-guidate

Parco solare Casei Gerola (Italy)

GOOD PRACTICE

Introduction

The Parco solare Casei Gerola is a ground-mounted solar PV park located in the municipality of Casei Gerola, in the province of Pavia, Lombardy, Italy. The project, which has been implemented in the period of 2022-23, is fully operational from 2023 and represents one of the latest renewable energy (RE) developments in the region. The plant with an overall installed capacity of 4.54 MW generates an average of 7 GWh of electricity per year, supplying electricity to around 2,200 households[267]. It covers an area of about 6.5 hectares, is managed by Enel[268] and is equipped with bi-facial photovoltaic panels mounted on single-axis trackers that follow the sun's movement throughout the day to maximise energy production. By replacing fossil fuel-based energy sources, the solar PV park helps avoid around 3,000 tonnes of CO_2 emissions annually[269].

Community engagement and benefit-sharing mechanisms are key aspects of the Parco solare Casei Gerola project. The initiative is part of *Scelta Rinnovabile*, an Enel Green Power programme designed to encourage the active participation of local communities in RE projects[270]. A notable feature of this engagement strategy is the Ener2Crowd crowdfunding campaign, which allowed citizens to invest directly in the solar park[271]. In addition, parallel initiatives for the local well-being, such as the installation of micro-PV and the introduction of EV chargers, not only encourage local involvement in the clean energy transition but also offer tangible economic benefits to those who actively support the project.

Source: Enel Green Power [271,1]

267 Parco Solare Casei Gerola, Italia. Enel Green Power. Available at: https://www.enelgreenpower.com/it/impianti/operativi/parco-solare-casei-gerola
268 Enel Green Power inaugura un nuovo impianto fotovoltaico a Casei Gerola, Fondazione Sodalitas. Available at: https://www.sodalitas.it/conoscere/news-imprese-associate/enel-green-power-inaugura-un-nuovo-impianto-fotovoltaico-a-casei-gerola
269 Innovazione, territorio, comunità: il nuovo parco solare a Casei Gerola. Enel Green Power. 27/06/2023. Available at: https://corporate.enel.it/media/esplora-notizie/notizie/2023/06/parco-solare-casei-gerola
270 Gli ambasciatori dell'energia di Casei Gerola, Enel Green Power. 09/06/2023. Available at: https://www.enelgreenpower.com/it/media/news/2023/06/casei-gerola-parco-solare
271 Parco solare Casei Gerola – Ener2Crowd webpage. Available at: https://www.ener2crowd.com/es/proyectos/detalles/116-parco-solare-casei-gerola
272 Corporate Enel, Parco solare di Casei Gerola, Foto Impianto. Available at: https://corporate.enel.it/media/esplora-foto-impianti/foto/2024/impianti-enel/parco-solare-casei-gerola

Table 1: Assessment of the Parco solare Casei Gerola project against the KPIs on community engagement and benefit sharing[273]

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	Two people worked full-time for 30 days to disseminate the project initiative and were particularly involved in the in-kind benefits initiatives.	60 person-days (13 persons days per MW, 7.5% pMW)
2	Number of actors engaged	Project investors engaged through Ener2Crowd crowdfunding campaigns and local students engaged through in-school activities.	36 investors, 57 students and 6 professors (4.2% of people living near the in-stallation)4
3	Type of actors engaged in project development		Local authorities, public utility, grid operator, young people (students)
5	Number of consultation sessions during the planning phase	Three presentations were held by Enel Green Power, together with Ener2Crowd.	3 online sessions
6	Establishing an online platform for communication	The Scelta Rinnovabile crowdfunding initiative was managed through the Ener2Crowd platform, which served as a key communication channel to engage local investors.	Yes (Crowdfunding plat-form via Ener2Crowd)
7	Is there a mediator involved in community engagement?	Ener2Crowd (crowdfunding platform) oversees informing the investors on the operational status of the PV plant and on the related annual returns. The Comune of Casei Gerola informed local residents during the planning phase.	Yes
8	Adding up the information requests made and responded to by the company	No direct written or digital requests have been received directly by Enel Green Power. The mediators (Ener2Crowd for investors and Comune of Casei Gerola for local residents) received and managed the information requests.	-
10	Role of local enterprises and investors:		
	a. Number of local firms engaged	Bioenergy Casei Gerola S.r.l. (subsidiary of Enel Green Power) has been responsible for planning and operational phases, and Associazione Helpcode for schools' participation in the project.	2 local companies
	b. Locally sourced technology and resources	The project used bifacial solar panels and tracking systems, but their origin is not local.	N/A
	c. Number of local investors and funders	The total amount of EUR 150,000 was financed by local investors, representing 3.5% of the total CAPEX of the project.	36 local investors (3.5% of CAPEX)
11	Monetary benefits reaped by locals	Through the Scelta Rinnovabile crowdfunding campaign, interested participants provided financing for a period of three years, with a minimum investment of EUR 100 and a maximum of EUR 5,000, receiving a fixed interest on their investment.	
	a. Lump sum compensation paid to locals	No lump-sum compensation paid to locals.	-
	b. Regular payouts to locals	Investors receive an annual return of 5.5% if they reside in the municipality of Casei Gerola, while non-residents receive an annual return of 4.5%.	N/A

273 This assessment draws on available information to evaluate the Parco solare Casei Gerola project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.

No.	Criterion	Brief description	Quantitative assessment
12	Local ownership and control	The local enterprise Bioenergy Casei Gerola S.r.l. (subsidiary of Enel Green Power) was created for the project planning and operation.	
	a. Local ownership	Local residents could invest, but the ownership structure remains under Enel Green Power.	-
	b. Local control	BioEnergy Casei Gerola S.r.l. is the plant manager, no other local entities are involved.	-
13	In-kind benefits		
	a. Number of monetary value of in-kind projects	Enel Green Power dedicated a percentage of the project CAPEX to develop valuable in-kind projects such as: 1. installation of a 20-kW solar PV system on the roof of the elementary school of Casei Gerola, 2. installation of an EV charging station, and 3. installation of two defibrillators in the municipality of Casei Gerola. Furthermore, this percentage included the budget related to the school activities and the crowdfunding campaign.	3 in-kind benefit initiatives (3% of the project's CAPEX of around EUR 130,000 has been used for community benefit initiatives)
	b. Cost savings for local residents and companies	There were no direct savings for companies and residents (i.e. no direct compensation). Only interest rates on their investments were applied.	N/A
14	Local job creation		
	a. Local jobs created during the construction phase	Enel Green Power is responsible for the permitting, installation and operation and maintenance (O&M) of the plant, and no local jobs have been created, according to our findings.	-
	b. Long-term local jobs created		N/A
+1	Tax contributions to the local economy	No direct tax contribution to the local economy (i.e., no direct compensation).	-

Source: eclareon, 2025 based on publicly available information

Overall assessment and concluding thoughts

The Casei Gerola project exemplifies a successful model of community engagement and benefit-sharing. Using the Ener2Crowd crowdfunding platform, local residents were able to invest directly in the solar park, contributing 3.5% of the total CAPEX and receiving a competitive annual return of 5.5% for residents. In addition to this financial participation, the project provided significant in-kind benefits, including the installation of a 20-kW solar system on the roof of the local school, an EV charging station, and two defibrillators for the community. These initiatives not only encouraged local participation in the clean energy transition, but also provided tangible benefits to the community, reinforcing the project's commitment to local well-being.

The project demonstrates strong performance against the KPIs, with a notable 3% of capital expenditure allocated to community-benefit initiatives. The active involvement of local investors and the tangible benefits delivered highlight the success of the project in engaging the community. Given the level of community involvement and the context of the project, the approach is considered positive, with significant scope for expanding its possible impact at the planning stage. Despite some limitations, such as the lack of direct fiscal contributions, the project is a solid example of RE development that meets community interests.

Andilly-les-Marais Wind Farm (France)

GOOD PRACTICE

Introduction

The Andilly-les-Marais Wind Farm, located in the Nouvelle-Aquitaine region of south-west France, consists of three wind turbines, each with a capacity of 5.6 MW, for a total installed capacity of 16.8 MW. The onshore wind farm, which has been operational since June 2024, generates approx. 48.5 GWh of electricity annually, enough to supply around 10,600 households. Its implementation began in 2017 after local citizens discussed green electricity options with the Mayor of Andilly-les-Marais, a municipality of approx. 2,300 inhabitants (2021). Although the Mayor was initially hesitant about traditional wind energy projects due to the lack of foreseen community benefits, he was inspired by existing citizen-led projects in Brittany, France. Financial close was achieved in May 2023, with commissioning planned for summer 2024[274].

In terms of community engagement, consultation and communication mechanisms were put in place during the development phase to ensure that the project met the expectations and needs of the area. This is also reflected in the benefit-sharing mechanism, where the COOPEC (Coopérative de Production d'Énergies Citoyennes en Aunis Atlantique) cooperative has a majority stake in the management of this wind farm[275].

Source: EOLIEN ANDILLY. Andilly-les-Marais Wind Farm.

274 Énergie Partagée, 2024. Parc éolien d'Andilly-les-Marais (PEAM). Available at: https://energie-partagee.org/projets/parc-eolien-dandilly-les-marais-peam/
275 Éolien Andilly, 2025. La société citoyenne. Available at: https://eolien-andilly.fr/energie-citoyenne/societe-citoyenne/

Table 1: Assessment of the Andilly-les-Marais Wind Farm project against the KPIs on community engagement and benefit sharing[276]

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	· June 2018: Presentation in the municipal bulletin of Andilly. · November 2018: The association A Nous l'Energie ! renouvelable et solidaire (ANE!rs 17) officially joins the Steering Committee (Municipality/Valorem) to integrate into the project a citizen participation that goes beyond the participative theme. · April 2019: Partnership with the Aunis Atlantique community federation. · December 2019: 1st Monitoring Committee - site visit to validate the feasibility of the different layouts. · May /2020: 2nd Monitoring Committee - presentation of the wind turbine layout and progress. December 2020: 3rd Monitoring Committee - residents' representatives are invited to a round table[277].	N/A
2	Number of actors engaged	With the exception of the 2,300 inhabitants of Andilly, almost everyone in the Aunis Atlantique community association was involved.	About 2.500 people
3	Type of actors engaged in project development		Interregional/ local actors (such as Aunis Atlantique community federation, the municipalities of Andilly, Marans, La Ronde, la Greve-sur-Mignon and Saint-Ouen d'Aunis) Environmental authorities (La Commission Départementale de la Nature des Sites et des Paysages) Citizens living in the community of Andilly and of other municipalities NGOs/ Associations (such as ANE!rs 17, Énergie Partagée)

276 This assessment draws on available information to evaluate the Andilly-les-Marais Wind Farm project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.

277 Éolien Andilly, 2025. L'origine du projet. Available at: https://eolien-andilly.fr/projet/

No.	Criterion	Brief description	Quantitative assessment
5	Number of consultation sessions during the planning phase	1st residents' workshop (January 2020): An initial presentation of the project to gather residents' first impressions. 2nd residents' workshop (February 2020): Participants were invited to discover the sitting scenarios and project their role in such a project. The Steering Committee, accompanied by the engineering firms, validated the layout of the wind turbines. 3rd residents' workshop (March 2021): Due to the COVID-19 curfew, the third workshop was delayed and held by videoconference, presenting the progress of the project. Officially public consultation (March - April 2021): 411 contributions, 2 Public intercommunal cooperation establishments (EPCI) and 5 communities support the project. 4th residents' workshop (November 2021): A field visit aimed to understand the impact of wind turbines on the landscape, and to consider the planting of hedges in accordance with the prefectoral decree[278]. Finally, a list of complaints was submitted to the Andilly Town Hall to gather information on the problems associated with the commissioning of the wind farm in the following three areas: · radio and TV reception problem, · request for planting a hedge to limit visibility of wind turbines, · complaint related to wind turbine noise[279].	4 in-person sessions
6	Establishing an online platform for communication	Since November 2020[280].	Yes (a website)
7	Is there a mediator involved in community engagement?	l'Institut de Formation et de Recherche en Education à l'Environnement (IFREE) led the mediation process[281].	Yes
8	Adding up the information requests made and responded to by the company	80% of the 178 requests received in total have already been processed by Valorem in the Annual Monitoring Committee on 13 February 2024[282].	179 queries in total (80% responded to)
9	Number of locally proposed ideas implemented	The planting of 600 ml of hedges in connection with a school and a local ESAT (Les Établissements et Services d'Aide par le Travail) is taking place with the advice of the Marais Poitevin Regional Natural Park. The construction of the foundations is carried out in the autumn, after the ban linked to respect for the reproduction of fauna and avifauna, from 1 March 2023 to 15 August 2023[283].	N/A

278 Ibid.
279 Éolien Andilly, 2024. Ouverture du cahier de doléances. Available at: https://eolien-andilly.fr/2024/04/09/ouverture-du-cahier-de-doleances/
280 Éolien Andilly, 2025. L'origine du projet. Available at: https://eolien-andilly.fr/projet/
281 ibid
282 Paudal, 2025. Installation of wind turbines: how the mayor of Andilly-les-Marais made his consensual project. Available at: https://www.paudal.com/2025/03/10/installation-of-wind-turbines-how-the-mayor-of-andilly-les-marais-made-his-consensual-project/
283 Énergie Partagée, 2024. Parc éolien d'Andilly-les-Marais (PEAM). Available at : https://energie-partagee.org/projets/parc-eolien-dandilly-les-marais-peam/

No.	Criterion	Brief description	Quantitative assessment
12	Local ownership and control		
	a. Local ownership	The social contribution for the project is EUR 50. An Associate Current Account should be opened with an interest rate of 2.5%-5% .	31%
	b. Local control	The project was originally supported by the Andilly-les-Marais community, the Aunis Atlantique Communities federation and ANE!rs. These three local players withdrew from the project at the end of 2022 to make way for the local citizen company, COOPEC (Cooperative for the Production of Citizen Energy in Aunis Atlantique), which brings together 115 members, including 6 communities (namely, Aunis Atlantique Communities Federation and the municipalities of Andilly, Marans, La Ronde, la Greve-sur-Mignon and Saint-Ouen d'Aunis). This transfer took place at the end of 2022, with COOPEC inheriting 31% of the park's capital, but also a majority stake in the management of PEAM (Andilly-les-Marais Wind Farm), with 3 of the 5 decision-making votes[285].	60%
13	In-kind benefits		
	a. Number of monetary value of in-kind projects		-
	b. Cost savings for local residents and companies	The annual development bonus received by COOPEC is donated to the Municipality of Andil-ly-les-Marais to combat energy insecurity and promote energy savings (incl. renovation of heating systems and the purchase of electric bicycles[286]).	Approx. EUR 62,000 per year (about 2% of the pro-ject total budget)

Source: eclareon, 2025 based on publicly available information

Overall assessment and concluding thoughts

The Andilly-les-Marais Wind Farm can be seen as a well-executed community-driven renewable energy (RE) project that balances technical feasibility with strong local engagement. From the outset, the initiative prioritised community involvement, ensuring transparency and building trust through consultation workshops, public enquiries and active participation in decision-making processes. The involvement of a mediator at all phases of the project should also be highlighted as a positive factor. The establishment of COOPEC as a majority stakeholder in management highlights a shift towards a cooperative model that empowers local citizens and municipalities. The project's response to community concerns, such as addressing visual impacts by planting hedges and resolving radio and TV reception issues, further underlines its commitment to social acceptability. Additionally, the annual development bonus reinvested in the municipality reinforces the socio-economic benefits and demonstrates a long-term vision for local development.

In conclusion, according to our findings, the project could serve as a benchmark for community-based energy projects that effectively integrate citizen ownership and governance through COOPEC. The Andilly-les-Marais Wind Farm project sets a precedent for participatory RE that reinforces regional sustainability objectives and makes it a valuable case study to follow for similar projects across the EU.

285 Énergie Partagée, 2024. Parc éolien d'Andilly-les-Marais (PEAM). Available at : https://energie-partagee.org/projets/parc-eolien-dandilly-les-marais-peam/
286 Paudal, 2025. Installation of wind turbines: how the mayor of Andilly-les-Marais made his consensual project. Available at: https://www.paudal.com/2025/03/10/installation-of-wind-turbines-how-the-mayor-of-andilly-les-marais-made-his-consensual-project/

Parc Solaire de l'Espace du Génie (France)

GOOD PRACTICE

Introduction

The Parc Solaire de l'Espace du Génie project is located in the community of Écrouves, Meurthe-et-Moselle, Grand Est region in north-eastern France. The solar PV park has a capacity of 11.8 MW and produces 12.8 MWh annually, representing 77% of the electricity production of the community of 'Écrouves (4,457 habitants)[287] and avoiding 5,174 tonnes of CO2 per year[288]. The project, with a total budget of EUR 9.6 million, was launched in autumn 2023. It was commissioned in the summer of 2024 and inaugurated on 13 September 2024[289].

In 2019, the joint communities federation *Pays Terres de Lorraine*[290] launched a call for expressions of interest for the solarisation of specific sites in the region. There were two successful bidders. The EDF Renouvelables was the first one, but it abandoned the project three years later without giving a reason, according to our findings. The other winning consortium led by SipEnR, SCIC ENErgic (Enercoop Nord-Est) and Énergie Partagée launched the development of the Espace du Génie solar park on the polluted site of the former 15th Air Force Engineer Regiment with the objective of creating the first citizen-owned ground-mounted solar PV park in the Grand Est region. For that reason, the SAS (société par actions simplifiée) "Parc solaire de l'Espace du Génie" was created. During the consultation sessions, it became clear that local citizens and stakeholders valued the winning consortium because these organisations were receptive to community input and open to co-designing the project[291]. The strong aspect of community engagement and benefit sharing can be seen in the involvement of the communities federation Terres Touloises in being a shareholder of the SAS in 2022, with a right of veto, while at a later stage, the capital of the project was opened up to communities and citizens who can participate in its financing through a subscription to Énergie Partagée or ENErgic[292].

287 Territoires à énergie positive (TEPOS), 2024. 100% citoyen, le parc solaire du Génie !. Available at: https://tepos.fr/100-citoyen-le-parc-solaire-du-genie/
288 GECLER, 2022. L'espace du Génie : premier parc photovoltaïque au sol citoyen du Grand Est. Available at : https://gecler.fr/espace-du-genie-pv-sol-citoyen/
289 Énergie Partagée, 2024. Parc solaire de L'Espace du Génie d'Écrouves. Available at: https://energie-partagee.org/projets/espace-du-genie/
290 The joint communities Federation "Pays Terres de Lorraine" consists of the communities federations of Terres Touloises, Pays de Colombey- Sud Toulois, Moselle et Madon et Pays du Saintois. In Écrouves, the seat of the communities federation of Terres Touloises is located.
291 Claustre, Raphaël, 2025. Executive Vice President SipEnR. Interview conducted on 21 March 2025.
292 Énergie Partagée, 2024. Parc solaire de L'Espace du Génie d'Écrouves. Available at: https://energie-partagee.org/projets/espace-du-genie/

Table 1: Assessment of the Andilly-les-Marais Wind Farm project against the KPIs on community engagement and benefit sharing[293]

No.	Criterion	Brief description	Quantitative assessment
2	Number of actors engaged	The communities federation Terres Touloises was involved, as were the citizens who were informed about the project.	N/A
3	Type of actors engaged in project development		Interregional and local authorities (such as "Pays Terres de Lorraine, Terres Touloises) SipEnR, la SCIC ENErgic (Enercoop Nord-Est) Énergie Partagée Residents
5	Number of consultation sessions during the planning phase	There were 3 sessions in total. The first aimed to present the project to the public in its initial phase. The second gave a more comprehensive overview of the project, taking into account environmental factors. It was also explained how citizens could acquire shares of the project. The last session was held during the inauguration of the park. These sessions were coupled with public information meetings, co-creation workshops, information stands, and post-screening discussions.	3 face-to-face sessions
7	Is there a mediator involved in community engagement?	Although not a formal mediator, but GECLER (Lorraine Energie Renouvelables/ LER- Grand Est Citoyen et Local d'Energies Renouvelables) effectively acted as one. GECLER, financed by Société par Actions Simplifiée (SAS), and made up of SipEnR, Enercoop Nord Est (ENErgic), Énergie Partagée, and the communities' federation Terres Touloises, played a role similar to that of a mediator.	Yes
8	Adding up the information requests made and responded to by the company	Yes, there were requests but no major objections to the project. Within the Environmental Impact Assessment (EIA) process, requests were addressed. For instance, areas of the study area were excluded to preserve the local birdlife. Several hectares have been set aside to protect certain species, including the shrike. New habitats have been created to encourage biodiversity: a hibernaculum, a wetland, and perches have been created, and a 600-metre hedge of species favourable to biodiversity, has been planted.	2
9	Number of locally proposed ideas implemented	The communities federation Terres Touloises proposed the solar PV panels to be assembled in France. Although not the most economical choice, this proposal was accepted and Photowatt, a French PV manufacturer, was selected.	1

293 This assessment draws on available information to evaluate the Parc Solaire de l'Espace du Génie project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.

No.	Criterion	Brief description	Quantitative assessment
10	Role of local enterprises and investors:		
	a. Number of local firms engaged	Number of local firms engaged	Up to 2
	b. Locally sourced technology and resource	The solar PV panels were assembled in France by Photowatt.	N/A
	c. Number of local investors and funders	Any local citizen can buy a share in the project.	N/A
12	Local ownership and control		
	a. Local ownership	Citizens can subscribe to Énergie Partagée or Ener-coop Nord Est / ENErgic to receive capital shares.	N/A
	b. Local control	The governance structure is made up of the General Assembly, which brings together citizens and communities. There is a Management Committee made up of the 4 main actors (SipEnR, Enercoop Nord Est (ENErgic), Énergie Partagée et, and the Terres Touloises community association).	100%
13	In-kind benefits		
	a. Number of local firms engaged	These are essentially awareness campaigns and solar energy seminars at local primary schools. Pupils were tasked with creating a banner describing the project. An escape game was also organised in the solar park to familiarise the students with PV panels.	N/A
	b. Cost savings for local residents and companies		-
+1	Tax contributions to the local economy	A distinction is made between taxes paid annually at regional and local level.	Regional: approx. EUR 25,000 per year Local: approx. EUR 45,000 per year

Source: eclareon, 2025 based on Claustre, 2025[294] and publicly available information

Overall assessment and concluding thoughts

The Parc Solaire de l'Espace du Génie represents an important milestone in France's regional transition to renewable energy (RE), combining environmental responsibility with community engagement. The project demonstrates a strong commitment to participatory governance, ensuring that local citizens play an active role in its ownership and decision-making processes. The project has also successfully incorporated French-made solar PV panels and promoted biodiversity conservation, balancing energy production with environmental concerns. Through structured consultation sessions and public outreach initiatives, it has fostered a sense of community involvement, making the project a symbol of local empowerment and sustainability.

Overall, the project can serve as a model of how RE projects can be developed with strong community involvement. The active involvement of Terres Touloises in the management of the project and the possibility of involving local citizens in the financing of the project demonstrates the viability of community-driven RE projects and paves the way for future sustainable energy developments in the region.

294 Claustre, Raphaël, 2025. Executive Vice President SipEnR. Interview conducted on 21 March 2025.

Südharz grid connection (Germany)

GOOD PRACTICE

Introduction

One of the flagship projects of 50Hertz (German TSO) is the Südharz grid connection, which is the transmission network between the interconnection points Lauchstädt near Halle, Saxony-Anhalt, Wolkramshausen near Nordhausen, Thuringia, and Vieselbach near Erfurt, Thuringia. The project aims to replace the existing 220 kV overhead line by a 380 kV overhead one. The new line, with its grid connection point at Wolkramshausen, will secure the electricity infrastructure in the entire area of northern Thuringia, southern Harz up to Mansfelder Land and connect the region to the extra-high voltage grid. With its increased capacity, the project also makes an important contribution to the energy transition (*Energiewende*) by feeding regionally generated wind power into the extra-high voltage grid and transporting it to regions where it is needed[295]. The project has been included in Germany's Federal Grid Development Plan since 2014, with the permitting process began in 2020, the construction phase expected to start in 2025 and be completed in 2028[296].

In parallel to the official public participation required by the law, 50Hertz has created a "public dialogue discourse" for informal community participation and engagement. It is always adapted to the local and regional needs of each project, according to 50Hertz[297]. This informal public discussion aims to fill the potential gaps created by the Grid Expansion Acceleration Act (NABEG)[298], which has removed some steps in the permitting process. This proactive approach helps to identify potential barriers at an early stage and is therefore time and cost effective.

Source: 50 Hertz[299]

Table 1: Assessment of the Südharz grid connection project against the KPIs on community engagement and benefit sharing[300]

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	On average, 1/3 of the annual working time (approx. 70 days) is spent (Working group consists of 5 employers).	350 person-days
2	Number of actors engaged	250 persons per stakeholder type	More than 1,000
3	Type of actors engaged in project development		Landowners, farmers, regional & local administra-tion(s), especially when a project crosses more than one federal state e.g., Südharz, environmental/ monument preservation/ emission agencies, local & regional political parties & politicians, energy compa-nies, other network/ grid operators

295 50Hertz, 2025. Netzanbindung Südharz. Available at: https://www.50hertz.com/de/Netz/Netzausbau/ProjekteanLand/NetzanbindungSuedharz/
296 50Hertz, 2024. Netzanbindung Südharz Projektflyer April 2024. Available at: https://www.50hertz.com/de/Netz/Netzausbau/ProjekteanLand/NetzanbindungSuedharz/Flyer
297 Manthey, Dirk, 2025. Head of Public Participation. Interview conducted on 24 March 2025.
298 Netzausbaubeschleunigungsgesetz Übertragungsnetz (NABEG). Available at: https://www.gesetze-im-internet.de/nabeg/inhalts_bersicht.html
299 50Hertz, 2025. Netzanbindung Südharz. Available at: https://www.50hertz.com/de/Netz/Netzausbau/ProjekteanLand/NetzanbindungSuedharz/ 3
00 This assessment draws on available information to evaluate the Südharz grid connection project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.

Table 1 contd.

No.	Criterion	Brief description	Quantitative assessment
5	Number of consultation sessions during the planning phase	Prior to the permitting process, there have been 4 meetings with the most concerned stakeholders (authorities, local councils and regional administration) on the project. The project was divided into two subprojects: the Southern and Northern part. Furthermore, for each subproject there has been an early public participation with the Länder-AG and the Planungsforum. A van toured more than 17 places in the project area informing all citizens and responding to any queries[301, 302]. Further meetings on a local level have been organised so as to explain the background of the project, e.g., in Töttleben[303].	4 in-person meetings
6	Establishing an online platform for communication	50Hertz has established a dedicated website for the Südharz grid connection project, which also features a citizen hotline for inquiries[304,305].	Yes (a dedicated website and a hotline)
7	Is there a mediator involved in community engagement?		No

Source: eclareon, 2025 based on Manthey, 2025[306] and publicly available information

Overall assessment and concluding thoughts

50Hertz's Südharz grid connection project represents a major infrastructure upgrade that will strengthen grid stability, facilitate the integration of renewable energy (RE), and support the country's broader energy transition objectives. Despite the need for a lengthy permitting process from 2020, construction is set to commence in 2025 and conclude in 2028. While the project is primarily technical in nature, its role in ensuring efficient transmission of wind power to demand centres underscores its strategic importance. However, challenges remain, particularly in reconciling grid expansion with local environmental and land-use concerns, which will require ongoing stakeholder engagement to mitigate potential opposition.

50Hertz has placed a strong emphasis on community engagement through both formal consultations and informal participation mechanisms, such as the "public dialogue discourse". This proactive approach aims to address concerns at an early stage, making the process more time- and cost-effective, while fostering public trust. The company has engaged a wide range of stakeholders, including landowners, local authorities, environmental agencies and political representatives to ensure diverse input. However, with a transparent communication strategy, including an online platform and direct community outreach, the project provides a valuable example of inclusive infrastructure development that seeks to balance between technical feasibility, regulatory compliance and community engagement.

306 Manthey, Dirk, 2025. Head of Public Participation. Interview conducted on 24 March 2025.

Bürgerwindpark Simmerath (Germany)

GOOD PRACTICE

Introduction

Bürgerwindpark Simmerath is located in the Municipality of Simmerath, Aachen, North Rhine-Westphalia with a population of 15,841 (2022). Commissioned in 2016, the wind farm currently consists of 23 wind turbines with a cumulative installed capacity of 52.3 MW and a projected annual electricity production of 111 GWh[307]. As of December 2024, 72.9 MW of new (additional) wind power plants are in the permitting phase[308].

The success story of the Municipality of Simmerath can be summed up in one phrase: "*We just make it simple*"[309]. The municipality has defined the areas of land it owns where wind energy turbines can be installed. This ex-ante definition, which respects all the requirements for wind energy projects, simplifies the whole process without further community involvement. Moreover, the distribution of benefits introduced by the municipality is clear and known to project developers from the outset. As a result, the highest bidder, i.e. the developer, realises the project, while the financial benefits are distributed equally to all residents of the municipality through a reduction in the municipal taxes[310].

Source: Gemeinde Simmerath[311]

307 Energieatlas NRW, 2025. Excel Tabelle zum Ausbaustand der stromerzeugenden Energien in NRW. Available at: https://www.energieatlas.nrw.de/site/service/download_daten
308 Energieatlas NRW, 2025. Excel Tabelle: Genehmigungsmonitoring Windenergie. Available at: https://www.energieatlas.nrw.de/site/service/download_daten
309 Goffart, Bernd, 2025. Mayor of Simmerath Municipality. Interview conducted on 6 March 2025.
310 Ibid.
311 Gemeinde Simmerath, 2023. Windkraft in Simmerath. Available at: https://www.simmerath.de/wirtschaft-und-bauen/windkraft/

Table 1: Assessment of the Südharz grid connection project against the KPIs on community engagement and benefit sharing[312]

No.	Criterion	Brief description	Quantitative assessment
13	In-kind benefits		
	a. Number of monetary value of in-kind projects		-
	b. Cost savings for local residents and companies	In general, a family of 4 members that resides in the municipality of Simmerath has a tax relief (e.g., business tax, property tax) of EUR 600 per year.	Approx. EUR 2.3 million
+1	Tax contributions to the local economy	The Municipality of Simmerath has a cumulative budget income of around EUR 50 million. Around EUR 2 million comes from the wind parks; this can be further broken down as follows: · lease income, · one-off payout by the project developer, · profit share, · EEG, · business tax (due to fact the project developer should be based in Simmerath). It is difficult to distinguish between the various income categories. As an exception, the EEG § 6 revenue (fee of EUR 0.002 per kWh for the quantity of electricity actually fed into the grid paid to municipalities by RE operators) can be roughly estimated at EUR 222,000.	Approx. EUR 2 million, out of them EUR 222,000 from EEG

Source: eclareon, 2025 based on Goffart, Bernd, 2025[313]

Overall assessment and concluding thoughts

The Municipality of Simmerath acts as a representative of the entire local society and therefore the revenues collected are distributed equally to all residents of the municipality through lower municipal taxes each year. Nevertheless, the municipality is keen to develop more wind energy, as this can further increase its budget revenues, given the foreseen increase in the municipal budget deficit. Apart from the distribution of benefits, it is transparent about the location of wind energy projects as it has defined areas suitable for wind energy that it owns and offers them to the highest bidder. It is also interesting to note that the municipality[314] generates 187% of its electricity needs (this could rise to 300% in the future), making it a net electricity exporter[315].

The Municipality of Simmerath is considered one of the most interesting cases of wind energy deployment in a local context which is attracting national attention[316,317,318]. The ex-ante identification of suitable areas for wind energy, based on clear criteria i.e., sitting on the commercial forest, an area owned by the municipality, and the availability of sufficient staff in the municipal planning department are two important factors in accelerating the deployment of onshore wind energy in the area. Furthermore, another aspect worth following is that it has provided a comprehensive explanation of how and why this is being done, thereby reducing any potential public resistance. Last but not least, it acts on behalf of the whole community, which results in better and more sustainable financial benefits that are distributed equally to all residents.

312 This assessment draws on available information to evaluate Bürgerwindpark Simmerath project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.
313 Goffart, Bernd, 2025. Mayor of Simmerath Municipality. Interview conducted on 6 March 2025.
314 So simmer, 2023. Berliner Luft in Simmerath: Der Besuch des Bundeskanzlers und des Ministerpräsidenten NRWs. Available at: https://sosimmer.de/ein-ehre-fuer-simmerath-windparks-mit-vorbild-charakter/
315 Goffart, Bernd, 2025. Mayor of the Simmerath Municipality. Interview on 06 March 2025.
316 Gemeinde Simmerath, 2023. Hoher Besuch: Bundeskanzler Scholz und NRW-Ministerpräsident Wüst besuchen Simmerath. Available at: https://www.simmerath.de/news/2023/aug/hoher-besuch-bundeskanzler-scholz-und-nrw-ministerpraesident-wuest-besuchen-simmerath/
317 Gemeinde Simmerath, 2023. Windkraft in Simmerath als Vorbild für NRW. Available at: https://www.simmerath.de/news/2023/jan/windkraft-in-simmerath-als-vorbild-fuer-nrw/
318 Bundesministerium für Wirtschaft und Klimaschutz, 2024. Team Energiewechsel: Eine Gemeinde voller Energie. Available at: https://www.energiewechsel.de/KAENEF/Redaktion/DE/Standardartikel/Best-Practices/best-practice-buergerwindpark-eine-gemeinde-voller-energie.html

Margonin Wind Farm (Poland)

GOOD PRACTICE

Introduction

The Margonin Wind Farm, located in the Margonin municipality in Chodzież County, Wielkopolskie Voivodeship, is the second largest onshore wind power plant in Poland. It was developed by Relax Wind Park I Sp. z o.o., a special purpose vehicle indirectly owned by EDP Renováveis, S.A., with co-development by Buttero Holding Limited, representing Polish private investors. Commissioned in 2010, the project consists of 60 wind turbines with a total installed capacity of 120 MW. The wind farm is fully operational and contributes significantly to Poland's renewable electricity production, supplying power to an estimated 90,000 households annually[319,220].

During the planning and development phase, the project included multiple community engagement mechanisms, such as public consultations, information points, and publications in local media outlets. Interactions included those with local governments, residents and institutions such as the State Sanitary Inspectorate (SANEPID). In terms of benefit sharing, the wind farm contributes approx. PLN 6 million (approx. EUR 1.4 million)[321] annually to the municipal budget through property taxes, which are used for infrastructure and public services. Moreover, in-kind contributions have been made, such as road improvements and the construction of a local stadium[322,323,324].

Source: Margonin Wind Farm[325]

319 EBRD, n.d. Margonin Wind Farm (Project Summary Document). European Bank for Reconstruction and Development. Retrieved March 18, 2025, from https://www.ebrd.com/home/work-with-us/projects/psd/40553.html

320 EDPR, 2015. Annual report: Margonin Wind Farm. EDP Renewables Polska Retrieved March 17, 2025, from https://www.edpr.com/poland/sites/edprpoland/files/annual_report_margonin_za_2015_1.pdf

321 Based on the exchange rate of EUR 1 = PLN 4.28 (XE.com, April 09, 2025), which has been used for the Margonin Wind Farm case study.

322 EDP Renewables Polska & ENVIRON PolandEDPR, 2013. Streszczenie nietechniczne projektu farm wiatrowych Margonin i Pawłowo.

323 WindEurope, 2020. Wind industry commitments on community engagement. Retrieved April 4, 2025, from https://windeurope.org/wp-content/uploads/files/policy/position-papers/20200702-WindEurope-position-paper-wind-industry-commitments-on-community-engagement.pdf

324 Kompas ESG, 2023. Nowelizacja ustawy wiatrakowej atrakcyjna dla branży i gmin. Retrieved March 17, 2025, from https://kompasesg.pl/aktualnosci/nowelizacja-ustawy-wiatrakowej-atrakcyjna-dla-branzy-i-gmin/

325 Urząd Miasta i Gminy Margonin, n.d.. Farma wiatrowa. Retrieved April 4, 2025, from http://archiwum.margonin.pl/dla-mieszkanca/ochrona-srodowiska/farma-wiatrowa.html

Table 1: Assessment of the Margonin Wind Farm project against the KPIs on community engagement and benefit sharing[326]

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	No figures have been published on the number of person days dedicated to understanding the local context and community. Project documentation indicates that the investor (EDP Renewables) conducted a number of activities in this area (required by existing law), including public consultations, publications in local media, and making Environmental Impact Assessment (EIA) reports available to local communities[327].	N/A
2	Number of actors engaged	There is no precise data on the number of local entities engaged by the developer. However, project documentation indicates that EDP Renewables carried out extensive information and consultation activities during the planning phase of the investment. The process involved local governments (Gmina Margonin, Chodzież County), institutions such as the county and provincial SANEPID offic-es, as well as local communities through publications in newspapers and municipal newsletters, access to EIA reports, and opportunities to submit comments[328]. Additionally, information about the project was published in local media such as Margoniński Informator Samorządowy, Chodzieżanin, and Tygodnik Nowy, which reached the region's residents[329].	N/A
3	Type of actors engaged in project development	Although an analysis of the available materials indicates a range of actors involved in the project development process, the Margonin Wind Farm project did not include a formal community engagement plan. The stakeholders involved during the development of the Margonin Wind Farm included: landowners directly impacted by turbine placement entered into lease agreements with the developer, receiving annual payments and compensation for construction-related damages. Residents in nearby villages were engaged through public consultations and local information points, where they could learn about the project and provide feedback. The developer maintained regular contact with local authorities, including the Margonin commune, to ensure alignment with planning frameworks and community needs. Broader public outreach was conducted through websites, press announcements, and bulletins. Local businesses benefited indirectly from infrastructure upgrades, including around 10 km of new or improved roads, and the wind farm was promoted as a potential tourist attraction. Environmental considerations were addressed through consultations during the EIA process, involving authorities and relevant stakeholders.	i) Households and landowners directly impacted (e.g. land acquisition) ii) Households and landowners neighbouring the installation iii) Local authorities iv) The general public v) Local businesses that may be affected by the endeavour (e.g. construction firms, agriculture sector, fishers, tourism) vi) NGOs / environmental groups

326 This assessment draws on available information to evaluate the Margonin Wind Farm project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.
327 EDP Renovaveis, 2009. Margonin wind farm: Non-technical summary. European Bank for Reconstruction and Development.
328 Ibid.
329 ENVIRON, 2013. Raport uzupełniający: Farmy wiatrowe Margonin i Pawłowo – Polska.

No.	Criterion	Brief description	Quantitative assessment
5	Number of consultation sessions during the planning phase	While the documents indicate that at least several meetings and forms of exchange were held, a complete record of the total number of sessions, both in-person and possibly online (which, prior to 2010, were relatively uncommon), is not available. Except for the EIA process required by law, the available documents indicate that the developer voluntarily organised a number of consultative and informational activities, including: · Establishment of consultation points in four villages within the wind farm's area of influence, allowing residents to familiarise themselves with the project and express their opinions; · Creation of Project Information Points (PIP) in the municipal offices of Gmina Margonin and Gmina Gołańcz, where project-related documents and forms for submitting comments and feedback were made available.	N/A
6	Establishing an online platform for communication	The developer set up an online communication platform for the Margonin Wind Farm project. Information about the project was available on the EDPR website, where key documents such as EIA reports and project-related announcements were shared. In 2013, a Polish-language website was launched by EDPR (www.edprenovaveis.com/Sustainability/EDPRintheCommunity/PoloniaSustainability/Margonin[330]), containing basic information about the wind farms and enabling local communities to contact the company, ask questions, and submit any complaints.	Yes (website)
7	Is there a mediator involved in community engagement?		No
11	Monetary benefits reaped by locals		
	a. Lump sum compensation paid to locals	Landowners whose properties host wind turbines receive regular lease payments. Each participating landowner received an annual income increase of approx. PLN 8,000 (€1,864)[331].	~€112,000 per year in lease payments to landowners
	b. Regular payouts to locals	The Margonin municipality receives significant tax revenues from the presence of wind turbines. It is estimated that the annual revenue from property taxes generated by the wind farm amounts to approx. PLN 6 million (EUR 1.4 million) making 15% of total incomes for the municipal budget[332].	~€1.38 million per year % of project CAPEX: ~0.41% annually

330 The website is no longer available. Currently, only the following website run by the local authorities is available: https://samorzad.gov.pl/web/gmina-margonin/farma-wiatrowa

No.	Criterion	Brief description	Quantitative assessment
13	In-kind benefits		
	a. Number of monetary value of in-kind projects	The exact monetary value of these investments has not been published. However, the Margonin Wind Farm investment brought several in-kind benefits to the local community, including: · Modernisation of local roads: as part of the wind farm construction, existing access roads were rebuilt and reinforced, improving transportation infrastructure within the municipality[333]; · Construction of a football stadium: EDP Renewables, in cooperation with local authorities, financed the construction of a modern sports stadium, supporting the development of local physical culture[334].	N/A
	b. Cost savings for local residents and companies		-
+1	Tax contributions to the local economy	According to a report by the EBRD, the development of the Margonin Wind Farm could contribute to an approx. 10% increase in the tax revenues of the Margonin municipality[335].	Annual tax contribution: approx. €1.4 million % of estimated annual project income: approx. 4.85%

Source: eclareon, 2025 based on publicly available information

Overall assessment and concluding thoughts

The Margonin Wind Farm is an example of a large-scale renewable energy (RE) project that implemented basic but effective community engagement and benefit-sharing practices. The project included public consultations, information points in local municipalities, and the publication of materials through local media. Although no formal community engagement strategy or mediation mechanism was documented, the investor's cooperation with local authorities and institutions helped to ensure a certain level of transparency. In terms of benefit sharing, it generates significant property tax revenues for the Municipality of Margonin and the developer provided in-kind benefits, such as infrastructure improvements and the construction of a sports stadium.

The Margonin case shows moderately good performance. While it met basic expectations in terms of access to information, engagement with key local stakeholders, and economic redistribution through taxation and infrastructure, it lacked systematic documentation of indicators, such as the number of consultation sessions, queries received and addressed, or implementation of ideas proposed by the community. There is also no evidence of targeted support for vulnerable groups or of local ownership and governance mechanisms. However, the project was implemented in the late-2000s and became operational around 2010, which helps explain why many data points are unavailable or not systematically recorded. Given its early implementation, the level of engagement and benefit delivery was relatively advanced for its time. With this in mind, Margonin can be considered a solid early-stage benchmark for wind energy development in Poland; albeit, with room for improvement in inclusivity and transparency.

331 EBRD, 2009. Environmental and Social Action Plan (ESAP) – Margonin Wind Farm. European Bank for Reconstruction and Development. Retrieved March 17, 2025, from https://www.ebrd.com/english/pages/project/eia/40553.pdf

332 Kompas ESG, 2023. Nowelizacja ustawy wiatrakowej atrakcyjna dla branży i gmin. Retrieved March 17, 2025, from https://kompasesg.pl/aktualnosci/nowelizacja-ustawy-wiatrakowej-atrakcyjna-dla-branzy-i-gmin/

333 Urząd Miasta i Gminy Margonin, n.d.. Farma wiatrowa. Retrieved March 18, 2025, from https://archiwum.margonin.pl/dla-mieszkanca/ochrona-srodowiska/farma-wiatrowa.html

334 WindEurope, 2020. Wind industry commitments on community engagement. Retrieved April 4, 2025, from https://windeurope.org/wp-content/uploads/files/policy/position-papers/20200702-WindEurope-position-paper-wind-industry-commitments-on-community-engagement.pdf

335 EBRD, n.d. Margonin Wind Farm (Project Summary Document). European Bank for Reconstruction and Development. Retrieved March 18, 2025, from https://www.ebrd.com/home/work-with-us/projects/psd/40553.html

Potęgowo Wind Farm (Poland)

GOOD PRACTICE

Introduction

The Potęgowo Wind Farm is a large-scale renewable energy (RE) project located in northern Poland, spanning the municipalities of Słupsk, Damnica, Potęgowo (Pomeranian Voivodeship), and Malechowo (West Pomeranian Voivodeship)[336]. The project developed by Mashav Energia employs onshore wind energy technology and has a total installed capacity of 257 MW, making it the largest wind farm in Poland . It includes 98 General Electric wind turbines, generating approx. 722 MWh of electricity annually and reducing CO2 emissions by 500,000 tonnes per year[338]. The project is classified as a Category A investment by the European Bank for Reconstruction and Development (EBRD) due to its environmental and social impact and has undergone comprehensive Environmental and Social Impact Assessments (ESIA) and stakeholder engagement processes. It is fully operational since 2022, with the initial phases completed by 2019, followed by an expansion that included additional wind farms in Wieliszewo (37 MW) and Bięcino (22 MW)[339].

In terms of community engagement, Mashav Energia implemented a formal Stakeholder Engagement Plan (SEP) and carried out consultations across all affected municipalities, meeting regularly with local authorities, landowners, and residents. Information was disseminated through public meetings, local media, and a dedicated website. A local Contact Point has also been established to deal with enquiries. Regarding the benefit sharing, the project has generated substantial tax revenues for the local municipalities (approx. EUR 20,000-25,000 per turbine annually totalling around EUR 1.6-2 million), which have been used to co-finance improvements in education, infrastructure, and public safety. In-kind contributions included the construction of local roads, fully funded by the developer, and educational support for children through sponsored after-school programmes[340,341,342].

Source: Mashav Energia. (n.d.). Potęgowo South (left) and Potęgowo West (right).[343]

336 Ramboll Environ, 2018. Potęgowo Wind Farm: Environmental and Social Impact Assessment (ESIA) Summary. Ramboll Environ Poland.
337 EBRD, 2019. Project Summary Document: Potęgowo Wind Farm (Project 50200). European Bank for Reconstruction and Development.
338 Zephyrus, n.d. Potęgowo Wind Farm. Retrieved March 16, 2025, from https://www.zephyrus.co.il/projects/potego/
339 Mashav Energy, 2021. Expanded Potęgowo Wind Farm Project: Non-Technical Summary. Ramboll Environ Poland. Retrieved March 16, 2025, from https://mashavenergia.com/wp-content/uploads/2021/02/Extended-Pot%C4%99gowo-Wind-Farm-Project-Non-Technical-Summary-1.pdf
340 Mashav Energia, 2021. Wieliszewo Wind Farm Project Non-Technical Summary. Retrieved March 16, 2025, from https://mashavenergia.com/wp-content/uploads/2021/02/Wieliszewo-Wind-Farm-Project-non-technical-summary-rev.1.2-1.pdf
341 Beyond Fossil Fuels, 2025. Where the wind blows, prosperity grows in Poland. Retrieved March 16, 2025, from https://beyondfossilfuels.org/2025/01/08/where-the-wind-blows-prosperity-grows-in-poland/; Beyond Fossil Fuels. (2025, January 14). From doubts to joy. Wind energy has transformed our municipalities. Retrieved March 16, 2025, from https://beyondfossilfuels.org/2025/01/14/how-wind-energy-has-transformed-municipalities-in-poland/
342 Business Insider Polska, 2022. Ta gmina wiatrakami stoi. „Krowy dają mleko, a kury niosą jaja". Retrieved March 16, 2025, from https://businessinsider.com.pl/gospodarka/ta-gmina-wiatrakami-stoi-krowy-daja-mleko-a-kury-niosa-jaja/7b5zfsl
343 Mashav Energia, n.d. Projekt Potęgowo. Retrieved March 16, 2025, from https://mashavenergia.com/projekt-potegowo/#szczegoly

Table 1: Assessment of the Potęgowo Wind Farm project against the KPIs on community engagement and benefit sharing[344]

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	In 2018, public consultations were held in Potęgowo and the neighbouring municipalities to inform residents about project impacts and time-lines. Information was shared via local websites, notice boards, and newspapers. A Contact Point was set up at the Municipal Office, and engage-ment with local leaders has continued throughout construction and operation, reflecting a strong ef-fort to understand the local context.	N/A
2	Number of actors engaged	The project followed a Stakeholder Engagement Plan (SEP) to ensure inclusive communication throughout all phases. Activities included individual meetings with landowners for lease negotiations, formal consultations with local authorities during zoning and EIA processes, coordination with the Distribution System Operator (DSO) on grid connection, and engagement with relevant infrastructure and regulatory bodies for necessary approvals.	Number of people engaged: approx. 700 % of local population: approx. 2.4%
3	Type of actors engaged in project development	The SEP for the Potęgowo Wind Farm identified key stakeholder groups, including approximately 100 directly affected landowners, neighbouring residents in villages, such as Siemianice and Wieliszewo, local authorities and political leaders from municipalities like Potęgowo and Damnica, as well as community leaders. The general public was engaged through meetings and media outreach, while local businesses contributed to construction.	(i) Households and landowners directly impacted (ii) Households and landowners neighbouring the installation (iii) Local authorities (iv) Local political leaders (v) Community leaders (vi) The general public (vii) Local businesses that may be affected by the endeavour (ix) Grid operator (xi) NGOs / environmental groups
5	Number of consultation sessions during the planning phase	There is no data on the number of consultation sessions held during the planning phase. However, Mashav Energia engaged consistently with stake-holders through various channels, including: regular meetings with commune and county representatives, participation in local events, such as harvest festivals, and visits to commune councils where the project was generally well received. Mashav organised meetings in all communes to inform local communities and maintained ongoing communication with local authorities to secure necessary approvals.	N/A
6	Establishing an online platform for communication	The project developer, Mashav Energy, has launched a dedicated website (https://mashavenergia.com/en/the-potegowo-project/) available in both Polish and English.	Yes (a dedicated website)
7	Is there a mediator involved in community engagement?	There was no formal mediator involved in the discussions between Potęgowo residents and the Potęgowo Wind Farm developer (Mashav Energy).	No

344 This assessment draws on available information to evaluate the Potęgowo Wind Farm project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.

No.	Criterion	Brief description	Quantitative assessment
10	Role of local enterprises and investors:		
	a. Number of local firms engaged	While exact numbers are unavailable, key local firms involved include Electrum Sp. z o.o., the general contractor for the project, and the Erbud Group, which handled design, construction, and commissioning of the 101.25 MW Potęgowo-East Wind Farm.	At least 2
	b. Locally sourced technology and resources	The project deployed 81 turbines supplied by General Electric and 17 turbines from Vestas, both of which have established manufacturing and service operations within Poland. Local sourcing of materials and services was prioritised, involving Polish companies in the supply chain; thereby, supporting the regional economy.	€80-100 million ~25–30% of total investment
	c. Number of local investors and funders	The project was financed by a consortium of five banks, including two Polish institutions: Bank Pekao S.A. and mBank, as well as PZU, Poland's largest insurance company.	At least 3
12	Local ownership and control		
	a. Local ownership	There is no evidence of ownership shares held by Polish citizens, local governments or other domestic stakeholders. The project is owned by Potegowo Mashav Sp. z o.o. – a special-purpose vehicle established to develop, construct, and operate the wind farm. This company is controlled by the Israel Infrastructure Fund, Helios Energy Investments and CERAC SA, all of which are international entities[345]. This reflects a model of project development focused on foreign institutional investment without a mechanism for local equity participation.	-
	b. Local control	There is no evidence that any local entity or residents possess voting rights or hold influence over strategic or operational decisions. Decision-making authority resides with the project's foreign share-holders through Potegowo Mashav Sp. z o.o. No formal structures (such as community advisory boards, co-governance mechanisms or voting rights for local stakeholders) have been publicly disclosed.	-

345 EBRD., 2018. Stakeholder Engagement Plan (SEP) - Potęgowo Wind Farm (Project 50200). European Bank for Reconstruction and Development. Retrieved March 16, 2025, from https://www.ebrd.com/documents/environment/esia-50200-sep.pdf

No.	Criterion	Brief description	Quantitative assessment
13	In-kind benefits		
	a. Number of monetary value of in-kind projects	The exact number and total monetary value of all in-kind projects associated with the Potęgowo Wind Farm are not comprehensively documented. However, a known in-kind contribution from the Potęgowo Wind Farm developer was the construc-tion of several kilometres of local roads, fully funded by the company.	N/A
	b. Cost savings for local residents and companies	Specific data on direct cost savings for local residents and companies, such as reduced electricity prices or preferred access to locally generated electricity, are not readily available.	N/A
+1	Tax contributions to the local economy	The estimate assumes 81 turbines generate €1.6-2.0 million in local taxes annually. With average production of 565,400 MWh per year (assuming 2,200 full-load hours) and electricity priced at €110 per MWh, total revenue is estimated at around €62.2 million.	€ ~1.6-2.0 million annually % of annual project income: ~2.6-3.2%

Source: eclareon, 2025 based on publicly available information

Overall assessment and concluding thoughts

The Potęgowo Wind Farm demonstrates several commendable practices in both community engagement and benefit sharing. Stakeholder involvement was incorporated from the early stages, including environmental consultations and information sharing through dedicated platforms and local meetings. The benefit sharing mechanisms, while not structured through direct ownership models, included substantial tax contributions to municipalities and in-kind infrastructure investments, such as road construction and educational support. These initiatives have contributed to strong local acceptance and tangible improvements in public services.

Against the KPIs assessed, the project scores particularly well in terms of early-stage engagement, transparency, and fiscal redistribution through municipal revenues. However, there is no evidence of local ownership or governance control, and there is limited data available on formal feedback incorporation or long-term revenue sharing at the household level. Contextually, the project is embedded in a national auction based RE support scheme, and its development has relied heavily on foreign investors. Nevertheless, Potęgowo Wind Farm project sets a valuable benchmark for the integration of large-scale RE infrastructure into local socio-economic contexts, with scope for expanded participation and shared ownership in future phases or replication models.

Los Naranjos y las Corchas solar PV park (Spain)

GOOD PRACTICE

Introduction

The Los Naranjos y las Corchas solar PV park in Carmona and La Rinconada, Seville, are two PV parks with a combined capacity of 100 MW, generating 202 GWh per year. This is equivalent to the annual electricity consumption of Carmona (about 25,500 households), where the park is located, and results in a reduction of around 31,000 tonnes of CO2 annually. The project developer, Enel Green Power Spain/Endesa, began the construction works in August 2019 and completed by December 2020[346]. It has been presented and awarded 7 times, among others, the Spanish Solar PV Association's of Excellence in 2023 and the best sustainability project in the CONAMA foundation's 11th Edition of the Award for Sustainability in Small and Medium-Sized Municipalities in 2022[347].

Enel Green Power Spain/Endesa follows the Creating Shared Value (CSV) policy, introduced in 2015, which sets out the company's approach to engaging with communities in an inclusive manner. The main objective is to create long-term value for all stakeholders, minimising environmental and social risks and impacts, while generating value for the company and the region[348]. Early community engagement was one of the key factors in the success of the Los Naranjos y las Corchas solar PV project, where the developers have discussed main concerns related to the project through bilateral meetings. Prior to this, they had conducted a social, environmental and economic context analysis. The product of the early community engagement was the definition of actions together with relevant stakeholders, which were included in the CSV plan. Benefit sharing was reflected in the CSV's actions that encompassed support for local activities and initiatives related to beekeeping, grazing, agriculture, tourism and support of vulnerable communities. Additionally, the developer has focused on supporting and engaging local businesses and workforce, while donating various materials and infrastructure used during construction to the local authorities[349].

Source: Enel, 2022. La energía positiva de las plantas solares de Carmona.[350]

346 Enel Green Power Spain, 2020. Parques solares Los Naranjos y Las Corchas, España. Available at: https://www.enelgreenpower.com/es/proyectos/operativos/parques-solares-los-naranjos-y-las-corchas
347 Fiteni Campos, Inmaculada Maria, 2025. Head of CSR Enel Green Power Spain/ Endesa. Interview conducted on 3 April 2025.
348 Enel Green Power Spain, 2024. Creación de valor compartido. Available at: https://www.endesa.com/es/nuestro-compromiso/personas/proyectos-csv-creating-shared-value-sostenibilidad
349 Fiteni Campos, Inmaculada Maria, 2025. Head of CSR Enel Green Power Spain/ Endesa. Interview conducted on 3 April 2025.
350 Endesa, 2022. La energía positiva de las plantas solares de Carmona. Available at: https://www.endesa.com/es/proyectos/todos-los-proyectos/transicion-energetica/renovables/energia-positiva-plantas-solares-carmona

Table 1: Assessment of the Los Naranjos y las Corchas solar PV park project against the KPIs on community engagement and benefit sharing[351]

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	In the initial phase of the project, the CSV project manager, with the support of a local consultant expert in the management of local actors, devoted two months to analysing the socio-economic context and contacting the main local actors in the project's vicinity. This work is usually carried out around all Enel projects and assets as an integral part of the CSV process[352], whose overall objective is to maximise the value generated for the local population through a process of active listening and valuation of local resources.	80 person-days
2	Number of actors en-gaged		23 local authorities in the vicinity of the facility
3	Type of actors engaged in project development	Public administrations (local and regional), com-panies, business and social associations, and pri-vate individuals.	More than 23 local stakeholders, including local authorities[353] as well as local associations and individuals[353]
4	Outreach and benefits delivered to vulnerable communities	In the construction phase, El Alcazar Vocational Centre, which participated in the recycling of con-struction material, the hardware workshop and the design of the solar honey label. In the operation and maintenance (O&M) phase, Fundacion TAS, which received the Compost-IN course on weeding and composting, and the Pro-laya Association, which participated in several events of the Ciclorrinconada race by providing volunteers for the refreshment points.[355]	3 entities associated with vulnerable communities
5	Number of consultation sessions during the planning phase	According to the CSV methodology, during the design and construction phase of the project, 46 meetings were held with the 23 local stakeholders. During the O&M phase, 14 meetings were held (specifically with IFAPA, Fundación TAS, Aso-ciación PROLAYA, BICIOMANIA EXTREME and a tourist guide).	60 meetings held in total with 23 local stakeholders
6	Establishing an online platform for communication	The preferred format for initial contact with local stakeholders was face-to-face meetings, which opens a channel of communication that continues through telephone contacts, online and face-to-face meetings. In addition, during the project planning phase, the local community was informed about the characteristics of the project through the panel website, which was installed at the project con-struction site and where an email box (Sos-tenibilidad_csv@enel.com) was also made availa-ble to resolve any doubts or concerns about the project.	No (instead, outreach via email and close contact via bilateral meetings and phone)

351 This assessment draws on available information to evaluate the Los Naranjos y las Corchas solar PV park project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.

352 Endesa, 2022. La energía positiva de las plantas solares de Carmona. Available at: https://www.endesa.com/es/proyectos/todos-los-proyectos/transicion-energetica/renovables/energia-positiva-plantas-solares-carmona

353 More specifically la Rinconada City Council, the Carmona City Council and the Sociedad Fomento los Alcores (integrated by the City Council of Carmona, El Viso and Mairena),

354 More specifically: Related to bee-keeping: Loramiel SL, Protofy and Smartbee, Fundación Amigos de las Abejas,Raul Bonilla, entrepreneur and tourist guide from Carmona, involved in beekeeping activities. Convent of the Poor Clare Sisters and Juan Jose Garcia Martin Bakery. Related to vulnerable groups: El Alcázar" Occupational Center for people with disabilities, TAS Foundation and PROLAYA Association of people with mental disabilities. Related to agriculture/ pastoral activities: sheep Herder, Colectivo municipal de Huertos Sociales, Plantaroma SL and CTAEX - Centro Tecnológico Agroalimentario Extremadura, BICIOMANIA EXTREME, IFAPA (Institute of Agricultural Research and Training and Fisheries of Andalusia), ASAJA (Association of young farmers).

355 Diario de Sevilla, 2021. Endesa, proyectos socialmente sostenibles. Available at: https://www.diariodesevilla.es/andalucia/Endesa-proyectos-socialmente-sostenibles_0_1560444320.html

No.	Criterion	Brief description	Quantitative assessment
7	Is there a mediator involved in community engagement?	At the beginning of the project planning phase, a CSV contact person was appointed. S/he was acting as a liaison between the local community and the business teams in the different phases of the plant development (Project Developer, Project Manager and Plant Supervisor in operation). The person was dedicated exclusively to this task and was responsible for gathering all feedback from the local community regarding the project at its various phases.	Yes
8	Adding up the information requests made and responded to by the company	There have been two response channels. First, the official one, established by the regulations (public information period of the project), in which a response was given to the allegations received by the technical project. Second, an additional one, through the CSV process, which started from the early stages of the project to present it to the local community, to gather sensitivities and to design the different initiatives that form the backbone of the CSV accompanying plan. The requests and consultations received through this channel usually focus on the technical project, the CSV plan and Endesa's different business activities (such as distribution, commercialisation, etc.).	100% of allegations an-swered and 100% of re-quests handled
9	Number of locally proposed ideas implemented	In summary, the CSV plan was made up of the following initiatives: · training for employment under agreement with the City Councils of Carmona and La Rinconada as well as other associations, · promotion of local hiring (at least 20% of the projects workforce), · solutions to reduce the cost of electricity supply in the municipality of Carmona, · development of primary sector initiatives (beekeeping, grazing, agriculture), including the Solar Apiary project, which combines beekeeping with solar energy production and supports local beekeepers and helps maintain a safe environment for the bees, · integration of groups at risk of social exclusion), · various tourism support activities (such as open Open Days), · donation to the local community of different materials used during construction once the work is completed (i.e., a PV self-consumption kit, rainwater storage tanks of 40,000 litres, 3 defibrillators, 1 charging point for an EV and 5 spotlights).	31 initiatives

No.	Criterion	Brief description	Quantitative assessment
10	Role of local enterprises and investors:		
	a. Number of local firms engaged	In the construction and O&M phase, contracts have been signed with the following different local and national companies: - GES (main contractor) - Considera (CSV consultancy) - Esasolar (construction) - Solarig (maintenance) - Labygema (waste management) - Sertego (hazardous waste) - Ramaltura (clearing)	7 companies
	b. Locally sourced technology and resources	Related to the previous point, during the construction and plant operation phase, and as an integral part of the CSV approach, attempts are made to maximise the consumption of local goods and services (security, cleaning, clearing, etc.), but not the supply of the PV components, e.g., PV panels.	-
	c. Number of local investors and funders	No local participation initiatives have been developed in the investment.	-
11	Monetary benefits reaped by locals		
	a. Lump sum compensation paid to locals	No compensation of any kind has been paid to individuals in this project.	-
	b. Regular payouts to locals	Payments to landowners: established on the basis of hectares leased with a fixed percentage share of total farm turnover allocated on a pro-rata basis.	N/A
12	Local ownership and control		
	a. Local ownership	Enel Green Power España is the sole owner of the plant. There is no local ownership interest in this project.	-
	b. Local control		-
13	In-kind benefits		
	a. Number of monetary value of in-kind projects	The (estimated) monetary value generated by the set of CSV initiatives amounts to around €900,000 broken down into the following axes: - Training axis: €50,000 - Donation of building elements axis: ~ €100,000 - Primary sector axis: ~ €400,000 - Sustainable tourism axis: ~ €10,000 - Lowering the cost of electricity supply axis: ~ €350,000	Approx. €900,000
	b. Cost savings for local residents and companies	No calculations have been made.	-

No.	Criterion	Brief description	Quantitative assessment
14	Local job creation		
	a. Local jobs created during the construction phase	The projects promoted local recruitment. A pool of local workers was created and the selection of workforce was based on this pool. Specifically, during the construction phase, 175 jobs/29 local workers. Construction started in February 2020 and went into full production on 30 April 2021 (14 months construction phase).	406 person-months
	b. Long-term local jobs created	4The local employees who are directly related to the management of the plant are: - 1 plant supervisor (who is basically Enel's own staff), - 3 people from the O&M contractor, - 1 person for administrative support. In addition, there are a number of services that are provided by local companies, such as, cleaning of buildings, clearing and firebreaks, and environmental monitoring.	5 full-time jobs (FTEs)
+1	Tax contributions to the local economy	Construction phase (~ €2.2 million): - Urban planning licence fee: €80,000 - Tax on Construction, Installations and Works-ICIO: €1.3 million - Urban planning fee: €0.9 million - Business opening licence: €5,000 O&M phase (~ €220,000 per year): - Tax on Economic Activities- IAE: €100,000 per year - Real Estate Tax-IBI: €120,000 per year	Approx. €2.2 million, and €220,000 per year

Source: eclareon, 2025 based on Fiteni Campos, Inmaculada Maria, 2025[356] and publicly available information

Overall assessment and concluding thoughts

Endesa's renewable energy (RE) projects, like Las Corchas and Los Naranjos, follow its "Creating Shared Value" (CSV) strategy to engage local communities for long-term sustainability. The CSV plan focuses on sustainable engineering, economic support, and education, with initiatives such as RE training, tourism programmes, and agrivoltaic farming. By integrating local businesses and maintaining these efforts throughout the plant's lifetime, Endesa has strengthened the project acceptance.

The project demonstrates strong local engagement, with 80 person-days spent on community understanding, 23 stakeholders engaged, and 60 consultation sessions held. Outreach was facilitated through meetings, an email channel, and a dedicated mediator. It delivered EUR 900,000 in in-kind benefits and implemented 31 local initiatives. These initiatives varied from training courses to support of local activities, e.g., the solar apiary and of vulnerable communities. Additionally, a significant tax contribution is offered to the local communities. These values also validate the project's various awards and distinctions. On the other hand, the project did not promote local ownership and no local participation initiatives were developed in the investment. This is because it was one of the first projects in Spain to follow the CSV strategy but later projects, according to our findings, envisage integrating the local ownership component[357].

356 Fiteni Campos, Inmaculada Maria, 2025. Head of CSR Enel Green Power Spain/ Endesa. Interview conducted on 3 April 2025.
357 Inmaculada Maria Fiteni Campos, 2025. Head of CSR Enel Green Power Spain/ Endesa. Interview conducted on 3 April 2025.

Aigaio wind project (Greece)

BAD PRACTICE

Introduction

The Aigaio project was a very ambitious project by Eunice Energy Group involving the installation of 138 wind turbines with a planned installed capacity of 582 MW. The onshore wind project was to be located on 23 islets in the Aegean Sea and also included the construction of a submarine DC transmission link[358]. The project obtained electricity producer's license, which is the first step in the permitting process in Greece, issued by the former Regulatory Authority for Energy (RAE) in 2011, which was renewed in 2022[359]. Furthermore, the interconnection of the Aigaio project has been included in the ten-year development plan of ENTSO-E as *Project 293 – Southern Aegean Interconnector (SAI)* for the period of 2014-2022[360]. It was supported by the Ministry of Energy and Environment (MEE) and former RAE[361].

Environmental NGOs have voiced their opposition to the project as it would have an irreversible impact on the local flora and fauna of these islands[362]. In the same vein, by 2020, three separate statutory bodies – the state-appointed bodies responsible for managing the protected areas of the Cyclades[363] and the Dodecanese[364] under the Natura 2000 framework, and the MEE's own Directorate of Natural Environment and Biodiversity Management[365] – had advised against the project. The rejection was based on environmental criteria, such as that the fieldwork was too short to adequately assess biodiversity, while it did not evaluate the cumulative impact on the site of other wind turbines in the permitting or production process. In addition, the islets were considered "uninhabited". However, the 2021 census revealed that 6 islets had a small but permanent population[366]. Finally, MEE rejected the environmental permit application in 2021[367]. As of February 2025, Eunice has appealed the rejection decision to the Council of State, while the inhabitants of the islets have also appealed to the former RAE, now the Regulatory Authority on Waste, Energy and Water (RAAEY)[368].

Source: Wikipedia, Aerial view of Levitha Islet

358 Eunice, n/a. Aigaio project. Available at: https://eunice-group.com/projects/aigaio-project/

359 RAE, 2022. Βεβαίωση Παραγωγού Ειδικού Έργου Υπ' Αριθμ. 0433/2022. Available at: https://www.raaey.gr/energeia/wp-content/uploads/2022/05/0433_2022.pdf (It should be mentioned that this license concerns one of three wind parks expected to be realized).

360 ENTSO-E, 2022. TR 293 - Southern Aegean Interconnector. Available at: https://tyndp2022-project-platform.azurewebsites.net/projectsheets/transmission/293

361 Reporters' United, 2021. Nobody's backyard – how the "Mediterranean Galapagos" almost became a giant wind farm. Available at: https://www.reportersunited.gr/en/5849/nobodys-backyard-how-the-mediterranean-galapagos-almost-became-a-giant-wind-farm/

362 Ορθολογική Εταιρία Ελλάδος, 2019. «Ευθύνη προστασίας των μικρών νησίδων του Αιγαίου». Available at: https://files.ornithologiki.gr/docs/nisides/20191107_Epistoli_Prostasia_Nisidwn_Aigaiou.pdf

363 Φορέας Διαχείρισης Προστατευόμενων Περιοχών Κυκλάδων, 2019. Ανάπτυξη Τριών ΑΣΠΗΕ Συνολικής Ισχύος 486MW Επι 14 Ακατοίκητων Νησίδων Των Δήμων Νισύρου, Λερού, Αστυπάλαιας Και Ανάφης Της Περιφέρειας Νοτιου Αιγαίου Και Συνοδών Έργων. Available at: https://files.ornithologiki.gr/docs/Gnomodotisi_FD_Kykladon_D9_final.pdf

364 Φορέας Διαχείρισης Προστατευόμενων Περιοχών Δωδεκανήσου, 2019. Ανάπτυξη Τριών ΑΣΠΗΕ Συνολικής Ισχύος 486MW Επι 14 Ακατοίκητων Νησίδων Των Δήμων Νισύρου, Λερού, Αστυπάλαιας Και Ανάφης Της Περιφέρειας Νοτίου Αιγαίου Και Συνοδών Έργων. Available at : https://files.ornithologiki.gr/docs/nisides/Gnomodotisi_FD_PP_Dodekanissou.pdf

365 Διεύθυνση Διαχείρισης Φυσικού Περιβάλλοντος και Βιοποικιλότητας, 2020. Γνωμοδότηση επί της ΜΠΕ του έργου «Αιολικοί Σταθμοί Παραγωγής Ηλεκτρικής Ενέργειας (ΑΣΠΗΕ) συνολικής ισχύος 486MW (106 Α/Γ) στις νησίδες Κούνουποι,Σύρνα, Πλακίδα, Μεσονήσι, Μεγάλο Σοφράνο, Παχεία Ανάφης, Μακρά, Λιάδι, Κίναρος, Λέβιθα, Οφιδούσσα, Κανδελιούσσα, Περγούσσα, Παχειά Νισύρου των ΠΕ Καλύμνου, Θήρας και Κω Περιφέρειας Νοτίου Αιγαίου και των συνοδών σε αυτό, έργων. Available at: https://files.ornithologiki.gr/docs/nisides/Gnomateysi_YPEN_ASPHE_14_nisides.pdf

366 ΕΦΣΥΝ, 2025. Στο ΣτΕ η τύχη των «Γκαλαπάγκος της Μεσογείου». Available at: https://www.efsyn.gr/periballon/461338_sto-ste-i-tyhi-ton-gkalapagkos-tis-mesogeioy

367 Υπουργείο Περιβάλλοντος & Ενέργειας Γενική Διεύθυνση Περιβαλλοντικής Πολιτικής- Διεύθυνση Περιβαλλοντικής Αδειοδότησης (ΔΙΠΑ), 2021. Απόρριψη αιτήματος για την περιβαλλοντική αδειοδότηση του έργου: Αιολικοί Σταθμοί Παραγωγής Ηλεκτρικής Ενέργειας (ΑΣΠΗΕ) συνολικής ισχύος 486 MW (106 Α/Γ) στις 14 ακατοίκητες [...]τα συνοδά τους έργα, και τη διασυνδετική Γραμμή Μεταφοράς (υπόγεια και υποβρύχια), 150 kV, με το ΚΥΤ Λαυρίου του Δήμου Λαυρεωτικής, της Περιφέρειας Αττικής. Available at: https://diavgeia.gov.gr/doc/Ψ0ΔΟ4653Π8-3ΥΦ?inline=true

368 ΕΦΣΥΝ, 2025. Στο ΣτΕ η τύχη των «Γκαλαπάγκος της Μεσογείου». Available at: https://www.efsyn.gr/periballon/461338_sto-ste-i-tyhi-ton-gkalapagkos-tis-mesogeioy

Table 1: Assessment of the Aigaio project against the KPIs on community engagement and benefit sharing[369]

No.	Criterion	Brief description	Quantitative assessment
1	Person days spent on understanding context and community	Until the latest population census of 2022, islets were considered uninhabited. Even the local people on the larger neighbouring islands were unaware of the project. Furthermore, one of the reasons MEE rejected the EIA submission was the fact that the days spent on field were considerably less than those foreseen in an EIA.	43 days (instead of 120- 360 days)
2	Number of actors engaged	About 80-100 actors have been engaged. It is a rough estimation on the type of actors that knew about the project. About a third of whom have lived near the planned wind farm, i.e. in the neighbouring larger inhabited islands.	80-100 persons
3	Type of actors engaged in project development		**National level** 1. Ministry of Environment & Energy (MEE) a. Department of Energy b. Department of Environment Directorate of Natural Environment and Biodiversity Management Directorate of Environmental Permitting 2. Regulatory Authority on Waste, Energy and Water (RAAEY) (former Regulatory Authority of Energy (RAE)) **Regional level** 3. Municipalities of Nisiros, Leros, Astypalaia, Anafi 4. State-appointed agencies responsible for managing the protected areas of the Cyclades and the Dodecanese under the Natura 2000 framework
4	Outreach and benefits delivered to vulnerable communities	None, as the project developer was not aware that some islets were inhabited.	No

Source: eclareon, 2025 based on publicly available information

Overall assessment and concluding thoughts

Although the Aigaio project was initially rejected on environmental grounds, as it would have been built within 10 Natura 2000 sites, 4 Special Conservation Areas (SCAs) and 6 Special Protection Areas (SPAs), also the community engagement factor was completely undermined. The developer, along with national and regional stakeholders, wrongly considered the islets to be uninhabited. This fundamental misjudgment led to conflicting and incorrect interpretations. Environmental authorities used the supposed lack of residents to justify rejecting the project due to landscape disruption in protected areas, while the developer claimed the wind farm would encourage settlement—a claim directly contradicted by the existing, albeit small, local population[370].

The project's complete lack of community engagement, coupled with opposition from environmental NGOs and regional environmental agencies, triggered significant backlash. This reaction resulted in the MEE's environmental divisions rejecting the project's permit, despite support from the MEE's energy department and RAE. The project's final decision now rests with the Council of State, where both the developer and the islet residents have filed appeals, highlighting the deep divide and controversy surrounding the project[371].

369 This assessment draws on available information to evaluate the Aigaio project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.

370 Φορέας Διαχείρισης Προστευόμενων Περιοχών Κυκλάδων, 2019. Ανάπτυξη Τριών ΑΣΠΗΕ Συνολικής Ισχύος 486MW Επι 14 Ακατοίκητων Νησίδων Των Δήμων Νισύρου, Λερού, Αστυπάλαιας Και Ανάφης Της Περιφέρειας Νοτίου Αιγαίου Και Συνοδών Έργων. Available at: https://files.ornithologiki.gr/docs/Gnomodotisi_FD_Kykladon_D9_final.pdf

371 ΕΦΣΥΝ, 2025. Στο ΣτΕ η τύχη των «Γκαλαπάγκος της Μεσογείου». Available at: https://www.efsyn.gr/periballon/461338_sto-ste-i-tyhi-ton-gkalapagkos-tis-mesogeioy

Clúster del Maestrazgo wind project (Spain)

BAD PRACTICE

Introduction

The Clúster Maestrazgo is a major wind energy project located in the Maestrazgo and Gúdar-Javalambre regions of Teruel, Aragon. Promoted by Copenhagen Infrastructure Partners (CIP) and Forestalia, the project involves the construction of 20 wind farms (122 wind turbines) and 2 solar PV plants, totaling 763 MW of capacity. Such a huge renewable energy (RE) project is equivalent to the average consumption of 570,000 households, while compensating for 320,000 tonne of CO2 emissions per year[372]. The Council of Ministers approved the project after a 7-year period on 22 July 2024[373] and the developers expect the construction work to begin in the first quarter of 2025[374].

Community engagement on the project is divided. On one side are project developers, some municipalities under the umbrella organisation Viento alto[375], and the Spanish Government, which approved the project. On the other are grassroots movements like Paisajes de Teruel, Movimiento Ciudadano Teruel Existe, Fundación Quebrantahuesos, and Plataforma No a la MAT, alongside local municipalities and opposition parties[376]. Concerns relate to the destruction of 890 hectares of land for high-voltage lines and roads[377]. Moreover, in January 2024, major environmental groups, including Ecologistas en Acción, Friends of the Earth Spain, Greenpeace Spain, and WWF Spain, signed a manifesto against the project[378]. Further concerns involve the impact on 8 Natura 2000 sites and on endangered species such as the Egyptian Vulture and the Bonelli's Eagle. Developers argue the project only affects 140 hectares of forest and 98,000 trees, replacing an existing transmission line with a safer one. They also highlight local job creation, taxes, and potential regional economic growth[379].

Source: paisajesteruel.org

372 Voz populi, 2024. El fondo CIP defiende su macroproyecto eólico en Teruel de las críticas ambientales y administrativas. Available at: https://www.vozpopuli.com/actualidad/3033424.html

373 El Comarca, 2024. El Consejo de Ministros aprueba la construcción del Clúster Maestrazgo. Available at: https://www.lacomarca.net/consejo-ministros-aprueba-construccion-cluster-maestrazgo/

374 El Periódico de Aragón, 2025. El Clúster del Maestrazgo iniciará las obras en marzo con cuatro litigios abiertos. Available at: https://www.elperiodicodearagon.com/aragon/2025/02/24/cluster-maestrazgo-iniciara-obras-marzo-114612311.html

375 Diario de Teruel, 2025. a Asociación Viento Alto defiende que el Clúster Maestrazgo será "bueno para el territorio" en la Jornada Eólica y Mercado de la Asociación Eólica Española. Available at: https://www.diariodeteruel.es/teruel/la-asociacion-viento-alto-defiende-el-cluster-maestrazgo-en-la-jornada-eolica-y-mercado-de-la-asociacion-eolica-espanola

376 El Comarca, 2024. El Consejo de Ministros aprueba la construcción del Clúster Maestrazgo. Available at: https://www.lacomarca.net/consejo-ministros-aprueba-construccion-cluster-maestrazgo/

377 Plataforma a favor de los paisajes de Teruel, 2025. Presentadas las alegaciones al Clúster Maestrazgo. Available at: https://paisajesteruel.org/presentadas-las-alegaciones-al-cluster-maestrazgo/

378 Greenpeace, 2025. Manifiesto a favor de la biodiversidad y contra el Clúster Maestrazgo. Available at: https://es.greenpeace.org/es/wp-content/uploads/sites/3/2025/02/Manifiesto-revision-cluster-maestrazgo.pdf

379 Voz populi, 2024. El fondo CIP defiende su macroproyecto eólico en Teruel de las críticas ambientales y administrativas. Available at: https://www.vozpopuli.com/actualidad/3033424.html

Table 1: Assessment of the Clúster del Maestrazgo project against the KPIs on community engagement and benefit sharing[380]

No.	Criterion	Brief description	Quantitative assessment
2	Number of actors engaged	As it is the largest wind project in Spain, many actors were involved in the process. However, the level of their engagement varies.	
3	Type of actors engaged in project development		Ministry of Transport, Mobility, and Urban Agenda Ministry for Ecological Transition and Demographic Challenge Government of Aragón (14 Directorates) Generalitat Valenciana (7 Directorates) 16 municipalities 11 public entities[381]
6	Establishing an online platform for communication		No
8	Adding up the information requests made and responded to by the company	In 2023, MITECO approved the project's EIA but excluded 36 wind turbines and 2 wind farms to protect the Zepa del Río Guadalope, plus 4 tur-bines to safeguard the Egyptian vulture[382]. Paisajes de Teruel requested 22 supplements from MITECO but received no response. Along with other groups, they filed a complaint against the Maestrazgo Clus-ter, requiring the project's administrative file. Despite requesting it in March 2024, they received incorrect documents and no further response[383]. Additional complaints and appeals aim to halt con-struction.	No
10	Role of local enterprises and investors:		
	a. Number of local firms engaged	The American company GE Vernova, whose factory in Les Coves de Vinromà, Castellón, manufactures the blades for the wind turbines.	1
	b. Locally sourced technology and resources	Teruel International Airport provides storage for the wind blades (EUR 90,000 per month for min. 18 months and max. 36 months). Furthermore, GE Vernova has a contract of EUR 700 million.	approx. EUR 4 million
11	Monetary benefits reaped by locals		
	a. Lump sum compensation paid to locals	A counterpart of EUR 1,000 to the occupation of the land to build the high-voltage towers are offered[384].	EUR 1,000/ owner
	b. Regular payouts to locals		N/A

380 This assessment draws on available information to evaluate the Clúster del Maestrazgo project against 14+1 KPIs on community engagement and benefit sharing. Due to data limitations, only a subset of these KPIs could be meaningfully assessed, as detailed below.
381 Boletin oficial del Estado (BOE)- -A-2022-22101. Available at: https://www.boe.es/diario_boe/txt.php?id=BOE-A-2022-22101
382 Boletín oficial del Estado (BOE) A-/2023- 707. Available at: https://www.boe.es/boe/dias/2023/01/11/pdfs/BOE-A-2023-707.pdf
383 Plataforma a favor de los paisajes de Teruel, 2025. Clúster del Maestrazgo: ministerios contra la justicia. Available at: https://paisajesteruel.org/cluster-del-maestrazgo-ministerios-contra-la-justicia/
384 La Vanguardia, 2024. Government authorizes Spain's largest wind farm despite opposition from environmentalists. Available at: https://www.lavanguardia.com/mediterranean/20240827/9893684/spain-government-authorizes-largest-wind-farm-opposition-environment-energy-green-bird-turbine-windmill.html

No.	Criterion	Brief description	Quantitative assessment
13	In-kind benefits		
	a. Number of monetary value of in-kind projects		N/A
	b. Cost savings for local residents and companies		a 30% discount on the electricity bills is offered[385]
14	Local job creation		
	a. a. Local jobs created during the construction phase	About 3,500 jobs for the construction of the project[386]. In addition, 700 jobs will be safeguarded at GE Vernova, which will manufacture the wind blades.	4,200 jobs
+1	Tax contributions to the local economy	More than EUR 400 million in fees and taxes for 14 municipalities in Aragon and Valencia[387]. Others sources reduce this figure to EUR 136 million[388]. No time frame is defined.	of up to EUR 400 million

Source: eclareon, 2025 based on publicly available information

Overall assessment and concluding thoughts

The project's community engagement and benefit-sharing mechanisms reveal gaps that could affect its acceptance in the long-run. While local job creation and land compensation have been highlighted, direct local ownership, control and public participation appear limited. The lack of an online communication platform and delayed responses to requests for information are fuelling dissatisfaction among opponents. Despite the offer of a 30% discount on electricity and compensation for land use, opposition groups argue that the environmental costs—particularly in Natura 2000 protected areas—outweigh the benefits. As the Mayor of Morella, a community affected by the project, pointed out, *"We don't negotiate for money, we are driven by the interests of our neighbours. Money is not important to us at this point"* .

Although the Clúster del Maestrazgo project promises direct economic benefits, such as local job creation, industry, and tax contributions, its impact on local communities remains controversial. This is mainly due to the faulty community engagement approach and the lack of transparency that induced the ongoing legal challenges, demonstrating a critical failure to implement an inclusive process that genuinely considers the perspectives of diverse local actors and stakeholders.[390] In fact, concerns over environmental impact have led to formal complaints of potential ecological crimes being investigated by the Environmental Prosecutor. Additionally, separate legal appeals are underway, seeking to impose preventative measures against the project's construction. This is an example where the balance between local environmental and social concerns and RE deployment has been distorted. This is mainly due to the lack of a comprehensive community engagement process, which led to important landscape and environmental conservation parameters being overlooked. As a result, the negative attitude towards this project has created and will continue to create tensions, despite the significant local economic benefits.

385 El Mediterraneo, 2024. El Clúster del Maestrazgo ofrece un 30% de ahorro en la luz a los pueblos afectados en Els Ports. Available at: https://www.elperiodicomediterraneo.com/comarcas/2024/09/24/cluster-maestrazgo-ofrece-30-ahorro-luz-pueblos-afectados-ports-compensaciones-morella-portell-cinctorres-108493314.html

386 Castellón al día- El Mundo, 2024. El Clúster del Maestrazgo ya aborda las compensaciones a los ayuntamientos. Available at: https://castellonaldia.elmundo.es/comarcas/maestrat-els-ports/el-cluster-del-maestrazgo-ya-aborda-las-compensaciones-a-los-ayuntamientos-BB21135141

387 Castellón al día- El Mundo, 2024. El Clúster del Maestrazgo ya aborda las compensaciones a los ayuntamientos. Available at: https://castellonaldia.elmundo.es/comarcas/maestrat-els-ports/el-cluster-del-maestrazgo-ya-aborda-las-compensaciones-a-los-ayuntamientos-BB21135141

388 Siendo Pyme, 2024. Clúster Maestrazgo beneficiará a municipios de Teruel con 136 millones en tasas e impuestos. Available at: https://www.siendopyme.com/2024/09/13/cluster-maestrazgo-beneficiara-a-municipios-de-teruel-con-136-millones-en-tasas-e-impuestos/

389 El Mediterraneo, 2024. El Clúster del Maestrazgo ofrece un 30% de ahorro en la luz a los pueblos afectados en Els Ports. Available at: https://www.elperiodicomediterraneo.com/comarcas/2024/09/24/cluster-maestrazgo-ofrece-30-ahorro-luz-pueblos-afectados-ports-compensaciones-morella-portell-cinctorres-108493314.html

390 El Periódico de Aragón, 2025. El Clúster del Maestrazgo iniciará las obras en marzo con cuatro litigios abiertos. Available at: https://www.elperiodicodearagon.com/aragon/2025/02/24/cluster-maestrazgo-iniciara-obras-marzo-114612311.html

Published in April 2025 by Climate Action Network (CAN) Europe

CAN Europe 2025, Community Engagement and Fair Benefit Sharing of Renewable Energy Projects - Presenting policies and practices across Europe and guidelines for developers

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Special thanks to Guy Willems from Wind Europe, Arthur Hinsch at ICLEI, and Christian Grauvogel from Koop-Wind for their valuable insights and feedback.

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