



Local Benefit Sharing in Large-Scale Wind and Solar Projects

Discussion Paper
June 2019



Creating Markets, Creating Opportunities

Acknowledgements

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1st row: Children visiting a corner shop in an underserved community pick up a solar lamp manufactured by Lighting Pakistan's international manufacturing partner NIWAIFC. Photograph by Anam Abbas. IFC photo collection.

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MESSAGE

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The renewable energy industry is truly coming of age. In the early days, wind farms and solar arrays were characterized as fringe technologies with high operational costs and limited scale. But within a single generation, much has changed. The rapid pace of technological advancement and industry maturation has made utility-scale wind and solar installations an increasingly viable option for countries looking to accommodate ever-growing demand for electricity while addressing climate concerns. In particular, large-scale renewables offer great potential for poor countries and communities that have long lacked access to affordable and reliable power. That's why renewable energy is an increasingly large share of IFC's power business. Over the past five years, IFC has invested in more than 126 renewable energy projects, contributing over \$10 billion in capital in emerging markets around the world, including financing from IFC's own account and funds mobilized from others.

Despite these milestones, the growth in renewables projects comes with its own set of social risks. Among these: the need to secure large tracts of land for future renewables parks and projects; amplified community expectations about job prospects, particularly for the rising youth population; and the ability of renewable energy projects to provide access to electricity for all.

In fact, pressure is growing for project developers to demonstrate that local communities will see their fair share of benefits from renewables projects—beyond the value yielded to national or regional clean energy agendas.

We have seen from other industries the adverse effects and skyrocketing costs when projects do not have community acceptance and support. Delayed construction timelines, permit denials, disrupted operations, financial losses, and reputational damage can all result from a failure to engage with host communities and those impacted by the project.

Mitigating negative actual or perceived impacts from solar and wind projects is essential to do no harm and avoid undermining trust with host communities. For local communities to be vested in the long-term presence and success of wind and solar projects, they need to see tangible and authentic benefit sharing. Generally, it is more efficient to invest early in a smooth operating environment than to hold off until disputes arise and must be settled.

This paper, *Local Benefit Sharing in Large-Scale Wind and Solar Projects*, offers insights into the unique social challenges and opportunities for wind and solar developers. It distills lessons from the experiences of wind and solar companies in securing and maintaining social license to operate by ensuring that local communities share in the benefit from their projects.

This new research is aligned with IFC's mission to leverage private sector-driven development to create markets and opportunities. Already, global markets for climate-smart businesses and technologies have grown to \$1 trillion annually. And yet, rapid growth raises visibility and introduces new expectations.

Meanwhile, significant development challenges remain. More than 800 million people around the world are still living without electricity. And climate change impacts threaten to push an additional 100 million people into poverty by 2030.

We hope that efforts such as this paper will advance understanding, helping to unleash renewables investments that yield benefits for local communities while harnessing the private sector to fulfill the industry's great promise: ensuring access to clean, affordable, reliable, and sustainable energy for all.

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EXECUTIVE SUMMARY

Local benefit sharing is about ensuring that host and impacted communities receive value from industrial projects located on their lands, in the form of social, economic, and environmental gains. This paper specifically focuses on local-level benefit-sharing approaches deployed by wind and solar projects and ways that these approaches can be optimized to create value for developers and operators and host communities. It underscores the importance of promoting equity in the local-level benefit sharing mechanisms sponsored by wind and solar projects. By sharing lessons from the implementation of benefit-sharing programs with wind and solar decision makers—owners, developers, operators, and company executives and managers—as well as company staff tasked with sustainability, community relations, and social and environmental performance, the paper is designed to stimulate discussion and help frame future projects’ approaches to this critical issue.

MAIN MESSAGES

The main messages of the paper are:

- ▶ As the renewable energy industry experiences dramatic growth, **wind and solar developers must sharpen their focus on securing and maintaining public acceptance**—social license to operate—which will be critical to smooth project operations.
- ▶ **Ensuring that communities share the benefits from a wind and solar project is one aspect of securing and maintaining social license to operate**, but taken alone, it will not be sufficient. Benefit-sharing efforts must be integrated into an overall system that involves management of social and environmental impacts and proactive stakeholder engagement.
- ▶ **Project developers must demonstrate visible benefits to local communities beyond the value to national or regional clean energy agendas.**
- ▶ **Ensuring that tangible benefits flow to local communities needs to be aligned with project fundamentals.** The horizontal and vertical approach is key to achieving good governance, transparency, and accountability.
- ▶ **There is no single, one-size-fits all approach to designing and implementing local benefit-sharing initiatives**, but lessons from others’ experiences offer robust guidance. As with other sectors, there may be pay-offs from the industry as a whole operating in a more coherent socially-acceptable manner.

Insights contained in this paper were gathered through extensive document review of wind and solar projects around the world and interviews with renewables industry experts at headquarters and in the field. The research team contributed additional insights based on direct industry experience.

THE BUSINESS CASE: WHY DOES BENEFIT SHARING MATTER?

Experience shows that improved community participation in benefit sharing can lead to community projects with better outcomes, lasting local impact, and positive perceptions that add to good will. The identification of appropriate local benefit-sharing measures should flow from deliberate engagement between the developer(s) and the community, along with other relevant local stakeholder and rights-holder groups. To ensure effectiveness, the various groups and sectors within communities—such as women, youth, indigenous people and minorities—must have a meaningful say in prioritizing, sharing and monitoring the benefit sharing.

Well-structured benefit sharing contributes to social license to operate but it is not the only factor. Among other factors: responsible project management, caring and transparent behavior of project employees and contractors, and fair distribution of benefits.

The lifecycle of large-scale wind and solar projects features several phases, including development, construction, operations and maintenance, and de-commissioning. Given the variation in activity at each of these stages, the benefit-sharing efforts will differ as well. Thus, it is important to identify the most appropriate benefit-sharing initiatives for each phase.

IMPROVING COMMUNITY PROSPECTS AND QUALITY OF LIFE

With increased connectivity, access to information, and comparisons of lifestyles around the globe, the demand for benefit sharing is increasing. Many factors, both internal and external, can influence a developer's response. All industries are being scrutinized more closely in the context of benefit sharing. It is no longer sufficient to provide cleaner energy at national level. Wind and solar projects are expected to harmonize global clean energy goals with national as well as local impact by improving a community's prospects and quality of life.

Developers have a variety of ways to achieve these goals, because there is no single, one-size-fits-all design or approach to effective benefit sharing. Local-benefit sharing measures commonly deployed by wind and solar projects typically fall under several categories:

- ▶ Revenue sharing and shared ownership
- ▶ Public services and infrastructure
- ▶ Skills and livelihoods
- ▶ Environmental stewardship

Projects can share revenue with local stakeholders—government or communities—through various fees, taxes, and leasing structures, as well as through commitments to specific revenue-sharing formulas. Some projects engage with communities through joint-venture arrangement effectively creating a shared ownership of an asset/project.

Given significant local infrastructure needs and demand for improved public services in developing countries, wind and solar developers commonly contribute to addressing these priorities. Among these, supporting energy services at the household or community level stands out. Most of the projects reviewed as part of this research have implemented benefit-sharing programs featuring some aspect of local energy service provision.

Improved skills and livelihoods are often key expectations in host communities. There can be considerable scope for local employment in wind and solar projects, but deliberate focus on employing local people is critical. Because, for the most part, local job creation opportunities during a project's operations phase are limited, overall benefit-sharing strategies often include a focus on building alternative skills and livelihoods—those not linked with wind and solar projects' employment and procurement.

Wind and solar projects also have an opportunity to combine proactive environmental stewardship with local benefit sharing through mechanisms such as environmental education, conservation programs, and sustainable tourism activities.

EFFECTIVE BENEFIT SHARING REQUIRES INVESTMENT OF TIME AND RESOURCES

The global review of wind and solar projects revealed that effective local benefit-sharing programs require a careful investment of company time and resources. Even before specific activities are identified, companies should identify their own business drivers/rationale for undertaking benefit-sharing initiatives.

The approach must align with company culture, values and competencies. Companies should also conduct a due diligence of sorts, to learn the local history and uncover community sensitivities, concerns and priorities. This includes a review of any earlier projects in the area that may have faced challenges with their social license. Such efforts will help determine the reasons for benefit sharing, along with the financial and human resources that will be needed. If these are not taken in to consideration, there is a risk that initiatives will not be supported or effectively implemented, potentially exposing the company to loss of the social license to operate.

STRONG COMMUNITY RELATIONS ARE FUNDAMENTAL

Building and maintaining strong community relations should be a fundamental aspect of wind and solar projects. However, companies often must balance this need with limited budgets for community relations functions and limited experience and skills in social risk management, stakeholder engagement, and benefit sharing. In addition, project ownership changes can have a negative impact on benefit-sharing programs. The lack of continuity can increase the risk of implementation disruptions or breach of trust. To mitigate such risks, companies should implement inclusive benefit-sharing programs with the support of senior management, community members, and other stakeholders, such as local governments. These programs should be underpinned by a strong sustainability plan and clear exit strategy.

LOOKING AHEAD: THE FUTURE OF BENEFIT SHARING

Wind and solar developers are facing an increased urgency to enhance their social license to operate. This comes as other industries, from e-commerce and technology to infrastructure, manufacturing, and natural resources, confront the reality that promised economic benefits negotiated at the national or regional level might not reach the local level. Local communities are finding and amplifying their voices with the help of global communications technologies and international organizers. They are wielding growing influence over private- and public-sector projects alike.

Going forward, trends such as continuous innovation and technology, the changing nature of jobs and workforce of the future, circular economy considerations, and the democratization of energy are likely to influence the renewables industry. In turn, such shifts will alter renewables developers' social contract with local stakeholders and, consequently, their approaches to benefit sharing. The choice facing developers is to take a reactionary approach—to follow local demands and new regulations—or to proactively engage with communities with local benefit sharing designed to build goodwill, rather than facing the more difficult task of repairing damaged relations.



Celsia Solar Yumbo project. Photograph courtesy of Celsia.

2,351 GW

Global renewable generation capacity at the end of 2018

7.9%

Growth in renewable capacity during 2018

171 GW

Increase in global renewable capacity in 2018

61%

Share of new renewable capacity installed in Asia in 2018

84%

Wind and solar share of new capacity in 2018

63%

Share of renewables in net capacity expansion in 2018

Source: IRENA, 2019

1. INTRODUCTION

Local benefit sharing in large-scale wind and solar projects is about ensuring that host and impacted communities experience tangible gains from the wind and solar projects in their backyard. It is an increasingly important discussion topic today.

The reason? In a nutshell: rapid industry expansion that is outpacing investment in fossil fuels and growing global embrace of renewables, meaning more greenfield projects, requiring more land in more places where people live.¹ With this growth comes greater complexity, increased scrutiny, and heightened expectations over the value created. Large-scale, commercial-grade renewables projects can help address regional and national energy, climate, and economic priorities. However, there often is a mismatch between expectations for benefits from the host communities impacted by the wind and solar developments and the actual benefits delivered to localities where such developments are sited.

As renewable energy scales up, more projects are likely to be located in emerging markets, and frequently sited in economically depressed and marginalized host communities. These circumstances can translate into even greater expectations for local benefits. Added to this comes pressure from a variety of other actors—governments, investors, civil society and advocacy organizations. This combination of factors can increase the potential for community frustration and dissatisfaction if the reality does not live up to expectations.

Indeed, based on renewables developers' first-hand experiences, the evidence is mounting that lack of community acceptance of a project—also known as lack of social license to operate—can lead to project delays, cancellations, and cost overruns.² Given the need to secure large tracts of land for onshore renewables parks and projects, there are increased risks of loss of social license specifically associated with land acquisition processes. Developers and operators with proactive approaches to management of social and environmental impacts, stakeholder engagement and benefit sharing are better positioned to address these risks.

Thus, given that the growing acknowledgement of renewable energy's socioeconomic and environmental value will open more doors for new developments, there is an increased urgency to focus on social license to operate and, within this, on local benefit sharing.

¹ Gold, Russell. "Global Investment in Wind and Solar Energy is Outshining Fossil Fuels." *Wall Street Journal*. June 11, 2018; Bloomberg New Energy Finance. 2019. "New Energy Outlook 2018." Bloomberg Finance.

² Social license to operate is a term that refers to the status of a company's (or project's) ongoing relationships with its stakeholders. Sociallicense.com defines the term as a "level of acceptance or approval continually granted to an organization's operations or project by the local community."

PURPOSE AND FOCUS OF THIS DISCUSSION PAPER

The focus of this discussion paper is on local-level benefit sharing and approaches that can help optimize the value of such efforts—for developers, operators, and host communities. It aims to raise awareness about options, challenges, opportunities, trade-offs, and good practices in local benefit sharing, as well as to suggest areas for further research.

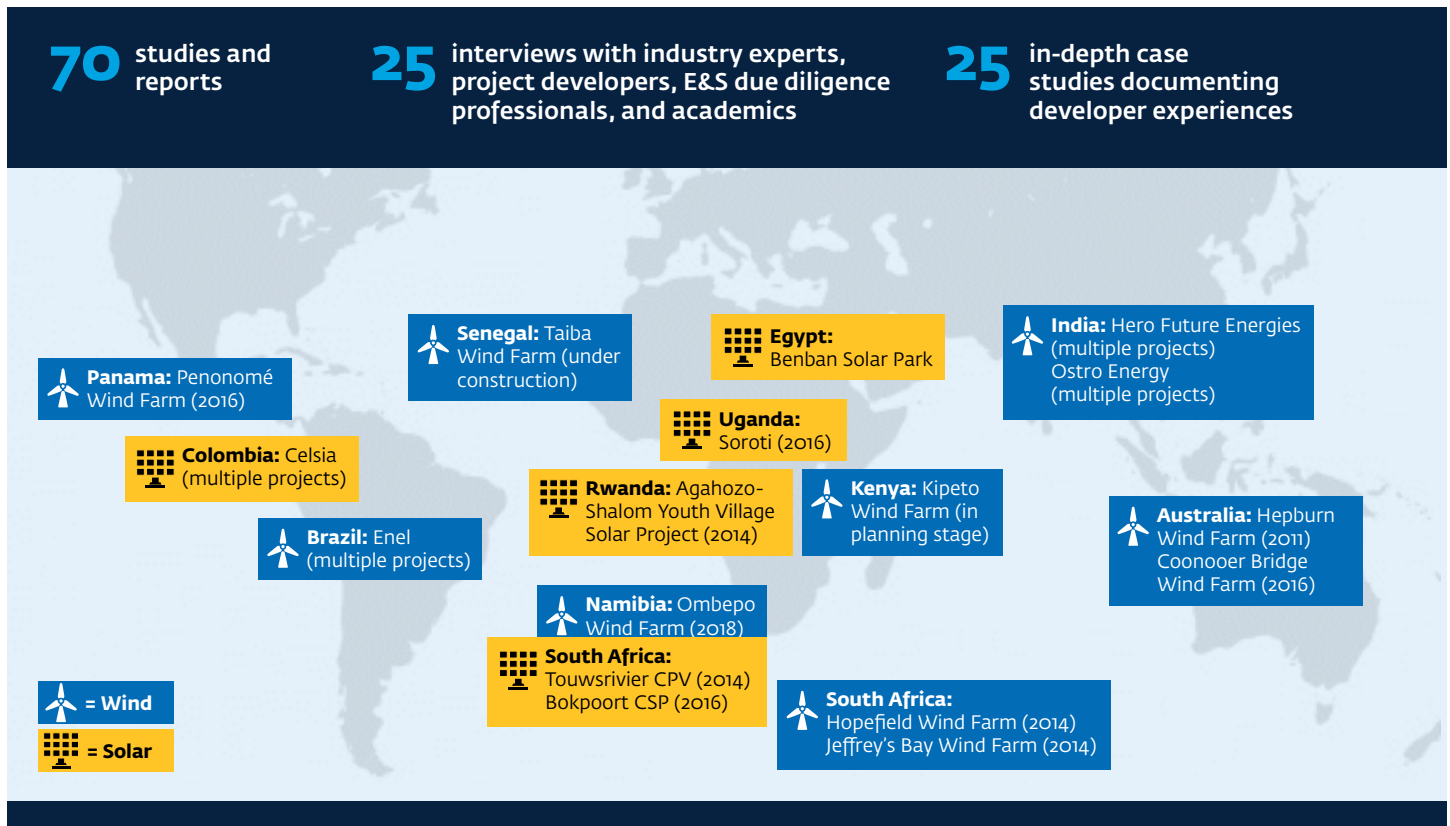
Prepared by IFC’s Sustainable Infrastructure Advisory Services and Synergy Global Consulting, the paper sets out to:

- ▶ Clarify terms and highlight key aspects related to community benefit-sharing initiatives
- ▶ Map various benefit-sharing mechanisms with local-level host communities currently adopted by large-scale wind and solar projects
- ▶ Present key lessons learned from the implementation of community benefit-sharing initiatives

The research team deployed several mechanisms to gather the data and information for the paper, including:

- ▶ Desk review of publicly available information on benefit sharing in wind and solar industries, as well as renewable energy at large. Some case studies and examples referenced in this discussion paper are based on desk review and have not been verified for accuracy.
- ▶ Interviews with senior managers, environmental, social, health and safety (EHS) managers, community relations staff, consultants, and academic researchers working in this field
- ▶ Direct experience of research team members
- ▶ Field visits to document benefit-sharing practices in more detail
- ▶ Internal and external peer review processes

Figure 1.1 **Global scope of data collection**



TARGET AUDIENCE

This discussion paper is designed as an informational tool for wind and solar project decision makers, including owners, developers, operators, company executives and managers, and company staff tasked with sustainability, community relations, and social and environmental performance.

Although most of the project examples draw from the experiences of private sector developers—some with partial government shareholding—the insights and lessons can apply for public sector projects as well. Similarly, while the focus is on onshore wind and solar, some sections may be relevant to decision makers working in other renewable energy technologies.

The paper aims to provide useful information for other stakeholders as well, including government ministries and agencies charged with implementing energy reforms, employment and procurement programs, and/or setting standards and guidelines regarding the contribution of renewable energy to socioeconomic development. It also could be of interest to civil society organizations and the public at large, as it contributes to the global knowledge base on to the role of renewable energy projects in sustainable local and national development.



Meeting community stakeholders in Kenya, Kipeto Wind project. Photograph courtesy of Actis.



National Solidarity Program - Care project. Photograph by Sofie Tesson. World Bank photo collection.

2. UNDERSTANDING BENEFIT SHARING

As noted in Chapter 1, the future of renewables is less secure without the industry maintaining its social license to operate, including through transparent and fair distribution of benefits. A recent investor briefing from the Business and Human Rights Resource Center underscored the importance of the issue, highlighting several instances of wind and solar projects that were affected—positively and negatively—by social license issues. The briefing notes that Engie’s engagement efforts, involving more than two years of consultations and negotiations, paid off in the form of support from local fishermen who were originally opposed to the company’s wind farm off the islands of Yeu and Normoutier in France. The report contrasts Engie’s experience with that of Kinangop Wind Park, a \$150 million, 61 MW wind farm in Kenya that was cancelled by investors and project developers due to land disputes and protests.³

As more projects come online, the industry—and governments that are promoting the expansion of renewable technologies—will need to ramp up efforts to identify approaches that will improve community engagement, help maintain social license, and ensure that communities are vested in projects’ long-term presence and success. Benefit sharing can play a role in achieving these goals.

This chapter explores:

- ▶ The benefit sharing concept
- ▶ The role of community engagement
- ▶ How benefit sharing fits into the overall social license framework
- ▶ Applicability to wind and solar projects
- ▶ Key stakeholders involved

DEFINITION OF BENEFIT SHARING

Broadly speaking, the phrase “benefit sharing” can be used to describe the variety of ways in which a project, organization or an industry contributes positively to socioeconomic development. The private sector uses several terms to describe such contributions, including corporate social responsibility, local content, community and/or social investment, sustainable development, socioeconomic development, shared value, and responsible investment.

Wind and solar projects create broad value just by virtue of being developed and operated, since access to energy—and clean energy at that—is fundamental to achieving a host of societal benefits.

This paper specifically focuses on local-level benefit sharing. Here, benefit sharing implies a deliberate strategy, requiring dedicated human and financial resources, that yields tangible and improved socioeconomic benefits at a local level. Embedded in this strategy is an implied need for a clear course of action. This includes specific focus areas, along with goals

³ Horvath, Eniko; Meredith Benton; and Andrea Armeni. 2017. “Investor Briefing: Renewable Energy Impacts on Communities.” Business & Human Rights Resource Centre.

Box 2.1 The importance of local-level benefit sharing

Lessons from various projects demonstrate that socioeconomic benefits captured at national and regional levels, might not be felt at the local level. The potential issues described here elevate the importance of an intensified focus on local-level benefit sharing.

- ▶ Local community members might not be able to access job opportunities unless they are specifically targeted and provided with skills training; however, they may be impacted by associated project risks.
- ▶ Communities hosting wind and solar projects may continue to experience poor or unreliable access to energy.
- ▶ Finances channeled through community funds and trusts set up to benefit communities might not result in locally relevant initiatives.
- ▶ Local governments that receive payments from wind and solar projects—either directly or indirectly through the existing mechanisms of transfers—might not have the capacity, remit, or adequate development plans to invest these resources effectively for the benefit of local stakeholders.
- ▶ In some cases, wind and solar technologies may increase inequalities for local communities and serve to heighten community conflicts. This can happen because a group of landowners are often recipients of rent payments, which can be significant in comparison to other local livelihood opportunities. Meanwhile residents or owners of neighboring lots and the broader impacted community often receive considerably less or nothing at all.

Sources: Tshikululu Social Investments, August 14, 2014; World Wildlife Fund South Africa Technical Report, 2015; New York Times, July 27, 2016; Why Green Economy, 2017.

and expected positive impacts and plans to measure progress against these goals. Some of the benefit-sharing measures may be required by legislation or regulation while others may be voluntary.

DISTINCTIONS BETWEEN IMPACT MITIGATION AND BENEFIT SHARING

Impact mitigation focuses on preventing and managing the environmental and social impacts on local communities. Mitigating the negative impacts from solar and wind projects is essential to doing no harm and to avoiding undermining the trust of host communities.

By contrast, benefit sharing focuses on opportunities to deliver value to the project's host communities. Cross-industry experience shows that inspiring and incentivizing local communities' commitment to projects' long-term operation and success requires the sharing of tangible and authentic benefits.

Benefit sharing does not involve compensation or repayment of losses experienced in the context of a project—for example, from land acquisition or resettlement.⁴ Neither does it encompass measures to mitigate or offset the negative impacts of wind and solar projects, such as restoring and recreating wildlife habitats to make up for impacts caused by construction and operation.

While it is simple to make such distinctions in theory, in practice it can be difficult to determine where mitigation ends and benefit sharing begins. One example concerns land-lease payments in the context of land acquisition and resettlement. Depending on how well-defined and enforced land tenure systems are, and the extent to which land agreements have been negotiated freely and in good faith, land leased from landowners might not be associated with any overall adverse impact on livelihoods of these landowners. In this case, land payments can represent a benefit stream.

In some countries, however, land tenure systems may involve collective ownership or usage rights. Defining these rights can be complex, involving multiple parties with different or competing claims over the same piece of land. In such

⁴ For good practices related to compensation and repayment of losses, see: IFC. 2012. "Performance Standards on Environmental and Social Sustainability." https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards

contexts, determining the appropriate beneficiaries associated with land access and use payments can be challenging.

Procuring land for wind and solar projects also might affect use of agricultural land. This can translate into livelihood for landowners as well as non-title holders such as traditional rights holders, tenants, landless laborers, and contract workers. Women also can be negatively impacted given the lack of joint registration of assets or spousal co-ownership of rights titles. In situations where land payments are intended to compensate for livelihood losses, the payments should be considered part of the mitigation instead of as a component of the benefit-sharing stream.

Of note, opportunities exist for wind and solar projects to create synergies between impact mitigation and benefit-sharing initiatives. For example, in addition to rent payments to agricultural landowners for use of the site, a project could help enhance their farming practices, as well as those of other farming groups in the community, thereby improving livelihoods. This type of benefit-sharing program adds value to the broader community and ensures that benefits are distributed more equally.

THE ROLE OF STAKEHOLDER ENGAGEMENT IN IDENTIFYING A BENEFIT-SHARING STRATEGY

Stakeholder engagement—the processes through which a developer interacts with the affected communities to guide the development of an energy project—is closely linked with developing a benefit-sharing strategy. However, the two are not interchangeable concepts.

Stakeholder engagement is key to any energy project operation. International good practice calls for a stand-alone stakeholder engagement plan that is scaled to project risks and impacts and development stage, and that is tailored to the characteristics and interests of the affected communities. Stakeholder engagement covers many different activities, ranging from stakeholder analysis and planning to consultation, participation, monitoring, and reporting on activities.⁵ If benefit-sharing considerations also apply, projects typically have in place separate benefit-sharing strategies and plans.

Benefit sharing focuses on opportunities to deliver value to the project's host communities...benefit sharing does not involve compensation or repayment of losses experienced in the context of a project—for example, from land acquisition or resettlement.

Experience from across a variety of sectors shows that stakeholder engagement is more likely to lead to community projects with better outcomes and lasting local impact. Thus, the identification of appropriate local benefit-sharing measures should flow from deliberate engagement between the developer and the community, along with other relevant local stakeholders, such as local governments. This engagement should involve groups and individuals of varying socioeconomic levels and vulnerabilities within communities—such as women, youth, Indigenous Peoples, minorities, the disabled—to ensure that all have a meaningful and appropriate say in how benefit sharing will be prioritized, shared and monitored.

As with stakeholder engagement, the identification of appropriate local benefits should be driven by the context, nature, and scale of issues related to the proposed development and the impacts and rights of local community stakeholders. The greater the change that communities experience or perceive, and the greater the desire for transparent and fair distribution of benefits, the more likely it is that efforts will be needed to integrate the project into the local community in a positive way.⁶

However, benefit sharing as a deliberate strategy might not always be required. In some cases, sufficient benefit sharing could be structured into project development and operations already, meaning there might not be a need for a separate benefit-sharing strategy with dedicated human and financial resources, as in situations where commercial projects are co-owned by communities. In other cases, projects in remote areas with straightforward land use arrangements might have little or no significant impact on communities, meaning limited need for benefit sharing.

⁵ IFC Performance Standards on Environmental and Social Sustainability

⁶ Hicks, Jarra, Taryn Lane, Emily Wood, and Nina Hall. 2018. "Enhancing Positive Social Outcomes from Wind Farm Development." Clean Energy Council. <https://assets.cleanenergycouncil.org.au/documents/resources/reports/enhancing-positive-social-outcomes-from-wind-farm-development.pdf>

BENEFIT SHARING AND SOCIAL LICENSE TO OPERATE: MAKING THE CONNECTION

Social license to operate is understood as the level of acceptance continually granted to a project by communities, stakeholders, and the public—as distinct from the various legal and regulatory business licenses and permits required by projects throughout their lifecycle.⁷

The spectrum of this social acceptance ranges from active dissent against a project, through to active support for the project. The level of acceptance can change over time, in response to shifts in practices, key events and local contexts. Social acceptance should come from those individuals and groups who have specific rights and claims affected by the project, as well as those that are most directly impacted by the project, and those who can most influence the project success. In practice, many diverse stakeholder groups and subgroups—local, national and international—can influence the ability of a project to gain and maintain its social license to operate.

Research also suggests that many factors, including perceptions, influence people’s responses to and acceptance of wind and solar developments. These various social factors and their implications are not always easily understood or integrated into the project development process.⁸

Several insights about establishing social license to operate ring true across many industries—oil, gas, and mining; forestry; and palm oil among them. They are equally relevant for wind and solar projects. These insights are discussed in turn below.

Cross-industry insight: Well-structured benefit sharing contributes to social license, but it is not the only factor

Ultimately, establishing and maintaining social license depends on three inter-related aspects of company practices:

- ▶ Taking responsibility for management of project impacts
- ▶ Caring and transparent behavior of project staff and contractors
- ▶ Fair distribution of benefits

So, while benefit sharing is important to social license, it is not the only driver. Without the other components, benefit sharing alone will not be sufficient.

Figure 2.1 Degrees of social license to operate



⁷ Definition from: Sociallicense.com. “What is the Social License” web page.

⁸ Hicks, Lane, Wood, and Hall. 2018.

Cross-industry insight: Company behavior counts

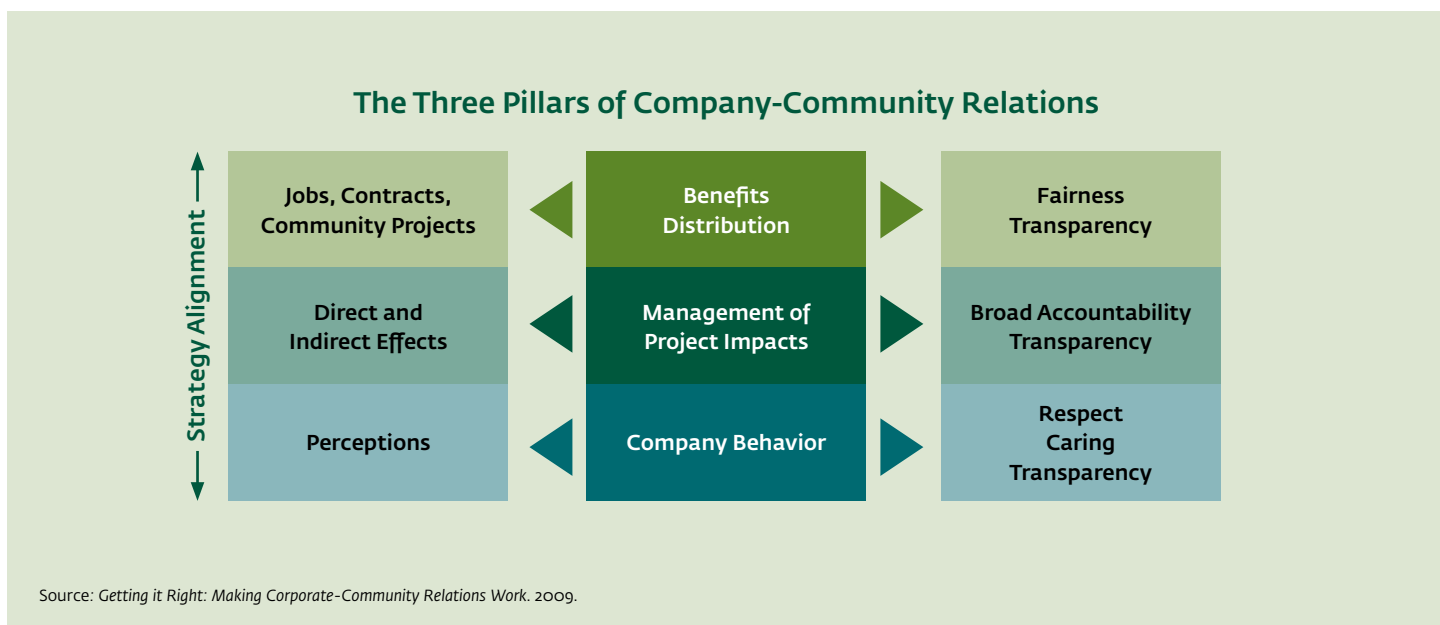
Company-community relationships are strengthened by continuous and meaningful engagement with the community. This involves open and transparent sharing of information about positive and negative project impacts and a demonstrated willingness to proactively avoid negative impacts, and to answer questions and jointly explore and resolve outstanding issues. The existing literature often emphasizes the importance of not viewing the engagement as a tick-the-box exercise for meeting regulatory requirements or the company's own policies.⁹ The quality of engagement—how genuine, collaborative, and open it is—influences trust, and, ultimately, social acceptance.¹⁰

When it comes to renewable energy projects, one of the most commonly-referenced causes for lack of community acceptance has to do with inadequate engagement and community involvement in decision-making processes. Examples frequently include the inability of local communities to influence project design (for instance, project siting, or turbine locations), engage in environmental and social impact assessments, shape the process of stakeholder engagement, and contribute to the design of benefit-sharing packages.

A growing body of research suggests that active participation of local community members in renewable energy developments... can increase the level of local acceptance and reduce the degree of resistance.

Engaging the public after decisions have been made—exemplified by the decide-announce-defend approach—likely will not be considered a meaningful approach. In fact, it can backfire, causing community members to believe they are merely part of a transaction, rather than stakeholders or partners. In many cases in which conflicts between communities and projects arose, the research points to the fact that these communities were not necessarily against renewable energy projects themselves. Rather, they objected to the ways in which decision-making on planning or deployment of specific projects was conducted.¹¹ A planning process that is perceived as fair and transparent can lead to greater acceptance of the outcomes, even if it does not fully satisfy all stakeholders.¹²

Figure 2.2 **Building blocks for corporate-community relations**



⁹ Mercer-Mapstone, Lucy; Will Rifkin, Winnifred Louis; and Kieren Moffat. 2017. "Meaningful dialogue outcomes contribute to laying a foundation of social license to operate." *Resources Policy* 53: 347-355

¹⁰ Mercer-Mapstone, Rifkin, Louis, and Mofatt. 2017.

¹¹ Avila, Sofia. 2018. "Environmental justice and the expanding geography of wind power conflicts." *Sustainability Science* 13, no. 13: 599-616; Regen, SW. 2014. "Community Benefits from Onshore Wind Developments." London: UK Department of Energy and Climate Change; Hicks, Lane, Wood, and Hall, 2018; IRENA Coalition for Action. 2018. "Community Energy: Broadening the Ownership of Renewables." International Renewable Energy Agency; Kim, Elizabeth. "Wind Energy Development in Mexico: At What Cost?" John F. Kennedy School of Government, Harvard University. Submitted March 27, 2018.

¹² Rand, Joseph and Ben Hoehn. 2017. "Thirty years of North American wind energy acceptance research: What have we learned?" *Energy Research & Social Science* 29: 135-148.

A growing body of research also suggests that active participation of local community members in renewable energy developments, through community-driven renewables projects or as (co)owners or co-investors in commercially developed renewable energy projects, can increase the level of local acceptance and reduce the degree of resistance.¹³

An additional argument in support of positive company behavior, stakeholder engagement, and community involvement is the growing role of social media. Social media can quickly add fuel to the flames of dissatisfaction, swiftly turning subjective opinions about a project into objective facts in the eyes of the community and the national and international public. A lack of information or engagement by companies can leave a vacuum which is often filled with rumors and misinformation, spread rapidly through social media.

Cross-industry insight: Social credibility is as important as sound technical fundamentals

Project developers and owners can build credibility by providing a consistent flow of accurate and clear information and by consistently meeting commitments that the company or project has made. This credibility can be set and maintained through the development of formal agreements, in which rules, roles, and responsibilities of the company and community are formally negotiated and agreed.

However, while a project might be technically sound—and credible—it still might lack social credibility, in part because of differences in perspectives and expectations. Communities often speak about their perceptions and assumptions related to a company's motivation and activities. Meanwhile, companies may tend to respond with fact-based or legalistic arguments to convince stakeholders, often in situations in which stakeholders might not believe that the project shares their values and concerns.

For example, when a community complains about diminished water quantity and quality, the company might rely on its monitoring data to demonstrate that this is not the case. In this instance, involving local male and female stakeholders in shaping and carrying out monitoring activities could contribute to building bonds of trust that can go both ways: The company is asking local stakeholders to trust its data, while opening the door for the company to work with and trust local stakeholders. Engaging with stakeholders early, continuously, and reciprocally helps create mutual language

and understanding, leading to trust. Based on this, differences in perceptions and assumptions can be more effectively discussed and resolved.

DEFINING LARGE-SCALE WIND AND SOLAR PROJECTS

Categorizations of renewable energy projects are rapidly evolving as the technologies and their deployments progress. Thus, the definition of what constitutes a large-scale project varies across government energy policies and existing research. For the purposes of this paper, large-scale wind and solar projects are defined as utility-scale facilities that are 5 megawatts in size or larger. Smaller projects with 1–5MW capacity that are connected to a grid also might need benefit-sharing measures, although typically, larger projects tend to require a dedicated and planned approach to benefit sharing and are more affected by issues related to social license to operate.

- ▶ **Wind energy technology** uses turbines to convert wind into electricity. Turbines can be placed either onshore or offshore.
- ▶ **Solar technology** comes in two forms. Photovoltaic (PV) produces energy from sunshine, while concentrated solar power (CSP) produces energy from heat.

Wind and solar projects are situated in many different contexts: rural, peri-urban, and urban settings, developing and developed economies, and mature and emergent renewable energy sectors. All of these factors will influence the benefit-sharing choices of developers. Project developers and owners also differ, with the private sector, government, and sometimes citizens and communities driving the development, construction and/or operation of projects. In terms of wind energy, it should be noted that this study focuses on onshore rather than offshore projects, as offshore wind projects tend to have limited requirements or potential for managed approaches to benefit sharing.

Despite these differences, project lifecycles generally follow a similar pattern, which also influences the types and phasing of benefits to be shared. A typical project lifecycle has several distinct phases:

¹³ Bauwens, Thomas and Patrick Devine-Wright, 2018. "Positive energies? An empirical study of community energy participation and attitudes to renewable energy," *Energy Policy* 118:612–625.

► **Development:** The development phase is associated with timelines averaging between 2 and 10 years. The primary objective of this phase is to assess a wind or solar project's feasibility and ensure project readiness through completion of permitting, financing, and contracts. Given the fluctuating timelines, project developers face considerable uncertainty. However, development is also the most critical phase, because it is the time when community relationships are set, building the foundation for a positive or negative legacy. During the project development phase, land is acquired or leased and land use is negotiated. The wayleave consent for required interconnectors to the grid also is arranged at this stage. Given the difficulties in procuring the land, developers might not spend significant

resources until after they acquire the land. This is the stage when benefit-sharing opportunities are further discussed and defined and discussed. The development phase also presents opportunities to facilitate local jobs and procurement contracts that will be needed during the construction and operations phases. In addition, it can be a good time to connect with local educational institutions or the government's education ministry to explore possibilities for skills training programs that would qualify potential graduates for jobs created by the project.

► **Construction:** The construction phase is preceded by a project approval and financial close. This is the most critical phase for maximizing job creation through local



Purchasing a portable solar system. World Bank photo collection.

community employment and local contracts. These localized employment efforts should be inclusive, with an emphasis on encouraging women and men equally to apply. The construction stage is a good time to start training local hires for ongoing employment during the operations and maintenance stage. In addition, there are opportunities to demonstrate tangible benefits to communities. Such initiatives can help deliver on initial government and community expectations and serve as a counterbalance to potential disruptions and impacts caused by construction activities.

- ▶ **Operations and maintenance:** In general, operations of a utility-scale project are contractually bound by 20–25 year purchase power agreements. Benefit sharing should be re-examined every few years or when there is a change in the operational context of the project. Such changes include shareholding changes, project expansions, and shifting socioeconomic profiles and community development priorities. As a result, it is important to integrate continuous engagement and monitoring into this phase.
- ▶ **Decommissioning:** Typically, project sponsors are required to return the land to its original state during the decommissioning phase—at the end of the project’s life. This involves removal of equipment, buildings, and infrastructure. Concrete foundations are extracted to 1 meter below ground. They are replaced with topsoil so that other activities, such as agriculture can start up again. Decommissioning requires end-stage planning that includes the projects themselves and the communities they support. In conducting research for this study, the authors found no examples of inclusive decommissioning. That said, it is important to view decommissioning through the lens of sustained, positive socioeconomic benefits once the project is no longer operational. In the case of repowering, local community expectations could be discussed and integrated into the plans. In the case of decommissioning, parts of the wind or solar project infrastructure could continue to serve a functional purpose and could be left in place, such as substations, buildings, roads, access tracks, gates and fences. Local workers and companies can be involved in decommissioning and rehabilitation activities, thereby maximizing benefit sharing opportunities for local communities.

WHO ARE THE PROJECT STAKEHOLDERS?

A project stakeholder is an individual or group that can either affect or be affected by a project, and/or has an interest in that project. Two of the central stakeholders are:

- ▶ The **project company** as the seller of the energy generated—typically a private developer
- ▶ The **buyer** of the energy generated, or the off-taker, typically a state-owned utility

The project company can play a number of roles in a project—as a developer, operator, and financier. Governments also can develop and own a project, with private companies contracted for construction and support during operations and maintenance phase.

While the seller and buyer are key to the operation of the project, a diverse range of other stakeholders can also play important roles in any wind and solar project. A thorough understanding of who these stakeholders are and the roles they play will influence the decision making on an appropriate and fair benefit sharing strategy. The range of potential stakeholders is depicted in figure 2.3. These include:

- ▶ **Lenders, investors and shareholders:** By providing the financing, investors are in a position to require or encourage companies to engage in good practices related to social and environmental risk management, community engagement, and benefit sharing. This influence could be leveraged through financing requirements, provision of technical assistance, involvement in board membership and shareholder decisions, and ongoing project oversight and monitoring.
- ▶ **Governmental authorities:** National, regional, and local governments all play various roles in the development of wind and solar projects. They oversee any new economic development—down to project-specific details such as zoning and permitting. They drive the regulatory framework governing the renewable energy industry, including how energy is procured and what benefit-sharing obligations the project company should assume. Governments can serve as arbiter between the company

and the local community. They often act as energy buyers. Local governments have important roles in the provision of social services and infrastructure as well as driving overall local development planning.

- ▶ **Contractors:** Contractors frequently come on board during the construction and operations and maintenance (O&M) phases. They often become the public face of a wind or solar project operation. Issues with contractors' poor social and environmental performance are likely to be associated with the wind or solar project. At the same time, contractors can play an important role in identifying and maximizing opportunities to improve a project's social license to operate. They often employ significant numbers of people. They can provide skills development and training opportunities in the local area and they can increase demand for local goods and services. In addition, they can partner with the wind and solar project developer to design and deliver other benefit sharing activities.
- ▶ **Community:** These communities include residential or other social settlements in host, adjacent or impacted geographic areas where a development project is proposed. Within the community, there could be a wide range of interests, vulnerabilities, as well as multiple levels of power and influence.

- ▶ **Landowners and land users:** These individuals may have land tenure through formal, legally recognized ownership over the land needed for the project or through informal, customary tenures. Landowners may or may not be land users. Land users could be an entirely different stakeholder group and distinct from landowners, but both are critical to the success of a commercial development.
- ▶ **Civil society actors:** These include local, national and international groups with an interest in project impacts and benefits. Civil society actors can represent concerns and interests of host communities. Among those are non-governmental organizations that promote advocacy and/or development goals. Since these organizations reflect a range of missions, engagement will differ as well. Development-oriented organizations might be interested in partnering with wind and solar projects. Such institutions also can serve as service providers.
- ▶ **Other industry players:** In situations where multiple projects (from the same or different industries) are located in close proximity, they can cause cumulative social and environmental impacts, elevating the importance of demonstrating positive benefits for host communities. In such situations, the various players can collectively choose to collaborate with each other on benefit sharing.

Figure 2.3 The universe of wind and solar stakeholders and their roles in community benefit sharing

Benefit-sharing requirements, compliance, and guidelines	Benefit-sharing expectations and priorities	Implementation of benefit sharing
<p>Investors</p> <p>Shareholders</p> <p>Government actors</p> <p>Industry and civil society actors</p>	<p>Landowners</p> <p>Project host communities (groups and individuals)</p> <p>Civil society actors</p> <p>Government actors</p>	<p>EPC contractors</p> <p>O&M contractors</p> <p>Employees</p> <p>Developers</p> <p>Systems operators</p> <p>Project host communities</p> <p>Government actors</p> <p>Civil society actors</p>



Solar energy is used to light village shop in Sri Lanka. Photograph by Dominic Sansoni. World Bank photo collection.

3. BENEFIT SHARING OPTIONS, APPROACHES, AND OPPORTUNITIES

This section presents a broad range of benefit-sharing opportunities that wind and solar project owners and developers could consider pursuing. The information is based on a review of initiatives undertaken by wind and solar projects around the world. Figure 3.1 summarizes the results of this global mapping exercise. Table 3.1 offers additional detail, along with specific examples of the types of initiatives implemented by various companies around the world.

Wind and solar projects can benefit local communities in a variety of ways. Some of the benefits are closely linked with wind and solar projects' operations, such as employment and project ownership; others address broader development priorities such as provision of public services.

Local benefit sharing measures commonly deployed by wind and solar projects fall under several general categories:

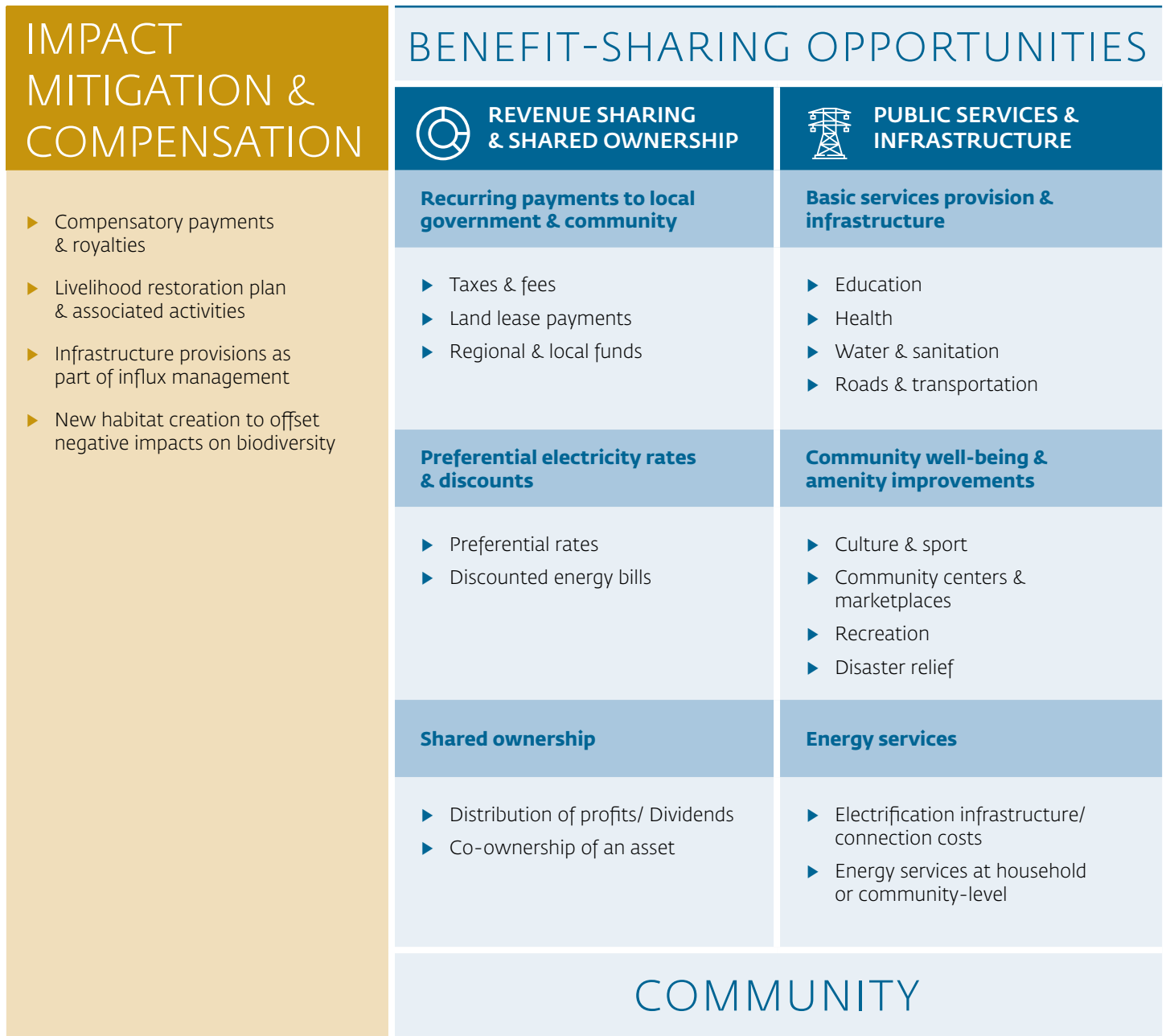
- ▶ Revenue sharing and shared ownership
- ▶ Public services and infrastructure
- ▶ Skills and livelihoods
- ▶ Environmental stewardship

Within each of these categories are several different mechanisms to meet the desired goals, such as local employment and local procurement in the skills and livelihoods category. Depending on the country context, some of the benefit-sharing mechanisms could be mandatory, while in other countries, the same measures could be voluntary.

Of note: It is clear from the global review of wind and solar projects that there is no single, one-size-fits-all design or approach to effective management of benefit sharing. For example, projects might deliver certain programs in house and partner with third parties to implement others. To help advance local development initiatives, projects might allocate funds to implement programs or they might use their core competencies, such as staff expertise and ability to leverage business contacts and convening power.

In addition, the design of benefit-sharing programs can influence the potential scope of impact at the community level. For example, projects can leverage plans to improve energy access in the project-affected communities through distribution of household-level energy products, such as solar water heaters. By including a programmatic component that trains community residents so they can distribute and install these household-level products they can promote skills and livelihood development at the same time as they are helping to increase access to electricity. The diversity in options and approaches underscores the importance of a clear benefit-sharing strategy—and of engaging stakeholders to arrive at the best configuration for the specific project context.

Figure 3.1 The broad spectrum of community benefit-sharing opportunities for wind and solar projects



continued

Figure 3.1 The broad spectrum of community benefit-sharing opportunities for wind and solar projects



Table 3.1 Common community benefit-sharing approaches in wind and solar projects

Type of benefit	Benefit-sharing approaches	Description	Example
Revenue sharing and shared ownership	Recurring government payments	Required or negotiated payments and fees, or other specific and consistent or recurring payments that are received at the local government level, such as payments/fees for permits (water, road access), royalties, taxes paid or transferred to local government. Of note: Some indigenous groups may have formal state recognition and a governmental role, so they also could receive such payments.	In the Philippines , the Renewable Energy Act of 2008 aims to accelerate development of renewable energy resources. It also promotes sharing of benefits with host communities and Indigenous Peoples. Under this act, 40 percent of the government's share from the sale of renewable energy produced should be distributed at the local government level. It specifies that 80 percent of the local government share should be used for directly subsidizing the electricity consumption of end users in host communities/local government units whose monthly consumption does not exceed 100 kwh. Twenty percent of the local government share goes to the <i>sanggunians</i> (the most local-level elected government body in the Philippines) to finance local government and livelihood projects. ¹⁴
	Community payments	Required, negotiated or voluntary payments to the community—for instance, into a community development fund or bank account controlled by community members. These funds can be used for local development projects that benefit the community. Payments for land are not included in this category as they are considered a compensatory mechanism.	In Australia , wind projects proffer Community Enhancement Funds (CEFs)—voluntary payments made by a wind farm for distribution to community groups, programs and projects. Funds are managed in a variety of ways; however, some are entirely community driven. The number and size of CEFs is growing sharply. As of 2019, CEFs will direct an estimated \$2.5 million each year to local communities. ¹⁵
	Shared ownership	Community or government involvement in a commercial developer's renewable energy project. Depending on ownership structure, this can imply sharing in project assets and the dividend stream, as well as a potential role in governance and decision making.	In South Africa , the Jeffrey's Bay wind farm started operations in mid-2014. Developed by Globeleq and owned by a consortium of South African and international investors, the farm has 60 turbines with a combined capacity of 138MW. In compliance with legislative requirements, the Amandla Omoya Trust—the local community trust—owns 6 percent of the wind farm. Community equity was financed through a loan from the Development Bank of South Africa, which will be repaid through the shareholder dividends generated by the project. After the loan is paid off, the trust will use the dividends to support local community projects. ¹⁶

¹⁴ Peñarroyo, Fernando. "Renewable Energy Act of 2008: Legal and Fiscal Implications to Philippine Geothermal Exploration and Development." In *Proceedings of the World Geothermal Congress 2010*, 25–29 April 2010. National Geothermal Association of the Philippines. <https://www.geothermal-energy.org/pdf/IGStandard/WGC/2010/0305.pdf>; Government of Philippines. 2009. "Rules and Regulations Implementing the Republic Act No. 9513." Manila. http://notocoal.weebly.com/uploads/8/3/4/2/8342315/irr_republic_act_no_9513.pdf

¹⁵ Australian Wind Alliance. 2018. "Building Stronger Communities: Wind's Growing Role in Regional Australia." https://d3n8a8pro7vnm.cloudfront.net/vicwind/pages/1482/attachments/original/1523831528/AWA_2018_Wind_Energy_Building_Stronger_Communities_Report.pdf?1523831528

¹⁶ Hagget, Claire, Mhairi Aitken et al. "Supporting Community Investment in Commercial Energy Schemes." University of Edinburgh. https://www.climateexchange.org.uk/media/1548/supporting_community_investment_in_commercial_energy_schemes.pdf; <https://jeffreysbaywindfarm.co.za/community/overview/T>

Type of benefit	Benefit-sharing approaches	Description	Example
Revenue sharing and shared ownership	Preferential electricity rates and discounts	Preferential rates or discounts applied to existing electricity services for a certain consumer group, such as local communities or businesses. Vertically integrated developers and developer/retailer partnerships could make use of this approach.	In Brazil , the Vale Luz program is part of Neoenergia Group's energy efficiency program. This program from the electricity distributor features discounted energy bills for residential customers in exchange for solid waste. In addition to facilitating access to energy for low-income consumers, the program has catalyzed more careful use and recycling of metal, paper, cardboard, and plastics to minimize the negative impacts of waste on the environment. In 2016, 1,571 consumers registered for the program. Combined, they delivered more than 500 tons of recyclable material and received energy discounts totaling 115,530.48 Brazilian reals.
Provision of public services and infrastructure	Basic services provision and infrastructure	<p>Facilitating or supporting the provision of basic services—water, sanitation, health, education, transportation—including associated infrastructure: This category does not include public infrastructure improvements required solely for the project's own needs or to meet various planning requirements, such as road tarring/widening, fencing, substation upgrades.</p> <p>New or enhanced local infrastructure and amenity improvements: These include local road and/or verge repairs beyond what is required, paving, construction of public viewing areas, and upgraded telecommunications. Among others. Such improvements also include the donation of project-related infrastructure and materials for community benefit. This category does not include local infrastructure improvements solely for the project's own needs and to meet various planning requirements, such as substation upgrades, road tarring/widening, and fencing.</p>	<p>In Kenya, Lake Turkana Wind Power's Winds of Change Foundation built a 208 km road from Laisamis to Sarima, which has transformed the transportation network in the area. It has significantly increased local communities' access to markets, health care and education. The foundation also supported the construction of community storage facilities in Illaut and Sarima.</p> <p>In India, Avaada supports a number of interventions near its solar project sites to improve health outcomes in host communities, such as no-cost medical services. Specialized and general awareness camps and regular health check-ups are provided, to raise awareness and help local residents lead healthier lives. The company also provides access to important services such as immunization, pre- and post-natal care, pathology, and referrals. In addition, Avaada is addressing sanitation challenges in rural India by building toilets and clean drinking water facilities in underserved communities.¹⁷</p>

¹⁷ Website of Avaada Energy, "Sustainability" page. <http://www.avaadaenergy.com/sustainability.html>

Type of benefit	Benefit-sharing approaches	Description	Example
Provision of public services and infrastructure	Community well-being and amenity improvements	Facilitating or supporting the provision of public services that promote community well-being, such as cultural activities and sports, recreation areas, community centers and marketplaces, disaster relief. Activities can include long-term development programs, donations and sponsorships. Additional examples include construction of public viewing areas and enhanced telecommunications.	In Senegal , as part of its broader benefit-sharing program, the Taiba Wind Farm is building new marketplaces at villages in the Taiba N'Diaye Commune. The first marketplace is operational with shelters and stalls, improving the built environment, enhancing livelihoods, and benefiting local produce vendors. The wind farm team regularly consults with the Taiba Women's Association, which had identified the need for the new marketplaces.
	Energy services	Facilitating or implementing energy services at the household or community level—for example, distributing household-level renewable technologies such as solar panels.	<p>In Nepal, Neoen, an independent producer of renewable energy, supports Empower Generation and its network of 12 solar lamp distribution microenterprises, managed by 16 women in 10 districts. Through this distribution model, an estimated 182,000 people now have access to cleaner and safer electricity.</p> <p>In Uganda, Access Power has been awarded two adjacent 5MW solar PV power plants in Soroti. Through its Access Foundation, the company is working to improve study conditions for young people. To date, 80 primary school students living near the Soroti solar project have received solar lanterns to light their homes.¹⁸</p>

¹⁸ Website of Access Power, "Social Impact" page. <http://access-power.com/social-impact>

Type of benefit	Benefit-sharing approaches	Description	Example
Local skills and livelihoods	Local employment	Employment of local people throughout the project lifecycle—for example, through the project company and/or subcontractors—along with skills development and training either prior to or during employment. Depending on the circumstances, the term “local” can mean employment at the host community, regional, and national levels. For purposes of this research, the term applies only to people and groups from host and project-affected communities.	In Rwanda , the Agahozo-Shalom Youth Village Solar Project spans 170 acres. The project has provided community benefits through local employment and procurement. During the planning phase, local Rwandan experts were hired to complete surveying and feasibility studies. Local Rwandan workers also handled site preparation, including ground levelling and road building, financing, regulatory licensing and permitting. During construction, the developer employed 200 part-time construction workers, most of whom were Rwandan nationals. To maintain the solar field, 30 local workers were hired for full-time jobs.
	Local procurement	Procurement of local goods and services, such as food, housing, and fuel, throughout the project lifecycle. This includes support for local businesses that are already supplying the project or have the potential to become a supplier. The term “local” can mean host communities, indigenous and previously disadvantaged groups, as well as regional and national suppliers. The authors acknowledge the important role of local procurement in host and project-affected communities. However, the authors also recognize that such opportunities might be limited in some communities, so the focus might need to be on regional and national suppliers.	Additional work was subcontracted out to local businesses—accounting, legal, administrative and management firms—creating about 20 jobs. The project also supported women’s economic empowerment by ensuring gender-diverse hiring of security, cleaning, and administration staff. Current and former employees have access to training and certification opportunities. For example, locally hired module mounters received compliance and completion accreditation, enabling them to find other work on grid-connected solar irrigation systems.
	Alternative skills and livelihoods	Support for alternative skills development and income generation, such as microcredit for SME development and skills audits, in areas unrelated to local procurement for the wind or solar project. Livelihood restoration activities to mitigate livelihood impacts resulting from the project are not included in this category.	In Mexico , Acciona’s La Venta wind farm supports an initiative to create a competitive dairy business for farmers living near the wind farm. Under the project, 11 production units have been set up, with the goal of achieving a quality standard sufficient for commercialized milk distribution. By partnering with a specialized consultancy, the company also is providing guidance on additional agricultural activities that the production units could undertake. ¹⁹

¹⁹ Website of Acciona, “Sustainability Initiatives” page. <https://www.acciona-mx.com/sustentabilidad/iniciativas-sustentabilidad/proyecto-agropecuario/>

Type of benefit	Benefit-sharing approaches	Description	Example
Local skills and livelihoods	Institutional capacity building	Establishment of and/or capacity building for community-based organizations or public institutions: Examples include strengthening productive community units, such as farmer groups, participation in working groups/committees to share knowledge and expertise, and supporting local/regional planning activities.	In Panama , the Penonomé wind project (<i>Laudato Si</i>) is helping to strengthen five rural aqueduct administrations—legally established community-based organizations that supply drinking water to rural areas. The country’s healthcare ministry is responsible for building and maintaining the water systems as well as controlling and monitoring water quality. In 2016, the wind farm assisted the ministry in these efforts. The logistical support included providing transportation and 288 man-hours for sampling and inspections, which entailed setting the water quality baseline and conducting 24 monitoring tests to identify water quality issues. After gaps were identified, and using a public-private partnership model, the wind farm, the ministry and the National University of Panama worked together to develop a training program for rural aqueduct administration board members. This support has benefited an estimated 4,405 residents. ²⁰
Environmental stewardship	Environmental enhancements	Activities to conserve and/or improve the local environment, in addition to impact mitigation measures required for the project: Examples include wildlife habitat creation and/or on- or offsite environmental improvements, environmental education and conservation programs and sponsorships, and sustainable tourism activities.	In Colombia , Celsia supported a voluntary reforestation program aimed at planting 1 million trees per year over 10 years. Between the years 2015 and 2018 the company planted 2.6 million trees to protect the main region’s water basins—Valle del Cauca, where Celsia’s Yumbo solar project is located.
	Low-carbon community development	Local programs that are aligned with and designed to meet climate change mitigation or adaption objectives, such as distribution of environmentally preferred products and services, household energy efficiency programs, and building of climate- resilient local economies and communities.	In South Africa , the Hopefield Wind Farm started commercial operation in 2014. Since that time, its Hopefield Home Improvement Project has provided household-level renewable energy services. Improvements to homes include solar water heaters, insulated ceilings, and upgraded wiring and electrical plug points. About 18 local residents received training and were hired to handle the installations and upgrades during the project’s first phase, which resulted in improvements to 600 homes. Later, these workers created their own small businesses which contracted their services to the community company that assumed the day-to-day responsibilities for the project’s second phase. In addition to the improved quality of life for local residents, the project led to the creation of three new small businesses—electrical work, plumbing, and carpentry.

²⁰ According to a 2014 description and evaluation of the project, the rural aqueduct administrations’ system is based on the principles of community management. The aqueduct is property of the community, a board of elected community members is in charge of its administration and maintenance, and all of its beneficiaries must participate in the decision-making, financing and maintenance of the aqueduct. See: Messenger, Matthis. 2014. “Evaluación de la gestión de recursos hídricos al nivel de Juntas Administradoras de Acueductos Rurales (JAARs).” CATHALAC.

BENEFIT SHARING IN THE WIND AND SOLAR CONTEXT: EXPECTATIONS, OPPORTUNITIES, AND CONSTRAINTS

Building and maintaining strong community relations should be a fundamental aspect of wind and solar projects. However, the global review revealed vast differences in developers' and operators' commitments to benefit sharing and the degree of professionalism associated with such efforts. Many factors—both internal and external to the company—come into play. This section briefly discusses some of these internal and external factors and the ways in which they can influence developers' benefit-sharing choices. The discussion also illustrates the complexity of the decision-making processes involved.

Changes in project ownership and limited experience in benefit sharing

Internally, the potential for multiple changes in ownership and management of a project during the lifecycle can constrain a developer's ability to ensure continuity of engagement. It also increases the risk that community expectations will not be met. To manage these risks, there should be strong commitments and plans in place for every stage of the project's lifecycle.

In addition, many companies find themselves having to balance limited budgets for community relations functions, with limited experience and skills in social risk management, stakeholder engagement, and benefit sharing. These issues pose additional challenges to effective design and implementation of benefit sharing.



Chairman of Jordan Wind project Company walks through Tafila Wind Farm in Tafilah, Jordan. Photograph by Dominic Chavez. IFC photo collection.

Energy procurement models can constrain developers' choices

The manner in which energy is procured also can affect developers' ability to deliver benefits. For instance, renewable energy auctions have gained in popularity compared with feed-in tariffs and quotas.²¹ Key to the fast growth of auction schemes around the world is their ability to achieve low prices.

However, while this single-objective auction model does generate lower energy prices, it penalizes bidders that want to include benefit-sharing opportunities in their projects/bids. South Africa's Renewable Energy Independent Power Producer Programme (REIPPP), which mandates local manufacturing, procurement, jobs and other measures, is currently a bit of an outlier, although some few countries are moving towards a similar vision. The South African program combines energy and

development policy objectives, thereby obligating participating companies to allocated resources to benefit sharing (figure 3.2).

Another aspect relates to the ability of a developer to engage with the community in the project siting process. Of late, a number of countries have developed a preference for the scaling-solar approach promoted by IFC, involving government-led feasibility studies to identify optimal sites from the public sector's perspective²². This can constrain independent producers' ability to engage and form a relationship with local stakeholders early on, because they must bid a tariff on pre-determined sites.

Integrating benefit-sharing aspects into the design of energy procurement model is not without its challenges. South Africa's experience with REIPPP—and the issues faced—has yielded valuable learning for all stakeholders.

Figure 3.2 Community benefits and economic transformation in SA's REIPPP: Achievements and challenges



KEY ACHIEVEMENTS

Significant collective financial commitment:

- ▶ Enterprise development: 6.4 billion South African rand (\$442.7 million est).
- ▶ Socio economic development: 20.6 billion South African rand (\$1.4 billion est.)
- ▶ Community shareholding: 29.3 billion South African rand (\$2 billion est.) in net income

NOTE: Dollar amounts based on May 2019 exchange rate).

Considerably higher employment figures than planned: 96 percent more black South African citizens and 156 percent local community members were employed during construction than originally projected and committed in project bids

Local socioeconomic and enterprise development investments addressed targeted areas: 40.7 percent for education, 21.2 percent for social welfare, 24.5 percent for enterprise development, and 4 percent for health care.



KEY CHALLENGES

Uncertainty on appropriate institutional arrangements for effective governance of and decision making on community benefit investments.

Insufficient REIPPPP monitoring requirements, heavily focused on quarterly input/output data but not enough information on socioeconomic development impact.

Lack of leadership in coordinating corporate community investments in cases where there are many renewable energy projects in close proximity.

Source: IPP Office South Africa, 2018.

²¹ IRENA 2017.

²² For more information, see: scalingsolar.org

The wind and solar industry at a time of rising public expectations

Public demand for benefit sharing seems to be increasing. The renewable energy industry is coming of age at a time when international efforts and agreements are underway to tackle climate change, biodiversity loss, poverty, and inequality. While all industries are now being scrutinized in the context of these issues, the fact that wind and solar are considered clean energy sources—and thus have received significant attention as a way to meet global and national green- and equalized access-to-energy goals—means there is a heightened focus on impacts and benefits.

Expectations for job creation

Job creation is often viewed as a key socioeconomic benefit of wind and solar projects. Job creation of any kind, including direct, indirect, and induced, can prove vital to improving a community’s prospects and quality of life.

Much like the sector itself, data on employment in renewable energy is at an early stage of development, as is data that compares employment in renewables with other energy sectors. Future data collection also must go beyond direct employment figures to assess indirect, induced, and local employment, as well as gender-disaggregated data on employment. Given the current constraints, any commentary on renewables employment and comparisons with other sectors should be considered preliminary until a fuller picture









The emerging data on employment in the renewable energy industry is promising.

emerges, including a more comprehensive understanding about the renewable energy sector and—more broadly—about the future of work itself in an increasingly digitalized global economic environment.

Measuring employment and jobs is a complex task, requiring distinguishing among the various types of jobs created: direct, supplier (indirect) and induced. The direct jobs figure is the only one that can be ascribed to a specific activity, making it the most definitive indicator. Yet, including only direct jobs—and excluding indirect and induced employment—will likely yield lower-than- actual job creation figures, since it does not account for economy-wide impacts, such as the ways in which lower-cost electricity affects the spending patterns of firms and people.

That said, some of the emerging data on employment in the renewable energy industry is promising. Globally, employment in renewables increased by 1.1 percent between 2015 and 2016. Excluding large hydropower, renewables employment grew 2.8 percent during this time period, reaching 8.3 million in 2016. Of this figure, the solar photovoltaic sector represented the largest employer, with 3.1 million jobs, up 12 percent from 2015.²³

Figure 3.3 Example: Employment levels for a 50MW solar PV and 50MW onshore wind plant

	 Project Planning	 Procurement and Manufacturing	 Transport	 Installation and Grid Connection	 Operation Maintenance	 Decommissioning
 50 MW solar PV: 229,055 person-days	1%	22%	2%	17%	56%	2%
 50 MW onshore wind: 144,420 person-days	2%	17%	1%	30%	43%	7%

²³ IRENA. 2017. "Renewable Energy and Jobs Annual Review 2017." Abu Dhabi: International Renewable Energy Agency.

Box 3.1 Preparing local communities for O&M employment

South Africa's Bokspoort CSP project set a target to train enough nearby residents that local employees could handle 80 percent of plant operations. With 1,300 jobs created during construction and 62 permanent jobs now in full operation with the potential for doubling that

Sources: ESI Africa; ACWA Power

number, the !kheis community in the Northern Cape has seen direct benefits. Twenty local workers were selected to receive advanced training as skilled plant operators and maintainers. The goal is a plant that employs a majority of !kheis municipality residents within the next few years.

In the United States, the solar and wind industries were creating jobs 12 times faster than the rest of the economy, according to a 2017 article in *Fortune* magazine. The article noted that solar and wind jobs were growing at annual rates of about 20 percent.²⁴ Employment numbers from the US Department of Energy further affirm this. As of 2017, the U.S. solar PV and wind industries employed 470,000, according to the department's data. Meanwhile, combined, the nuclear and coal segments employed only 240,000. This disparity is even more notable given that wind and solar deliver only 10 percent of America's electricity demand while nuclear and coal supply about 60 percent, as of 2017. It points to the strong job creation potential for the renewables sector as it expands.

One driver of these renewables job figures could be the growth of embedded small-scale and mini-grid renewables projects, which typically employ more people per MW than large-scale projects. Meanwhile, in addition to the promising job numbers, the quality of renewables employment is notable—jobs are safer and the workforce is more gender-diverse than other energy sectors.²⁵

Purposeful focus on local job creation needed

For project developers, ensuring that opportunities exist for job seekers from host communities will play an important role in the overall local benefit-sharing strategy. A deliberate commitment and carefully planned approach is needed if such opportunities are to be maximized.

Typically, job seekers in host communities are unskilled or semi-skilled. They generally find work and contracting

opportunities in security, cleaning—offices, solar panels, and vehicles—land preparation, road works, fencing, hole digging, road safety, environmental monitoring, community engagement, and community benefit implementation.

However, once the project is operational, it becomes more difficult to employ large numbers of unskilled or semi-skilled workers. The specialized skill sets required to operate sophisticated wind farms and solar arrays are often drawn from elsewhere.

Given this situation, targeted and early preparation is advantageous. For example, to enable participation by smaller, local contractors, larger contracts might have to be broken up. In addition, partnerships with service providers and local organizations likely will be necessary. They can provide technical training and workshops to improve the skills of workers living near the site, including competencies needed to support ongoing operations and maintenance.

Building in support for alternative livelihoods and skills development as part of the overall benefit-sharing strategy also could be important. Particularly in communities that are struggling with deepening unemployment—especially for youth and women—interventions designed to address skills shortages and limited livelihoods can profoundly affect long-term prospects. Developing alternative skills and livelihoods can stimulate local empowerment, thus promoting independence rather than dependency. This approach also offers the developer a credible exit plan—a means of exiting an area without removing benefits already provided.

24 Samuelson, Kate. "Renewable Energy is Creating Jobs 12 Times Faster Than the Rest of the Economy." *Fortune*. January 27, 2017.

25 U.S. Department of Energy. 2017. "U.S. Energy and Employment Report." Washington D.C.: United States Department of Energy.

📍 MOROCCO:

Noor 1 Solar Power: Gender and Local Hiring

The 160MW Noor 1 project corresponds to the first phase of the 500MW Noor-Ouarzazate Concentrated Solar Power (CSP) Complex, a public-private partnership between the Moroccan Agency for Solar Energy (MASEN) and ACWA Power Ouarzazate.²⁶ Located in Ghassate, in the Moroccan province of Ouarzazate, the project is surrounded by 38 villages, with a total population of 8,300. The rural province is characterized by poverty and high rates of illiteracy: 68 percent overall—higher than Morocco’s national level—and 85 percent for women, according to a recent World Bank study on the Noor 1 project.

FROM THE OUTSET, LOCAL JOBS A KEY EXPECTATION

As project planning got underway, MASEN set voluntary local content targets, in line with the government’s expectation. During a two-year public consultation period, 2010–2012, the developer also heard from stakeholders about the importance of local job opportunities. To address those expectations, Noor 1’s recruitment policy aimed to maximize the number of local workers.

As construction got underway in October 2014, direct employment picked up, reaching a peak of 1,917 workers. However, overall local employment fell short of recruitment goals, and only a small share of local women benefited from direct employment. The key challenge was a skills mismatch: technical skills were needed for the project but local workers did not have the necessary qualifications. Additional constraints in hiring women were due to local gender norms and higher illiteracy rates, since women and girls in rural Morocco tend to lag behind men in educational attainment.

In the period between June 2014 and August 2015, 34 percent of jobs went to residents of the province. Local community members accounted for only 6 percent of the workforce, filling low-skilled construction jobs. Of the remaining jobs, 45 percent went to Moroccan nationals and 21 percent went to foreigners.

FEW FEMALE EMPLOYEES, BUT WIDE RANGE OF JOB FUNCTIONS

Women accounted for only 4 percent of the project’s direct workforce during this same time period, about 71 percent of whom were Moroccan. Despite the small numbers, women held down a wider range of job functions than is typical, from cleaning and catering to quality control and technical positions. During field research in July 2015, women and men in the local community wanted to learn how to get high-quality jobs at the Noor 1 CSP plant and sought information on required qualifications.



NOOR solar complex project in Ouarzazate, Morocco. African Development Bank Projects photo Collection.

²⁶ ACWA Power Ouarzazate is the winning consortium. The consortium includes Saudi Arabian developer ACWA Power and Spain’s Aries Ingeniería y Sistemas S.A. and TSK Electrónica y Electricidad. This consortium signed a \$1billion power purchase agreement for the sale of Noor 1’s net electricity output.

COMMUNITY IMPRESSIONS: UNMET EXPECTATIONS, LACK OF TRANSPARENCY, AND DESIRE FOR TRAINING

In discussions with local community members, the World Bank study team noted some frustrations. Community members felt that NOOR's local recruitment policy did not work as well as intended and that local hiring fell far short of the target. In particular, they cited a lack of transparency in the recruitment process.

During these discussions, male and female community members alike expressed interest in training and skills-building programs so they could qualify for better jobs at the plant. They also said that local youth would benefit from more information about job qualifications, so they could follow an educational path that would help them get hired into professional and technical positions.

LESSONS FROM THE NOOR 1 EXPERIENCE

Several important findings emerged from the World Bank study, with applicability for other wind and solar projects.

- ▶ To overcome challenges in local hiring, additional efforts are needed: Even with the best intentions, it can be difficult to optimize local hiring. Community expectations are often higher than what developers consider reasonable, so engaging regularly with communities is critical to ensure transparency and dispel rumors. As part of these efforts, female community members should be equally consulted and encouraged to pursue jobs in non-traditional fields.
- ▶ Collaborating with local universities on tailored programs could increase opportunities for higher-skilled local employment. Specifically, this would encourage more local young men and women to pursue the required coursework for skilled positions. In the communities around Noor 1, women and young people indicated an interest in becoming qualified for direct, high-quality jobs within the CSP plant. To address this, the consortium partnered with the polydisciplinary faculty of Ibn Zohr University, Ouarzazate. As part of the agreement, the project's experts will offer graduate-level coursework for students, as well as for instructors in the university's renewable energy department. The agreement also includes guided visits to Noor 1, as well as awards to top students in the department and internship opportunities.
- ▶ Traditional income-generating activities also can be supported. Initiatives should target men and women alike and could be based on local demand. For example, after female community members indicated that they were interested in home-based income-generating activities, Noor 1's developer partnered with Morocco's Ministry of Craft to offer training for activities such as embroidery, weaving and knitting.
- ▶ Engaging with women is critical, but it can be difficult due to gender norms. For Noor 1, women's associations played an important role in representing women's interests. Women tended to participate in consultations only when they were represented by the association. Using such an approach can help avoid creating social tensions, while contributing to greater local acceptance of women's participation in the economic and social affairs of the community. Efforts here might involve building capacity for these associations and encouraging women to join them.

Source: ACWA Power Ouarzazate; Orlando, M. et al/World Bank 2018

Addressing access-to-energy expectations

Similarly, local communities often express significant interest in improved access to energy. This interest can be amplified by the nature of the projects themselves—energy generation. In developing countries, households in communities hosting a wind or solar project might not be connected to the electricity grid, elevating even more the expectation that the project will yield major benefits, in the form of access to electricity.

As noted earlier, connecting households directly to the energy generated by wind and solar often is not possible, because of technical constraints and restrictions imposed by the electricity regulator. Unless the company can sell electricity to local consumers directly, the company will have to collaborate with a willing electricity provider. Consumers might have to make a switch to this provider to take advantage of the service. Plus, determining eligibility comes with its own set of complexities, increasing the risk of backlash from those who are deemed ineligible.

In such situations, the project's attention to facilitating or implementing energy services at the household or community-level can become important. For example, the provision of various off-grid household- or community-scale renewable energy technologies and services is particularly well-suited as a benefit-sharing response. It yields quick wins—and tangible changes to living conditions. In fact, the majority of projects reviewed as part of this research have implemented benefit-sharing programs featuring some aspect of local energy service provision.

Regardless of the type of energy technology, assessing the degree of community buy-in and social acceptance on the proposed solution and its affordability will be key. Communities might not want certain proposed energy service solutions, such as off- or mini-grid, due cultural or other reasons. In addition, the poorest community members might not be able to afford the proposed solution. Alternative implementation approaches might need to be considered, such as arranging credit or subsidizing connection costs. Nongovernmental organizations, development institutions and the like can provide guidance on shaping such programs, so partnering with such organizations could be helpful.

Addressing expectations for local ownership

There is a growing civil society and political agenda around the possibilities for economic advancement through community-driven renewable energy projects. A recent study from the global renewable energy policy network REN21 suggests several approaches to adjust auction design as a way to enable more diverse actor participation, including communities, either through individual participation or as represented through groups, such as citizen cooperatives and community trusts.²⁷

In addition, there is an established history—mostly in Europe and the United States—of community participation in private- and public sector-led renewable energy projects. This could be contributing to the growing local appetite for more pro-active roles in renewable energy transition. The result is a gradually increasing global spread of such activity, with examples in Australia, Canada, Kenya, Namibia, New Zealand, and South Africa, among others.

In renewables, the community ownership concept is not widespread beyond developed markets, although community ownership models appear to be gaining traction, even in developing markets. One recent estimate suggests more than 60 examples of indigenous and local community-owned electric generation, transmission and distribution projects worldwide.²⁸

Projects in other industries—oil, gas, mining, water and wastewater, hydro and geothermal power—offer evidence of implemented or explored community ownership. According to recent research with a particular focus on Canada by Moody's, the global bond and credit rating company, more Indigenous communities are likely to become key players in big infrastructure projects.²⁹

Many examples reviewed over the course of this research appear to have been established as a result of specific regulation, previous precedents, or in response to community and government expectations, as part of the project's legal and social license to operate.

COMMUNITY OWNERSHIP: A DIVERSE CONSTRUCT

For purposes of this study, community ownership means local ownership. However, a diverse set of actors, including individuals, community cooperatives, local governments, and indigenous community organizations, at local, regional and national levels, all could be involved.

While community ownership is often referenced in relation to community-owned projects such as Hepburn Wind, Australia's first community-owned wind farm, this paper focuses on community ownership models in commercially driven, private-sector developed projects. From this standpoint, community ownership models fall into two categories: those that require cash investment from the communities, and those that are given as grants.

27 Renewable Energy Policy Network for the 21st Century. 2017. "Renewable Energy Tenders and Community [Em]power[ment]: Latin America and Caribbean." Paris: REN21 Secretariat.

28 Podlasly, Mark and Suzanne von der Porten. "The Role of Indigenous People in Major Project Development: Paths for Indigenous Participation in Electricity Infrastructure." First Nations Major Project Coalition, March 29, 2019.

29 Winter, Jess. "Indigenous participation in infrastructure to increase: Moody's." *The Star*. August 30, 2017.

While the existing literature is generally positive about community ownership models and their results, more remains to be understood about such approaches' advantages and disadvantages. In the literature review, it became clear that community ownership models can be challenging to execute for both commercial developers and for communities themselves. Among the issues uncovered:

- ▶ Regulatory/policy constraints
- ▶ Community difficulty in raising equity or accessing third-party financing on commercial terms
- ▶ Lack of knowledge and skills in defining company-community ownership arrangements, on the part of both developers and communities
- ▶ Inherent distrust between developers and communities
- ▶ Disparities and conflicting interests within communities³⁰

Community ownership models appear to be gaining traction, even in developing markets. One recent estimate suggests more than 60 examples of indigenous and local community-owned electric generation, transmission and distribution projects worldwide.

Variety of community ownership approaches observed in wind and solar projects

Among the wind and solar projects with a community ownership component reviewed, no single, predominant approach emerged. In fact, comparisons were difficult given the lack of consistency or similarities observed. As with the role of community ownership models in other industries, more research is needed on community ownership in wind and solar to detail experiences and document the various stakeholder perspectives.³¹

Box 3.2 Community ownership structures: project examples of joint ventures and independent ownership

Joint venture: The £15.6m Neilston Community Wind Farm in Scotland is owned by the limited liability partnership between Neilston Development Trust (NDT) and the developer, Carbon Free Developments. As part of the planning process, Carbon Free Developments offered NDT the right, with no obligation, to contribute up to 49.9 percent of project costs, including a pro-rata share of development costs. Scotland's Co-operative Bank provided 80 percent debt financing towards £15.6 million in project capital expenditure. The community trust, needed funding to trigger their 49.9 percent ownership stake, totaling £1.5 million in equity. By accessing £950,000 in loans from Social Investment

Scotland, Charities Aid Foundation, Big Issue Invest, and West Scotland Loan Fund, NDT was able to secure its ownership stake. The four turbine, 10MW wind farm commenced operations in May 2013. The community's ownership stake in the project will generate an estimated £10 million over the lifetime of the project.

Independent ownership: The Middelgrunden wind farm is a 20-turbine, near-shore development in Denmark. The project's developer led the planning and construction phase. Upon commission, a community organization took control of 10 turbines, operating and maintaining them separately from the developer's turbines.

Source: Hagget, Aitken et al.

³⁰ IRENA 2018.

³¹ Hagget, Aitken et al.

Based on the global review, communities typically enter into project ownership either as a joint-venture arrangement with the developer, effectively creating a shared ownership structure, or they might own a portion of an asset independently (see box 3.2).

Lack of clarity on governance of assets

The review of existing projects revealed that in some cases, communities purchased shares in a company that was undertaking a renewable energy project. They hold rights to future dividend streams, but remain passive owners, with limited participation in governance matters. In other situations, communities are active co-owners, owning a portion of the project and actively participating in the management of the asset, often as a joint-venture partner. In some few cases, shares were gifted or provided in exchange for “sweat equity.” In all these cases, details on governance of community-company ownership arrangements such as presence of voting rights, and the scope of decision making allotted are generally not discussed.

Access to finance a significant hurdle

Even when communities are given the opportunity to participate in ownership, they face a major challenge in raising the funds needed to buy in. Several approaches are used to overcome this hurdle:

- ▶ **Developer financing:** In some few instances, the developers themselves have offered financing to the community, to enable joint ownership. For example, in Scotland, Falck Renewables loaned funds to Fintry Development Trust so that the community could buy into the developer’s 35 MW Earlsburn Wind Farm.
- ▶ **Third party financing:** In South Africa, some communities work through third parties, such as national banks, development finance institutions, and government agencies, to facilitate financing. Community dividends are used to repay loans.
- ▶ **Fundraising by individuals and local organizations:** These efforts to attract financing include share raises, crowd-funding, social impact investors, and local development and government organizations.

- ▶ **Free or low-cost ownership shares:** In some cases, developers offered shares with a low enough minimum entry to allow participation by local residents—or they offered free shares. In Australia, Windlab offered free shares to host and neighboring landowners of its Coonooer Bridge Wind Farm project.³²

Issues with distribution of community benefits

Another consideration associated with community ownership relates to the ways in which dividends are allocated in a community, as well as spending decisions associated with use of such funds—and the governance structure for such decisions. In South Africa for example, community trusts are the most common legal structure. Through their trustees, these trusts represent the interests of the local community and manage the dividends that go into a community. The review of existing projects for this paper revealed that the specifics of such governance arrangements are often vague and policy guidance is lacking. Little detail is provided on key questions such as selection of trustees—particularly when multiple communities are involved,—whether there is company representation on the trust, the ways in which resources are managed and distributed, and the process for monitoring and dispute resolution.

Capacity building on community ownership a critical need

The literature review makes it clear that communities and developer/operators alike could benefit from more skills and knowledge on the subject of community ownership. While the notion of negotiating for and holding an equity position in a project may seem appealing to local communities, they might not know much about it, or about the potential downsides that might come with sharing of risks and liabilities. On the part of the developer, technical teams might not have expertise in engaging and negotiating with communities, which requires a degree of sensitivity that they may lack.

³² Hagget, Aitken et al.



Photograph by Dominic Chavez. IFC photo collection.

4. GETTING IT RIGHT: LINKING THE BENEFIT-SHARING RATIONALE TO PROJECT SPECIFICS

This section presents the experience of wind and solar project owners and developers as they seek to develop and implement approaches to benefit sharing. The review of developer experience for this paper identified certain commonalities, pointing to three related but distinct efforts—each requiring an investment of company time and resources—that are critical to building a project-specific benefit-sharing strategy. These include:

- ▶ **Identifying the company's own benefit-sharing business drivers:** Understanding the clear rationale for undertaking the benefit-sharing initiatives in a given context.
- ▶ **Ensuring that the benefit-sharing approach aligns with company culture and values:** Otherwise, there is a real risk that implementation will not happen or that those charged with carrying out the community efforts will not be supported by company leadership.
- ▶ **Learning the lay of the land, the local history, and community sensitivities:** Taking time to study the community in-depth will deepen the company's understanding of their concerns. This includes an exploration of past history, including a look at earlier projects that may have faced challenges with their social license.

Among other things, an examination of these factors helps to determine the reasons that benefit sharing is needed and the level of financial and human resources required. What follows is an exploration of each of the three aspects mentioned above.

IDENTIFY THE BENEFIT-SHARING BUSINESS DRIVERS

In the course of the research for this paper, it was found that while a growing number of wind and solar developers view benefit sharing as important, most stop short of articulating links back to the business—frequently seeing it as a stand-alone activity disconnected from the company's operational goals or strategic mission.

However, to ensure adequate allocation of resources, secure buy-in, and enable effective initiatives, there must be a strong business rationale for why benefit-sharing programs are needed, including an understanding of risks and rewards, costs and benefits. Several common business drivers of benefit-sharing activities emerged from the research, including:

- ▶ Compliance with legal/regulatory and financier requirements
- ▶ Ability to access land and resources
- ▶ Ability to secure the needed approvals
- ▶ Meeting industry standards/benchmarks
- ▶ Ability to secure and maintain social license to operate
- ▶ Reputational benefits that can help developers gain competitive advantage

Figure 4.1 offers a graphic representation of the common business drivers identified and some specific examples.

Linking business objectives and social license

Making a connection between business objectives, business drivers, and benefit sharing often requires careful consideration. However, these connections help to unlock win-win opportunities—benefit sharing programs that yield dividends—both for the company and community stakeholders. For instance, a goal to complete a project on time and budget can be linked with the company's ability to meet local community expectations about benefit sharing, since benefit sharing can help reduce the likelihood of a dispute with a community. This would reduce the risk of the delays and cost overruns associated with resolving the dispute. Companies also reap business benefits from helping to build a skilled workforce and operating in a stable community, since these efforts can lower the project's overall risk profile.

Also of note: Increasingly, investors are taking a careful look at stakeholder-related risks and examining the management approach to such risks as part of their due diligence. A company that demonstrates proactive management of its stakeholder risks and good company-community relationships will have a better chance of obtaining more competitive financing terms and less onerous lender requirements.

Commitments to community benefit sharing also can serve as a competitive differentiator in public infrastructure bidding processes, giving it an advantage with stakeholders ranging from existing and potential communities to governments.

To ensure adequate allocation of resources, secure buy-in, and enable effective initiatives, there must be a strong business rationale for why benefit-sharing programs are needed, including an understanding of risks and rewards, costs and benefits.

In South Africa, for example, developers are obligated to grant communities equity shares of at least 2.5 percent of the project. In practice, to make a project application more competitive in subsequent bidding rounds, developers have upped this share to 40 percent.³³

While there is a growing understanding among industry stakeholders that social license and strong company-community relationships are important, less understood is the extent to which what might be considered non-technical risks impact projects. Such risks often are underestimated, not thoroughly quantified, or not considered at all. Some studies have explored the ways in which the quality of company-community relationships can impact projects, though most reveal findings for the natural resources and infrastructure sectors,³⁴ given the limited information available in the renewables sector.³⁵ Box 4.1 highlights research from Latin America that quantifies the costs and consequences when a project loses its social license to operate.

³³ Wlokas Holle Linnea. 2015. "A review of the local community development requirements in South Africa's renewable energy procurement programme." Technical report. South Africa: World Wildlife Fund.

³⁴ Munden Project. 2012. "The Financial Risks of Insecure Land Tenure: An Investment View." Washington, D.C.: Rights and Resources Initiative; TMP Systems. 2015. "IAN: Managing Tenure Risk." Washington, D.C.: Rights and Resources Initiative; Franks, Daniel. M.; Rachel Davis; Anthony J. Bebbington; Saleem. H. Ali; Deanna Kemp; and Martin Scurrah. 2014. "Conflict translates environmental and social risk into business costs." *Proceedings of the National Academy of Sciences of the United States of America*. Vol. 111, No. 21. Washington, D.C.: National Academy of Science.

³⁵ Waldman, Laura; Eniko Horvath; and Christen Dobson. 2018. "Renewable Energy Risking Rights & Returns: An analysis of solar, bioenergy and geothermal companies' human rights commitments. Business & Human Rights Resource Centre.

Box 4.1 IADB study explores drivers of conflict in Latin American infrastructure projects

An Inter-American Development Bank study looked at sources of conflict in 200 infrastructure projects throughout Latin America and the Caribbean. Energy projects represented 45 percent of the study sample, with thermal power plants representing 7 percent of the total and wind farms representing 6 percent. The analysis revealed that the nature of conflict is multidimensional. Among the key drivers cited:

- ▶ **Inefficient planning and lack of adequate consultation:** In the projects reviewed, this was the highest source of conflict reported.
- ▶ **Lack of community benefits:** This led to conflicts in 84 percent of cases, making it among the strongest drivers of conflict in the study sample.
- ▶ **Reduced access to resources:** This led to conflicts in 78 percent of cases, representing the third highest driver of conflict. In most cases, local communities were concerned about losing access to agricultural and marine resources they depend on for their livelihoods and daily income. For example, Mareña Renovables and its successor, Eolica del Sur, a \$1.2 billion wind farm in Mexico, was halted by community members in 2013. Conflicts reportedly began as fishermen were prevented from accessing lagoon areas during construction hours.³⁶ Community concerns over threatened fishing livelihoods and harm to their local environment reportedly played a role. Other issues factored in as well, including an ineffective regulatory context, complex indigenous land ownership structures, and the influence of legacy issues.

Consequences of conflict

The IADB study and others have explored the consequences of such conflicts:

- ▶ **Project delays:** The IADB study noted that 81 percent of projects in the study sample reported delays. The average delay from all projects listed in the available literature is about five years.
- ▶ **Cost overruns:** The IADB study noted that 58 percent of projects in the study sample reported cost overruns. The average publicly reported cost overrun from all projects that faced cost overruns is \$1.7 million, translating to 69.2 percent of average original budgets.
- ▶ **Project redesign:** In the IADB study, 42 percent of projects needed to be redesigned because of conflicts. Such modifications create high additional costs for the project. They also come with delays, as some project activities must be postponed to implement the modifications.
- ▶ **Intervention from an independent expert:** In the IADB study, 57 percent of projects brought in an outside expert to help ameliorate or explain the conflict.
- ▶ **Reputational damage:** Company representatives surveyed for the IADB study identified this as among the most significant consequences of conflict, with 95 percent reporting reputation damage as an issue.

Source: Inter-American Development Bank

³⁶ Elizabeth Kim. March 27, 2018.

Box 4.2. Quantifying the business value in benefit sharing and community engagement

A recent study from Australia offered insight into the ways in which wind projects quantify the business value of community engagement and benefit sharing.

The study looked at community engagement plans from 32 wind farms, and uncovered approaches that included calculations designed to analyze the risk associated with negative community engagement outcomes.

According to the study, one company included an analysis of the potential costs of poor community engagement to

the project (what it would cost if community engagement was not done well). The analysis arrived at:

- ▶ An estimated **\$35 million in additional costs**
- ▶ Potential for **project delays of at least 36 months**

“This resulted in the company adopting a new approach to their engagement process, by investing in significant staff time for face-to-face engagement with a very clear plan and strategy for both engagement and benefit sharing,” the study noted.

Source: Hicks, Lane, Wood, and Hall. 2018.



Meeting with community stakeholders on the Kipeto Wind project in Kenya. Photograph courtesy of Actis.

Use business case to secure internal buy-in

Quantifying the business value of benefit-sharing activities—for instance, calculating the cost of the community engagement or benefit-sharing program compared to the estimated value of preventing construction delays—is a rare practice across various sectors, but particularly in renewable energy projects. However, one such example is discussed in box 4.2.

Quantitative indicators of the business value have proved to be effective in securing internal buy-in, but they are also challenging to assess. Therefore, non-quantitative indicators can be just as important in securing internal alignment and support. Building a culture inside the company that recognizes the value of good community relations is one of the key benefits of a strong business rationale. Internal alignment is important in any situation, but particularly in the complicated corporate structures of entities that manage renewable energy assets, which can include multiple affiliates, shareholders, diverse assets.

Figure 4.1 **Common benefit-sharing business drivers for wind and solar projects**



Sources: Sources: IFC; World Bank project appraisal documents; Hicks, Lane, Wood, and Hall 2018; Kerr, Johnson and Weir, 2017; field visits, industry consultations, and personal communications, 2018–19

Box 4.3 Examples of national requirements, industry benchmarks, and project commitments to benefit sharing

COUNTRY BENCHMARKS

Australia: As a guide, several Australian wind farm projects contribute benefits of \$500–\$1,500 per megawatt (MW) of installed capacity per year.

Ireland: In its 2030 Vision, the Irish Wind Energy Association indicated that its members commit to providing €2/MWh to community benefit funds for all future wind farm projects. As an example, the 3 MW wind turbine (@€2/MWh) will provide approximately €250,000 to a neighboring community over this 15-year period.

South Africa: The Renewable Energy Independent Power Producer Programme (REIPPP) requires projects to comply with a comprehensive economic development scorecard that aligns with the national black economic empowerment legislation. The scorecard calls for projects to commit a percentage of total project revenue to socioeconomic development (1–1.5 percent) and incentivizes projects to commit up to 0.6 percent of revenue to enterprise development measures. In addition, projects participating in the first four rounds of the program must allocate a minimum of 2.5 percent of total project shares to an entity representing local communities, defined as within 50 kilometers of the district's municipal area.

United Kingdom and Scotland: Industry bodies RenewableUK and Scottish Renewables have set a minimum amount to be shared per megawatt of installed onshore wind capacity per year. Since 2013, this figure has been £5,000 per MW.

PROJECT COMMITMENTS

In El Salvador, Capella Solar, a 140 MW solar photovoltaic power plant to be operated by Neoen, will transfer 3 percent of the power plant's annual revenues to FUSAL, a not-for-profit foundation that runs social projects in El Salvador.

In Zambia, the Ngonye project, a 34 MWp solar photovoltaic power plant developed by Enel Green Power, is committed to developing and implementing a community development plan to be funded through annual allocation of 0.5 percent of annual project revenue.

In Kenya, the Kipeto wind power project is committed to distributing 5 percent of the project's net profit to a community trust, overseen by a community implementation committee. These funds will finance community development initiatives. The first distribution to the trust will occur after the start of commercial operations.

In India, in line with the country's corporate social responsibility regulations, Azure Power has developed a CSR policy. The company has committed to spending at least 2 percent of average net profit earned in the three immediately preceding financial years.

In Australia, the Bodangora Wind Farm in central New South Wales has an annual commitment of 2 percent of the income from a single wind turbine to a community enhancement fund. This is in addition to its per-wind-turbine commitments.

Sources: Lane and Hicks, 2017; Irish Wind Energy Association, 2018; Regen, 2014; Neoen, 2018; IFC; Azure Power, 2016; Times of India, August 29, 2013.

DETERMINING HOW MUCH TO CONTRIBUTE: BALANCING PROJECT CHARACTERISTICS WITH LOCAL CONTEXT

Given the variety of benefit-sharing approaches, diverse business drivers and country-specific contexts, it is not possible to distill a simple, consistent methodology that would calculate optimal contribution amounts or what

would be considered reasonable levels of benefit sharing. Some projects set a specific financial commitment to benefit sharing and communicate this information, an approach that can help promote transparency in the company-community relationship. Other projects might opt against establishing a specific formula, often in recognition that all measures to manage benefit sharing depend on the size and unique needs of the project and local context.

Some countries have specific benchmarks in place, which can provide a helpful roadmap for industry practices in these countries. Examples of such benchmarks are provided in box 4.3.

At the project level, determining how much to contribute and what might be considered fair usually depends on:

- ▶ Legal and financial requirements
- ▶ Corporate culture and appetite
- ▶ Community and stakeholder rights and claims
- ▶ Local development needs
- ▶ Project specific potential to generate benefits
- ▶ Broader license to operate considerations

Wind and solar projects can benefit communities in a variety of ways, some of which do not involve a cash outlay.

The precise benefit-sharing approach and level of contribution should be based on discussions and negotiations with the relevant community stakeholders themselves. It also should take into account the characteristics of the project, including the financial realities and timelines of the project. For instance, developers' benefit-sharing approaches and contributions could be constrained by extremely tight timelines and low capital and operating expenditure budgets. Another constraint is that projects often are driven by young companies and small teams involved in high-risk developments. They might lack the resources to handle the complex demands of designing and implementing benefit-sharing measures.

On the other hand, wind and solar projects can benefit communities in a variety of ways, some of which do not involve a cash outlay. These include in-kind contributions, use of project infrastructure and materials for community benefit, staff volunteer programs, and support for the community through the project's contacts and convening power.

Project developers should make every effort to allocate sufficient human and financial resources, while taking into consideration the business drivers such as social license considerations and ensuring access to benefits for all stakeholders, including marginalized groups.



Wind turbine farm in Tunisia. Photograph by Dana Smillie. World Bank photo collection.

POSITION THE BENEFIT-SHARING APPROACH IN THE CONTEXT OF COMPANY VALUES AND CULTURE

Lessons from others' experiences suggest that poor benefit-sharing implementation can exacerbate a challenging company-community relationship. But without a corporate culture and specific set of values that guide the approach, benefit-sharing activities could face some implementation risks—even with a strong set of business drivers.

Company or project values and culture can be shaped by various motivations. Some companies emphasize the importance of benefit sharing as a risk management strategy—one that helps to achieve a lower overall risk profile of the project, mitigate risks of a community conflict, and avoid project delays and budget overruns. Others emphasize the shared value potential—a company can deliver long-term value to the community through the presence and operations of a project, while the project enjoys a more stable and enabling environment. Additional motivations can include a company's ambition to ensure that its projects make positive contributions to host communities.

These motivations can be driven by an owner's and/or executive team's vision, shareholder expectations, and/or related experiences in other projects that demonstrated the business value of good community relations. Many companies have formally committed to the United Nations Sustainable Development Goals (SDGs)—goals to address global challenges related to poverty, inequality, climate, environmental degradation, prosperity, peace and justice. For example, SDG 7 specifically targets access to affordable, reliable, sustainable, and modern energy for all, with connections to other development goals and indicators. Wind and solar projects contribute to the overarching goal through their core business, but benefit-sharing activities also can focus on ensuring host communities have access to reliable and affordable energy.

Project developers have an opportunity to build a genuine corporate culture around these goals—and some have done just that. A number of examples reviewed in the development of this paper, including the Penonomé project in Panama, the pan-African renewable energy generation platform Lekela Power, and Celsia power company in Colombia, have used SDGs to guide their thinking on benefit sharing.



ReverdeC project seeks to plant one million trees each year in main water basins. Photograph courtesy of Celsia.

📍 GLOBAL:

Enel Builds an Internal Culture of Shared Value

Enel is a global leader in energy generation and distribution. In 2008, the company established a subsidiary—Enel Green Power—focused on renewable energy production, which created its own approach to community engagement through the concept of shared value (CSV) in 2012. Soon after, the company's CEO extended the CSV approach more broadly, throughout the entire Enel Group. Objectives include: establishing a long-term relationship with local stakeholders and aligning ethical, social, and environmental objectives with profitability and business objectives. Through CSV, Enel is committed to achieving 4 out of the 17 Sustainable Development Goals for education, clean energy, socioeconomic development and climate change.

The CSV approach involves several steps, including:

- ▶ **Local context analysis:** Information from environmental and social impact assessment studies and associated stakeholder engagement processes is used to identify key environmental and social risks and stakeholder priorities for the site. Additional analysis of socioeconomic indicators for a country/region is often done.
- ▶ **Shared value matrix:** This involves mapping company and stakeholder priorities to identify issues to address that bring value to both the company and the communities.
- ▶ **Shared value plan:** This includes detailing the various initiatives identified, linking the initiatives with the relevant SDGs, explaining company and stakeholder benefits, and estimating costs and timeline.

Embedding the approach into procedures and organizational structures was a gradual process. A first internal step was the “CSV IN” business challenge, which promoted the then-new CSV model, encouraged collaboration across as many functions as possible, and enabled a pilot test of the proposed CSV tools. Company teams in participating countries picked a project, and, using the CSV model, identified recommended actions.

Within the Enel Group, Brazil's Enel Green Power has been a champion of the approach. The company's experience in applying CSV in host communities shows that even small actions can yield business and community benefits. For example, Delfina Wind Farm—Enel's largest in Brazil for installed capacity and annual energy production (180 MW)—is located far from urban centers, in Bahia state. Pallets and coils were essential to transport and store materials used in the construction of the facility, but they could not be reused. Plus, the coils took up storage space. To address the issue of what to do with used pallets and coils, the company donated them to local communities. In conjunction with the donation of the materials, the company hosted woodworking workshops to teach local residents how to build tables, chairs, beds, toys and playsets, which they could sell to generate income while enhancing the public spaces around Enel's construction projects.

UNDERSTAND THE PAST AND PRESENT LOCAL ENVIRONMENT TO UNCOVER ISSUES AND OPPORTUNITIES

Knowing the local context is critical for understanding whether or not benefit sharing makes sense. If the decision is to move forward with a benefit-sharing effort, such knowledge will also play a key role in identifying the types of activities to undertake. The review of renewables projects around the world yielded several commonalities and issues associated with local context, despite the variety of project circumstances. While by no means a comprehensive exploration, the analysis provided here offers a starting point. It can help spark further discussion among stakeholders about specific local context parameters and how they might influence decision making on benefit sharing in wind and solar projects. Among the issues to consider:

- ▶ History of conflict with land-based businesses
- ▶ Land tenure insecurity
- ▶ Economic or physical displacement/resettlement
- ▶ High levels of poverty and unemployment
- ▶ Low or unequal access to energy
- ▶ Presence of Indigenous Peoples
- ▶ Existence of other large renewable energy, infrastructure, or other natural resource projects in the vicinity

History of conflict with land-based businesses

A history of past mismanagement on unrelated projects can adversely affect community views on new project proposals. As a result, many communities have built up varying degrees of negativity towards resource-based industries through the years. This negative legacy creates distrust in the communities and makes building community-company relationship a challenge. In such situations, from a developer's perspective, transparent and equitable benefit sharing can be important in demonstrating good will and commitment to community development.

Projects in areas with weak land rights and land governance are more likely to encounter land conflicts, which can be very costly.

Understanding this history can help in situations where conflict is present or likely. Approach benefit sharing with caution and careful attention to avoid reinforcing any enduring negativity or dynamics between communities and the proposed project, and between and within communities themselves. Bringing in outside resources, including conflict resolution experts, could be helpful in such situations.

Land governance and tenure

Addressing issues over land ownership is a challenge no matter what the circumstances. But they are even more difficult to deal with in developing countries, where customary and informal land tenure and conflicting and overlapping claims to land are common and enforcement is frequently lacking. It is estimated that 65 percent of the world's land area is held by local communities and Indigenous Peoples under customary systems,³⁷ and yet, their ownership rights are formally recognized on just 18 percent of what they hold.³⁸ However, there is growing acknowledgement of these land ownership claims and rights, enabling these groups to have a stronger say in decision-making and management of impacts and benefits.

Women's land tenure security also must be considered. Women tend to be disproportionately affected by the land-use changes typically involved in large-scale energy infrastructure projects, for example, with the loss of agricultural land for small-scale farming.

The issues associated with women's land tenure security are complex. There can be multiple barriers, including discriminatory social dynamics, unresponsive legal systems, and lack of economic opportunities, all of which can intersect, potentially exacerbating negative impacts on a number of aspects of wellbeing for women, children, and their greater communities.³⁹

³⁷ Rights and Resources Initiative. 2015. "Who Owns the World's Land? A global baseline of formally recognized indigenous and community land rights." Washington, DC: RRI.

³⁸ Business and Human Rights Resource Centre. 2018. "Renewable Energy Risking Rights & Returns."

³⁹ Namubiru-Mwaura, Evelyn. 2014. "Land Tenure and Gender: Approaches and Challenges for Strengthening Rural Women's Land Rights." Women's Voice, Agency, & Participation Research Series 2014, No. 6. Washington, D. C.: World Bank.

Understanding these realities—and integrating them into interventions—is critical. Insecure land tenure and ownership conflicts can significantly increase project risks. “Projects—for energy infrastructure or otherwise—in areas with weak land rights and land governance are more likely to encounter land conflicts, which can be very costly,” notes a brief on land tenure and energy infrastructure from the United States Agency for International Development.⁴⁰ An awareness of the potential for such conflicts—and identifying ways to de-escalate such potential conflicts can contribute to social license to operate.

Economic or physical displacement/ resettlement

The displacement of existing economic activity, physical structures or resettlement of households because of the siting of a project is extremely sensitive. It carries significant risks to a project’s success. Any negative legacies associated with dissatisfaction over land access, resettlement, or consultation processes—particularly as they relates to the ways in which

such processes affect men and women differently—can heighten the potential for loss of social license and increase project costs.

It is true that wind and solar technologies come with different land footprints. However, whenever land acquisition and resettlement are required, it is important to identify and mitigate a range of impacts in accordance with good international practice.⁴¹ Note that the land acquisition process and the management of resettlement could be led by either the private or public sector, depending on the situation.

Any mitigation efforts should be considered distinct from benefit-sharing activities, but an understanding of the situation can help inform the direction that benefit-sharing activities could take. For example, in other sectors, in cases of resettlement, benefit-sharing activities have been used as an add-on to the required livelihood restoration activities. They also have been used to ensure sustainability of livelihood restoration activities after these formal obligations end. In addition, benefit sharing has been used as a separate strategy



Tafila Wind Farm in Tafilah, Jordan. Photograph by Dominic Chavez. IFC photo collection.

⁴⁰ Lowery, Sarah and Darryl Vhugen. “Land Tenure and Energy Infrastructure.” March 16, 2016. USAID.

⁴¹ See IFC Performance Standards for more on this topic.

to ensure broader community benefits and support, beyond the individuals and groups that were impacted by land acquisition and resettlement.

High levels of poverty and unemployment

If nearby communities are poor and jobs are scarce, there could be greater expectations of strong local benefits—especially job creation. Low socioeconomic development also can signal a high dependence on renewable resources—such as such as water, forests, rangelands, and croplands—for livelihoods.

The increased competition for these resources between companies and communities—or the perception thereof—can be a source of conflict.⁴² In such contexts, benefit-sharing responses could be designed to support sustainable livelihoods and reduce vulnerabilities to resource scarcity. Such responses should be based on an understanding of local livelihood strategies, risks to vulnerable and minority groups, and feasible conflict-resolution approaches—all reasons to devote time to delving into the local context.

In addition, because many communities lack the skills needed to take full advantage of potential benefit-sharing opportunities, the project developer could consider embedding capacity-building initiatives into the overall plan. These initiatives help strengthen the skills, abilities and confidence of residents and community groups, empowering them to take on leading roles in improving the local quality of life.⁴³

Low or unequal access to energy

As previously noted, the arrival of a large energy infrastructure project might raise community expectations about the provision of generated electricity to residential and public buildings. Project developers should be aware of such expectations as they think through their approach to benefit sharing. This is particularly important because national legal frameworks often limit the distribution of electricity to the national electricity grid. Understanding both the legal requirements for electricity distribution—as well as local expectations—can help developers identify ways to address communities' energy needs while remaining in compliance with the country's laws.

Presence of Indigenous Peoples

The co-existence of business and indigenous communities is another sensitive issue, requiring particularly careful relationship management by project developers. Indigenous populations can be disadvantaged by development that offers a host of other benefits. The World Bank and other development institutions have acknowledged these concerns with efforts to mitigate such effects.⁴⁴

Increasingly, projects on indigenous lands are expected to include informed consent protocols and benefit-sharing agreements that respond to the needs, interests, and unique histories of the indigenous communities in question. These expectations come not just from the affected tribes, but from those advocating on their behalf, including civil society activists and other stakeholders. This can elevate the profile of the project, along with any associated issues or dissatisfaction.

At the risk of stating the obvious, it is important to note that Indigenous Peoples are not all the same—nor will they have the same concerns or motivations. What works in one circumstance might not work in another. For some indigenous communities, wind and solar power constitutes a culturally compatible form of development. Others might see it differently. Meanwhile, rivalries and internal disputes among indigenous groups, their leaders, and local governments can hinder the ability to gain consensus on agreements with the various indigenous communities.

Determining the presence of indigenous communities is a fundamental aspect of the effort to understand the local context. It is also a requirement of international best practice, including IFC's Performance Standards.⁴⁵ To confirm indigenous status, help structure engagement processes, and identify appropriate benefit-sharing approaches, engaging experienced social scientists and anthropologists is often necessary.⁴⁶

⁴² Watkins, Mueller, et al.

⁴³ Power Africa and USAID. 2018.

⁴⁴ Ledec, Rapp, and Aiello. 2011.

⁴⁵ For specifics, see IFC Performance Standard 7: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/performance-standards/ps7

⁴⁶ This section is excerpted from: Power Africa and USAID. 2018. "Guide to Community Engagement for Power Projects in Kenya."

📍 COLOMBIA: Jepirachi Wind Power and Indigenous Community Engagement

The Jepirachi Wind Power project faced challenges in engaging indigenous communities in consultation and participation processes. Built on the Guajira Peninsula, the project is located in a desert area in the northernmost part of Colombia, near the Venezuelan border. The area is home to the Wayuu, among the more numerous of Colombia's 80 Indigenous Peoples.

A World Bank report notes that the Jepirachi project is a model example of how to conduct consultations with indigenous communities. The sponsor for the project, Empresas Públicas de Medellín, took several steps to gain Wayuu support, including:

- ▶ Engaging in extensive up-front discussions
- ▶ Agreeing to benefit-sharing arrangements targeted at the *rancherías* (Wayuu clans) in the immediate vicinity of the windmills
- ▶ Supporting social action programs covering all residents in that part of the Wayuu territory
- ▶ Modifying project design and operational specifications to meet Wayuu preferences and religious beliefs.

DESPITE EXTENSIVE DEVELOPER EFFORT, ISSUES REMAINED

Yet, even with the extensive effort and degree of accommodation, the project still faced discontent.

After the wind farm was built, a community meeting was convened and the World Bank-based project team expressed its intention to apply for grant funding for an on-site sustainable electrification project.

The grant application process was extensive. Finalizing funding details took longer than anticipated.

But the community members' expectations were raised so early that obtaining access to electricity with the Bank's help became an all-consuming goal for them.

As the application process wore on, this mismatch in expectations led to some friction between the *rancherías* involved and the project team. It also resulted in a loss of momentum for other aspects of the social action program that the project sponsor had put in place.

CRITICISM ESCALATES

Meanwhile, at regional consultation meeting on climate change mitigation strategies in La Paz, Bolivia, the head of Fuerza de Mujeres Wayuu—a small Wayuu nongovernmental organization—launched sustained and highly public criticism of the Jepirachi project. Among the claims: project consultations did not involve a sufficiently wide cross-section of Wayuu, the electricity generated by the wind farm was bypassing the communities and going to a mining company located in another part of La Guajira, and project construction was directly linked to a surge in paramilitary activity in the Wayuu territory.

A preliminary World Bank review of the Jepirachi project's performance to that point determined that most of the claims were exaggerated. Direct Wayuu project beneficiaries disputed the claims as well.

WITH STRENGTHENED SOCIAL BENEFITS IMPLEMENTATION, CRITICISM ABATES

Although the World Bank project team continued to try entering into a dialogue with the NGO's leader, the outreach was not met with a consistent response. However, following an intensive effort to strengthen the implementation of the social benefits program by the World Bank team and the project sponsor, the criticism has subsided.

Existence of other large renewable energy, infrastructure and natural resource projects in the vicinity

Another aspect of understanding the local context involves scouting the vicinity to identifying the presence of other wind and solar projects. Significant cumulative environmental and social impacts can be created by a concentrated development such as an industrial park, or by close proximity of wind, solar, or other industrial developments to each other. Such cumulative impacts create both challenges and opportunities. One of the challenges—and risks—is that the inadequate environmental, social, and benefit-sharing practices of one project can negatively impact the efforts of other projects.

As a result, the entire industry could be perceived poorly by local stakeholders and the broader public. In such situations, it could take some time and effort to restore trust. Typically, such issues extend beyond the individual project's own ability to address them. Managing the effects requires collective action.

Multiple developments also can create opportunities for greater benefit sharing, such as larger aggregate demand for local goods and services. Leveraging these opportunities can deliver more extensive positive impact. For instance local companies might have even more incentive to improve their skills and capabilities so they can accommodate even greater demand for goods and services.

The Increased competition for these (natural) resources between companies and communities—or the perception thereof—can be a source of conflict. In such contexts, benefit-sharing responses could be designed to support sustainable livelihoods and reduce vulnerabilities to resource scarcity.



Workers carry medium-voltage cables at the Benban Solar Park in Egypt. Photograph by Dominic Chavez. IFC photo collection.

BOX 4.4 In South Africa, raising awareness on collective action for community benefits

In South Africa, through the national Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), 112 independent power producers have been procured. As of March 2018, 62 were connected to the electricity grid. Of these, 1 980MW are on-shore wind energy projects.

Since the launch of REIPPPP, the South African Wind Energy Industry Association (SAWEA) and South African Solar Photo Voltaic Industry Association (SAPVIA) have helped their members learn more about the community benefit aspects of the REIPPPP. Both associations have set-up thematic working groups and hosted a range of multi-stakeholder discussions to help project developers and owners understand more about implementing the community benefit requirements. Several insights have emerged from these discussions:

- ▶ There is a growing realization of the magnitude of the challenge. It is difficult to implement meaningful, lasting positive change through often highly socially contested development interventions and limited funding in communities.
- ▶ Minimal government oversight and guidance often results in fractured community engagement practices and development initiatives. There is a lack of support on supervision of quality, direction of interventions, and funding allocation.
- ▶ Due to a significant focus on compliance and quarterly reporting, reported compliance on local development might not have resulted in much impact on the ground. Real change requires companies to have more presence in communities for a longer time and to pay attention to the place- and people-specific conditions for development, beyond meeting the reporting requirement.
- ▶ Unique local conditions are dynamic and demand a highly responsive capacity from companies and communities to maintain quality relationships over time.
- ▶ Discussion participants repeatedly identified a need for processes and structure (through an independent entity such as a community trust association) to support the sector's community development work over time, allowing lessons to be shared among communities, industry and government.

Connecting community trusts

Because power plants typically where solar and wind resources are best, concentrated benefits to the local communities can be substantial, particularly given REIPPPP's economic development requirements. Empowered trusts can support local economic development that is locally relevant and effectively targeted.

For this reason, SAWEA decided to connect the members of community trusts, by hosting two provincial-level workshops on local community shareholding and trusts. These events were held in the Eastern Cape and Northern provinces, home to the bulk of the country's wind IPPs. The purpose of the workshops was to understand the practical challenges experienced by trusts, with the potential goal of creating independent support networks.

Among the issues addressed at the workshops: connecting the various trusts with each other to enable peer support and knowledge sharing. Since most trust-focused initiatives include education, health, and women's empowerment, there were clear opportunities for such exchanges of experience.

The workshops also explored the challenges when multiple trusts exist within a single community. Given the dividend structures for different projects, some communities see limited cash flows in the earlier years, with a substantial increase in later years. Some trusts have started to receive dividends after three years, while others will not receive dividends for 12 or 17 years.

Another issue associated with the multiple trust structure is that some trust beneficiary communities overlap. This creates two risks: the so-called feast-and-famine cycle and duplication of efforts. For these reasons, cooperation among the trusts is essential. "It does not make sense for wind farms, communities and government to plan in silos," a report from SAWEA noted.

The SAWEA effort, in partnership with its member companies, government, and supporting stakeholders including researchers, is helping to identify mechanisms and processes to support increased coordination and collaboration.

Source: Wlokas, Westoby, and Soal. 2017



Small solar grids from Azure Power now provide electricity to households in Dulu Sarna Village village in India. Photograph by Dominic Chavez. IFC photo collection.

5. LESSONS LEARNED FROM THE IMPLEMENTATION OF WIND AND SOLAR PROJECTS' BENEFIT-SHARING PROGRAMS

The global review of wind and solar projects has yielded a wealth of information on what works and what does not work for wind and solar project developers as they design and implement their own community benefit-sharing programs. Key lessons are summarized here and include:

- ▶ Benefit sharing requires commitment from the top
- ▶ A good planning approach starts early
- ▶ Community engagement is mission-critical
- ▶ Aim for inclusion: When distributing benefits consider various groups
- ▶ Transparency and accountability matter, especially during implementation
- ▶ Robust monitoring enables mid-course correction and reporting on results
- ▶ Partnerships, industry collaboration, and collective action represent major opportunities for greater impact

LESSON 1: BENEFIT SHARING REQUIRES COMMITMENT FROM THE TOP

Experiences from projects around the world show that building and maintaining strong community relations should be considered a fundamental, strategic aspect of the business. However, a review of projects globally revealed that wind and solar developers typically have limited budgets for a community relations function and with limited experience in the areas of social risk management, stakeholder engagement, and benefit sharing. There is strong potential for frequent ownership changes throughout project development and operation, meaning a lack of

continuity and increased risk of disruption to the implementation of benefit-sharing programs. These circumstances create additional risks to company-community relationships.

Demonstrate senior management support

The lessons from other projects point to the critical role of company executives and senior leaders in championing the community relations function. Their many choices—from how an organizational structure integrates the community relations function and the structuring of reporting lines to job descriptions and performance reviews—can serve to either hinder or promote the overall company culture and understanding of the importance of community relations. Ideally, the development and implementation of benefit-sharing activities and stakeholder engagement should be responsibility of broader management team, not just community relations staff.

Senior management also plays an essential role in driving and formalizing company commitments to benefit sharing. Such formalized policies can vary from a short vision statement to a detailed set of community obligations.

There is strong potential for frequent ownership changes throughout project development and operation, meaning a lack of continuity and increased risk of disruption to the implementation of benefit-sharing programs.

📍 GLOBAL: Scatec Solar's Social Policy

Scatec Solar is a leading, globally acting, independent solar energy provider, focusing on making solar power attractive and affordable to customers. The company's portfolio includes projects in Africa, Asia, Europe, and Latin America. Scatec's social policy reads as follows:

"Our goal is to positively impact the societies in which we operate, both directly and indirectly. We strive to employ local labour, identify needs in the local communities for our community development programmes and maintain open and transparent dialogue with relevant stakeholders.

"Our policy is to:

- ▶ *Employ local labour, enable knowledge transfer and generate job creation in local communities*
- ▶ *Use local suppliers whenever feasible*
- ▶ *Plan for and contribute to local development initiatives*
- ▶ *Train and educate our people on how best to operate in a new, often foreign culture*
- ▶ *Develop a structured stakeholder engagement plan for all projects at an early stage to help us inform and communicate with parties that are going to be affected by the project.*
- ▶ *Appoint a designated community liaison officer in our projects to facilitate understanding and communications in local communities*
- ▶ *Maintain an active dialogue during the project phases with the local communities and engage with communities at several levels, from national governments to project neighbours to ensure open and integrated communication"*

Source: Scatec Solar

Ensure appropriate resourcing of the community relations function

Commitment from senior decision-makers is critical for ensuring the availability of human and financial resources. Having appropriate people and skills in community-facing roles is a recurrent theme for building lasting relationships and trust.⁴⁷ While some may choose to outsource these activities to third parties, the developer's own community relations staff will still need to have some oversight to keep benefit-sharing programs on course. For developers deploying in-house community relations, training and staff development is an important consideration. Such training should extend to other staff in the company as well as to contractors' community relations staff.


⁴⁷ Hicks, Lane, Wood, and Hall. 2018; Regen. 2014.



Meeting with community stakeholders on the Kipeto Wind project in Kenya. Photograph courtesy of Actis.

📍 AUSTRALIA: Resourcing Community Engagement

A 2018 study of community engagement and benefit sharing practices in the wind industry in Australia highlighted the importance of paying close attention to resourcing of such efforts. The survey yielded responses from 26 wind farm developers. These responses shed light on how to ensure that community engagement and benefit-sharing activities were appropriately resourced. Among the findings:

- ▶ Local-facing staff, who have a regular presence in the community, are extremely important for building trust and community relationships. Equally important: staff consistency and staff willingness to engage with local people face-to-face, one-on-one and in group settings. Some respondents said that their technical staff were also responsible for community development and only visited the community for important activities or meetings.
 - ▶ More than half of the survey respondents indicated that they have dedicated community engagement staff—typically less than one full-time employee. The study called it “a surprising result” given that more than half are companies with more than 20 full-time workers in total.
 - ▶ Half of the survey respondents said that their community engagement staff typically oversee three or four projects at once, while 37 percent said that they assign one community engagement worker per project. Most respondents—58 percent—indicated that staff involved in community engagement roles live in the wind farm development area.
 - ▶ Respondents said that community engagement staff should have some decision-making authority. This helps to establish credibility with local stakeholders and enhance the efficiency of the efforts. Local residents want to know that they are talking to an individual with a degree of power, who will take their concerns seriously, respondents said.
- 
- Photograph by Jutta Benzenberg. World Bank photo collection.
- ▶ The survey uncovered a notable lack of specific community engagement training among community engagement staff. The majority of community engagement staff who responded to the survey possess on-the-ground experience, but only 25 percent have received specific training or qualifications related to community engagement. More respondents said they had formal communications qualifications—an interesting indication of the overlap in job functions.
 - ▶ Survey respondents suggested community engagement skills training for all staff, not just those in community-facing roles. This will help bring about a culture change across the organization, to elevate the role and demonstrate the value of community engagement. Such training could include skills in community engagement and community development, public speaking, active listening, negotiation, models for participation and evaluation, and conflict resolution, and could be provided to staff at various levels.

LESSON 2: A GOOD PLANNING APPROACH STARTS EARLY

While the presence of a clear and careful benefit-sharing strategy or plan does not guarantee successful implementation, it can help. At the very least, a benefit-sharing strategy provides the framework for action and enables engagement with various internal and external stakeholders on what the company hopes to accomplish. Beyond that, a benefit-sharing strategy can help secure human and financial resources. For example, several important opportunities for engagement and benefit sharing might emerge pre-construction, at a time when the project has no income. Allocating resources to such activities without a clear plan can be a challenge.⁴⁸

Make use of existing studies, assessments, and plans to inform benefit-sharing strategy

Existing social and environmental studies, impact assessments, and management plans are a valuable source for planning benefit-sharing activities. For example, the management plan might identify potential negative impacts from construction activities and a sudden influx of workers: greater prevalence of communicable and sexually transmitted diseases, reduced access to quality care for host communities due to heightened demand for health services, a rise in alcohol and substance abuse, and increased crime and gender-based violence, among others. The management plan also should include mitigation activities to address these negative impacts. Acknowledging the potential for such issues as the benefit-sharing plans take shape can enable the design of additional activities to enhance mitigation efforts and maximize positive community health outcomes. Examples of such activities are life skills offerings for employees, safe sex education programs for communities, adolescent high-risk behavior prevention programs, and community initiatives that foster positive relationships through sports and music.

Existing social and environmental studies, impact assessments, and management plans are a valuable source for planning benefit-sharing activities.

Know your stakeholders and their connectedness

Most developers are familiar with stakeholder identification and analysis techniques. These processes can uncover those who can affect a proposed project as well as those who might be affected by it. That said, it is important to note that stakeholder analysis is often generic, meaning that it could be of limited use for the purposes of planning benefit sharing programs.

A robust stakeholder identification and analysis should explore all groups and interests in the community, as well as the relationship between and among various groups. Desk research and targeted focus groups can get this process started. Typically, the company's community relations specialists would conduct such a stakeholder identification and mapping exercise. However, lessons learned indicate that integrating viewpoints of staff representing diverse company functions—Human Resources, Environment, Health and Safety, Operations—can help provide a more accurate assessment of which stakeholder groups to target. It also enables a more comprehensive exploration of the ways in which project design and operations affect host communities.

This could be followed by conversations with various stakeholder group representatives, possibly involving multiple discussions to uncover others and to triangulate information about important development concerns, opinion leaders, vulnerable and underserved groups, and legitimate community representatives.⁴⁹ It can be particularly challenging to assess vulnerable and underserved groups, as they tend to be less visible in a community, less likely to participate in formal stakeholder engagement processes, and less likely to have an organized voice.⁵⁰ Also note that individuals or organizations who present themselves as community representatives might not have been entrusted with such roles—or they might not be incentivized to represent broader interests of the community. So it is essential to connect with a diverse cross-section of the community—across socioeconomic groups, genders, ethnicities, languages, abilities, and disabilities.

While prioritizing stakeholder interests and concerns is important, lessons indicate that the more critical issue is understanding the connectedness of stakeholders. If a stakeholder analysis exists, it can be revisited to map out and analyze the social and political relationships among the various community groups and the ways in which such relationships can influence project engagement considerations.

⁴⁸ Hicks, Lane, Wood, and Hall. 2018.

⁴⁹ Power Africa and USAID. 2018.

⁵⁰ Shift. 2013. "Discussion Paper: Stakeholder Engagement and the Extractive Industry Under the OECD Guidelines for Multinational Enterprises." New York: Shift.

The influence of local and global stakeholders should be accounted for as well, particularly at a time of technology-enabled connectivity. Even the most remote of communities are linked to the outside world. This means that local community conflicts can quickly become global, front-page news and fodder for viral social media, forcing companies to respond to fundamental questions of reputation and social license well beyond the immediate project area.

Identifying specific risks to the project linked to various stakeholder positions and concerns can be part of the process. For example, stakeholders often have expectations and concerns over job opportunities. A failure to address such expectations and concerns could trigger a confrontation and carry a financial or health and safety risk for the company.

In addition, various local, regional, and national political stakeholders all may come with opposing agendas. Those who do not see much benefit from the development could use their networks to generate considerable resistance. By building a robust understanding of the interplay among stakeholders and the range of risks, benefit-sharing initiatives can be better tailored to the context.

Align with the project cycle

During the planning process, alignment with a project cycle is crucial. Each phase of the cycle represents a number of distinct opportunities, which are depicted in table 5.1. Attention to and planning for these opportunities will increase the likelihood that benefits will be maximized throughout the project.

Table 5.1 Opportunities for benefit sharing and associated community engagement along the project lifecycle

Development phase	Construction phase	Operations and maintenance phase	Decommissioning phase
Community liaison function	Ongoing engagement and grievance management: where EPC is involved, monitoring of the activities conducted by EPC	Ongoing engagement and grievance management	Engagement prior to and during decommissioning and grievance management
Early socioeconomic assessments, stakeholder mapping and analysis	Collaboration (for example, with EPC, local partners, government, other projects in the area) to maximize local employment and procurement, and to deliver benefits	Continued delivery of community programs and capacity building: based on agreed priorities and commitments	Renegotiation of contract terms in case of project extension, including benefit provisions
Management of expectations	Management of expectations	Ongoing collaboration and partnerships	Potential to leverage local skills and companies for decommissioning and rehabilitation activities
Community engagement as part of ESIA assessments, land acquisition and negotiation: to identify an appropriate benefits package	Hiring of local workers and development of skills for the construction and/or operations phase	Routine and regular monitoring: reviewing performance of community engagement and community development programs; reassessing of stakeholders and local development priorities; review of any ongoing procurement of local content or shareholding requirements	Opportunities to leverage existing infrastructure for continued community benefit
Capacity building for local workers and businesses: focus on job/contract opportunities and skills development for the construction and/or operations phase	Procurement of local goods and services (local content)		Careful phasing out/exit and/or handover of ongoing community programs
Community, company, and contractor staff capacity building: for instance, for staff and contractors, skills related to understanding local culture and ways to engage with community; for local stakeholders, work-related skills building and training on governance of community funds	Opportunity to demonstrate tangible benefits through implementation of selected community programs		
Multi-stakeholder engagement to identify potential opportunities for enhanced infrastructure: such as widening and/or extending roads and pavement beyond what is needed for the project	Targeted capacity building: for example, for local governments and entities that will manage local ownership		
Structuring of local shareholding: engagements with local stakeholders and community about possible project ownership structures			

📍 KENYA:

Kipeto Wind Project's Multi-Faceted Benefit-Sharing Framework

The Kipeto wind project involves the construction and operation of a greenfield 100MW wind farm approximately 70 km southwest of Nairobi in Kajiado County. This area is predominantly inhabited by the Maasai, an indigenous community. The project's approach towards benefit sharing highlights the importance of good planning and alignment with the project cycle. It also demonstrates the key roles played by the developer, Kipeto Energy Plc (KEP), and the majority investor, Actis, in enabling good planning and benefit sharing.

The project's area of influence was defined as the area most directly affected by negative and positive impacts. This was the focus of the project's immediate mitigation and enhancement measures. Within the project footprint, communities and land associated with the Esilanke, Olosirua and Oloiyankalani (wind farm) and Enarau, Inkiito and Isinya (transmission line) communities were the main focus for engagement and community investment.

Land owners were among the essential stakeholders identified. Based on the signed lease agreements with KEP, stakeholders who host wind turbines would receive lease payments throughout the development and construction phases, as well as during commercial operations. In addition to land lease payments, KEP committed to ensuring that the broader project area community would receive short- and long-term benefit from the project, through well-planned and transparent community development programs. To reach the range of stakeholders, the company set up a multi-faceted community development framework, aligned with the project's development cycle.

FIVE PERCENT OF PROFIT DESIGNATED FOR COMMUNITY TRUST

Given its commitment to provide benefits to affected communities, the company decided to allocate 5 percent

of the project's net profit from the project to a community trust, overseen by a community implementation committee. This income is expected to start flowing into the entity a year after operations begin. The vision of the trust is that decisions on how the benefits will be channeled and managed are determined by the community. To ensure that the trust was properly structured, the company undertook extensive consultations with the affected community during the development phase, at which time governance structure and investment strategy were both set.

DEDICATED BUDGET FOR COMMUNITY INVESTMENT

The project also has a dedicated budget for community investment that spans the two-year construction phase and the first year of operations. Allocations during this phase are based on a community needs assessment and broad consultation. Focus is on water access and education, with school refurbishment and installation of water boreholes included in the plans.

SKILLS BUILDING PROGRAM

Before the construction phase started, the company initiated a community skills development program, to improve local employment opportunities. The company engaged with Arc Skills, a global service provider, to train 300 unemployed young people who live in the impacted area, using a curriculum developed in consultation with the project's EPC contractor to ensure applicability. The initial cohort of 50 students will be funded by Actis' charitable foundation. Program participants will learn construction and hospitality skills. After completing the program, they will earn a nationally recognized certification, which will enhance their employment prospects and earning potential. It is anticipated that the majority, if not all, of the trainees will be hired during project construction.

Focus on sustainability and include a clear exit strategy

Ensuring the sustainability of results from benefit sharing programs is arguably among the most difficult challenges. Sustainability starts in the planning stages. For example, in considering the construction of local infrastructure, such as a road, hospital, or training center, the plan also must include a strategy for long-term maintenance.

It is often assumed that the local government or communities themselves will take over this responsibility. However, the local government might lack an up-to-date investment plan or sufficient budget to take this on. Similarly, local communities may lack capacity or resources. Or, they might not see value in the infrastructure improvements. So they may not be committed to maintaining the improvements.

To address this, the exit strategy might involve targeted capacity building to strengthen local governments and community groups' knowledge, skills, and abilities so they understand more about the importance of ensuring sustainability of the benefits shared during the project's life.⁵¹

In addition, developers might consider setting aside a pool of funds to support longer-term maintenance in the event that a planned handover to government and/or local communities is delayed or requires reconfiguration.



ReverdeC project aims to plant 1 million trees each year in main water basins. Photograph courtesy of Celsia.

⁵¹ Power Africa and USAID. 2018.

INDIA:

Hero Future Industries: Building Sustainable Water ATM Programs

Founded in 2012 by the Munjal family, owners of Hero MotoCorp, Hero Future Energies (HFE) is a largescale independent power producer in India. In implementing various community benefit programs, HFE emphasizes the importance of understanding of local needs, working in collaboration with local communities and local partners, and ensuring sustainability.

RAJASTAN BENEFIT SHARING STARTS WITH COMMUNITY NEEDS ASSESSMENT

In the process of starting its Rajasthan operations, HFE had initially planned to provide local residents with electricity. But a community needs assessment led to the realization that water was a greater concern: Rajasthan is India's largest state and also one of its driest, making access to drinking water a major challenge for many rural villagers. While the government has provided hand pumps, the water drawn is of extremely poor quality. In fact, most local communities had no concept of or experience with the value of clean drinking water.

MEETING A PRESSING NEED FOR CLEAN WATER WITH INNOVATIVE SOLAR-POWERED WATER ATMS

To address the issue, HFE set up a solar-powered water ATMs program, enabling rural access to clean, drinking water. Using a radio-frequency identification card, villagers can draw water from the solar-powered pumps, which have a 1,000 liter per hour/5,000 liter per day capacity. The pumps, surrounded by ground-mounted solar panels, draw groundwater that is cleaned and purified using reverse osmosis and ultraviolet technology.

While the program benefits all local residents, it makes an even greater difference in the lives of women, who spend less time gathering water for their families, and children, who are healthier because the risk of water-borne illness has declined significantly.

FOCUS ON SUSTAINABILITY

From the outset, HFE considered the long-term viability of the water ATMs. To ensure longevity, the company integrated several sustainability-oriented elements into the original design, including:

- ▶ **Sustainable technical design:** The ATMs rely on renewable technology that is simple to operate, requires low maintenance, and can be scaled up.
- ▶ **Embedded community participation:** HFE created a committee of local residents that assumes day-to-day operational responsibilities, such as hiring a local operator. HFE will retain responsibility for major maintenance such as changing water filters.
- ▶ **Fee for service:** HFE decided to charge a minimal amount for the service, because the company believes that people do not value something that is free. The seven-member local committee collects the fees, which are used to pay the operator's salary. This has helped to instill a greater sense of ownership of the program by the community and ensure that the service is valued and used responsibly.
- ▶ **Exit strategies:** HFE trains the operators to turn the ATM on and off conduct routine upkeep and maintenance. Initially, HFE is providing general oversight to ensure that there is no conflict; ultimately, however, the committee will assume this role.

HFE tested out the approach in Rajasthan and is now replicating the model in two other states near its sites. Future plans include water harvesting along with the ATMs, which will both increase access to clean water and help preserve limited water resources.

Sources: Field visits; industry consultations; and personal communications, 2018–19

Box 5.1 Key topics for community engagement

- ▶ **Technical project components** that affect access to resources used by the community, such as siting, layouts and alignments, and technologies to be used
- ▶ **Legal framework** that regulates the relationship between the project and the local affected population
- ▶ **Anticipated social and environmental impacts**
- ▶ **Scope of community engagement**
- ▶ **Proposed management plans** to minimize, mitigate, avoid, or compensate for negative project impacts
- ▶ **Grievance mechanism**, design and implementation
- ▶ **Proposed benefit-sharing strategy and selected interventions**
- ▶ **Community expectations on leadership and representation**
- ▶ **Monitoring and evaluation plans and processes**

Source: Power Africa and US AID

LESSON 3: COMMUNITY ENGAGEMENT IS MISSION-CRITICAL

Experience from projects globally shows that effective community—and government—engagement is critical. This is as true for the project planning itself as it is for the benefit-sharing programs to be developed.

Various studies underscore the importance of quality engagement in ensuring that people feel heard and perceive benefit distribution as fair, or—at minimum—that they understand the reasons for the approach to benefits distribution. Engagement also helps to ensure that benefit sharing is not viewed as tokenism or bribery.⁵² Lack of opportunity for community participation in decision making on benefits or the benefit-sharing approach can reduce support and increase conflicts. Ultimately, it can threaten the sustainability of the benefits.⁵³

Integrate engagement on benefit sharing with the overall engagement program for the project

The identification and design of community benefit programs should be based on the engagement between the community and the developer, and integrated into the overall engagement program for the project.⁵⁴ Key lessons here include:

- ▶ Community engagement is most effective in developing constructive relationships and trust if it starts as early as possible. Early and inclusive engagement—including with groups that typically do not participate, such as women and youth—is strongly recommended by all reviewed industry guides. Developers need to explain their approach to benefit sharing early on to give sufficient time for local stakeholders to share their opinions, expectations, and ways in which they choose to engage. Starting early also makes sense because some activities—such as additional socioeconomic, and local industry assessments, capacity building for local businesses, and skills development initiatives for local communities—may require early planning and implementation to realize local benefits (such as jobs and local procurement) during construction phase. Such efforts take time and require multi-stakeholder partnerships.
- ▶ Management of expectations is critical, especially expectations that the project will clearly not be able to meet. Developers should always deliver a realistic picture. Being honest about the benefits that the project can and cannot deliver is important, as it helps stakeholders understand the uncertainties of project development and the ways in which these uncertainties can affect timelines for benefits delivery. The Inter-American Development Bank study that

⁵² Clean Energy Council. "Enhancing Positive Social Outcomes from Wind Farm Development." Briefing paper based on research of the same name by Jarra Hicks, Nina Hall, Taryn Lane, and Emily Wood.

⁵³ Rand and Hoen, 2017.

⁵⁴ Power Africa and USAID, 2018.

looked at four decades of infrastructure projects in Latin American and the Caribbean revealed that 55 percent of project representatives interviewed reported unrealistic community and government expectations as a common conflict driver (See box 4.1 for more).⁵⁵ Lack of a single voice or clear line of communication with the community—given potential relationships with the range of external actors, such as global civil society groups—puts additional pressure on the developer. Local communities might presume that many different infrastructure services will be provided by the developer, which could be due in part to political promises made to the community. These expectations are likely to generate frustration and discontent if not fulfilled.

- ▶ Regular and consistent contact with the local community builds trust, so continuity of engagement is key. Many developers have seen value in maintaining community engagement during the development, construction, and operational stages. This same, continuous-engagement principle applies to benefit sharing, particularly given that project ownership changes are common and the new owners may have a different level of commitment or want to take another approach.

“All your communications with people—from answering your telephone to participating in a formal presentation and face-to-face meetings—shape your relationship with the communities in your project area. Every interaction is a ‘moment of truth’ for your reputation and ultimately affects the degree to which you are welcomed into the community.”

Best Practices for Community Engagement and Public Consultation, Canadian Wind Energy Association



Meeting with community stakeholders on the Kipeto Wind project in Kenya. Photograph courtesy of Actis.

⁵⁵ Watkins, Mueller et al.

📍 PANAMA: Penonomé: Sustained Engagement Helps Strengthen Company-Community Relationship

Located in Penonomé, in Coclé province, approximately 110 km southwest of Panama City, the Penonomé project is the first commercial wind farm development in Panama. The first phase of the project—UEP Penonomé I, a 55MW wind farm that began operating in 2013—was developed by Goldwind, a Chinese wind turbine manufacturer. Goldwind did not have a dedicated team focused on social issues. Their engagement process was mainly directed at government officials.

InterEnergy Holdings (IEH) created UEP Penonomé II to own and operate the second and third phases of the project and received an IFC green bond investment.

The fourth and final phase has been licensed to Unión Eólica Panameña, which will bring the entire operation's installed capacity up to a projected 337.5 MW.

Maintaining efficient and effective collaboration with communities through different ownership structures proved to be a challenge. In 2015, IEH brought in a dedicated community relations coordinator, to convey its approach to sustainability.



Inspection of the water chlorination system, part of Penonomé's support for community based organizations that supply water to local communities. Photograph courtesy of Penonomé.

Beginning in the construction phase and continuing on an annual basis, the coordinator would convene community meetings and also conducted more frequent community visits. The outreach targeted landowners, the community in the impacted area, and local organizations. Local authorities and relevant government agency representatives also participated in the meetings during the operational phase. Among the methods deployed as part of the project's engagement:

- ▶ Stakeholder analysis and updating of stakeholder directory
- ▶ Annual meetings with local stakeholders
- ▶ Use of community radio to share information on a regular basis
- ▶ Monthly bulletin to share news about the project's social and environmental activities: distributed internally and also included in the semi-annual report to the Ministry of Environment
- ▶ Systematic record keeping of all meetings and commitments made
- ▶ Grievance mechanism for concerns and requests related to community programs

These engagement activities have helped to improve local authorities' and communities' understanding about the project and its sustainability goals. Internally, project staff have a deeper appreciation for the importance of community engagement and investment. One tangible result: The project's finance department has more flexible selection criteria for vendors and proactively seeks opportunities to contract with community vendors, such as cooperatives. This way, the project can procure from small local contractors that had previously been awarded to larger enterprises, thus generate more income and a direct flow of benefits to local families.

Use a range of methods to engage with communities

Wind and solar developers have a variety of approaches at their disposal to engage communities on benefit sharing, ranging from information provision to empowerment. Encouraging participation by applying various engagement methods is critical here. Since some local stakeholders might not want to be actively engaged, outreach to them could require alternate approaches. Deploying the range of methods will help ensure that all stakeholders are reached, including formal and informal meetings, individual and group settings, and face-to-face and remote encounters. A community liaison office located, not on-site, but in convenient proximity to people is another option.

Note too that community engagement is as much about the delivery as it is about choice of tools. It doesn't have to require a large financial commitment, either. An inexpensive company booth set up at the local community market and featuring informal and interactive outreach such as surveys and children's' educational activities can go a long way towards maintaining strong engagement.⁵⁶

LESSON 4: AIM FOR INCLUSION: WHEN DISTRIBUTING BENEFITS, CONSIDER VARIOUS GROUPS

The risk of exacerbating community inequalities is common with benefit sharing. It is a major concern since it also can trigger conflict. The existing research highlights the issue as creating or reinforcing a "have" and "have not" dynamic in a community. For example, such situations can occur because landowners often receive rent payments that may be significant in comparison to other local livelihood opportunities. Meanwhile, people who reside in the broader impacted community or own neighboring land plots might receive a great deal less or nothing at all. Including all the various voices in the benefit-sharing decision making and carefully considering the scope of benefit sharing activities so they do not create imbalances can help ensure a more equalized distribution of benefits.

Understand vulnerabilities and map opportunities

Certain groups—women, youth, the elderly, people with disabilities, ethnic minorities, nomadic groups, and the very poor or illiterate—are often disenfranchised and constrained from participating in benefit sharing and engagement activities. They also tend to experience negative impacts of wind and solar developments differently. At the same time, these groups seem to miss out on opportunities for social and economic empowerment.

In recent years, there has been an increased global focus on women and the ways in which projects impact them differently. Local women may have fewer economic opportunities in the infrastructure sector, for instance, since men might have access to jobs and other income sources. Meanwhile the women and children most cope with the impacts associated with such operations. Such gender biases create barriers for women, resulting in unequal access to education, employment, entrepreneurship, and other income-generating activities. Education gaps and restrictions on land ownership and other assets also lead to underrepresentation in community consultations and decision-making processes. Experience shows that even if environmental and social safeguards policies are systematically integrated into wind and solar projects, gender-inclusive public consultations might not happen, due, in part, to social and gender norms in the affected communities.

Here, opportunities to bridge the divide abound. A growing body of evidence has demonstrated that community programs focused on women tend to have a positive impact on the overall community: Women are more likely to focus on more productive, prosocial income management, and invest in health, nutrition, education, and safety for their families and community. Studies have shown that women's security in land ownership rights leads to higher household food security and wellbeing. In addition, initiatives that promote hiring more women in the broader energy sector can yield concrete business benefits, with opportunities spanning technical and leadership positions within utilities or other energy agencies and distribution and outreach roles that support community-level programs. While data on the wind and solar industry is limited, the Del Sur solar project, profiled in box 5.2 offers an example.

⁵⁶ Lane and Hicks. 2014.

Box 5.2 First Solar sees business benefits in employing local women in Honduras

For its 25 MW Del Sur solar project in Honduras, First Solar partnered with Latin American conglomerate Grupo Terra.

At its peak, the construction phase created about 750 jobs, of which 200 were filled by women. The female construction workers installed more than 290,000 First Solar modules.

Source: First Solar, 2017

According to First Solar, the hiring of female construction workers contributed to the success of the project because the women attended carefully to detail and module placement. This attention to detail resulted in fewer module breakages (0.17 percent) during installation compared to other projects, in which men constituted a greater percentage of the workforce.

With more than half of the world's population younger than age 30—and with 90 percent of these young people living in developing countries—youth are increasingly important stakeholders for the growing wind and solar industry.

Engaging and consulting with the community's women also helps avoid inefficiencies and resource wastage. For example, in a situation where plans include digging a well for community use, failure to consult with the primary users of the well—women—could result in a location that simply does not work. It might be too far away, unsafe for them or children, or too disruptive to their daily routine. So, the principal beneficiaries might not want to use the well, resulting in wasted resources and defeating the purpose of the initiative. Consulting with women will ensure greater effectiveness of services intended for their use or supervision, increasing the potential for sustainability and positive impact.

Other voices, such as those of nomadic communities, are important as well, as demonstrated in the Noor CSP project in Southern Morocco.⁵⁷ Sheep-herding lands previously used by the local community were sold to the Moroccan Agency for Solar Energy. However, the associated consultations did not address the concerns of the nomadic communities that roamed the land. The combination of high, unmet community expectations and lack of transparency about the community benefits to be provided resulted in community protests against the project.

Rising youth population creates increasingly important stakeholder group

With more than half of the world's population younger than age 30—and with 90 percent of these young people living in developing countries—youth are increasingly important stakeholders for the growing wind and solar industry. For instance, in Africa, where there is enormous industry potential, the population is projected to almost double by the year 2050, creating a strong new stream of talent.⁵⁸ Another example is India which is on track to build 175 gigawatts of solar and wind energy by 2022, to meet the needs of nation where nearly 300 million people in the country live without access to electricity. Achieving this goal will require 300,000 renewable energy workers.⁵⁹

The issue—and the need to enfranchise youth—goes even deeper than meeting the employment needs of a growing industry. The lack of steady, full-time, formal-sector jobs creates uncertainty for young people, leading to a sense of frustration. Fueled by chronic unemployment or underemployment, young people's perception of powerlessness can trigger protest and social unrest.

57 Wuppertal Institute for Climate, Environment, and Energy. "Energy and development: exploring the local livelihood dimension of the Noor CSP project in Southern Morocco." Final report. Bonn: German Federal Ministry for Economic Cooperation and Development. https://epub.wupperinst.org/frontdoor/deliver/index/docId/6444/file/6444_Social_CSP.pdf

58 IFC. "Creating Value through Global Youth Engagement."

59 Skerka, Kristina. "Ending energy poverty is at risk from a skills gap." World Economic Forum post, October 31, 2018.

Box 5.3 Recommendations on enfranchising vulnerable groups

- ▶ Conduct household surveys and collect gender-disaggregated data
- ▶ Include women, youth, and representatives of other vulnerable groups in consultative and governance structures
- ▶ Provide leadership training and capacity-building to commonly excluded groups so they can participate effectively in decision-making bodies
- ▶ Raise awareness among community members about gender bias and the importance of including women's voices
- ▶ Promote equality in employment opportunities for women, youth, people with special needs, ethnic minorities, and others
- ▶ Support income, training and special programs/activities in areas that are traditionally male-dominated
- ▶ Engage with local women leaders and women's groups, youth organizations, and indigenous organizations in the implementation of benefit sharing activities
- ▶ Socially empower women, youth and other groups through functional literacy, and life skills campaigns
- ▶ Support access to information, reproductive health services and efforts aimed at prevention of early marriage and gender violence
- ▶ Support programs that target business and entrepreneurship skills for women, youth, and other groups

Companies are beginning to recognize that they will need to attract many more young people, particularly in emerging markets. Investing in pipeline of young talent will ensure the availability of a workforce as the industry expands, promote knowledge transfer, mitigate sustainability risks and capitalize on innovation and creativity potential.

Develop concrete actions to ensure inclusive benefit sharing

Developers have a range of options as they seek to enfranchise and create opportunities for various stakeholder groups. Box 5.3 highlights several of these options, and figure 5.1 showcases developers' direct experiences in designing inclusive benefit-sharing activities, with an emphasis on women and youth.

The inclusive approach should extend to data collection, community consultation and monitoring as well.

Community asset and needs assessments that identify specific gender- and youth-related needs can then inform

activities that are built into the project design from the start. This will ensure maximum benefits to both community and the company.

Setting times for community consultations and negotiations that are convenient for women—working around household and childcare responsibilities—is another way to ensure inclusivity. Depending on the cultural context, creating women-only working groups might be beneficial since women might not feel comfortable speaking out in front of men—or they might not be permitted to do so. Inclusion of gender- and youth-relevant indicators in project performance monitoring will help track impact and plan future strategy.

Consider the specific needs of targeted groups in hiring and training. Focusing on skills development for youth, women, indigenous groups, and other targeted and commonly excluded stakeholders will be critical to ensuring that they can take advantage of employment opportunities. Often, the smallest efforts can bring the biggest difference. For example, providing

childcare services at the workplace and flexible job arrangements can help improve participation of women in the workforce.

Sometimes, community members—particularly disenfranchised groups—are simply unaware of training and employment opportunities being offered. Activities such as mentoring and networking raise awareness, helping to increase inclusive economic participation since they help build awareness.

Procurement policies should support contracting by smaller vendors to encourage participation by women- and youth-owned businesses. Typically, such firms are smaller than male-owned companies so they may not qualify for larger contracts. Policies that reflect a more inclusive procurement approach will enable more equal access to supply chain opportunities.

Close collaboration between procurement and community engagement teams will help ensure that diversity and inclusivity are embedded in the project's supply chain.

The provision of microloans or partnership with financial institutions can help companies owned by underrepresented groups access the funding needed to participate in the supply chain. Lack of access to finance is often the main barrier—particularly for women—in starting and growing businesses. Enabling credit or advances against future corporate contracts can significantly increase the number of businesses owned by vulnerable groups that participate in the supply chain. To ensure positive long-term outcomes for these smaller companies, the financial arrangements should be accompanied by business management and financial literacy training.



Electrification project in remote villages implemented by the Celsia company, Epsa, together with the Greater Council of the Anchicayá River and Organización de Negros Unidos del Río Anchicayá (ONUIRA). Photograph courtesy of Celsia.

Figure 5.1 Benefit-sharing activities associated with renewables projects that directly benefit youth and women



EMPLOYMENT AND TRAINING

Since it opened, the **Tafila Wind Farm in Jordan** has hired 60 workers, 90 percent of whom are from Tafila. Of this number, many are young engineering graduates with limited local job opportunities so they often sought jobs in the city. The wind farm is partnering with the local technical university to provide semester-long internships for six engineering students, who receive more than 200 hours of training and hands-on experience in wind energy and management.

Vattenfall, a European energy company, started the “Young Graduate Project” in Sweden in 2003. The project was designed to provide 45 young graduates with a year’s employment at the company. It came as a response to industry trends that foresaw extensive retirement of skilled workers, and the need for knowledge transfer to a new generation of workforce. By offering these time-limited projects, the company hoped to give young graduates a head start. With an emphasis on diversity, the program included 45 recent graduates, of whom 23 were female and 11 had non-Swedish ethnic backgrounds.



HEALTH AND NUTRITION

In **Rajasthan, Ostro Energy** operates the 50 MW Tejuva project and the 66 MW Rajgarh project. Many young women in the area face health issues due to frequent pregnancies, and there is an overall lack of knowledge about the nutritional needs of pregnant women, infants, and young children. To address the issues, the company created a pregnancy aid program, which provides kits to pregnant women that include vitamins and personal care items. Expectant women also were treated for anemia with sucrose injections.



SKILLS AND LIVELIHOODS

In **Brazil, Enel** supports several programs that benefit women. Enel partners with the women’s empowerment collective *Empodera Morro* to offer skills development workshops in areas such as hairstyling and cooking, which have helped families generate more income. One positive outcome is a commercial cooperative formed by women from the traditional *quilombola* communities, which produces home-made cookies. Such programs have benefited more than 1,700 since 2017. In addition, Enel supports the Women of Salgueiro association in the São Gonçalo municipality of Rio de Janeiro state, helping to expand the association’s range of training offerings. Initially the project was aimed at solely at the association’s female members, many of whom have limited education and work in unsanitary conditions as rubbish collectors. Now, men and young people are participating as well. To date, the project has benefited 5,000 families.



SKILLS AND LIVELIHOODS

In recognition of the important role in community development that women around the **Jeffreys Bay wind farm** and the surrounding areas play, the project, located in South Africa’s Kouga municipality, hosted a women’s dialogue. Participants included representatives of local non-governmental organizations, community workers, economic development managers and representatives from other wind farms in the area. Wind farms in Jeffreys Bay are, in essence, strategic partners for the NGOs. The collective annual budget from the various renewable energy projects in the area totals nearly 10 million rand. Coordinating funding and activities enables a far greater positive impact.

During construction of the 22 MW **Swinford wind farm in England**, the project took an innovative approach to engaging youth in the community. It enfranchised young people by teaming up with the Rural Youth Voice Project to visit local schools and create a focus group that gave young people a say in how to use community funds. Youth participants produced a film about the project’s potential from their perspective. Students and local residents also had the opportunity to visit the project site throughout construction and post-construction. The wind farm also hosted family fun days and created a blog to keep the community informed.

Sources: Christian Science Monitor, May 3, 2018; Enel; First Solar; Globaleq; Vattenfall; Regen/ UK Department of Energy and Climate Change, 2014.

LESSON 5: TRANSPARENCY AND ACCOUNTABILITY MATTER, ESPECIALLY DURING IMPLEMENTATION

As noted earlier, benefit-sharing projects that are not implemented well run the risk of damaging the relationship between the community and developer, potentially exacerbating issues and possibly resulting in loss of social license to operate.

Even with an optimal benefit-sharing strategy in place, if the implementation is poor and lacks transparency, local benefits are unlikely to materialize. Common risks that arise during implementation include:

- ▶ Elite capture of benefits by special interest groups
- ▶ Exclusion of the poorest and other marginalized sub-populations
- ▶ Conflict over distribution of benefits since this can be based on status and wealth
- ▶ Mismanagement of community projects, including projects not being completed, partners who do not contribute as intended, projects that do not meet the stated objectives or original design, and wasteful spending

The ultimate goal of a well-functioning implementation mechanism—an in-house team, a qualified local partner, the company's foundation, or others—is to ensure that intended benefits reach the local communities and targeted individuals. Thus, the ways in which community benefit packages are

distributed and managed should reflect the interests of the community as a whole.

However, in projects across multiple industries, communities typically view the decision making on benefit programs as opaque, with no financial transparency and little accountability when things go not as planned.

Promoting accountability

During implementation, companies can promote accountability and transparency goals in multiple ways. Important considerations here include:

- ▶ Clear strategy/policy/commitments and clear and enforceable agreements to guide the provision of benefits. Formalizing benefit sharing commitments can help ensure that the programs continue even if ownership changes.
- ▶ Transparent and representative decision-making that reflects diversity of voices in the community
- ▶ Documented and detailed roles and responsibilities of all parties involved
- ▶ Well-defined, reliable, and accountable approach to managing and distributing the funds
- ▶ Robust monitoring and review mechanism
- ▶ Disclosure of information tailored to the local context and stakeholder needs



Meeting with community stakeholders on the Kipeto Wind project in Kenya. Photograph courtesy of Actis.

📍 CHILE: Acciona's Social Commitment

ACCIONA Energy's Atacama desert project is its largest photovoltaic plant to date and the most powerful in Latin America. The El Romero Solar PV Plant supplies electricity to an estimated 240,000 Chilean homes.

SOCIAL IMPACT MANAGEMENT (SIM)

Beginning with the project's construction phase, ACCIONA purposefully implemented SIM methodology.⁶⁰ To strengthen its relationship with the communities close to the project, the company conducted a social impact study and designed specific initiatives. Formal agreements were signed, committing the company to the initiatives. These efforts have resulted in sustained and long-term community support that remains today.

SOCIAL INITIATIVES

The actions are in line with the specific needs identified, with a view toward ensuring the sustainable development of the communities in the project-affected areas. Among the initiatives:

- ▶ Educational campaigns for the community
- ▶ Environmental workshops
- ▶ Funding to training technicians on the installation and maintenance of photovoltaic panels in the city of Copiapó
- ▶ Grants to 48 students for development
- ▶ Food donation campaigns for specific members of the community

Source: Acciona

- ▶ Support to 45 members of the Vallenar goat farmers' association
- ▶ Training for private security guards
- ▶ Improvement of community sports infrastructure
- ▶ Installation of home water tanks for every house in the drought-affected town of Cachiyuyo, which had been severely impacted by a drop in the water supply
- ▶ Donation of 21 home solar panels
- ▶ Fund to finance community activities
- ▶ Repair of community centers in Cachiyuyo and Incahuasi

EL ROMERO'S SOCIOECONOMIC IMPACT

The photovoltaic plant's impact is an increased GDP and employment generation, along with avoided CO₂ emissions, preserved water and improved air quality. These estimated socioeconomic benefits include:

- ▶ EUR 298 million contribution to GDP throughout the project's 35-year useful life
- ▶ 7,876 full time jobs
- ▶ 327,242 tons of CO₂ emissions avoided per year
- ▶ 701,310 cubic meters of water saved per year
- ▶ 2,854 tons SO₂ and NO_x avoided per year

⁶⁰ For Acciona's definition of SIM, please see: <https://www.accionacompany.com/sustainability/society/social-impact/>

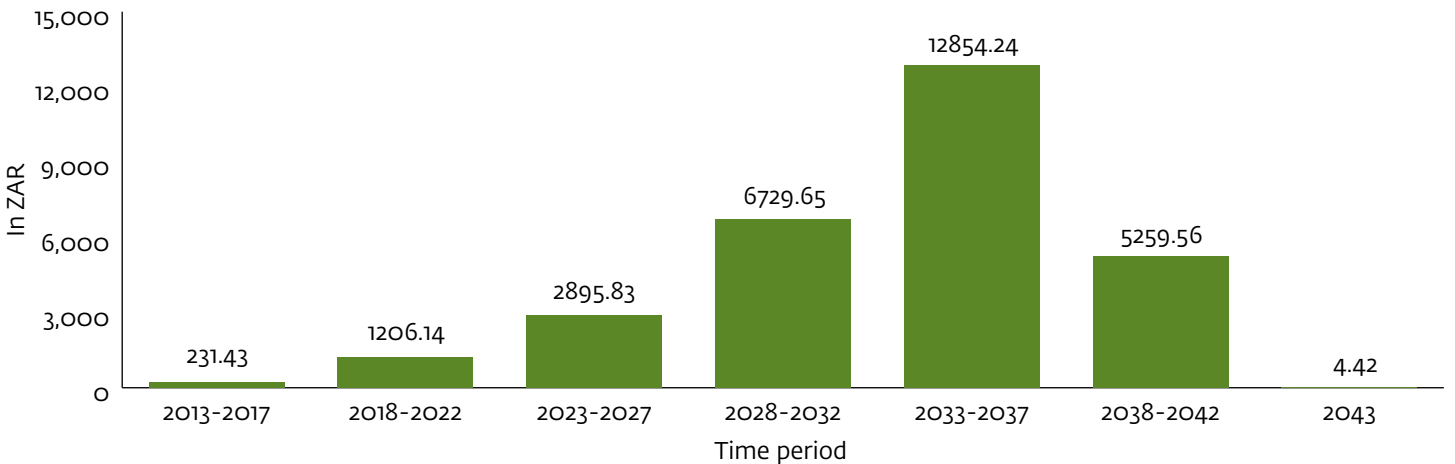
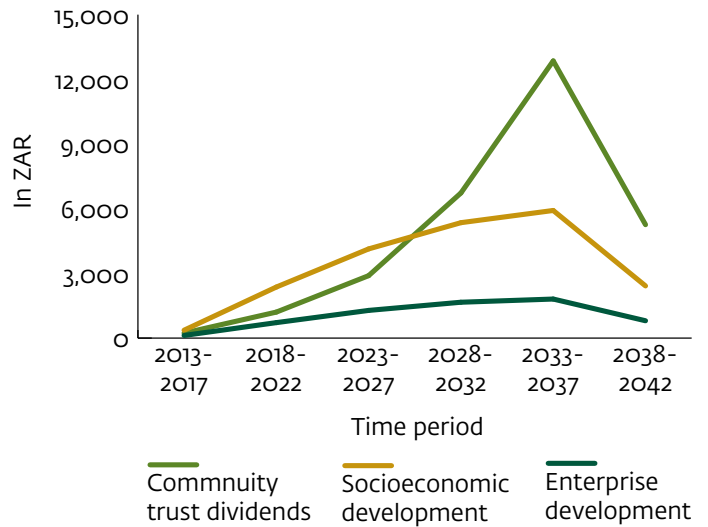
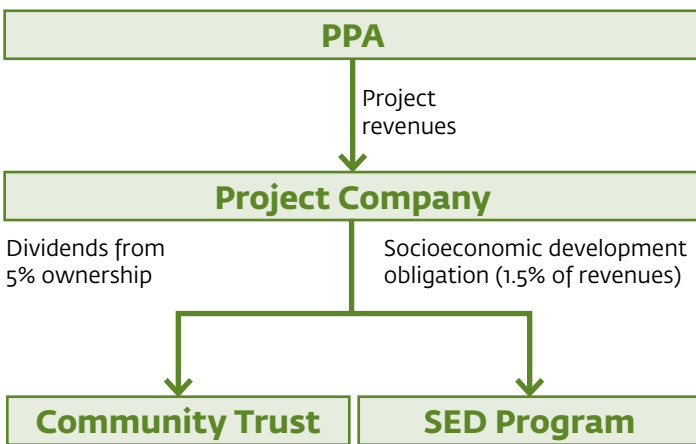
Accountability and transparency on spending decisions

Ensuring accountability and transparency on spending decisions is particularly important. This includes what gets funded, how much gets allocated, and who gets the funds. Such decisions are often delegated to a few community representatives or handled by a third party, such as a company, foundation, or community-based organization. This study uncovered several examples of companies outsourcing the entire implementation of benefit sharing programs to a dedicated foundation or local implementation partner.

In some cases, the amount of funds that will be received by such third parties over the life of a project is significant. It is in the developers' best interests to ensure that funds are spent according to their original purpose. In South Africa, for instance, the community shareholding and other socioeconomic development contributions from projects yield significant sums that accrue to shareholding community trusts and/or implementing organizations (figure 5.2).

It is important to ascertain the integrity of such third party groups and the extent of their commitment to act on behalf of the entire community.

Figure 5.2 Community benefit flows from South Africa's REIPPPP



*Based on Independent Power Producer contractual obligations under REIPPP bid windows 1-3.5, bid windows 3.5 and 4, and unsigned projects
 Sources: Clean Power Africa conference, May 2013; presentation to Parliament on the Independent Power Producer Procurement Programme, March 2018; Mark Pickering Presentation at Windaba 2012

It is not sufficient to merely provide information. There may be an assumption that local stakeholders have the motivation, capacity, and resources to access and analyze the information and use it to promote accountability, but this might not be the case.

In some cases, local governments receive mandatory fees and payments, such as taxes and royalties, from wind and solar projects—either directly or through transfers. Typically such funds are intended for local expenditures, in line with local development priorities. Experience from other sectors has shown that local governments and leaders require a certain degree of capacity in order to ensure efficient, transparent, and relevant local spending. This includes knowledge and skills in areas such as understanding of local priorities and transparency mechanisms and the ability to carry out multiannual planning and participatory budgeting. Information on how to carry out such critical activities can be provided to local governments and their leaders, but it should focus only on the knowledge they need and communicated in a way that is understandable.

Of note: There could be significant gaps between intended objectives to create representative decision-making processes and the realities on the ground. In many communities, decision-making processes are biased towards men and economically privileged groups. As a result, the implementation of benefit-sharing programs also could be biased towards these interests and influences. As an example, a study by Elizabeth King and Andrew Mason found that men and women often have different priorities for community investment. Women are often in favor of vital programs or infrastructure related to health, education, and safety, whereas men are more inclined to ask for large infrastructure projects that may not meet the immediate and basic needs of the population.⁶¹

Spending decisions can be strengthened if respective roles and responsibilities of the individuals and groups in charge are clear, documented, and disclosed, and when there is control and management of funds, with documentation and audit procedures in place. As noted above, building the capacity of local actors also will contribute to stronger spending decisions.

Ensuring access to information

Transparency and accountability are closely associated and mutually reinforcing. But this only happens if local stakeholders understand the benefit-sharing commitments and agreements, have access to relevant, up-to-date information, and are aware of what happens when issues are discovered. Transparency is demonstrated when organizations disclose information that is clear and accurate.

An important lesson here is that it is not sufficient to merely provide information. There may be an assumption that local stakeholders have the motivation, capacity, and resources to access and analyze the information and use it to promote accountability, but this might not be the case. For instance, significant resources can be invested in community trusts or company foundations, but it may be challenging for local community members—the intended beneficiaries of these funds—to connect what they actually see on the ground in terms of community projects and the resources that company invested. Communities often complain that they can't access the information they really need, including information on benefits. Companies might respond that the information is available on their website. However, there could be a fundamental mismatch between the information provided on the company website and the information that communities actually need.

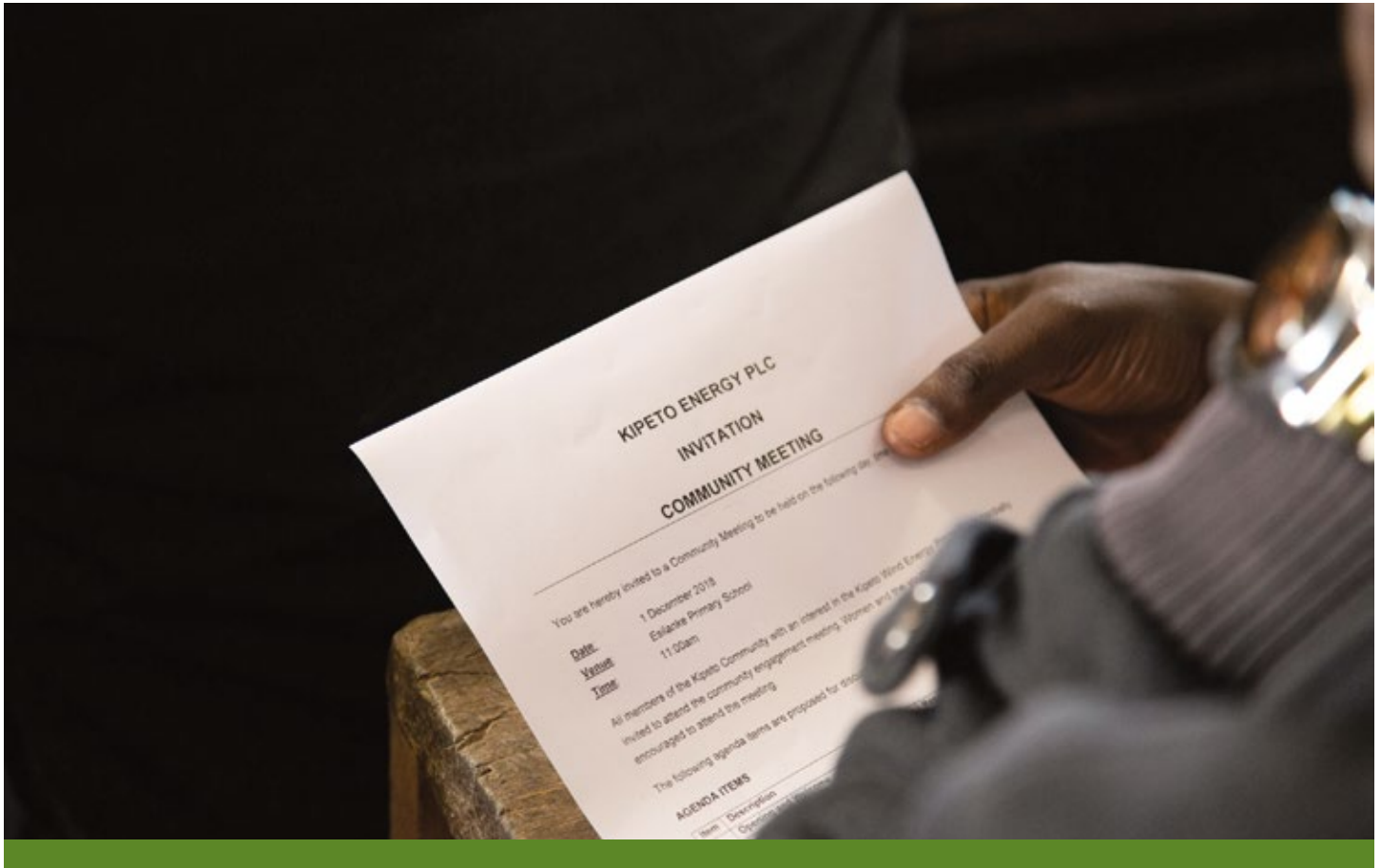
Developers must attend to the range of information needs, across the universe of stakeholders. They should provide this information making use of multiple outlets, such as posters, radio, mobile messaging, and direct communication with community representatives.

⁶¹ IFC. 2018. "Unlocking Opportunities for Women and Business: a Toolkit of Actions and Strategies for Oil, Gas, and Mining Companies."

Another important lesson learned from project experience is that at times the key stumbling block is not a lack of information itself, but rather the inability to generate trust that information shared is valid. Stakeholders simply may not believe that the information provided is true. Misinformation and rumors can add to this. Developers can employ various strategies to proactively ward off such issues:

- ▶ Direct access to primary sources
- ▶ Collaborative or community led data collection and monitoring
- ▶ Independent verification
- ▶ Data sharing policies

Creative, multi-faceted communications, such as infographics, mobilizing musicians and artists from the community, or educational films could serve as an avenue to enable local stakeholder to ask questions, fact check provided information, and build trust.



Invitation to a community meeting about the Kipeto wind project, Kenya. Photograph courtesy of Actis.

📍 SENEGAL: Taiba Wind Farm Aims to Improve Accountability and Transparency of Local Development Expenditures

Taiba Wind Farm is a 158MW renewable power plant under construction near the Taiba N'Diaye community, about 90 kilometers from Dakar and Senegal's first large-scale wind energy project. The project is one of several being built across Africa by renewable power generation company, Lekela. The project is expected to be completed in 2020.

Engagement and local benefits have been part of the efforts from early on—beginning with the pre-construction phase, when the project initiated a broader socioeconomic program in the Taiba N'Diaye area. The goal of this program was to create sustainable livelihoods in the local community. Activities included projects to improve local agriculture, vocational training opportunities, and efforts to refurbish or build local infrastructure such as a local marketplace and a technology center for school children—identified as priorities by the Taiba Women's Association. These activities are the start of a 20-year program through which Lekela will invest up to \$20 million over the life of the wind farm.

THREE REVENUE STREAMS FLOW FROM PROJECT TO LOCAL LEVEL; STRONG FUNDS MANAGEMENT KEY

Local authorities will receive three main revenue streams that flow from the project once operations start in 2020. The first comes from centrally paid taxes. A portion of these revenues, determined at the central tax office, flows back to local government. The second is a direct contribution from the project to the city of Taiba, based on the number of turbines installed. In addition, a voluntary contribution is provided through a community foundation. Once the funds start to flow, local government budgets will increase significantly, as will the available resources to invest in local communities. With such funds anticipated, early opportunities identified by the project included building the capacity of local stakeholders and improving the accountability of local development spending.



Photograph courtesy of Taiba Wind Farm.

While accountability mechanisms currently exist—such as a formal audit by state authorities— the engagement with local stakeholders uncovered several opportunities for improvement. Among these: better prioritization of community projects by local authorities to make sure revenue flows are channeled to community priorities and to the areas with most potential for impact. Others include ensuring that these priorities are reflected appropriately in the annual budgeting process and improving local government transparency in the management of local affairs.

With these opportunities in mind, Taiba Wind Farm is now developing a local capacity-building program. To start, the farm partnered with a local business school, to conduct a local government capacity assessment. Among the components of the planned program:

- ▶ Strengthening governmental capacity in mobilizing local revenues, managing local resources, and communicating
- ▶ Building the capacity of community actors to participate in the design and implementation of development activities and programs
- ▶ Promoting partnerships between local government and local actors

The goal of these efforts is to ensure that local resources are managed effectively and transparently. To date, a number of quick wins have been already implemented. Among them: the creation a local employment database to help the mayor's office track candidates for job opportunities, along with training on updating and maintaining it. Although it was originally developed for job openings at the Taiba Wind Farm, it now includes opportunities for local job seekers on other projects in the area.

Sources: Lekela; field visits; industry consultations; and personal communications, 2018–19

LESSON 6: ROBUST MONITORING ENABLES MID-COURSE CORRECTIONS AND REPORTING ON RESULTS

A strong monitoring and review system, with a focus on understanding and measuring impacts of community programs, is essential for the accountability and transparency that so many stakeholders now demand. In addition, if community engagement activities are not documented and evaluated along the way, it is difficult to know what is working and what might be ineffective, superfluous, or having negative unintended consequences.

Monitoring helps assess overall strategy progress, ensure accountability (either within a company or other third party/ entity charged with implementation of these activities), and ensure ongoing learning.

Rely on a few (rather than many) indicators

That said, designing appropriate indicators to measure results of benefit-sharing activities and performance of community relations staff can be challenging. The indicators should be selected based on the informational needs of the company and relevant stakeholders, and include qualitative and quantitative data collection. Consideration also must be given to the ability to collect and verify information—if it is too difficult to gather the information—or to confirm accuracy—the monitoring effort will not be effective.

In designing the monitoring framework, it is helpful to design two sets of indicators: one set to measure the ultimate social development impacts of the benefit-sharing programs and another to measure the outputs and outcomes of community engagement and benefits-sharing activities. Good practices from projects around the world suggest an emphasis on just a few of these output, outcome, and impact indicators, if at all possible.

If community engagement activities are not documented and evaluated along the way, it is difficult to know what is working and what might be ineffective, superfluous, or at worst, having negative unintended consequences.

BRAZIL: EDP Renováveis Measures Results

EDP Renováveis is among the world's leading renewable energy companies, currently active in 13 international markets. One of EDPR's flagship sustainability programs is EDP Renováveis Rural, the first phase of which has been successfully implemented in the communities surrounding the Baixa do Feijão wind complex in Brazil. The next phases will take place in the communities around the JAU and Aventura wind complexes in Rio Grande de Norte, and those surrounding the Babilonia wind farm in Bahia.

The objective of the benefit-sharing program is to create jobs and generate income for local residents. Extensive training programs were designed to enhance farmers' agricultural skills and technology. Additional support helped to commercialize and sustain local agricultural activities. Program participants—the majority of whom were women—learned marketable

skills, such as environmentally friendly food-handling techniques, and product marketing strategies. They also gained knowledge on accessing opportunities, such as participating in government farming opportunities and in the local value chain, and learned more about water resource management.

Other company efforts focused on sustainable and effective farming techniques. Using a model of integrated and sustainable agroecological production known as PAIS, farmers cultivated produce on their own small plots without the use of chemicals. In addition to direct results that were measured—such as a 58 percent increase in participants' incomes—indirect and difficult-to-quantify but no-less-important results were observed as well. These included improved self-esteem and hope for the future, along with and increased women's empowerment (See table 5.2).

Source: EDP Renováveis

Make use of SDGs in communicating results and achievements

A growing number of wind and solar projects are making use of the SDGs to help communicate the role of business in sustainable development, prioritize areas where the company can contribute the most, and strengthen monitoring and reporting practices. Companies can align existing sustainability targets with relevant SDGs, and develop new targets and activities.

Wind and solar projects' benefit-sharing activities also can yield important positive SDG-related impacts that are an indirect result of the initiatives. In some instances, such indirect benefits are of greater relevance to local communities than the direct impacts.

Here too, measuring results can be challenging. But once again, connecting through the SDGs can help. For example, benefit-sharing programs that promote access to clean energy can facilitate improved education, since learning is enhanced by better lighting in homes and schools. Access to clean energy programs also improve health outcomes through reduced exposure to indoor

pollution from traditional biomass use. Programs contribute to the well-being of women and children, since they no longer face the burden of fuel collection. There is a strong demonstration impact as well, since such initiatives enable broader adoption of clean energy technologies, in communities previously unfamiliar with renewables.

Table 5.2 Selected indicators and results from EDP Renováveis' rural program in Brazil

Note: The research team created this table based on EDP Renováveis' reporting of qualitative and quantitative results.

<h3>INPUTS</h3>	<h3>OUTPUTS</h3> <p>Short term: goods and services generated by use of inputs</p>
<p> Resources invested</p> <ul style="list-style-type: none">  money  staff time  inputs 	<ul style="list-style-type: none">  58 families participated and received completion certificates/qualification  53% female participants  2 farmers markets to showcase a variety of fresh produce and new farming technologies  Extensive training on various agricultural and marketing techniques, and on use of newly installed equipment**
<h3>OUTCOMES</h3> <p>Medium term: expected changes in users' access, usage, behavior, or performance</p>	<h3>IMPACTS</h3> <p>Long term: effects on on key dimensions of development, such as living standards</p>
<ul style="list-style-type: none">  20 production units (based on PAIS model) implemented  38% assimilation of the marketing practices by the rural farmers 	<ul style="list-style-type: none">  58% increase in income  Replication of practices among other community members and in other communities**  Reported increase in farmers' self-esteem and women's empowerment***

* In addition to reporting on specific training topics, the number of training sessions and participants can be measured.

** Replication of practices among other community members is a qualitative indicator. This indicator can be supplemented with an indicator that shows overall reach of the program (i.e., total number of beneficiaries including community members who benefited from replication)

*** Reported increase in farmers' self-esteem is a qualitative indicator. This indicator can be supplemented with an indicator that shows total number and/or % of farmers who participated in the program reporting increased self-esteem, overall outlook, empowerment.

AFRICA: Lekela Integrates Social Commitments into Business Strategy

Lekela is a renewable power generation company that delivers utility-scale projects in African countries. As a company, Lekela is committed to developing its projects with rigorous environmental, social, and governance (ESG) practices in place. Central to the company's strategy is driving the long-term prosperity of the local communities in which the company operates.

To promote this strategy and support the company's sustainability and business performance, Lekela developed a set of ESG commitments that embody its integrated ESG

















approach—including every project and starting at the earliest stages of development or project acquisition. All commitments are supported by specific focus areas and targets that will help the company achieve its goal of becoming the leading renewable power platform in Africa.

Table 5.3 showcases the Lekela strategy, along with commitments, targets and indicators.

Source: Lekela Power 2017

Table 5.3 Lekela's ESG strategy, commitments, targets, and indicators, linked to the Sustainable Development Goals

LEKELA STRATEGY	Build a platform to enable best-in-class delivery of utility-scale clean energy projects in Africa					
ESG FOCUS	Create long-term environmental and social benefits through the delivery of clean, reliable energy					
COMMITMENTS						
Partnering with contractors and employees	8 DECENT WORK AND ECONOMIC GROWTH	10 REDUCED INEQUALITIES	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOAL	2017 performance	2018 targets
Prioritizing health and safety					Zero lost-time incidents (LTIs) across the portfolio (figures and targets include direct Lekela employees and all contractors) 47 proactive H&S observations per year at each operational site	Zero LTIs on operational sites Less than 1.2 LTIs per 200,000 hours worked on sites under construction 48 proactive H&S observations per year at each operational site
Ensuring fair labor practices					Zero serious grievances from Lekela employees	Zero serious grievances from Lekela employees Resolve 80% of employee grievances within 30 days
Achieving the highest standards with contractors and partners					Toolbox Talks implemented at assets to increase the amount of health and safety training delivered to workers Creation of Lekela's Social Policy: establishing the labor standards expected of our workforce and contractors	Ensure that at least one Toolbox Talk is delivered each day at construction sites

Empowering local communities	   	2017 performance	2018 targets
Engaging with communities		Zero serious community Grievances Creation of Lekela's social policy: approach to community engagement and the standards expected of our workforce and contractors	Zero serious community Grievances Resolve 80% of community grievances within 30 days
Investing in education, enterprise and the environment	 	Approximately \$1.1 million invested in social enterprise and community development schemes	Invest over \$2.5 million in social enterprise and community development programs
Acquiring and developing land responsibly		No resettlement or economic displacement of people, or grievances relating to land issues	Implement the Taiba N'Daiye wind farm livelihood restoration plan (LRP), on time and on budget Develop an LRP for the Ayitepa project in Ghana
Protecting the environment	   	2017 performance	2018 targets
Helping climate change mitigation and adaptation		340,511 tons CO2 avoided	Avoid more than 1.25 million tons CO2 Build resilience in local communities through community investment schemes
Managing our lifecycle impacts	 	Zero serious environmental Incidents 524.4 million liters of water use avoided	Zero serious environmental Incidents Avoid use of more than 1.96 billion liters of water
Preserving and enhancing biodiversity		Post-construction avifauna monitoring ongoing at Noupoot wind farm	Undertake post-construction avifauna monitoring at Loeriesfontein and Khobab wind farms Successfully implement the Taiba N'Daiye wind farm BAP Develop a procedure to mitigate the biodiversity impacts for the operation phase of our Gulf of Suez projects

Note: Text highlighted in red denotes commitments, targets, and indicators that could be considered benefit-sharing activities (research team emphasis)

Source: Lekela

LESSON 7: PARTNERSHIPS, INDUSTRY COLLABORATION, AND COLLECTIVE ACTION REPRESENT MAJOR OPPORTUNITIES FOR GREATER IMPACT

Host communities' expectations for development can be significant. In most cases, wind and solar projects will not have sufficient financial and human resources to meet these expectations alone. Thus, aligning benefit sharing with local development priorities—as defined by the government, development institutions and/or non-governmental organizations among others— makes sense. They represent opportunities for partnership, leveraging resources already earmarked toward specific efforts. Adding the developer's resources to these existing commitments can enable achievement of what otherwise might have been too-ambitious development goals.

For example, a wind or solar project might decide to initiate a program to increase access to electricity for host communities. But this type of effort can be difficult to tackle alone. While renewable energy companies typically have the expertise to design such interventions, successful implementation might hinge on the effective collaboration of donors/funders, project initiators and recipients, depending on technology and application.

In addition, working in cooperation with the local government can help ensure sustainability—making use of information about electricity provision and energy services and future plans

for connectivity with the power grid. Other synergies can be achieved by partnering with local vocational training schools and enterprise development activities for maintenance and repair.

Industry collaboration is another significant opportunity to maximize development impact, particularly when multiple projects are co-located or in close proximity. This could allow for a more strategic, long-term approach that includes various developers. It would enable a pooling of resources to create a central, appropriately resourced entity charged with coordinated, collective action on behalf of the developers.

In countries with strong industry associations, coordinated collective action plays an important role in setting industry standards for benefit sharing. In turn, this enhances the industry's reputation, strengthening the collective social license to operate. Associations also help ensure industry alignment with government priorities. They can manage collective environmental and social issues and risks, and implement strategic industry-wide initiatives that support project-level benefit-sharing efforts. For example, industry associations can play a vital role in supporting the pipeline of local talent. They can partner with government authorities and academic institutions to set up new training facilities or enhance the offerings at existing educational institutions to ensure the availability of qualified local workers once projects come online. Of course, such efforts require sufficient advanced planning and collaboration.



Electrification project in remote villages implemented by the Celsia company Epsa, together with the Greater Council of the Anchicayá River and Organización de Negros Unidos del Río Anchicayá (ONUIRA). Photograph courtesy of Celsia.

📍 EGYPT:

Lessons from Industry Collaboration

Egypt's Benban Solar Park is the largest in the world. In 2017, an IFC-led consortium invested \$653 million to support construction of the \$2.8 billion, 38 km² complex, which is expected to generate 1.8 gigawatts of electricity, enough to power more than 1 million homes. The 45 local and international sponsors got started in 2018 and the park will be fully operational as of October 2019.

The project's strategic impact assessment (available at: <http://benban.org/>) identified a number of cumulative environmental, social and health and safety (ESHS) risks and impacts. Among the issues identified: an anticipated daily influx of over 8,000 workers at construction peak, working conditions, occupational health and safety risks associated with about 300 additional daily vehicle trips along a public highway, the need for resources such as potable and construction water in a water-scarce environment, management of waste and wastewater, and high community expectations for jobs and benefits.

ABOUT THE LOCAL COMMUNITY

Benban, a remote, rural village in the Aswan governorate, borders the solar park. With little economic activity in the area, many young people are unemployed. When the project was announced, the community was excited over the prospect of job creation and new business opportunities. Local government representatives were optimistic about the catalytic effect on the local economy that would be triggered by such a major development.

At the same time, there were concerns. Local firms and village elders were worried about being underbid by more qualified firms from other regions of Egypt. Sponsors and lenders questioned whether local firms could meet the technical requirements and ESHS standards.

COLLABORATING AND ORGANIZING TO ADDRESS ISSUES

Given the sheer complexity and common challenges, industry needed to come together. While some developers were not convinced about the importance of collaboration at the outset,

most quickly realized that managing the cumulative ESHS risks and impacts, as well as local expectations on benefits, would require a common central body. With support from lenders and building on industry initiative, the developers set up collaborative mechanism and approach, with ESHS a key focus. First, they brought in a facilities management company—a leading Egyptian provider of facilities management and operations maintenance services, hired through a government entity. This firm would provide pooled construction and operational services for the entire site. The facilities management firm also would have ESHS-related responsibilities, in areas such as potable and construction water, wastewater management, security, community relations, transportation management, and housing.

The facilities management firm also is responsible for stakeholder engagement and management of community grievances. Identifying this single point of contact eliminates the need for every sponsor to organize their own meetings and stakeholder engagement activities. The management firm has four community liaison officers on staff to handle these duties and has set up a local office within easy access of the villages near the site and an office in Aswan city center.

Next, the developers created the Benban Developers Association (BDA) to represent their interests. The BDA has oversight for the facilities management firm. The arrangement enables all 45 sponsors to contribute to a single source of funds, managed by the government and used to pay for facilities management services.

ROLE OF THE BENBAN DEVELOPERS ASSOCIATION

The BDA aims to provide a stronger voice for the Benban solar park sponsors and coordinate collective efforts. The BDA board includes representatives from several sponsors. It meets regularly to review common issues, such as the status of ESHS and the facility management company's performance. Some policies, procedures and systems—such as governance structure, responsibilities, and resourcing—have not yet been formalized.

However, the BDA's Benban Solar Park Community Social Investment Strategy is already in place. A previously conducted community socioeconomic assessment uncovered potential priorities and needed budget. The plan is linked with the operations and maintenance phase. It supports sustainable income generation programs in the communities and will deliver tangible outcomes in priority areas such as healthcare, mobility, and education.

CUMULATIVE EFFORTS YIELD POSITIVE RESULTS

To date, the efforts by the project sponsors have helped to manage local expectations, while delivering positive impacts for the community:

- ▶ Nearly 4,000 new jobs for local villagers, hired by local sub-contractors
- ▶ Villagers are working in a range of job functions: machine operators, basic civil works, fencing, security, transportation, cleaning, ground leveling, electrical and mechanical works, cable laying, basic assembly and frame and panel installers
- ▶ Some local workers have been promoted to foreman positions.
- ▶ Some local workers were recruited into the operations and maintenance teams for long-term jobs; project sponsors committed to hiring at least 30 percent of the long-term O&M workforce from neighboring villages.

- ▶ Local workers received certificates attesting to their experience and skills gained, making them stronger candidates for similar opportunities in the future.
- ▶ The facilities management company's database connects local workers and businesses with available opportunities: In response to community feedback, the project's Community Advisory Panel started to play a role in referring eligible workers to the database and raising community concerns related to local hiring.
- ▶ Local contractors and subcontractors received training on the project's ESH standards, in line with good international industry practices. This training is of particular importance, because of the risks involved, and given the limited local knowledge base on EHS practices and requirements. Local contractors and subcontractors have required significant capacity building, as well as monitoring and coaching. This has helped mitigate business risks, while providing an additional benefit to the local workforce.
- ▶ Projects hosted several visits from male and female students in the renewable energy track at the local vocational school.
- ▶ Projects have created safe working environment for local women, more of whom are working at the park, particularly in engineering and administrative positions. They are gaining valuable experience by working at an international project.



Engaging with stakeholders in communities near Benban Solar Park. IFC photo collection.

MANAGING EHS RISKS

With assistance from IFC, the sponsors deployed several tools to manage EHS risks. For instance, legal contracts specify ESHS requirements for contractors and subcontractors. An independent consultant conducts frequent environmental and social audits, while IFC's environmental and social team visits frequently, helping to identify risks and impacts needing attention. The facilities management company has brought in several firms with high ESHS from outside the region to partner with local contractors and enhance their performance. The management firm also distributed Arabic-language educational materials to detail ESHS requirements for various operational areas and created a steering committee on environmental and safety best practices, which has empowered health and safety managers and helped improve performance.



Construction workers at the Benban Solar Park in Egypt. Photograph by Dominic Chavez. IFC photo collection.

LESSONS LEARNED TO DATE

- ▶ Plan benefit opportunities early
- ▶ Incorporate mechanisms such as capacity-building programs for potential workers from the very beginning, to enable local sourcing of jobs and value chain opportunities
- ▶ Engage early with the government to understand environment and safety management challenges and opportunities and to set up a mechanism that enables involvement of relevant government officials in E&S compliance monitoring
- ▶ Create a robust approach to manage ESHS issues: The simultaneous mobilization of such a large number of sponsors created magnified challenges around ESHS issues and the need for robust management mechanisms to minimize risks
- ▶ Establish clear, frequent, and formal reporting lines between the various stakeholders involved: This will ensure that complex collaborative arrangements are working as efficiently as possible.
- ▶ Set clear mandates and identify potential conflicts of interest: At the Benban solar park, the facilities management company faces challenges in performing both ESHS supervision and community liaison functions, since some community members viewed the company as a competitor. In addition, balancing the supervisory role with the need to maintain positive community relationships has been difficult at times.
- ▶ Start early to manage local expectations: For Benban, the facilities management firm played a critical role in delivering clear messages to the local communities. The firm's community liaison officers, who were hired early on, have made a real difference in engaging with the affected communities.
- ▶ Begin implementing community investment programs in the affected communities before the number of construction jobs starts to decline.
- ▶ Seek support from the local government: This will help to quickly address issues they can control and help set local expectations for what the project will or will not do from the outset
- ▶ Find innovative ways to build the capacity of local contractors: Incentives can help to bring about changes in contractor behavior, striking a balance between rewarding good performance and being strict with poor performers.

6. LOOKING AHEAD

This paper is designed to deepen the knowledge base and continue the discussion about community-level benefit-sharing practices in wind and solar projects, even as it acknowledges the rapid pace of change in this relatively young—and increasingly diverse—industry. As this evolution happens, industry practices, challenges, and opportunities will shift as well.

Climate change, sustainability, and clean energy are among the mega-trends that are shaping twenty-first century society. But despite ambitious climate change targets and commitments guiding national-level decisions, such as the Paris Agreement, signed by member nations of the United Nations Framework Convention on Climate Change in 2016, a high degree of policy uncertainty over energy generation, transmission, and distribution remains in many countries.

Meanwhile, utility-scale wind and solar projects are gradually finding their way into the public consciousness, as they locate in rural, peri-urban and cosmopolitan socio-ecological environments. As the projects seek to integrate themselves into the local context, they offer the potential for positive local impact, regardless of that economy's stage of development.

A global review of wind and solar projects reveals an increasing urgency on the part of developers to address issues associated with social license to operate. This awareness tracks with what is happening in other industries, as e-commerce and technology companies like Amazon and Google,⁶² manufacturing firms, and other natural resources companies alike are confronting a reality that promised economic benefits negotiated at the national or regional level might not trickle down to the local level—and that local communities are finding their voices, organizing effectively, and wielding significant power, including the power to derail even the most high-flying of projects.

This trend is not likely to fade. In fact, in the renewables industry, it is likely to pick up steam as national and regional priorities increasingly align around green agendas. So, while there is growing recognition of the importance of community

buy-in and approval in maintaining social license, there is less knowledge—and limited consensus—around optimal approaches to take. This paper is an effort to fill that void.

Going forward, several factors are likely to affect the benefit-sharing landscape and they warrant a close watch:

- ▶ **Innovation and technology** can help advance the practice of engagement and benefit sharing to another level. The ways in which stakeholders connect and communicate with each other are changing as a result. With the continuous advancement of communications technologies, for instance, information about a particular wind and solar development can be better packaged and more customized to local communities and individuals, while communication and feedback processes become more efficient. Meanwhile, wind and solar technologies are advancing as well, bringing additional potential for local benefits. For example, next-generation solar PV parks could play an important role in addressing issues in warm climates where both food and energy are scarce.
- ▶ **Jobs and the workforce of the future** is a growing focus of many industries, governments, and development organizations. Increasing automation is likely to change the demand for jobs and nature of jobs themselves. It will be interesting to see how this trend will play out in the wind and solar industry—and the ways in which companies will respond in the context of rising public expectations for better lives, an expanding middle class, and a growing youth population, particularly in many developing countries where unemployment is already an issue.

⁶² In early 2019, Amazon pulled the plug on its highly touted HQ 2 project for Long Island City, New York after local community activists mounted significant protests. In late 2018, Google retreated from a plan to build a massive campus in the Kreuzberg neighborhood of Berlin, following massive local demonstrations.

- ▶ **Circular economy** considerations could alter the shape of benefit-sharing programs. Conversion of obsolete power plants into new facilities, waste to energy, or climate friendly recycling programs—such initiatives to minimize waste and maximize resource use present opportunities for integrating benefit sharing and for close collaboration and engagement with the communities and governments.
- ▶ **Democratization of energy** and the growth of distributed energy and off-grid solutions are likely to influence the nature of benefit sharing as well. Increased deployment of smaller-sized, decentralized energy generation will allow for individuals and groups in communities to actively participate in projects and to reap greater benefit from them. In fact, there is great potential for an increased local community role in developing and operating such facilities.



Photograph courtesy of Celsia.

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BUSINESS CASE

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"Lessons from Four Decades of Infrastructure Project-Related Conflicts in Latin America and the Caribbean" <https://publications.iadb.org/en/lessons-four-decades-infrastructure-project-related-conflicts-latin-america-and-caribbean>

COMMUNITY ENGAGEMENT AND ACCEPTANCE

"Wind Energy Development, Best Practices for Indigenous and Public Engagement" <https://canwea.ca/wp-content/uploads/2017/11/canwea-bestpractices-engagement-web.pdf>

"Guide To Community Engagement For Power Projects In Kenya" https://www.usaid.gov/sites/default/files/documents/1860/FINAL_Guide_to_Community_Engagement_-_Jan_17_2018_508-compressed.pdf

"Enhancing positive social outcomes from wind farm development: Evaluating community engagement and benefit-sharing in Australia" <https://assets.cleanenergycouncil.org.au/documents/resources/reports/enhancing-positive-social-outcomes-from-wind-farm-development.pdf>

COMMUNITY BENEFITS

"Strategic options for delivering ownership and benefit sharing models for wind farms in NSW" <https://www.environment.nsw.gov.au/resources/communities/EY-wind-farm-shared-benefits.pdf>

"A review of the local community development requirements in South Africa's renewable energy procurement programme" http://awsassets.wwf.org.za/downloads/local_community_development_report_20150618.pdf

"Community Benefits from Onshore Wind Developments" https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/363405/FINAL_-_Community_Benefits_Guidance.pdf

"Building Stronger Communities: Wind's Growing Role in Regional Australia" https://d3n8a8pro7vhm.cloudfront.net/vicwind/pages/1482/attachments/original/1523831528/AWA_2018_Wind_Energy_Building_Stronger_Communities_Report.pdf?1523831528

"Delivering community benefits from wind energy development: A toolkit" <https://www.cse.org.uk/downloads/toolkits/community-energy/planning/renewables/delivering-community-benefits-from-wind-energy-toolkit.pdf>

"Supporting Community Investment in Commercial Renewable Energy Schemes" <https://www.climateexchange.org.uk/research/projects/supporting-community-investment-in-commercial-energy-schemes/>

GENDER

"Getting to Gender Equality in Electricity Infrastructure" <https://openknowledge.worldbank.org/handle/10986/29259>

"Gender and Renewable Energy: Wind, Solar, Geothermal and Hydroelectric Energy 2014" https://www.climateinvestmentfunds.org/sites/cif_enc/files/knowledge-documents/idb_englishgetdocument.pdf

"Getting to Gender Equality in Energy Infrastructure: Lessons from Electricity Generation, Transmission, and Distribution Projects" <http://hdl.handle.net/10986/29259>

OWNERSHIP

"The Role of Indigenous People in Major Project Development: Paths for Indigenous Participation in Electricity Infrastructure" <https://static1.squarespace.com/static/5849b10dbe659445e02e6e55/t/5cc73a1cfaod602a43679d21/1556560440074/MPC++Final+v.10.pdf>

"Guidance on community ownership models under the Feed-in Tariffs scheme" https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/417731/Guidance_on_community_ownership_models_under_the_FITs_scheme.pdf

"Models of Local Energy Ownership and the Role of Local Energy Communities in Energy Transition in Europe" <https://cor.europa.eu/en/engage/studies/Documents/local-energy-ownership.pdf>

GUIDANCE AND TOOLS FROM OTHER INDUSTRIES

“Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets” https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_stakeholderengagement_wci__1319577185063

“Unlocking Opportunities for Women and Business: A Toolkit of Actions and Strategies for Oil, Gas, and Mining Companies” <https://www.commddev.org/unlocking-opportunities-for-women-and-business-a-toolkit-of-actions-and-strategies-for-oil-gas-and-mining-companies/>

“Strategic Community Investment: A Good Practice Handbook for Companies Doing Business in Emerging Markets” https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_communityinvestment_wci__1319576907570

“A guide to getting started in local procurement” https://www.ifc.org/wps/wcm/connect/03e40880488553ccb09cf26a6515bb18/IFC_LPPGuide_PDF20110708.pdf?MOD=AJPERES

“Establishing Foundations to Deliver Community Investment” https://commddev.org/wp-content/uploads/2015/05/P_Establishing_Foundations_Deliver_Community_Investment.pdf

“Understanding Company-Community Relations Toolkit” <https://www.icmm.com/en-gb/publications/mining-and-communities/understanding-company-community-relations-toolkit>



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