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

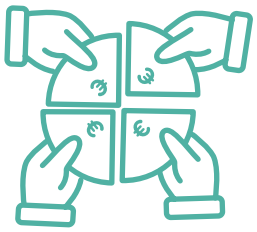
c. Number of local investors and funders

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.