POWERFUL FUTURES

Practitioner Insights on the Just Transition to Renewable Energy

JustRE Alliance

Global South Alliance for a Just Transition to Renewable Energy

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Book Sprint in Ağva Merkez, Türkiye - June 2024.
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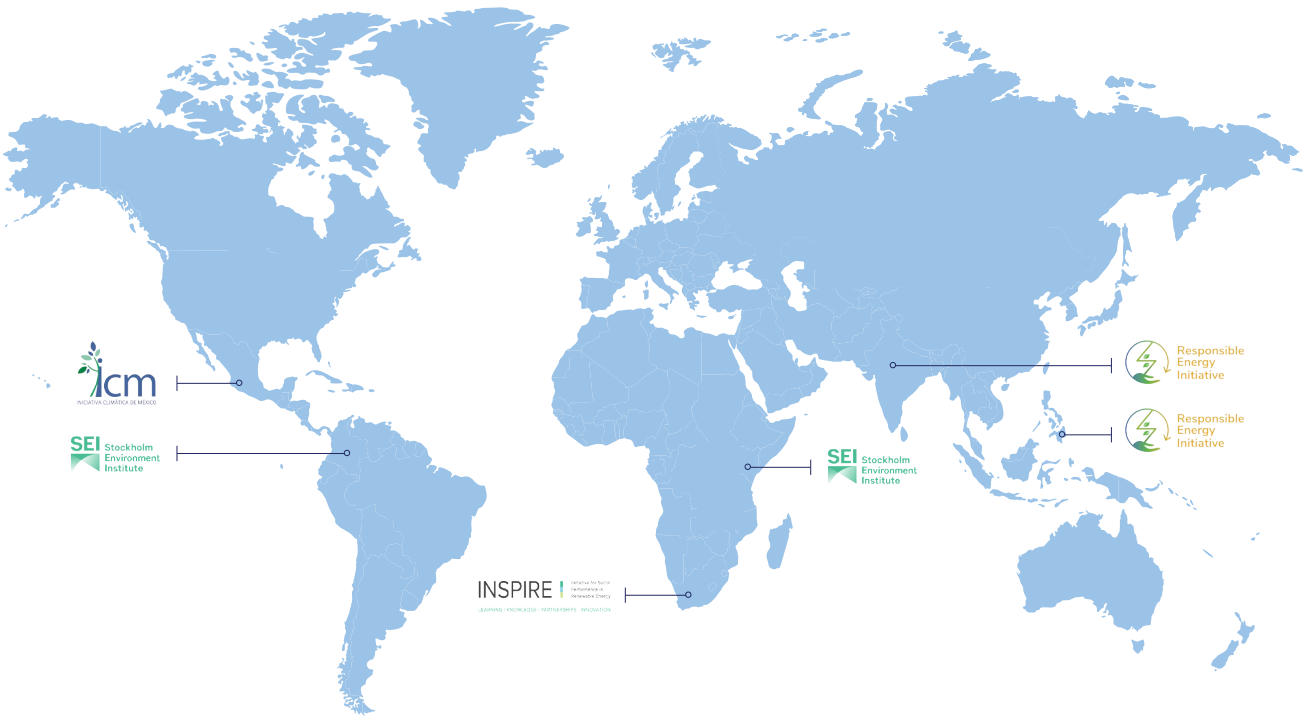
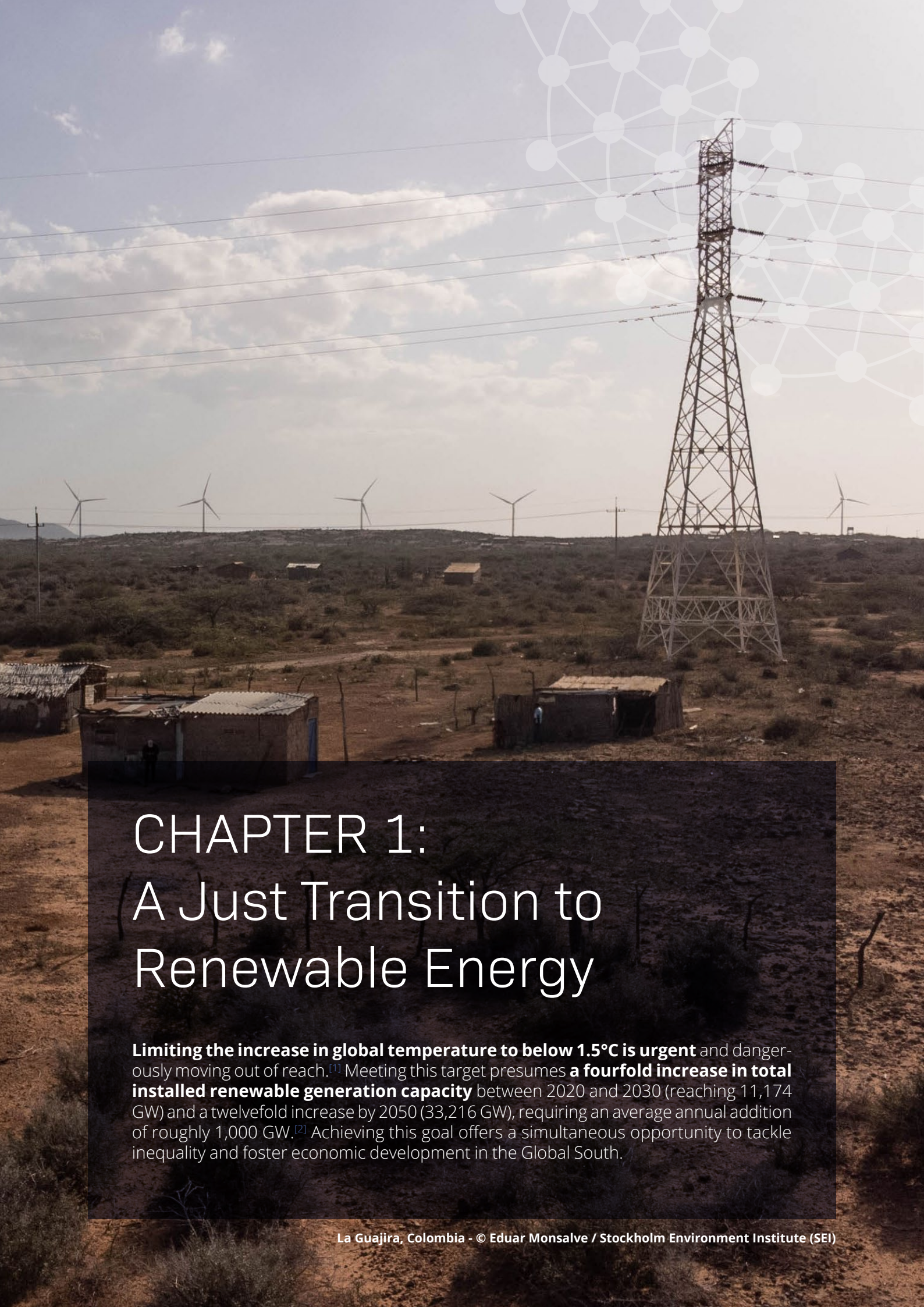
JustRE — Global South Alliance for a Just Transition to Renewable Energy

As the transition to renewable energy (RE) increases in pace, the challenge of ensuring that it is just, inclusive, and equitable is becoming increasingly pressing. As organisations working in the Global South, we felt the need to come together to work jointly on this collective objective. Each organisation's work is at the forefront of the social dimension of renewable energy deployment across Latin America, Africa, and South and Southeast Asia. We have extensively explored this challenge, and identified and formulated responses alongside the many stakeholders involved.

We envision energy transitions where justice is a core principle of the deployment of renewable energy. Our organisations and initiatives have a significant track record in our respective regions, and we decided to join efforts to form the **Global South Alliance for a Just Transition to Renewable Energy (JustRE).** The Alliance champions socially responsible renewable energy implementation with meaningful participation and benefits for communities across the globe. We will collaborate, exchange knowledge, and coordinate strategically to promote a just transition to renewable energy. This book is the first harvest of our collective endeavours.



The book is primarily written by practitioners for practitioners, especially those in an intermediary capacity working with various stakeholders in the scaling of renewable energy. By sharing insights and experiences from local initiatives, fostering international collaboration, and highlighting the global impact of these efforts, we aim to demonstrate that a just and equitable deployment of renewable energy is possible and desirable for all. We believe that through the collective efforts described in these pages, practitioners can find some of the tools and inspiration needed to drive meaningful change. We hope that you find this book useful in achieving this outcome and in amplifying the voices of communities worldwide.



CHAPTER 1: A Just Transition to Renewable Energy

Limiting the increase in global temperature to below 1.5°C is urgent and dangerously moving out of reach.[1] Meeting this target presumes **a fourfold increase in total installed renewable generation capacity** between 2020 and 2030 (reaching 11,174 GW) and a twelvefold increase by 2050 (33,216 GW), requiring an average annual addition of roughly 1,000 GW.[2] Achieving this goal offers a simultaneous opportunity to tackle inequality and foster economic development in the Global South.

La Guajira, Colombia - © Eduar Monsalve / Stockholm Environment Institute (SEI)

The benefits of the energy transition cannot be overstated. Renewable energy offers environmental, health, and socio economic advantages. These include reduced air pollution, job creation, energy access, and enhanced energy security.[3],[4] **Nonetheless, as with other infrastructure, renewables are not without risks of negative impacts.** These can include risks to human rights and health in the mining of raw materials, as well as resettlement and displacement of livelihood activities at utility-scale RE sites.[5] For just energy transitions, it is essential to mitigate negative and maximise positive impacts.

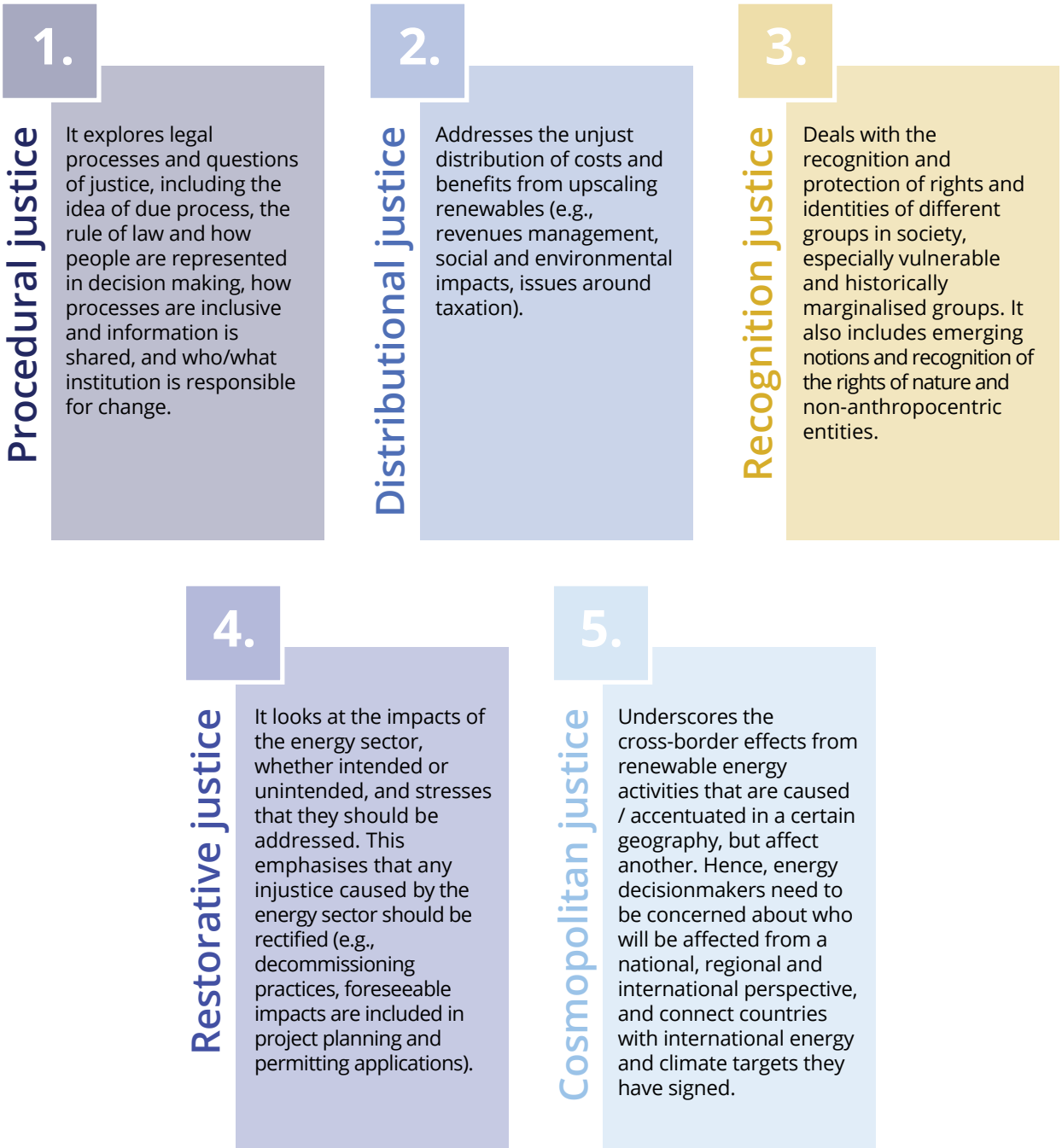
While **different conceptual approaches to the meaning of just energy transitions (JET) exist,** the common threads are low carbon, inclusivity, fairness, and economic resilience at the national and local levels. The following figure presents a selection of concepts developed by international entities:

Figure 1: JET definitions

"Greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind"[6]	**"A systematic transition towards sustainable, low carbon energy in such a way as to ensure the protection of society, the safeguarding of jobs, and environment and the promotion of economic resilience"**[7]	**"Just transition approach ensures that the affected people are considered by those who make decisions"**[8]
International Labour Organisation (ILO)	Africa Climate Foundation (ACF)	International Institute for Sustainable Development (IISD)

Building beyond the previous concepts, **this book takes an all-encompassing and systemic approach to justice and equity concerns**,[9],[10],[11] recognising the multiple dimensions across time, space, and the project lifecycle and the need for structural reform. In doing so, the book draws on existing literature identifying five forms of justice that are relevant to a just energy transition, as illustrated in Figure 2.[12]

Figure 2: Five forms of justice



The conversation about just energy transition has focused on the phasing-out of fossil fuels, **resulting in a gap in research** and discussion about the impacts and best practices in the phasing-in of utility-scale renewable energy.[13],[14],[15] The purpose of this book is to contribute to filling this important gap by **showcasing — from a Global South perspective — promising emerging inclusive practices** drawn from the experience of JustRE members.

This book discusses relevant issues and shares promising practices related to land and water resources, supply chains, community engagement, and benefit sharing. These discussions are followed by reflections on enabling factors, including policies and practice standards, and an outlook on future work and the role of JustRE.

While the book seeks an in-depth exploration of critical aspects of the RE challenge, readers should be mindful that the book does not attempt to fully capture the nuances and complexities of the whole RE sector. **The book centres on examples of practice from utility-scale RE** (solar, wind, and geothermal). However, we acknowledge the crucially important role of distributed energy resources, grid transmission and distribution, energy efficiency, and other technologies and innovations in the process towards a sustainable and just energy system. Readers are encouraged to critically approach the information presented, recognising that **it represents a snapshot of experiences and perspectives from different contexts.**

The Alliance experts, representing various Global South regions, **have collaborated through the Book Sprints**[16] **methodology to develop this book**. The book gathers invaluable practice insights, capturing experiences and lessons learned in RE deployment across the Global South and offering practical guidance and real-world examples to inform and inspire future sustainable RE initiatives. The book thus draws on the deep and wide-ranging expertise of organisations actively engaged in utility-scale RE implementation in Colombia, India, Kenya, Mexico, the Philippines, and South Africa. The organisations involved provide policy and industry practice advice, support, and capacity building in allyship with project-affected communities.

The Alliance aims to foster knowledge sharing and collaboration among like-minded organisations to guide JET's progress in the Global South. Defined by a profound dedication to equity, inclusivity, and community self-determination, JustRE members are committed to advancing just energy transitions globally. The Alliance is committed to placing these values at the forefront to enable the creation and roll-out of sustainable RE projects and guarantee the distribution of their benefits across all relevant parties.

JustRE seeks to catalyse transformative change in the RE sector by creating spaces for dialogue, facilitating knowledge sharing, fostering partnerships, and identifying actionable strategies that build on collective and adaptive learning. At the time of writing, JustRE is in its pilot year, building momentum towards a longer-term vision. Once the appropriate foundation is laid, the Alliance will seek to expand into a broader platform, accessible to organisations and stakeholders working in and/or on the Global South that share the goals of building more just societies, economies, and energy systems.

Northern Cape, South Africa - Holle Wlokas - INSPIRE

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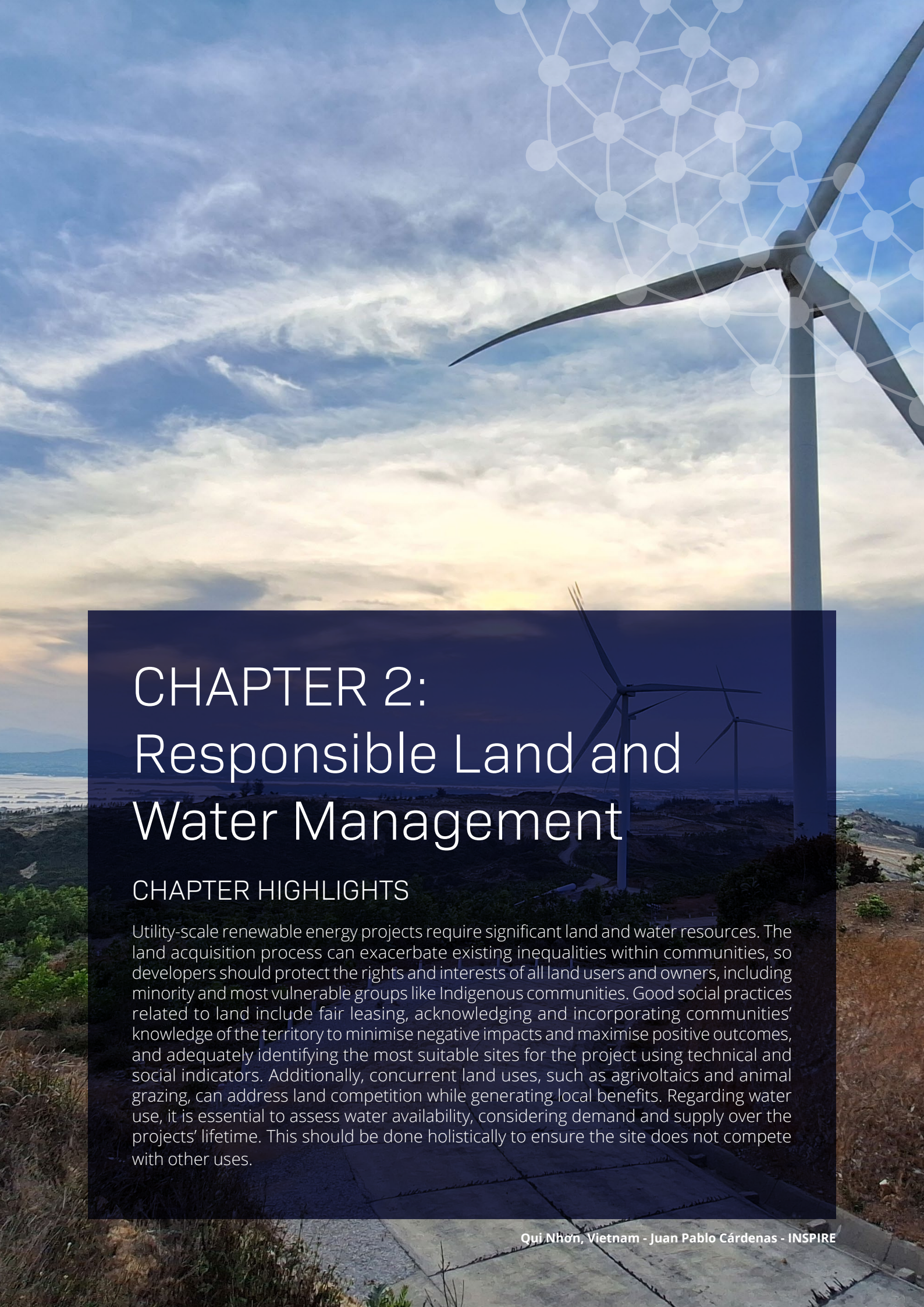


CHAPTER 2: Responsible Land and Water Management

CHAPTER HIGHLIGHTS

Utility-scale renewable energy projects require significant land and water resources. The land acquisition process can exacerbate existing inequalities within communities, so developers should protect the rights and interests of all land users and owners, including minority and most vulnerable groups like Indigenous communities. Good social practices related to land include fair leasing, acknowledging and incorporating communities' knowledge of the territory to minimise negative impacts and maximise positive outcomes, and adequately identifying the most suitable sites for the project using technical and social indicators. Additionally, concurrent land uses, such as agrivoltaics and animal grazing, can address land competition while generating local benefits. Regarding water use, it is essential to assess water availability, considering demand and supply over the projects' lifetime. This should be done holistically to ensure the site does not compete with other uses.

Qui Nhơn, Vietnam - Juan Pablo Cárdenas - INSPIRE

The development of RE significantly impacts people's rights and access to multiple natural resources. In this chapter, we discuss the challenges associated with land and water management arising from the deployment of utility-scale RE. We also explore emerging responses and cases where these have been applied and share some learnings from JustRE's experience.

Context

Onshore solar and wind projects require significant land. Unfortunately, competition over land is intensifying as renewable energy projects increase. Wind projects typically require 0.2 to 0.8 hectares per megawatt (MW), while solar projects typically require 1.2 to 2 hectares[1] per megawatt (MW). The world's largest solar project, currently being built in India, will cover 726 square kilometres, an area the size of Singapore.[2] Yet RE is still sometimes understood to be less land-intensive than the current fossil fuel-dominated energy systems (especially when considering distributed RE and energy efficiency).[3] At the same time, wind and solar projects can allow for multiple uses within the same land area, such as agricultural activities that can be co-located with the energy infrastructure.

Land acquisition processes are a common driver of conflict between developers, governments, and local communities, including Indigenous groups.[4] The challenge is particularly acute when land rights are customary or when identifying legitimate tenure rights holders is complex. This is often the case in countries in the Global South, where multiple land tenure systems, formal and informal, may exist in parallel and where reform processes and government records relating to land use and rights are often incomplete.

Existing inequalities within communities can be exacerbated by land acquisition processes. For example, in India, RE companies frequently engage in transactions with formal land owners, negotiating financial compensation for land to be allocated for project use. This can create greater economic and social disparities between landowners, who receive funds and status, and the landless, who lose access-and-use rights, making them more vulnerable. These compensation practices often exclude women from consultations and agreements, even though they play a substantial role in agricultural economies.[5]

Solar projects also need a significant amount of water for cleaning. Competition for water use is consequently heightened, especially in water-stressed areas. Using chemicals on renewable energy project sites, such as dust suppressants and dielectric fluids, can contaminate groundwater.[6]

Emerging good practice

Several good practices for inclusive land and water resource management are emerging in the context of RE development. There is much to learn from other infrastructure sectors and social practitioners' experience. Below, we share some highlights of good practice to support others looking for possible courses of action in land and water.

Environmental and Social Impact Assessments (ESIA)

Establishing robust environmental and social impact frameworks is essential for effective land and water management.[7] ESIAs analyse a planned project's positive and negative consequences based on a deep contextual understanding and community engagement. These instruments provide an updated and comprehensive information inventory from which to develop a set of actions that maximise the project's positive impacts and minimise the negative ones.[8] ESIAs represent international good practice, as exemplified by the requirements of international financial institutions such as the International Finance Corporation (IFC)[9] and the World Bank. These organisations provide extensive standards and guidelines to effectively conduct ESIAs, which can be adopted and adapted by countries and corporations to fit their particular needs.

Some countries integrate social and environmental assessments into a single process, while others conduct them separately. Integrated assessments can provide a more holistic view of a project's impacts, considering the interplay between social, livelihood, and environmental factors. Sectoral planning tools that consider the long-term, cumulative social, economic, and environmental impacts of multiple RE projects in the same general area are also essential. The preparation of Strategic Environmental Assessments (SEAs) can serve as a basis for a regional planning approach that takes account of the combined effects of different industry players using sites close to each other.

Socially and environmentally sensitive site prioritisation

Site selection for utility-scale RE projects requires careful consideration of the potential impacts on land and water resources. It is generally accepted that to minimise impacts, projects should prioritise land that is barren, uncultivable, or culturally and ecologically non-significant. However, no universal definitions for identifying such lands exist, and sometimes, land is officially classified as "wasteland" when used based on customary arrangements.

Community engagement and dialogue are essential for responsible site selection. Integrating the local knowledge of communities can highlight appropriate approaches for safeguarding traditional land practices and cultural amenities, ensure locally led development initiatives, and mitigate adverse RE project impacts on the community. **Using tools incorporating technical and social indicators can help identify the most appropriate site for a project**. An example is the SiteRight Tool[10] in India. This spatial mapping instrument considers factors like solar irradiance, wind patterns, and ecological and socio cultural factors such as species habitats and ancestral or spiritual locations. **However, it is crucial to note that these tools have limitations,** such as relying on official data that may not reflect community understanding of resource use patterns. They are not substitutes for community engagement (see Chapter 4).

Free, Prior, and Informed Consent (FPIC) application in customary lands

Respecting the land rights of legitimate tenure holders is essential, including where land and property rights are customary, collective, or not formally recorded. Land ownership varies in each country, but adherence to international standards such as the Free, Prior, and Informed Consent (FPIC) should be applied when customary land — individual or collective — is considered for renewable energy installations. FPIC ensures that the rights and interests of all land users are respected and protected (for instance, Forest Rights Act 2006[11] and LARR Act 2013[12] in India). One example of an international framework for FPIC is the International Labour Organisation (ILO) 169 convention,[13] which provides a consensus-building framework through consultation on Indigenous and Tribal lands.

Establishing an Indigenous consultation framework is an enabling factor for community engagement, fair benefit sharing, fair resource management, and inequality reduction. This can be achieved by creating a national legal framework and principles, guidelines, and procedures for its implementation.

Article 32, par. 2, of the United Nations Declaration on the Rights of Indigenous Peoples, provides that states must consult with the Indigenous Peoples in good faith to obtain their FPIC before approving any project affecting their lands or territories and other resources. Article 32 describes the FPIC process, which, if properly implemented, affords safeguards for Indigenous Peoples.

Establishing a clear national legal framework for FPIC helps build trust among all parties involved. Properly established consultation mechanisms and protocols can help address the root causes of conflicts and prevent new ones from arising. A prior and informed engagement with communities can also create the conditions for more equitable benefit sharing and ensure tangible benefits for the communities.[14]

Several countries have integrated FPIC into national legislation. For instance, in Mexico, the consultation process is established by law in the energy sector. In Colombia, the criteria and procedures for FPIC have been described in "Directivas presidenciales" (executive orders), decrees and Constitutional Court rulings without a statutory law. However, in both cases, stakeholders have criticised the lack of transparency, inadequate timing of engagement, coordination, and respect for local processes. Despite these challenges, having the framework and the protocol is important as they lay the foundation for improvement and ensure that Indigenous communities have a voice on legislative and administrative measures, projects, or activities (private or public) that take place in their territories as a way to protect their cultural, social and economic integrity.

Fair land procurement practices

Expropriation is defined as the "governmental seizure of property or a change to existing private property rights, usually for public benefit".[15] Acquiring land for RE projects through expropriation is not recommended since it causes significant adverse effects, including social conflicts and community disintegration. On the other hand, acquiring private land through a negotiated settlement between willing buyers and sellers is a more common and recommended approach. Compensation value should include the effect of dispossession on mental health, social fabric, and personal and community identity, as well as resources for capacity building such as financial literacy and management. Also, resettlement and rehabilitation plans must be co-designed with the affected community.[16] However, this negotiated land acquisition can be challenging and costly for developers. For instance, the LARR Act in India stipulates compensation for private rural land that is much higher than the current market value.[17]

For RE projects, land leasing arrangements tend to be a more favourable option for landowners than outright sale. Leasing terms are agreed between parties, ideally including regular payments for a period aligned with the project lifetime. Lease fees can be adjusted over the project timeframe to account for inflation. Land valuation should be context-specific and conducted by an independent expert. Landesa's experience in Southeast Asia suggests that for less productive land, the minimum annual leasing rate should be between 1/15th to 1/10th of market value to be attractive. The market value of land is usually the result of recent transactions in the area and takes into account the type of land. In some countries, the value of agricultural land can be found in registers. One practice for extensive land holdings is to lease part of the land and retain the rest for agricultural purposes to ensure food security. This approach works particularly well for landowners of less productive large holdings in arid zones where crop failure is highly risky.

Land acquisitions for a renewable energy project in India

Pavagada Solar Park, in the state of Karnataka, is one of the largest in the world, covering 5,261 hectares of private semi-arid land with a capacity of 2,050 MW. The land was chosen considering high solar radiation, low agricultural potential, and large individual landholding size. Favourable conditions to access the land were set by the Indian government through India's Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act in 2013.

The Act stipulates that land procurement for industry uses has to include a negotiation process, including clauses about informed consent, rehabilitation, and resettlement provisions for land leases. The state of Karnataka created a Special Purpose Vehicle (SPV), the Karnataka Solar Power Development Corporation, to facilitate timely land leasing for renewable energy developments. Land owned by individuals or groups of farmers was leased by the SPV. The lease agreements are renewed after five years, and the payments increase every two years at a rate of 5%.

Some of the steps used to negotiate land lease agreements with farmers were:

- Choosing a site with low agricultural potential and large individual holdings.
- Forming an SPV with experts from the energy sector and revenue department to ensure a coordinated approach for project siting.
- Fostering a dialogue process between landowners and government revenue officials to increase trust and comply with land record requirements.
- Ensuring leasing terms are simple and do not include a change of ownership.
- Creating work opportunities for one member of each farming family in the solar park.

While these approaches were promising, the project failed to address gender issues in land use and conduct advanced participatory water budgeting. The concerns of landless agricultural workers, including women and tenant farmers, were also not prioritised. No ESIA was undertaken to identify potential concerns and develop a rehabilitation plan.[18]

Promote shared land uses

Solar and wind projects can allow shared land uses to address the competition for land and maintain or even strengthen local livelihoods. Agrivoltaics — a crop-growing system under solar panels — is an emerging field. Animal grazing on solar and wind project sites can maintain vegetation and reduce maintenance costs. An assessment should determine the most suitable shared land use design, considering local climate, soil conditions, crop types, and community needs. This ensures that the chosen approach maximises land use efficiency and local benefits.

Livestock farming amongst wind turbines in the Philippines

The Burgos Wind Farm, in Ilocos Norte, Philippines, one of the largest in Southeast Asia, is an example of maximising land-use benefits involving renewable energy generation and livestock farming. Before the project, agro-pastoralists used the site for cattle grazing. The agro-pastoralists formed the Burgos Agri-Business Association (BABA) to negotiate with the EDC Burgos Wind Power Corporation (EBWPC). Discussions resulted in BABA members retaining access to the area and providing a feedlot system as an alternative to open grazing. Training workshops were conducted to improve livestock practices and the capacity of BABA members. Over time, it became clear that BABA members preferred the traditional grazing approach as they witnessed that wind turbines had no negative impact on their livestock and found their cattle safer inside the wind farm. BABA eventually established a cattle breeding livelihood project, which still benefits its members.[19]

Water planning

The planning process for solar energy projects requires a water availability assessment for panel cleaning and any proposed onsite agricultural activities. Landscape and watershed-based ESIA that consider water demand and supply over the project's lifecycle are essential for effective water management. Practices such as community water budgeting and stewardship[20] help ensure that water use is planned and prioritised holistically and over time so that the site does not compete with other uses.

Water efficiency measures

A range of technologies are being deployed to make water use more efficient, from waterless cleaning solutions involving magnets or electrostatic repulsion,[21] to robots that use limited amounts of water.[22] While automation can be more efficient, fewer (if any) manual cleaning roles are required on-site, negatively impacting job creation potential.

Relevant stakeholder insights

Below, we share some key considerations when working with the private sector, policymakers, and communities to carry out responsible land and water management.

COMPANY PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Risks associated with government-allocated land:** In some countries, the government may allocate the site to the project developer without adequate knowledge of the site's technical, social, and economic suitability. Consequently, RE companies may face unexpected risks such as community land use resulting in conflict, water resource access issues, and queries about the site's technical suitability.
- **Risks associated with shared land use:** Allowing grazing on a solar or wind site can present the risk of damage to equipment or raise security issues. Guards may struggle to distinguish between farmers or pastoralists tending to their crops and flocks from less well-intentioned visitors. Concerns about heightened insurance rates are associated with free access to the project site.
- **Increased project costs in shared land use:** Enabling agriculture under solar panels requires some adaptation to the equipment, such as increasing its height. Such changes to technical specifications can mean additional material and construction costs.

RECOMMENDATIONS FOR PRACTITIONERS

- **Draw on available tools and best practices:** Various tools can enable developers to understand better the risks associated with a particular land (e.g., the SiteRight Tool). These tools help identify no-go areas and the types of support required to safeguard ecosystems, livelihoods, cultural, and other assets. The results of such analyses should be integrated into and complemented with other activities, including community engagement (see Chapter 4) and ESIAs, which should consider cumulative impacts of multiple RE projects in the same general area, where relevant.
- **Promote the adoption of shared land-use strategies:** Enable developers to visit sites that exhibit shared land-use practices to better understand associated risks and the scope and costs of mitigation actions. In some cases, the necessary actions may be simple and cheap, such as using reinforced cables in photovoltaic systems.
- **Tap into financing for shared land use:** Additional funding may be available for agrivoltaics to cover the extra costs through mechanisms set up by Development Finance Institutions and governments concerned with food security.

COMMUNITY PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Elite capture of social structures and consultations:** Land discussions focus on fair compensation or remuneration for landowners rather than users more generally. Those with greater wealth and power can dominate the negotiations and appropriate most of the available gains.
- **Information asymmetry:** As more renewable energy projects are built, more land leasing rates and pricing data are available. While a growing number of enterprises and civil society organisations are providing legal advice to communities on these issues, they often remain poorly understood by community members due to language, legal complexities, etc.

RECOMMENDATIONS FOR PRACTITIONERS

- **Stress the importance of effective community engagements:** Community engagement needs to be meaningful and aligned with the practices outlined in Chapter 4.
- **Support access to reliable information:** Open access data on average land lease rates and acquisition prices can better equip communities to achieve fair negotiation outcomes. More provision of legal advice would further help community capacity to understand and claim their rights.

POLICYMAKER PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

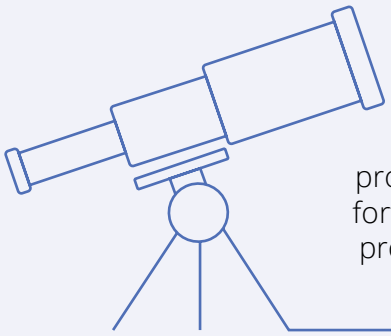
- **Ease of doing business:** In some countries, such as India, requirements for ESIAs are lightened or removed altogether to facilitate investment. However, many international investors require developers to conduct robust assessments as a social risk management tool that benefits all stakeholders, including businesses (in terms of avoiding costs and delays).
- **Support robust data collection and application:** Governments can find it challenging to identify appropriate areas for RE developments at the required scale. Even where land use and associated socio ecological or economic risks are mapped, the data can be inaccurate, and classifications may lack nuance.

RECOMMENDATIONS FOR PRACTITIONERS

- **Promote robust ESIAs:** Facilitate exchanges between developers who routinely produce robust ESIAs and policymakers to build an assessment framework that balances the need for agility in project development with managing social and environmental risks.
- **Systematically share community experiences with energy transition:** Policymakers can form a more holistic view of the complexities relating to RE infrastructure at the grassroots level. Enabling representatives of governments at all levels to visit project sites and hear directly from affected communities can be informative for policy design.

Future glimpse

Young Lorenzo remembers his grandmother's stories about the day in 2025 when they lost access to their ancestral land. Thousands of blue-glass solar panels and wires were erected in the fields, threatening to splinter the community by erasing the glue that held the community together: their land. Many years later, the painful memories of that day, captured and frequently retold in local lore, still inspire him to do his daily work with the renewable energy company. It is difficult for him to imagine such an injustice happening now. Thankfully, today, nobody would even contemplate simply fencing people out. The developers are entwined with the local communities — economically and socially — thanks to the government's law on designing for the context. Each morning, he walks through the solar farm to the sacred offering place, nodding at others as he goes and trying to avoid the temptation to pluck some of the arugula and spinach leaves from under the solar arrays. As he crosses the low fencing into the solar farm, he laughs at the sight of a farmer chasing the goats away from the fresh produce waiting to be picked up for market. He feels comforted by thinking that the farmers' land and livelihood are protected by the transparent long-term leasing agreement.



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CHAPTER 3: Responsible Supply Chain Management

CHAPTER HIGHLIGHTS

As RE deployment upscales, demand for critical minerals intensifies and so do the social risks in the supply chain, such as human rights violations and unsafe working conditions. Additionally, half of the transition minerals needed for renewable energy implementation are in Indigenous territories with potential adverse impacts.[1] Mitigation strategies include reducing mineral dependence through circular design, robust human rights due diligence, and traceability tools. Supply chain management must maximise local and regional benefits. While private business models dominate specialised equipment manufacturing, the potential for more inclusive models, such as cooperatives or employee ownership, should be explored.

Solar Technicians Installing Solar Panels - Los Muertos Crew

The energy transition depends heavily on the availability of transition minerals and resilient supply chains. This chapter focuses on several key social risks and opportunities within the RE supply chain: sourcing transition minerals, labour rights in manufacturing and recycling, and local economic development.

Context

With solar and wind equipment supply chains maturing and growing in number, the mining of transition minerals to meet the global demand is intensifying, as are associated risks, including to human rights, labour rights and biodiversity conservation. To meet Net Zero goals by 2050, the International Energy Agency (IEA) estimates a sixfold increase in demand for transition minerals.[2] Companies and countries in the Global North are scrambling to secure their mineral supply chains, half of which are linked to the Global South, with 50% of the world's transition minerals in Indigenous territories.[3]

Data from the Business & Human Rights Resource Centre's Transition Minerals Tracker reveals human rights abuses related to transition mineral mining. The Tracker currently includes 631 allegations of abuse from 2010-2023 associated with the mining of seven of the transition minerals: bauxite, cobalt, copper, lithium, manganese, nickel, and zinc. These allegations include environmental, land and Indigenous Peoples' rights violations, with a significant increase in labour rights violations and worker fatalities.[4] Indigenous Peoples are particularly vulnerable to the impacts of mining activities.[5]

Moreover, workers can be exposed to unsafe conditions in mineral processing plants. A case example is in Indonesia, where there were 57 fatalities in Chinese-owned nickel smelters from 2015 to 2020.[6] Similarly, in the production of polysilicon (a key material in solar modules), allegations of forced labour in the Xinjiang region of China persist.[7] According to multiple sources, the Uyghur people and other minority groups in the Xinjiang region are being denied the right to free choice of employment as defined in Article 23 of the U.N. Declaration of Human Rights.[8]

Construction companies and their staff also form part of the supply chain. The opportunity exists to stimulate the regional economy during the lucrative construction phase of power plants' development, when various businesses can be contracted or subcontracted and many jobs are created. In some cases, labour and contractors are brought in from other regions. This can cause resentment among the local communities and limits the benefits that stay in the area. The time span of the local socio economic benefits depends on several factors, such as the development of the RE industry in the area, policy and regulation or agreements with local populations.

Poor labour conditions in collecting, segregating, and treating solar panel waste are an issue, particularly in the Global South. Solar panels contain toxic heavy metals such as cadmium and include shatterable elements like glass, making them difficult to disassemble safely.

Emerging good practices

There are emerging good practices in inclusive RE supply chains. Tools are being developed to support procurement and supply chain managers with traceability and informed decision-making, such as Supply Trace[9] and the BHRRC Transition Mineral Tracker. Some RE developers are now performing more robust and gender-sensitive human rights due diligence processes as part of procurement and supply chain management, and this should be encouraged to become the norm.[10] This section focuses on three main aspects of the supply chain: transition mineral mining, manufacturing, and supplier development.

Social impact of transition minerals mining

The availability of critical minerals in the Global South makes it essential to avoid the common exploitative dynamics of extractive industries, and to ensure that the value created from these deposits remains within the Global South.

When mines are proposed, and during their operation and decommissioning, communities should be meaningfully engaged (see Chapter 4), including, where applicable, through FPIC, and receive fair compensation and benefit-sharing arrangements that enable shared prosperity. Particular attention should also be paid to managing pollution risks resulting from operations, waste storage, and transportation associated with a mine, including harm to potable water and soil health. High standards for mine closure procedures and guarantees for the integration of local and artisanal miners should also be adopted.[11]

Mining companies should adopt policies to guarantee worker safety, ensure payment of fair living wages, and guarantee workers' freedom of association and right to collective bargaining with trade unions. Ideally, companies should include workers and their unions in upstream project conception and design to support models of shared prosperity through decent work and new models of co-management, ownership, and cooperation. Lastly, mining companies should implement gender-sensitive human rights, environmental due diligence in operations and supply chains, and access to remedy through effective grievance mechanisms built on safe and inclusive worker and community engagement.[12]

Pililla Windmills, Rizal, Philippines - Dayanara Nacion

Robust impact assessments in siting nickel refinery

German chemical giant Badische Anilin und Soda Fabrik (BASF) had plans to partner with French mining company Eramet to build a nickel refinery in Halmahera, Indonesia. Nickel mining and refining in the area has impacted the lives of the Hongana Manyawa Indigenous people.[13] In April 2023, the BHRRC reached out to BASF regarding their plans, and the company responded by saying that it is still evaluating the project and has not yet decided on whether or not to implement it. BASF mentioned that its evaluation process is an intensive assessment of environmental, social, and governance (ESG) risks against the benchmarks of the International Finance Corporation (IFC) standards, the Equator Principles, and the International Responsible Mining Assurance (IRMA) standard. BASF also mentioned that they are willing to engage in constructive dialogue with civil society.[14] On 24 June 2024, BASF announced, after thorough evaluation, that it will not push through with the planned nickel refinery.[15]

Reducing the need for transition minerals through recyclable batteries

GRST

The 2023 winner of the Earthshot Prize, Green, Renewable, Sustainable Technology (GRST), has developed a cleaner way to make batteries that cause less pollution and use more easily recyclable components. GRST has created a way to build batteries using a water-soluble binding composite instead of toxic solvents and hard-to-recycle materials. Through this process, lithium, cobalt, and nickel can be recovered more economically and reused in other batteries, reducing the demand for further extraction of transition minerals.[16]

Labour rights and safety in manufacturing

The industry is trying various approaches to respond to labour rights risks in manufacturing. Companies with more robust sustainable procurement approaches set expectations that labour and gender standards, occupational health and safety, and worker representation, among other responsible practices, are included in supplier codes of conduct and contracts.[17]

To avoid enabling negative impacts on the Uyghur people, JustRE's experience suggests that some RE companies are attempting to buy from manufacturers outside of China, in countries where supply chain transparency and scrutiny are perceived to be more robust and standards more rigorously upheld. However, diversifying the supply chain is proving challenging for procurers around the world. Currently, over 80% of solar panels' components and stages (including polysilicon, ingots, wafers, cells, and modules) are produced in China.[18] Countries like India seek to boost local manufacturing, demonstrating how acting on these new norms can support national ambitions. Whilst avoiding high-risk suppliers is not always possible, a great deal can be learned from other industries (such as textiles and apparel) about effective and constructive engagement for supplier-by-supplier or group-based improvement. Leading investors are encouraging this practice in their investees.[19]

Whilst most prominent solar and wind energy equipment manufacturers are private, business models from other industries can point to more inclusive structures that could be applied to organisations in the RE supply chain. For instance, cooperatives or employee-ownership approaches may also apply to RE manufacturing. These models incorporate shared decision-making and profit sharing (examples include jam maker Wilkin & Sons and polymers manufacturer Scott Bader).

Eventide investor transparency requirements

EVENTIDE

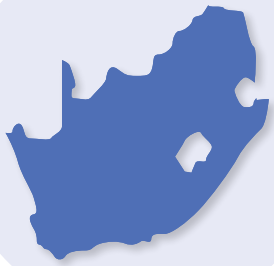
Eventide has been working with its renewable energy-related investees to develop an approach to increase visibility and traceability in the solar supply chain, specifically to avoid forced labour. They are "directly engaging companies in the solar supply chain who have the power to change sourcing and asset managers who have the power to move capital". Eventide has proposed three phases, gradually requiring the RE company to trace one tier of its supply chain in each six-month-long phase. They stipulate six months and three phases to allow time for supply chains to respond and increase capacity.[20]

Local supplier development

Owing to the substantial number of jobs and business opportunities created in the construction phase of new projects, this phase offers a key entry point into supporting the local economy and engagement with local communities. Developers need to understand how the capabilities of local labour and businesses compare to the expertise required during the construction using participatory technical skills and business competency audits as part of early community engagement. The engagement can expedite recruitment, ensure transparency, and build social acceptance and rapport.

Ideally, key gaps would be addressed through capacity-building programmes that empower individuals and businesses to access work and contracts beyond construction. While RE companies may not always be in a position to invest in such a detailed and costly exercise before operations and revenue flow, in some countries, this task may be undertaken by an existing RE company as part of its supplier or business development investment requirements.[21] Collectively planned and implemented strategic supplier development investments could significantly contribute towards economic development, as evidenced in other sectors, especially in areas with a high concentration of renewable energy projects.

Perdekraal East Wind Farm Supplier Development Programme in South Africa



In South Africa, RE projects must make enterprise development investments within the economy surrounding the site. To fulfil this requirement, the Perdekraal East Wind Farm, operated by Mainstream Renewable Power, launched a supplier development initiative involving multiple stakeholders, including local contractors, security service providers, and waste removal services. The initiative provides training and development to improve skills, productivity, and capacity, thereby benefitting the wind project and the wider local economy.

The capacity-building programme, for example, had the Guardhouse Contractor receive Safety, Health, Environment and Quality (SHEQ) training consisting of working at heights, erecting scaffolds and inspection, first aid, basic firefighting, operating hand tools and machinery, hazard identification and risk assessment, hazardous substances, and incident investigation training. The transport and security services providers received on-site Defensive Driving and Gravel Road training and funding to upskill security guards from Grade C to Grade B. The waste removal service provider received basic business training and grant funding for Personal Protective Equipment (PPE). One heating, ventilation, and air conditioning provider also received funding for SHEQ training before commencing on-site work.

Relevant stakeholder insights

Below, we share some key elements to consider when working with the private sector, policymakers, and communities towards more inclusive RE supply chains.

COMPANY PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Out of sphere of control:** For RE developers procuring equipment, the supply chains have many tiers, meaning the procurer is far removed. Therefore, it can be perceived as impossible for developers to influence (let alone control) suppliers' business practices.
- **Complexity:** Issues in mining and enterprise development are complex, with risks driven by deep, long-lasting systemic factors such as class, caste, ethnicity, etc. Other industries, societies, and governments have long tried to resolve such matters.
- **Retention of control:** Corporate leaders can perceive unionisation or other worker representative bodies as a time and attention drain that brings little business benefit. Sharing decision-making with workers can be against prevailing norms, sometimes driven by assumptions about workers' low capability to engage in business matters effectively and unwillingness to collaborate.
- **Time:** Building the capacity of local enterprises surrounding sites, so that they are ready to be suppliers at the construction stage, can take time — which developers may not believe they have.

RECOMMENDATIONS FOR PRACTITIONERS

- **Raise the industry's awareness that businesses are ultimately responsible for practices in their supply chain.** In promoting change, various strategies can be applied, including showcasing good practices that corporations can effectively engage to achieve business benefits through responsible approaches, and by providing access to traceability and transparency tools such as the BHRRC Transition Minerals Tracker.
- **Enabling collaboration across the industry** and collectively implementing good labour and Occupational Health and Safety (OHS) practices.
- **Building an understanding of effectively enabling workers' voices in decision-making** by inviting manufacturers and developers to learn from industry leaders to raise ambition.
- **RE developers need to plan well in advance to ensure they build local suppliers' capacities** to deliver during the construction phase. Practitioners can enable this by encouraging the integration of supplier development into national and regional development plans and early community engagement plans.

COMMUNITY PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Risk to rights defenders:** Standing up to poor labour practices and human rights violations carries particularly significant risk in the Global South. This risk may be physical, psychological, or financial, jeopardising the defenders' freedom.
- **The impermanence of opportunities:** RE projects do not require significant amounts of labour or suppliers past construction. Investing in starting an enterprise to supply one specific business targeting one stage of the project lifecycle can be a significant financial and resilience risk.
- **Social norms and structures:** In some cases, existing social structures or norms can undermine livelihood or gender outcomes. For instance, even when training is specifically designed for women on skills that can be used in micro-enterprise suppliers to RE developers, women may not take up job opportunities due to cultural norms of working with men, safety, and expectations of their role in the household.

RECOMMENDATIONS FOR PRACTITIONERS

- **Any work on rights should factor in the risks to workers and communities.** Practitioners should promote collaboration and cooperation between corporations, governments and rights defenders to create safe and enabling environments for engagement.
- **Local supplier capacity building must be sensitive** to the community's norms and interests to support outcomes meaningful to the intended beneficiaries.
- **Local supplier capacity development should include an element of longer-term planning** and, where possible, be interrelated with broader local economic planning.

Jagadhri Block, Karnal State, India - by Prashanth Vishwanathan (IWMI). Contact s.gunawardena@cgiar.org

POLICYMAKER PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Priority to secure transition mineral supply:** Current attention and effort in many Global South countries is to secure transition mineral supply. Once secured, it may be possible to consider the conditions under which they are mined and processed, but few promises or commitments are being made.
- **Falls outside or between traditional remits:** Transition minerals, conditions in RE manufacturing plants and enabling enterprise development through RE often cut across multiple remits within governments, making decision-making and responsibility lines unclear, particularly where government silos are strong.
- **Encouraging local economic development and local manufacture:** Government programmes might be able to support and fund supplier development, if the suppliers are guaranteed access to contracts as part of the RE supply chain. This is particular valuable where the RE companies are not in a position yet to invest in such a costly exercise before operations and revenue flow.

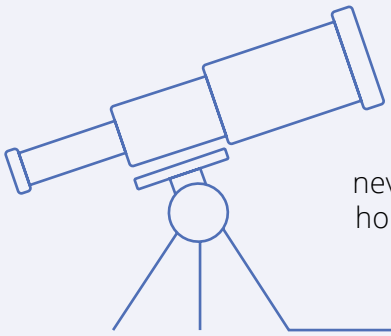
RECOMMENDATIONS FOR PRACTITIONERS

- **Working within the flow of government attention,** finding hooks in the current agenda can help open the door to deeper conversations on supply chain issues. For example, local manufacturing agendas (e.g., Make In India) and trade relations can be supported when countries build a reputation for better labour practices and, therefore, become preferred suppliers.
- Where possible, **engage with the government by creating transition task forces or special bodies** with representatives from across departments or ministries.

Small fishing community, Mpanta, Zambia - Mbeo Ogeya - SEI Africa

Future glimpse

Dominique has wanted to work at the Co-op ever since the solar panel manufacturing plant leader gave a talk at her college in 2025. The thought of having a say in how her company was run, even at a junior level, inspired her. When she learned a role was available in the supplier engagement team, she jumped at it. What if she could support their suppliers in adopting similar models? Dominique was pleasantly surprised by how many local suppliers were in their network and were already keen to learn. Even some of their clients wanted to know more. She'd heard they, too, saw this as a way of attracting the best talent. She feels excited and nervous as she gets ready to talk with her fellow members of the Just Transition Minerals for Renewable Energy Alliance. Today, they heard from her friend Ngoy from the artisanal mining collective in the Democratic Republic of Congo about the results of their ecosystem and community regeneration efforts. Dominique loves that she has gained a friend through their supplier engagement programme. From what she has heard, none of her predecessors got to know people so far into their supply chain, but they never had the data and visibility she had at her fingertips. She hopes to save enough flight credits to make it to Ngoy's family celebrations next year.



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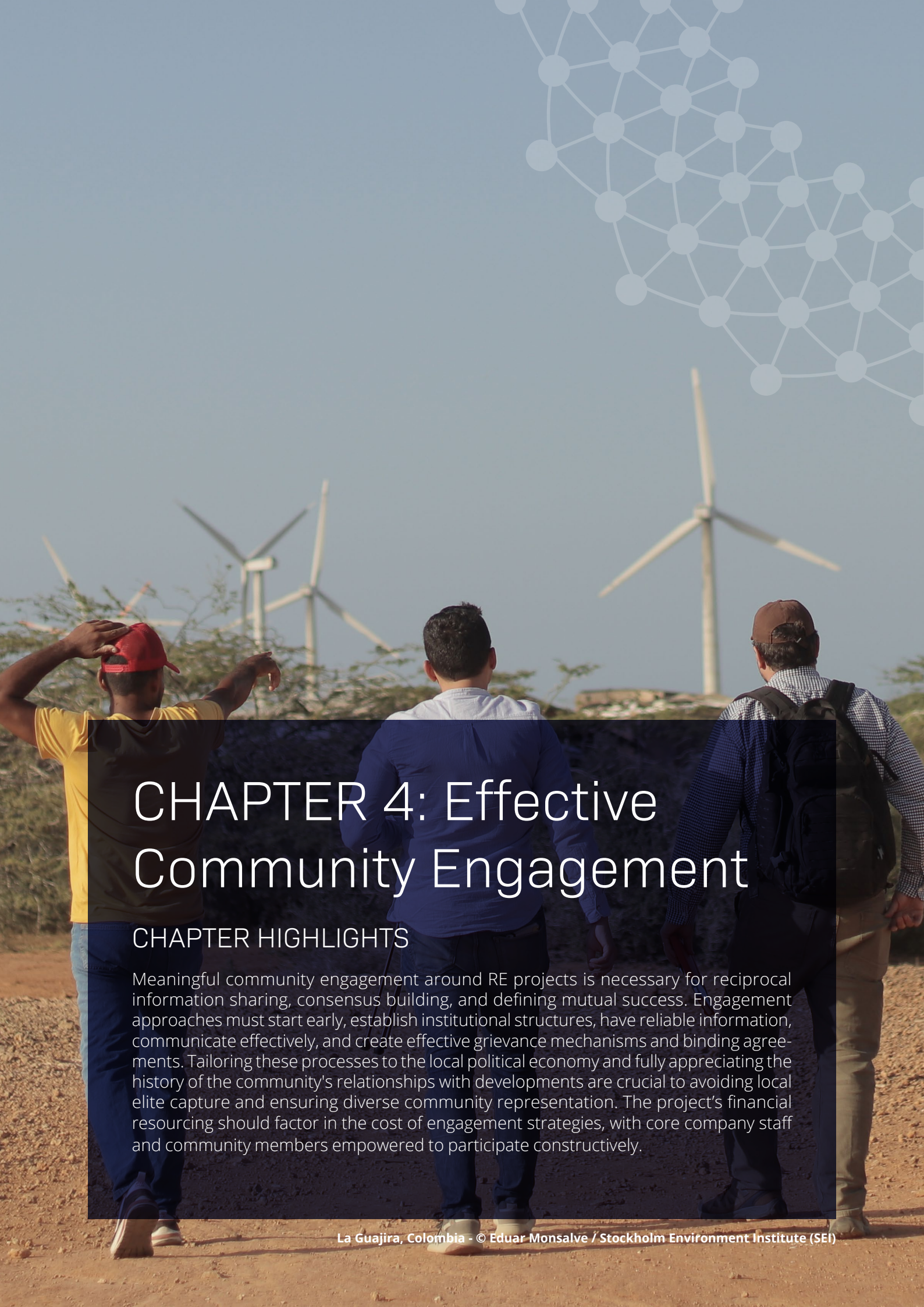


CHAPTER 4: Effective Community Engagement

CHAPTER HIGHLIGHTS

Meaningful community engagement around RE projects is necessary for reciprocal information sharing, consensus building, and defining mutual success. Engagement approaches must start early, establish institutional structures, have reliable information, communicate effectively, and create effective grievance mechanisms and binding agreements. Tailoring these processes to the local political economy and fully appreciating the history of the community's relationships with developments are crucial to avoiding local elite capture and ensuring diverse community representation. The project's financial resourcing should factor in the cost of engagement strategies, with core company staff and community members empowered to participate constructively.

La Guajira, Colombia - © Eduar Monsalve / Stockholm Environment Institute (SEI)

Utility-scale renewable energy projects can trigger multiple interactions between developers and communities who inhabit, use, or transit the land they occupy. This chapter discusses the challenges of these interactions and how community engagement can be done effectively.

Context

A complex interplay between stakeholders affected by RE projects is almost inevitable. Given the long-term nature and scale of these projects, the rights and interests of the community should be safeguarded. When done responsibly, renewable energy projects can benefit communities, particularly those most vulnerable, such as Indigenous Peoples. The question is how the project can generate local development, uphold human rights and protect the environment. Answering this necessitates effective community engagement, which includes close conversations and trust-building processes amongst all stakeholders.

Utility-scale renewable energy projects can be located in rural land or seascapes where livelihoods are under stress from climate change.[1], [2] Often, host communities have experienced trauma from past exclusion, which can be exacerbated through poor engagement efforts and result in heightened distrust and risk of conflict. Social performance is defined as "the direct and positive social impacts on the wellbeing of individuals and communities during the development and implementation of energy projects that effectively and comprehensively improve the lives of people and local communities".[3] Underestimating community-related risks can generally result in insufficient investment in social performance, particularly in community engagement processes. Consequently, minimal or counter-productive community engagement may foster internal community divisions, generate resentment against the project, and, ultimately, impact the project's social acceptance. Project delays and cancellations due to community opposition are costly and nonetheless generally poorly integrated into company risk assessments.

Despite the extensive guidelines available and the legal and/or institutional requirements for community engagement, project time and cost pressures usually result in hurried, superficial, compliance-based practices. Carrying out meaningful community engagement processes under project constraints is a challenge that many large development projects in energy and other sectors share.

Community engagement in practice is guided by norms and regulatory requirements which vary widely in different jurisdictions and for various groups. While stringent practices derived from Free, Prior and Informed Consent (FPIC)[4] apply to Indigenous Peoples in many contexts, community engagement can become a merely transactional requirement guided by intermediaries who may not be aligned with communities' interests, rather than an ongoing dialogue process to ensure long-term sustainability.[5] Furthermore, in many cases, RE projects are exempt from community consultation requirements, such as public hearings, because they are considered inherently green, and therefore, good.

On the other hand, funding institutions, such as the International Finance Corporation (IFC), outline detailed social and environmental safeguards, including provisions for community participation in the projects they finance. The IFC's Performance Standards on Environmental and Social Sustainability provide detailed guidelines for engagement and participation processes.[6] To comply with these standards, developers must periodically report on their implementation to their lenders. Similarly, some private companies have detailed and context-specific community engagement strategies. However, little recourse exists for communities where standards are implemented superficially.

Emerging good practices

Community engagement is a common concept in project development, but is conceived and implemented in widely divergent ways and is highly dependent on the context. Adequate attention and resources are necessary to ensure that engagement strategies are high quality and result in the desired outcomes. Ensuring the participation of all relevant stakeholders, including vulnerable groups, and creating adequate space for them to contribute to decision-making are crucial. Meaningful community engagement is not merely a procedural requirement but a fundamental strategy for fostering a just energy transition.

Engagement should allow for a comprehensive understanding of stakeholder interests and priorities, including the potential synergies for shared prosperity and trade-offs. It is the basis for consensus building and the community's acceptance of the project.

To establish meaningful community engagement, each party must understand what success and coexistence means for the other. While there will always be trade-offs, engagement aims to build joint value through synergies and distribute the costs associated with negative impacts that cannot be avoided or mitigated. Stakeholders often accept a project if they perceive the process has been conducted fairly through their participation and representation. Considering the above, a non-exhaustive chart defining the key stages of a basic model for meaningful community engagement is shown below.

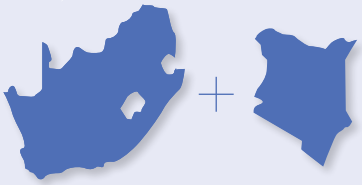
Table 1: Key elements of meaningful engagement

Key element	Description
Early and continuous engagement	Engage with the community early in decision-making, such as the project design process, considering the physical footprint and technology choices. Continue this engagement throughout construction, operation, and decommissioning. Community perspectives are critical not only during construction, when land use, water use, and major construction activities are likely to have negative (and positive) impacts on communities, but also in planning socio economic development programmes.
Institutional structures	Establish or collaborate with existing institutional structures, such as local clubs and women's groups, and harness the local government's commitment to supporting partnerships during the entire lifecycle of the project.

Key element	Description
Community input and generating trustworthy data	Ensure clear and predictable opportunities for community input on key issues such as optimal design to permit the co-existence of established livelihood practices, skill development aligned with the RE project and compensation measures. Pursue local socio economic support, environmental preservation, and remediation measures. Include communities in data generation such as skills mapping. Methodologies such as Participatory Rural Appraisal can be used to survey the landscape, assets, services, and livelihood patterns, informing Environmental Impact Assessments (EIAs) and Environmental and Social Impact Assessments (ESIAs). Create reliable socio economic data and spatial maps with accurate land and resource uses. This approach reflects lived experience and local knowledge, providing a basis for development planning.
Effective and culturally appropriate communication	Develop inclusive communication strategies that are effective and culturally appropriate to ensure all community members understand project details and have their voices heard. This includes using local languages, respecting cultural norms, and employing diverse communication methods tailored to the community's needs. Establishing continuous information-sharing channels between project developers, including their contractors and host communities, is essential.
Grievance mechanisms	Design a robust grievance management process with clear channels for community members to raise concerns, provide feedback, and seek resolution throughout all project phases. Regular reviews and adjustments based on community feedback are essential to maintaining trust and addressing emerging issues promptly.
Binding agreements	Develop binding agreements that outline the responsibilities, participation, ownership, benefits, and obligations of all parties involved. Ensure agreements are accessible and understandable for all relevant stakeholders. Consider mechanisms for periodic review and amendment to adapt to changing circumstances and ensure continued relevance and fairness over the project lifecycle.

Finding a common understanding is the ultimate goal of a community engagement process, and this requires consultations with all relevant groups, particularly vulnerable groups, such as Indigenous Peoples, who are often most at risk of adverse project impacts and have the least ability to claim their rights. In this sense, diversity and inclusivity are crucial in the engagement process. Diversity of knowledge and contexts is relevant, particularly in situations with significant power asymmetries between stakeholders.

Community engagement forums in South Africa and Kenya



In South Africa, some renewable energy projects have experimented with creating formal community engagement forums to establish reliable engagement channels and co-create community socio economic benefit programmes during the operations phase. One project established a forum in response to the community's dissatisfaction with not having input in the design of programmes funded by the community development trust — a mechanism for community shareholding (minimum 2.5%) of the project. Various forums were set up in line with the pillars of the community development strategy: education, youth development, health and wellbeing, and local economic development. They provided a space for community members to meet with the project company's social performance team to discuss current community assets, challenges, and additional support needed to advance the community development strategy.

This case is similar to the Local Community Benefit Sharing Forums (LCBSFs) in Kenya, which recommend and oversee the implementation of development activities at the community level. At the same time, the County Benefit Sharing Committees are responsible for implementing development activities at the county level. See Chapter 5 for more details.

Xazulula "Resolve" — Trauma-informed community leadership development in South Africa

INSPIRE and the Centre for Mental Wellness and Leadership (CMWL) partnered in the project Xazulula — Effective Social Performance in Traumatised Contexts. The project focuses on communities hosting and holding shares in a large-scale RE project by assessing the psychological architecture of the communities and implementing trauma-informed community leadership interventions.[7] The word Xazulula is significant as it explores and uncovers the nature, extent, and depth that stress and trauma have on a community, thereby working to unpack and address the underlying neuropsychological factors. This allows people to recover and build sustainable coping strategies for the individuals and the community at large. Following thorough analysis, the project developed strategies and objectives to address leadership challenges and ultimately provide frameworks, tools, and support to unlock the potential for community development and deepen positive community impact associated with renewable energy shareholding and other benefits. Addressing existing (historical and present-time) societal traumas is key to creating developmental impact.

What has emerged during the implementation of the Xazulula project is a lack of understanding and appreciation of the role that unresolved psychological wounds, whether collective or individual, play in hindering collaboration within and between RE projects and advancin sustainable impact. Moreover, there has been a lack of appreciation of the role of wounded/traumatised leaders in preventing the success of community engagement and development programmes.

Relevant stakeholder insights

COMPANY PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Lack of resources:** Companies can be wary of getting drawn into intra-community conflicts and sometimes find their engagement channelled through local power brokers. Decision-making usually occurs at the company's headquarters, which tends to be far removed from host communities. Bridging those divides takes consistent effort and adequate resources, including financial and staff time. Devoting resources to these processes is challenging. Utility-scale renewable energy projects have relatively long development and construction timelines (2-6 years on average) and do not start yielding profits until they begin commercial operations. Years without financial flows pose a challenge to secure the budget to carry out engagement strategies and meet community expectations.
- **Expectation management:** Companies can be sceptical about engaging with communities and local governments, wary of creating expectations before the project is fully funded and resources are defined.
- **Outsourcing leads to a lack of direct understanding:** Contracting out community engagement can mean company employees are poorly informed.

RECOMMENDATIONS FOR PRACTITIONERS

- **Quantifying the costs of inadequate engagement:** Work with the corporate sector to quantify the costs of inadequate engagement, making the value of a sound engagement strategy better understood. For example, these costs include litigation risk, foregone earnings from delayed commercial operation dates, and security concerns that impair smooth operations.
- **Planning for adequate resources in project budgets:** Community engagement activities should be budgeted in the project's financial modelling and initial investment. Building solid foundations of community and local government relations up front minimises the cost of fixing relationships at a later stage. This is similar to remedying a building's structural errors after the construction is finished.
- **Aligning incentives to social performance:** Management teams in specific projects may have a shorter tenure than the time required to reap the benefits of investing in a good community engagement strategy. Managers might be rewarded for minimising costs and increasing short-term profits. Personal and team incentives and Key Performance Indicators (KPIs) must be aligned with good social performance.
- **Mainstream professional social performance practices throughout project engagement activities:** Ensure appropriate company staff are informed of and participate directly in community engagement processes; that agreements reached with the community are preserved in written form; and that they remain part of the project management portfolio.

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Lack of accessibility:** In the absence of consistent information shared in accessible ways (e.g. local office to lodge grievances and material in local languages), influential actors in the community, including elected representatives from local government, often have earlier access to information that they can leverage to reap whatever benefits a project brings (e.g. land leases, jobs). Even where there are local project officers or community liaison officers, like in Kenya and South Africa, companies can be found to establish digital grievance procedures for community members to voice their concerns. Yet such approaches that avoid direct interaction may not be appropriate in certain contexts. Increasingly, the social divide is widening with automation. An RE project, remotely managed, in a remote location, does not require constant physical presence of technical staff on site, widening the gulf between company and community.

- **Superficial engagement:** Local communities are commonly briefed on the project through workshop or public hearing, where presentations are made, and communities can ask questions. This is usually offered in the local language. However, the predominant belief may be that the project will go ahead regardless of the community's inputs being valued or welcomed as part of the project's design.

- **Scepticism based on previous negative experiences:** Previous engagements with external actors in the same geography may have left communities feeling powerless to determine the project outcome. Memories of such experiences could also have been passed down through generations

RECOMMENDATIONS FOR PRACTITIONERS

- **Effective community liaisons:** Establishing a working community engagement forum can enable information-sharing and a more robust grievance redressal process. This communication channel informs the community of emerging opportunities (e.g., short-term or long-term employment, service requests, and more).

- **Use appropriate participatory methodologies** for community consultations to gain and build on local knowledge and gain understanding and buy-in for project-related and social performance alternatives. The community's needs and priorities should drive the engagement process. It is advisable to use community-based groups with the capacity and trust to work at the local level as intermediaries rather than professional consultants from outside the community, but it is essential to be aware of local bias.

- **Boosting communication through digital networks**: Not all community members, especially pastoralist communities, can access telephones or regular electricity to charge their devices. Conversely, this presents an opportunity for further infrastructural development, increasing the community's social and economic well-being.

- **Trauma-informed engagement:** Design trauma-informed engagement processes to ensure psychological safety and allow everyone to participate fully. For instance, social practitioners and community shareholders in South Africa received training in trauma-informed leadership approaches to community engagement and development (See Case Study 8).

POLICYMAKER PERSPECTIVE

CHALLENGES AND OPPORTUNITIES COMMONLY RAISED

- **Capacity and competing priorities:** Effective regulations and policies are pivotal in ensuring fair processes, particularly clearance and auctioning procedures. When accompanied by effective implementation and accountability structures, these mechanisms establish standards for procedural due diligence and robust tools for promoting best practices. However, their effectiveness hinges on the political will and administrative capacity to enforce them.

- **Lack of effective enforcement mechanisms:** Enforcement of procedural rights can be a challenge, especially in regions where judicial and administrative systems are ineffective or inaccessible. Strengthening the legal basis and administrative and judicial structures to enforce community engagement obligations and mechanisms for accountability and justice are essential for fostering meaningful community involvement in project development.

RECOMMENDATIONS FOR PRACTITIONERS

- **Support policy development and institutional capacity building for participatory development**, drawing on domestic constitutional and other legal provisions as well as relevant international guidance (e.g. Food and Agriculture Organisation (FAO) Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries). [8]

- **Adopt a systematic and systemic approach:** Drawing from a triple helix approach of community, conservation, and collaboration suggested by National Geographic and African People and Wildlife, the government should uphold and ensure effective implementation of the principles of effective community engagement through relevant policy and regulatory frameworks.[9] It emphasises recognising communities as creators of programmes, environmental entrepreneurs, and catalysts of change.

- **Legislated community capacity support:** Local communities often lack the capacities to comprehensively understand the implications of a renewable energy project and foster positive long-term impacts. Indigenous communities may request an adviser during the process of Free Prior Informed Consent (FPIC), such as in Colombia[10] and Peru.[11] However, establishing a regulated mechanism for providing such services, as well as the best advisory practices and funding alternatives, is sorely needed in many contexts.

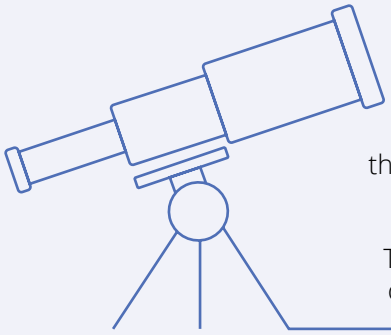
Workshop in Johannesburg, South Africa - Holle Wlokas - INSPIRE

Future glimpse

"Yesterday was an incredible day", Thandiwe wrote in her journal. The journal has grown into many books in the two decades since her early twenties. She started it when she spent six months, in 2026, in the Initiative for Social Performance in Renewable Energy's (INSPIRE's) social performance programme for rising leaders in the renewable energy sector. The early entries reflect some difficult days. Conflicts with her social performance department manager or stories about sexual abuse or violence in the communities where she worked left her depleted. She wanted to hide and not leave her bed, let alone return to work the next day.

However, the training and a degree in social development with psychology as a major were the best preparation for her role as the bridge between the RE company and the communities where they work. Her last two decades have been based on a fundamental understanding of herself, her wounds, her triggers, and how to take care of and sustain her energy. She even mentors young professionals on this trauma-informed approach.

She suddenly flashed back to the day she knew she needed the INSPIRE training. She was meant to attend a community forum meeting with a project construction manager, who looked frightfully similar to an apartheid politician. By chance, he couldn't attend that day, and the conversation with the community flowed much better than in previous engagements. In the end, she asked for feedback about the meeting, and a quiet old woman stood up and said: "we finally felt that we could speak freely. The manager you usually have with you reminds us so much of past injustices. Our hearts freeze when we see him, and it's hard to want to join hands. Without him in the room, we feel better. Please leave him at the office in future, and we can hear you better". The community's trauma from the past was triggered by the sight of this man, who unfortunately looked so similar to the former politician that they could not concentrate on the opportunities Thandiwe was discussing.



Today's entry is so different. Yesterday, she witnessed the quiet old woman's son become a member of the RE company board.

FURTHER READINGS

- Clean Energy Council, 2018, COMMUNITY ENGAGEMENT GUIDELINES For the Australian Wind Industry
- USAID, 2018, GUIDE TO COMMUNITY ENGAGEMENT FOR POWER PROJECTS IN KENYA
- BRE National Solar Centre, 2015, Community Engagement Good Practice Guidance for Solar Farms
- Taryn Lane and Jarra Hicks, 2014, Best practice community engagement in wind development
- Stockholm Environment Institute, 2024, Enabling factors of social acceptance of wind energy projects in La Guajira
- Initiative for Social Performance in Renewable Energy, 2020, Committing to community engagement
- Iniciativa Climática de México, 2020, Lineamientos para el Desarrollo de Proyectos de Energía Renovable Participativos, Incluyentes y Transpatrentes

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[2] Santos da Silva et. al., 2021, Power sector investment implications of climate impacts on renewable resources in Latin America and the Caribbean

[3] Institute for Advanced Sustainability Studies, 2021, The Social Performance Approach: Fostering community well-being through energy-sector investments

[4] Institute for Human Rights and Business, 2022, What is Free, Prior and Informed Consent (FPIC)?

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[6] International Finance Corporation, 2012, IFC's Performance Standards on Environmental and Social Sustainability

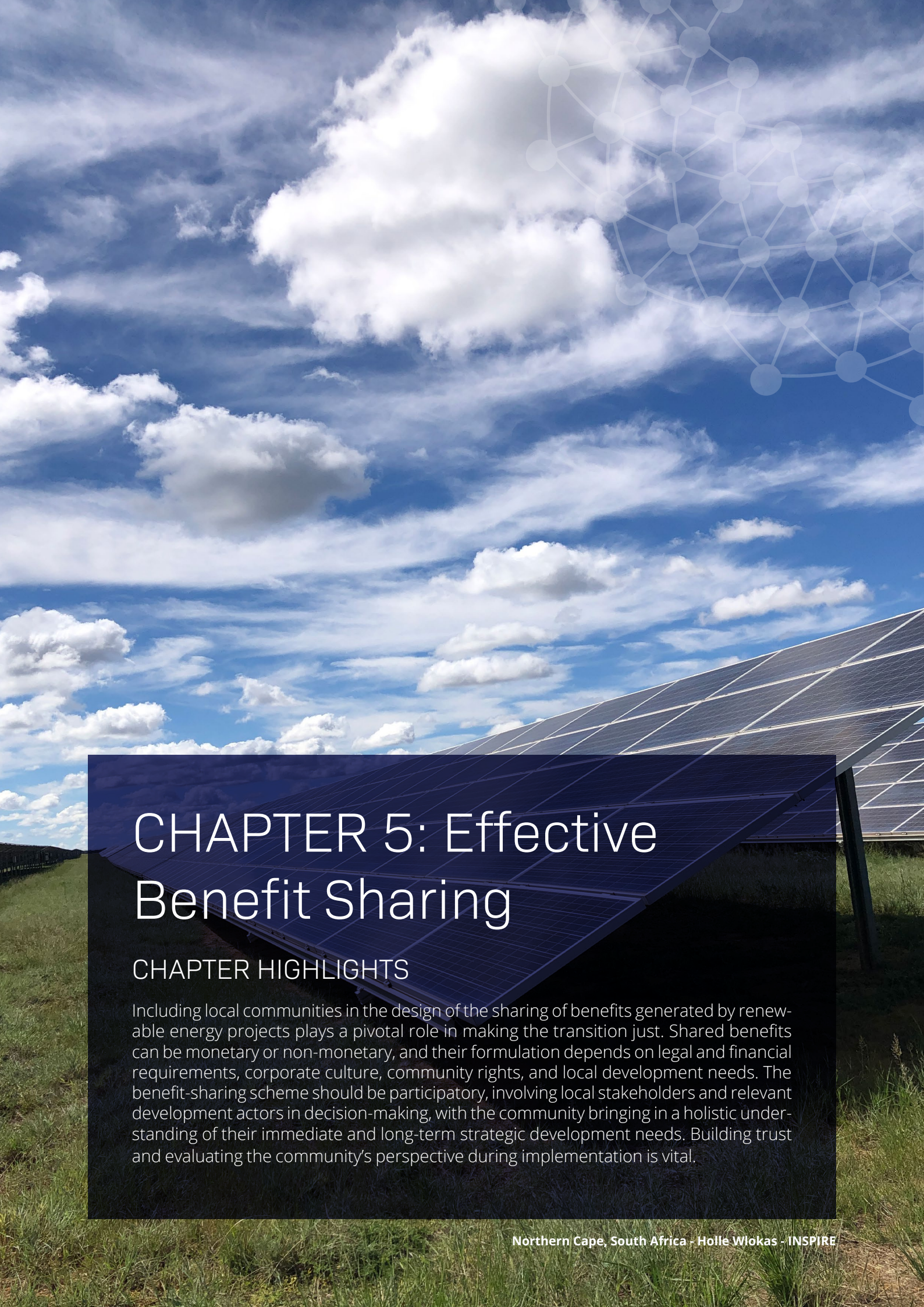
[7] Initiative for Social Performance in Renewable Energy, 2024, Trauma-informed leadership in Community Development: A case study of the Xazulula project in South Africa

[8] Food and Agriculture Organization, Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication [Accessed in June 2024]

[9] National Geographic Society and African People & Wildlife, 2019, Community, conservation, and collaboration: A framework for success. National Geographic Society

[10] Corte Constitucional República de Colombia, Sentencia T-969/14

11] Ministerio de Cultura. Perú, 2013, Consulta a los Pueblos Indígenas. Guía Metodológica



CHAPTER 5: Effective Benefit Sharing

CHAPTER HIGHLIGHTS

Including local communities in the design of the sharing of benefits generated by renewable energy projects plays a pivotal role in making the transition just. Shared benefits can be monetary or non-monetary, and their formulation depends on legal and financial requirements, corporate culture, community rights, and local development needs. The benefit-sharing scheme should be participatory, involving local stakeholders and relevant development actors in decision-making, with the community bringing in a holistic understanding of their immediate and long-term strategic development needs. Building trust and evaluating the community's perspective during implementation is vital.

Northern Cape, South Africa - Holle Wlokas - INSPIRE

Renewable energy projects can enable a just transition by ensuring direct benefits flow to local host communities. Benefit sharing means giving local populations part of a project's added value in recognition of the critical enabling role they and their surrounding ecosystems play. This chapter discusses how to share benefits and provides examples of where different methods have been effectively deployed.

Context

Shared benefits can be defined as contributions made by a project to local communities that help improve living conditions and build skills, reducing vulnerability and strengthening cohesion. If devised in a culturally appropriate and conflict-sensitive way, benefit sharing helps foster local socio economic development and creates good relations between the project and regional stakeholders, increasing the project's social acceptance.

Benefit sharing differs from infrastructure, assets, and amenities brought to facilitate project execution. Examples of the latter include constructing roads for the transport of materials. Other social amenities for construction workers shared with the community members also do not constitute benefit sharing. Similarly, shared benefits are distinct from measures to mitigate negative impacts or compensate for loss where avoidance is impossible, such as restoring natural habitats.

Benefits can take various forms, monetary and non-monetary, including technology or equipment, skill-, knowledge-, and capacity building, such as technical assistance in livelihood development, community infrastructure and social services. The mix of investments and the form, timing, and allocation of benefits should be determined in a participatory fashion. Community needs assessments and engagement mechanisms (see Chapter 4) must be sustained throughout the project lifecycle. They should clarify and codify mutual expectations, monitor progress, and allow joint troubleshooting and adaptation during project implementation. Sustainability beyond project closure is essential and is fostered through well-targeted benefit sharing.

La Guajira, Colombia - © Eduar Monsalve / Stockholm Environment Institute (SEI)

Emerging good practices

The practice of benefit sharing draws on traditions and frameworks of community development and related disciplines (e.g. local economic development, urban planning, social development, and psychology). This chapter provides a high-level overview of key considerations when planning, prioritising, implementing, and monitoring community benefit schemes.

How to get benefit sharing right	**How to choose the benefit-sharing scheme?**	Benefit-sharing schemes depend on the local context and involve stakeholder discussions and negotiations. The choice is influenced by various factors such as legal and financial requirements, corporate culture, community rights, local development needs, and project-specific potential to generate benefits.
	How to design the benefit-sharing scheme for long-term strategic impact?	The design should be a participatory process that considers the community's needs and involves them in decision-making. In collaboration with the community and other relevant development actors, strategic planning can achieve long-term benefits. Ideally, representatives of the community and key organisations should take leadership roles in planning, implementing, and monitoring benefit-sharing activities.[1]
	How to implement shared benefits?	Implementation should consider the community's perspective, build trust, and involve developer representatives who understand the local context and community. Stakeholder capacity building may be required.
	How to monitor benefit-sharing impacts?	Monitoring mechanisms should involve all stakeholders and focus on a manageable number of key output, outcome, and impact indicators. Data collection and analysis need to inform practice learning and review. Benefit-sharing schemes should be reviewed regularly and when community development priorities change.

CHOOSING A BENEFIT-SHARING SCHEME

Benefit-sharing schemes highly depend on the country- and region-specific context; no consistent methodology or silver bullet exists. Some countries have specific benchmarks for mandatory compliance, while others may have voluntary guidelines. In either case, minimum standards for benefit sharing should be established to manage expectations based on discussions and negotiations with relevant stakeholders — the developer, the community, and the various spheres of government. This takes place in an iterative process that depends on multiple considerations, including construction and operating costs, grid connection costs, interest rates, resource quality, and electricity costs.

In general, determining shared benefits depends on a series of considerations:[2]

- Legal and financial requirements
- Corporate culture
- Community and stakeholder rights and claims
- Local development needs
- Project-specific potential to generate benefits
- Broader considerations regarding social acceptance (e.g., history of conflict, land tenure insecurity, multidimensional poverty and unemployment levels, legacies and trauma from other large development interventions, presence of vulnerable groups, including Indigenous Peoples, etc.)

DESIGNING BENEFIT-SHARING SCHEMES FOR LONG-TERM STRATEGIC IMPACT

Community members should be at the centre of the design and implementation of the benefit-sharing mechanism. A unilaterally conceived benefit-sharing package devised by the renewable energy company alone is a missed opportunity to build bridges. It will result in a less effective programme that does not adequately consider community interests or give them a direct voice in decision-making. For more information about community engagement practices, see Chapter 4.

Long-term benefits can be achieved if the project is undertaken with a strategic impact objective (e.g., to improve education in the area). Initiatives executed in isolation from other ongoing development activities in the area tend to be less effective than strategic investments planned for and implemented in partnership with local stakeholders and institutions. Ideally, community members become leaders of the benefit-sharing scheme, and local implementation capacity is built. For example, if the mechanism is related to revenue sharing, communities could monitor revenue and inform residents about project performance; if the mechanism is related to public services, community members can play various roles in delivery.

IMPLEMENTING A BENEFIT-SHARING SCHEME FOR LONG-TERM IMPACT

A community's worldview, knowledge and underlying assumptions may be different from those of developers. Such differences are likely to surface throughout the implementation of the benefit-sharing scheme. There is a need for continuous exchange between stakeholders to build trust. The presence of company representatives, particularly skilled social performance practitioners, is often invaluable. Practitioners can become deeply familiar with a community's ways of life and internal dynamics and understand their perspectives and capacities. Appreciating existing local assets (social, financial, etc.) is advisable, as it supports filling capacity gaps and enables community and local government stakeholders to implement benefit schemes and manage investments effectively.

MONITORING BENEFIT-SHARING SCHEME IMPACTS

Establishing feedback mechanisms and a participatory monitoring and evaluation system that builds accountability and tracks progress and barriers to implementation is crucial. Participatory monitoring should involve legitimate representatives of all concerned stakeholders, from local governments and communities to public officials and private sector representatives, including contractors. A monitoring plan should focus on several crucial output, outcome, and impact indicators suitable to track progress made towards defined objectives.[3] Benefit-sharing schemes should be reviewed regularly or whenever there is a significant change in the project's operational context, such as shareholding changes or project expansions. This should be done through an agreed-upon guideline or procedure between the company and the community.

Opportunities for benefit sharing

Over time, various categorisations for benefit sharing have emerged based on specific national experiences[4], [5] or technologies.[6], [7] Attempts have been made to create a broader taxonomy encompassing multiple renewable energy technologies and countries. Notably, the 2019 report on benefit sharing in the context of large-scale wind and solar projects by the International Finance Corporation (IFC)[8] is adapted to present practice examples.

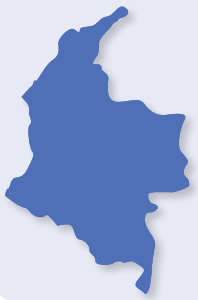
Figure 3: Spectrum of benefit-sharing opportunities (IFC, 2019)

SPECTRUM OF BENEFIT-SHARING OPPORTUNITIES		
	Revenue sharing and shared ownership	Recurring payments to local government and community
		Preferential electricity rates and discounts
		Shared ownership
	Skills and livelihoods	Employment and local procurement
		Alternative skills and livelihoods
		Local institutional capacity building
	Public services and infrastructure	Basic service provision and infrastructure
		Community well-being and amenity improvements
		Energy services
	Environmental stewardship	Environmental enhancements
		Low-carbon community development

REVENUE SHARING AND SHARED OWNERSHIP

This category of benefits includes financial and ownership structures where developers, employees, local community members and landowners participate in managing a renewable energy venture and share in its profits. Income generated from the project could be distributed among these stakeholders based on predefined agreements. Shared ownership is a collaborative investment model where multiple parties hold ownership stakes in the project. These may take different forms, examples of which we have set out below.

Mandatory financial transfers to local stakeholders in Colombia



Regulation in Colombia mandates power generation companies to make financial transfers to the communities and municipalities in which generation plants are located. These electricity sector transfers are calculated as a percentage of gross electricity sales. Transfers will gradually increase from 1% to 6% of sales for new RE projects and up to 4% for already-operating plants. This regulation applies only to RE projects located in areas with above national average wind speeds and solar radiation. The resulting funds are allocated to projects in infrastructure, public services, basic sanitation, and/or drinking water, as well as in projects defined by local communities.[9], [10]

Royalties payment in Kenya

The Kenya Natural Resource Benefits Sharing Bill (2020) sets the expectation that benefits from natural resource exploitation should be shared equitably, transparently, and inclusively among developers, the national government, county governments, and affected communities. Solar and wind are included in the list of natural resources alongside water, biodiversity, and industrial fishing. Through a consultative process, the Commission of Revenue Allocation (CRA) will determine the amount of royalties to be collected in consideration of, amongst other things, capital investment, prevailing international market conditions, impact on local communities, commercial viability of natural resources being exploited and obligations of the developer. 20% of the royalties collected will be paid into the sovereign wealth fund, and 80% will be shared between national and county governments in a ratio of 3:2. 60% of the sovereign fund shall be paid to the future fund for end-of-life waste management and 40% to the natural resource fund. 40% of the county government funds shall be channelled to the affected communities for local development, and 60% shall be held by the county governments for whole-of-county development activities, following the principle of "leave no one behind". County benefit-sharing committees will be in charge of implementing development activities at the county level, while local community benefit-sharing forums (LCBSF) shall recommend and oversee the implementation of development activities at the community level.[11]

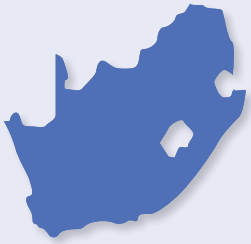
Preferential electricity rates and discounts

Wind farm electrifies the local community in Tanzania

The Mwengeni wind project provides affordable electricity to regional residents. The project sells electricity to national utility companies and distributes electricity to over 6,000 local connections. The company behind the Mwengeni project supported the expansion of the national grid to reach additional residents and businesses. Customers of the local connections pay less for electricity than other national grid customers. The company is cross-subsidising to ensure an affordable local electricity supply. In addition, the Mwengeni project is implementing further benefit sharing to boost local economic development. Activities include support for low-income households in purchasing domestic appliances, free training on the safety and productive use of electricity, and electricity supply at discounted prices to the elderly and people with disabilities. This ambitious benefit-sharing programme is driven by socially-minded company culture and extensive partnership work to bring together funders and implementation partners.

Shared ownership

Mandatory community ownership in South Africa's renewable energy procurement programme



South Africa's Renewable Energy Independent Power Producer Programme (REIPPPP) has been deemed a unique policy innovation, significantly influencing the country's energy transition.[12] The programme mandates renewable energy companies to contribute to economic development in communities within a 50km radius of the district municipal boundary of their power projects. One of the progressive economic development requirements stipulates that a minimum of 2.5% community shareholding needs to be allocated to an entity representing historically disadvantaged communities. The programme's forward-looking perspective focuses on economic commitments that need to be complied with over the 20-year contract period of the power projects, and to date, projects have allocated an average of 9% of total project shareholding to local communities.[13] While this programme is not without challenges, it is nevertheless encouraging progress towards shared ownership.[14]

Indigenous communities as shareholders of utility-scale solar in Argentina

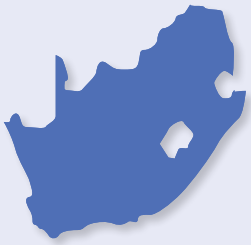
Meliquina designed the 18 MW solar project ANTÚ 1 in collaboration with the Mapuche Millaqueo Indigenous community in rural Argentina. Since its design phase, the Mapuche Millaqueo community has played a central role in the project as partners, landowners, co-developers, and shareholders. As there is no legal mandate for shared ownership, this is a unique example of a private developer company partnering with an Indigenous community to develop a solar project. The community holds partial ownership of the project in exchange for the land lease, local knowledge, acceptance, and participation. Meliquina's model[15] sees the partnership with the local communities not as a required social contribution but as a competitive advantage for their projects. This perspective implies a shift in the role of Indigenous communities from passive benefit recipients to active and equal partners.

SKILLS AND LIVELIHOODS

RE projects can build skills and improve employment prospects for local labour and businesses. Various jobs are created over the course of the project's lifecycle. Job opportunities include construction workers, technicians, engineers, and administrative staff. Specialised expertise is required in engineering, technical fields, project management, environmental science, and data analysis. When a longer-term perspective is taken to recruitment and local supplier procurement, individuals can gain valuable training and experience, increasing their employability beyond the project's lifecycle.

Additionally, renewable energy projects can stimulate local economies by creating demand for local services and products, promoting long-term employment and entrepreneurial opportunities. The projects can also offer opportunities to build institutional capacity. Whether jobs are provided to members of the local communities and the economic stimulation is sustained depends on the ability of the project company to act on its close proximity to local residents. Where mutually beneficial relationships are created, companies will experience lower risks of construction and operation delays, reduced litigation, and a lessening of cost increases in doing business in a conflictual environment.

Community involvement in monitoring and evaluating (M&E) benefit sharing in South Africa



The Perdekraal East Wind Farm in South Africa started a project in 2023 to train local community members, including Black youth and women, to work in capturing monitoring and evaluation (M&E) data about the wind farm social projects. The objective was to develop local M&E practitioners, create job opportunities, and establish a sustainable local M&E business entity.

The project was replicated by several other RE Power Producers in South Africa. For instance, the Kangnas Wind Farm implemented an innovative M&E incubation programme over two years, starting in November 2021. This initiative, developed with the Africa Foundation for Sustainable Development, focused on training and mentoring five young women from the Nama Khoi municipality to establish a business providing M&E services. The start-up business now actively contributes to the local economy and enhances the effectiveness of community development projects.

Another case with remarkable long-term impact is the Loeriesfontein Data Collection Specialists, established by young local entrepreneurs after participating in an M&E training programme funded by Khobab and Loeriesfontein Wind Farms. This company has become a leading data-capturing agency, providing services for various local projects and significantly contributing to the town's economic growth. Additionally, Noupoort Data Analysts, a women-owned small enterprise, was founded following an intensive M&E training programme supported by Noupoort Wind Farm. This entity provides research and data collection services for community projects, contributing to local socio economic development.

Promoting national heritage in India

Through its flagship program, Charkha, JSW Energy highlights and responds to the challenges weavers face by promoting the Indian handloom sector. JSW has established 17 training facilities to empower rural women and enhance their financial independence through long-term livelihoods. In 2023, more than 430 craftswomen from Sholtu and Kutehr, Himachal Pradesh, joined the training.[16]

Enhancing the quality of education in India

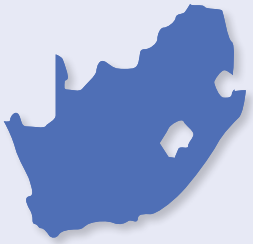
The Asha Education Centres provide education for children who lack access to the formal system, support them in exploring career paths, and train local women to be teachers. They operate in Rajasthan, Madhya Pradesh, and other Indian states and are run by Hero Future Energies (an RE company) and the Raman Kant Munjal Foundation Trust. The centres aim to create a community of capable teachers who can enable other teachers to help students grow. This is particularly valuable where high-quality teacher training is difficult to access.[17]

An innovative approach to entrepreneurship development at Umoya Wind Farm in South Africa

The Umoya Wind Farm created a business capacity-building programme with local community members. The chosen entrepreneurs were trained by established local business leaders. The entrepreneurs were incentivised to complete the training by the prospect of winning small contracts for their new businesses. The contracts would grow as more training modules were completed and helped the entrepreneurs get their businesses off the ground. In this model, the established local businesses and the students came from the same community. The success of the new small businesses became a relatable inspiration to others.

Local institutional capacity building

Creating capacities in community shareholding trusts in South Africa



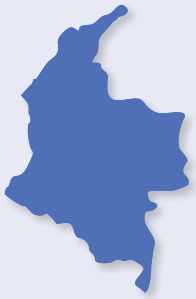
In South Africa, communities participate in renewable energy projects through government-mandated community shareholding and other required community investments. However, community shareholding entities are deemed vulnerable and need more capacity to govern and manage their revenue income effectively. A platform was created where community trusts can connect, learn from one another, and collaborate to maximise the developmental benefits possible for their respective communities.[18] The objectives of this initiative include creating networking opportunities, fostering best practices and building capacity.

PUBLIC SERVICES AND INFRASTRUCTURE

This type of benefit sharing involves the development of infrastructure and community services. These can encompass but are not limited to increasing access to energy, educational facilities, health and cultural centres, markets, recreational areas, public lighting systems, and water facilities.

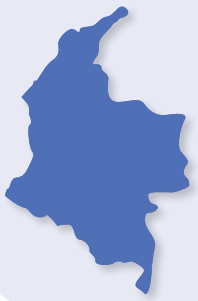
Basic services provision and infrastructure

Funding the construction of Indigenous towns in Colombia



The Terra Initiative is a 162 MW solar project in Colombia in the territory of the Arhuaco Indigenous People. The project's capital investments include the construction of three Indigenous towns next to the solar plants, which will provide housing for 150 families (~1,000 people), each with water sources, traditional schools, health clinics, farms, and clean energy. The community is responsible for the design, resource management, and construction of the towns, which have been planned under the traditional guidelines established by their highest authorities, thus guaranteeing the preservation of their traditions and culture.[19]

Supporting the development of community "Planes de Vida" (Life Plans) in Colombia



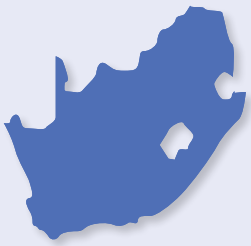
In Colombia, Life Plans is an autonomous planning tool for Indigenous communities that defines concrete actions to strengthen cultural, social, political, economic, and cultural aspects based on communities' worldviews and interests. The tool produces officially recognised documents describing the changes a community wants to achieve and its various land uses. Jemeiwaa Ka' I wind energy complex in La Guajira has supported the creation of Wayuu communities' Life Plans to strengthen self-governance structures, identify local development priorities and facilitate community planning and management while integrating their concept of well-being. During the development of Life Plans, Wayuu communities identified energy access as pivotal for their social and economic progress. In response, Jemeiwaa Ka' I forged strategic partnerships to implement rural electrification initiatives intended to provide reliable energy to communities currently lacking this essential service.[20]

ENVIRONMENTAL STEWARDSHIP

Environmental stewardship consists of maintaining or improving the local ecosystem. It is important not to confuse such actions with remediation of impacts from a power plant's installation and operation. Examples of this type of benefit sharing include reforestation programmes, projects to improve households' energy efficiency, and building sustainable local economies resilient to climate and disaster risks.

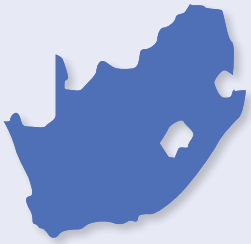
Environmental enhancements

Biodiversity conservation and local economic development in South Africa



The Perdekraal East Wind Farm Biodiversity Project aims to improve biodiversity conservation, ecosystem preservation, resilience to climate change, and protection of water resources. The initiative includes activities such as environmental education, ecological monitoring patrols, and asset management. The project's success is rooted in effective collaboration with key stakeholders such as municipalities, agricultural departments, local schools, and community members.

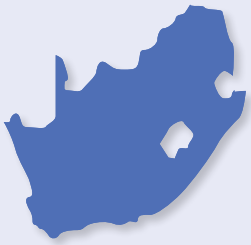
Wind farms collaborate in environmental stewardship initiative in South Africa



The Greater Kromme Stewardship (GKS) is a conservation initiative in the Eastern Cape focused on protecting the unique biodiversity of the Greater Kromme area, home to many endangered species and ecosystems exclusive to the region. Named after the vital Kromme River, the GKS aims to preserve critical habitats and biodiversity in the Kouga-Koukamma region beyond offsetting the environmental impacts of local wind farms. The initiative involves a partnership among several wind farms, farmers, conservationists, government bodies, and the local Kromme Enviro-Trust NGO. Together, they use a Biodiversity Stewardship approach, a legal framework that enables the creation of private nature reserves with fewer legal hurdles, fostering conservation on private lands. This collaborative approach has led to the establishment of two new nature reserves, demonstrating how renewable energy projects can incorporate significant environmental sustainability measures and emphasise the importance of cooperative efforts in conservation.

Low-carbon community development

Wind farm funds home improvement programme in South Africa



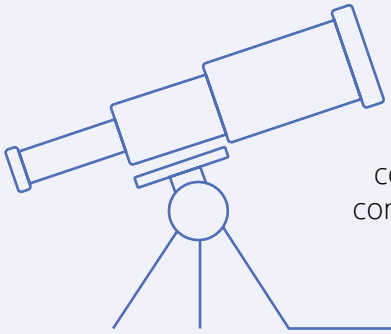
Driven by the national policy requirements for renewable energy projects to invest in socio economic and enterprise development in local communities, the Home Improvement Programme at the Umoya wind energy farm focuses on enhancing the energy efficiency of low-cost homes and providing vocational training to unemployed members of the local community. Initially aimed at boosting energy efficiency, the project's second phase emphasises skills development in plumbing, electrical work, and carpentry. The programme provides employment and entrepreneurship support and improves living conditions by installing solar water heaters, insulated ceilings, and energy-efficient lighting. It also offers extensive training in business skills and mentoring for community-based enterprises, and it plans to expand these services to more homes and towns. This initiative not only improves health, education, and gender equality by providing better access to hot water but also fosters significant community development.

Future glimpse

Priyanka remembers when people came to talk about the first solar park in 2025. It was a heated discussion, not least because the AC in the old hall wasn't working due to one of the common power cuts in those days. She was sceptical that anything would really change. She'd heard the stories of what had happened in a couple of neighbouring districts.

Years later, as she walks her son to school before heading to her nursing practice, she knows the school and hospital buildings would not exist without the solar park. Her uncle still works with Legendary Builders, who constructed both buildings and continue to help with repairs. The initial injection of money from the solar project's CSR fund for local infrastructure meant that Legendary could demonstrate their experience, and from then on, they've worked across the state.

Power cuts don't worry her as she flicks the switch for the monitors. She knows she will have electricity to perform the day's scheduled procedures. Today will be busy! Later that evening, she will attend the shareholders' meet-up. It's a big day for the representatives of the community shareholder trusts across the District. Priyanka enjoyed the last one despite being tired from work. She was inspired by some of the ideas from other communities that now have an emerging ecotourism and conservation sector. Priyanka loves her town by the river and is sure others would love to visit, too.



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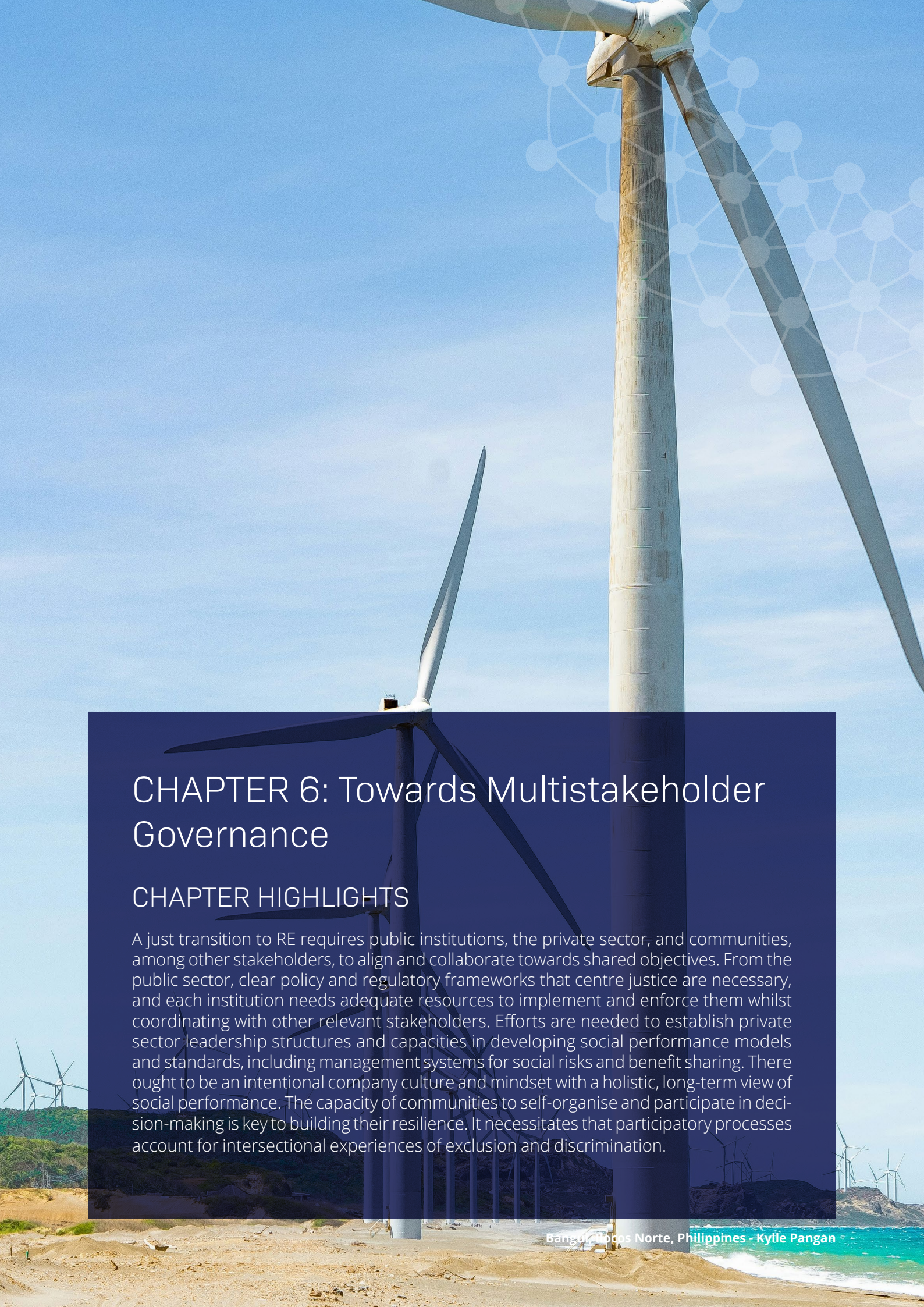


CHAPTER 6: Towards Multistakeholder Governance

CHAPTER HIGHLIGHTS

A just transition to RE requires public institutions, the private sector, and communities, among other stakeholders, to align and collaborate towards shared objectives. From the public sector, clear policy and regulatory frameworks that centre justice are necessary, and each institution needs adequate resources to implement and enforce them whilst coordinating with other relevant stakeholders. Efforts are needed to establish private sector leadership structures and capacities in developing social performance models and standards, including management systems for social risks and benefit sharing. There ought to be an intentional company culture and mindset with a holistic, long-term view of social performance. The capacity of communities to self-organise and participate in decision-making is key to building their resilience. It necessitates that participatory processes account for intersectional experiences of exclusion and discrimination.

Bangui, Ilocos Norte, Philippines - Kylle Pangan

Previous chapters presented many good practices and recommendations for the socially responsible implementation of utility-scale renewable energy. These actions cannot be undertaken alone. They require public institutions, the private sector, and communities, among other stakeholders, to align and collaborate behind a common vision.

The policies, accountability, and institutional capacities of all relevant actors are crucial enabling factors for achieving a just energy transition. Institutional capacity includes the quality of leadership and technical expertise, as well as the commitments, systems, and resources to set goals and implement actions to achieve them.[1] They are underpinned by legal and organisational frameworks and must effectively coordinate across stakeholders, manage competing interests, enforce regulations, innovate, and adapt to new challenges and opportunities.[2]

Effective public institutions

Ultimately, the public sector sets the rules and determines a country's decarbonisation paradigm and modes of implementation. Government agencies at all levels must, therefore, be adequately resourced and capacitated to guide the energy system transformations — and the knock-on effects on other parts of the economy and society — in a just manner. Creating a functional public institutional system that can guide action and demand accountability requires many key building blocks, including:

Policy and regulatory frameworks defining the objectives, means, and pace of the energy transition at national and subnational levels. Policies include subsidies, quality controls and penalties, and standards and guidelines to direct investment towards renewable energy, facilitate the provision of key factors of production (land, water, skilled labour, etc.), and mitigate social and environmental impacts.

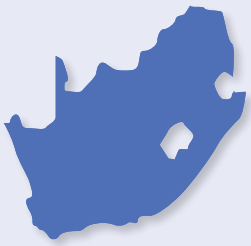
Adequate decision-making power and human and financial resources are needed for the effective performance of institutions relevant to the sector. These include planning entities that translate overarching policy goals into specific spatial, sectoral, and resource allocation decisions. They also include accountability institutions, such as courts, ombudsmen, right-to-information structures, and human rights and anti-corruption organisations that monitor and enforce rules, ensuring compliance with social commitments by companies and the government.

Effective coordination mechanisms among different spheres and sectors of government are needed to mainstream environmental and socio economic policies and ensure national, regional, and local coherence. Mechanisms such as interministerial commissions and joint task forces can promote coordination and convene dialogue and knowledge transfer across agencies and jurisdictions. The ideal are co-ordination platforms that synchronise the contributions of other sectors as well as government - private sector, civil society, labour, academia.

Governments worldwide are challenged by the task of transforming national and regional energy systems in an ever-changing context of technological innovation, competing policy objectives, and economic interests.

A just transition would be greatly facilitated if national policies included justice as a central element of energy system transformation and corresponding metrics are embedded in laws, budgets, staffing choices, and capacity development. For example, auction eligibility mechanisms and awarding criteria can go beyond price and include social and economic development criteria such as supporting local workforce training programmes, strengthening local supply chains, evidence of social risks analysis, communication plans detailing methods for engaging with local actors, and monitoring and evaluation plans.

Justice in South Africa's Renewable Energy Independent Power Production Procurement Programme (REIPPPP)



As mentioned in previous chapters, South Africa's Renewable Energy Independent Power Production Procurement Programme (REIPPPP) has been globally lauded as a visionary policy instrument in just energy transition. REIPPPP is South Africa's public sector auction programme for utility-scale RE designed to leverage energy transition for national and local economic development. The first five auction rounds selected projects based on energy tariffs and economic development commitments. The four economic development requirements in support of local economies and communities include job creation, socio economic development, enterprise development, and local ownership, channelling significant resources to improve livelihoods and quality of life.

To date, the industry has collectively committed R23 billion (USD ~1.2 billion), of which R1.384 billion (USD ~76 million) for socio economic and enterprise development has been spent.[3] The critical question is whether these significant resources will result in meaningful development impact for the communities. This uncertainty is rooted in concerns over monitoring and evaluation and a steep learning curve for all stakeholders on community engagement and development practices.

A socially responsible private sector

The RE industry is experiencing political and social challenges worldwide that are shaping how it does business. Unlike mining, oil, and gas, the renewable energy sector is still developing its social performance models and standards, including management systems for social risks and benefit sharing.

More work and effort are needed to establish corporate leadership structures and capacities to follow through. An important enabling factor for renewable energy transition is the maturity of the corporate practice of social performance. In this regard, capabilities tend to exist in isolation inside companies, on-site, or in small teams at corporate headquarters, with limited support, supervision, and resources.

The private sector needs to embrace a longer-term perspective. On average, power purchase agreements between renewable energy companies and off-takers (government, power utility, other private sector users) span 20 years, making RE projects long-term economic players in the communities in which they operate. Such decadal timeframes require producers to take a long-term view of their business environment in the interest of a just transition and their business viability.

The foundation of social responsibility is an intentional company culture and mindset with a holistic, long-term view of social performance. This approach includes comprehensive costing and performance incentives aligned with long-term social performance outcomes. The goal is to provide an economic rationale for systematically embedding community investment for socio economic development in business planning. Benefits include stable, thriving communities surrounding their plants, with a reduced probability and risk of protest action, and a greater probability of capacitated, reliable suppliers and staff.

Organisational incentives and reward systems are also important, whereby excellence in social performance is viewed as being as instrumental to success as engineering design or people and financial management. In a global industry where many of the customers of renewable energy companies are governments of emerging economies, an RE company's ability and track record in not only providing clean, renewable energy, but doing so in a socio economically just manner, can become a competitive advantage and an industry differentiator.

Resilient communities

Socially just projects are co-designed and implemented with local communities. This approach depends on the capacity of communities to self-organise through authentically representative structures; absorb and manage large amounts of technical and legal information; and articulate and promote their collective interests. The social capital required for these tasks is substantial, and communities vary in terms of cohesion and forms of association. Communities are heterogeneous, and intersectional experiences of exclusion and discrimination exist within them. Even where national law mandates participatory planning and decision-making, the most marginalised may not have the time or perceived social standing to have equitable access to participation opportunities. Project consultation and management structures that don't consider this reality can exacerbate vulnerabilities and stoke conflict.

When external stakeholders engage communities, it is important to avoid building parallel structures by first identifying, understanding, and appreciating local institutions and building upon these. Livelihood-based or faith-based groups and mutual savings and loan organisations are examples of community capacity for collective action, although these may need strengthening. A proper stakeholder mapping is the basis for tailored support consisting of several institutional elements in addition to technical support, including community development planning and investment management; project conceptualisation and management, discharging fiduciary responsibilities; and leadership skills, negotiation skills, and consensus building.

Co-designed community development strategies in South Africa

Wind projects in South Africa developed the Asset-based Community-led Development (ABCD) approach, encouraging collaborative efforts for economic and social transformation. ABCD rallies community members already working to improve their fellow residents' lives or planning to make a positive difference. It focuses on community strengths, potential, and capacities to shape and drive their development. The intention is to build on the available resources and foster citizenship. A participatory methodology involves empowerment, self-reflection, dialogue, and ownership principles. Research has shown that efforts are more effective and lasting when community members dedicate their time and talents to materialise the desired changes rather than focusing on what is lacking.[4] The ABCD model fosters justice by equipping and empowering communities with resources and skills that promote resilience.

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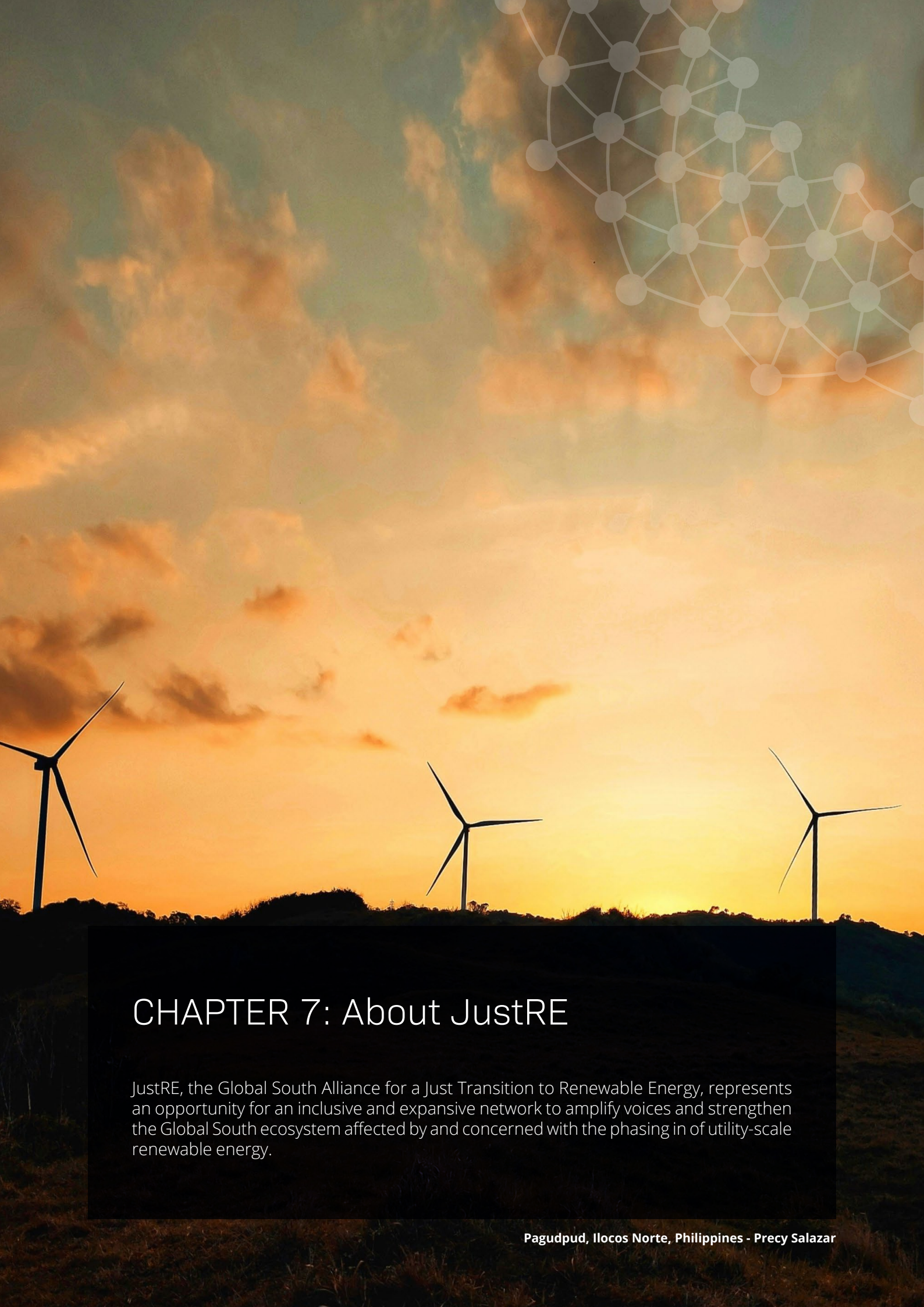


CHAPTER 7: About JustRE

JustRE, the Global South Alliance for a Just Transition to Renewable Energy, represents an opportunity for an inclusive and expansive network to amplify voices and strengthen the Global South ecosystem affected by and concerned with the phasing in of utility-scale renewable energy.

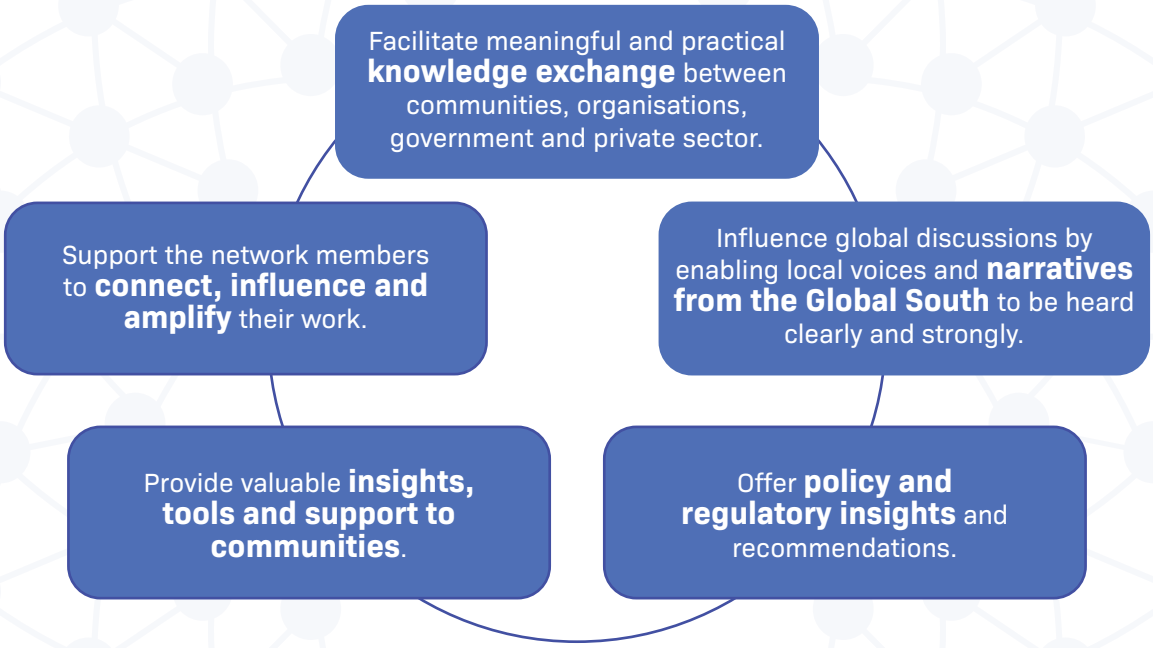
Pagudpud, Ilocos Norte, Philippines - Precy Salazar

This book has highlighted the social performance challenges faced by renewable energy projects at different stages of their lifecycles, including the use of scarce land and water resources, responsible supply chain management, community engagement, benefit sharing, and the necessary policy and regulatory frameworks.

The journey towards a just and sustainable energy future is complex. Despite this, a fair and resilient energy landscape is achievable with committed collaboration among public institutions, the private sector, and communities. By focusing on equitable and inclusive practices, we can ensure that the benefits of renewable energy transition are shared by all stakeholders.

Based on the challenges we see in the sector upon which the Alliance is built, **our mission is to serve as a strategic platform for multiple stakeholders** (including communities, civil society organisations, governments, and the private sector) working towards socially responsible renewable energy deployment.

The envisioned contributions include:



Emerging ways of working

- **Leading from the Global South:** Construct narratives that recognise contextual differences and amplify voices from the Global South in renewable energy discussions.
- **Practical knowledge, objectivity, and scientific rigour:** focus on real-world experiences and solutions ensuring high-quality research, communication, and analysis.
- **Inclusivity and expansion:** Promote diversity and inclusion within the network to harness collective wisdom and creativity. Strive for growth and outreach to new communities and regions, maximising global impact and relevance.
- **Cooperation, accountability, and transparency:** Foster cooperation, mutual respect, and shared responsibility among network members. Ensure integrity, trustworthiness, and openness in decision-making processes and resource allocation.
- **Balanced perspective and political awareness:** Promote a balanced approach considering diverse stakeholder perspectives and interests. Navigate political complexities and power dynamics to advance strategic and effective support.

Core members

The Alliance is in its pilot phase and this book gathers different insights and experiences from the following active organisations:

The Responsible Energy Initiative (REI)

The Responsible Energy Initiative (REI) is a multi-year, multi-country programme that aims to accelerate the ecologically safe and socially just deployment of renewable energy in Asia. It seeks to enable the renewable energy sector to adopt business models and value chains centering on justice, equity, universal rights, and resilient ecological systems. By engaging stakeholders across the renewable energy system to collaborate, REI aims to better equip actors to identify a shared view of what, how, and where they can intervene to shape a different future.

REI is a collaborative platform that brings together industry, manufacturers, investors, and professional and industry associations and policymakers. It is enabled by a consortium of partners including Forum for the Future, WRI India, TERI, CEEW, Climate Group, BHRRC, Landesa, WWF India and the Consensus Building Institute in India, and Forum for the Future, CentRE, Oxfam Philippines, BHRRC, ICSC, and FES in the Philippines.

Organisations from REI participating directly in JustRE include:

- Forum for the Future is a leading international sustainability non-profit with offices in London, New York, Singapore, and Mumbai. For more than 25 years, it has been working with businesses, governments, and civil society to accelerate the shift towards a just and regenerative future where people and the planet thrive. Forum is a core partner in the Responsible Energy Initiative (REI) and brings experience and learning from implementation in India, the Philippines, and several other Asian countries.
- The Council on Energy, Environment and Water (CEEW) is one of Asia's leading not-for-profit policy research institutions. CEEW uses data, integrated analysis, and strategic outreach to explain — and change — the use, reuse, and misuse of resources.
- Landesa, a global non-profit, advocates for decisionmakers to prioritise land rights in global initiatives. Landesa champions and works to secure land rights for millions of the world's poorest, mostly rural women and men, to provide opportunity and promote justice through the power of land rights. Landesa is a partner in the REI consortium for exploring land use and renewable energy expansion to help understand how local communities and women might be negatively impacted and the necessity to build the adaptive capacity of communities as India moves towards 50% of its electricity from renewables by 2030.
- The Business & Human Rights Resource Centre (BHRRC) is an international NGO that tracks the human rights impacts (positive and negative) of more than 10,000 companies across nearly 200 countries. BHRRC seeks responses from companies when concerns are raised by civil society.

Stockholm Environment Institute (SEI)

The Stockholm Environment Institute (SEI) is an international non-profit research and policy organisation that tackles environmental and developmental challenges. SEI connects science to policy and practice in order to develop solutions for a sustainable future for all. Its approach empowers people for change for the long term: research excellence and engagement with partners are at the heart of our efforts to set new agendas, build capacities, and support better decision-making. SEI's work spans climate change, natural resources, water, air, and health, and integrates evidence and perspectives on governance, innovation, business, poverty, gender, and social change. SEI has its headquarters in Stockholm (Sweden) and centres in Bangkok (Thailand), Boston, Davis, and Seattle (US), Oxford and York (UK), Tallinn (Estonia), Nairobi (Kenya), and Bogota (Colombia). Researchers from SEI offices in Latin America (Bogotá) and Africa (Nairobi) have been actively involved in shaping JustRE.

SEI Latin America was founded in Bogotá in 2018 and has a nonprofit legal status in Colombia. SEI's research addresses barriers and identifies policies and strategies to break the dependence on the extraction and export of fossil fuels and accelerate the sustainable transition to a low-carbon future in Colombia and Latin America. SEI-LA's work seeks to develop specific, concrete evidence to support actionable policies toward sustainable, low-carbon development objectives.

SEI Africa is based in Nairobi, Kenya, and is hosted by the World Agroforestry Centre. The centre collaborates with African governments, organisations, and networks — acting as a hub for SEI's engagement across the continent. The centre focuses on four key areas: energy and climate; natural resources and ecosystems; sustainable urbanisation; and health and environment. SEI Africa's energy and climate change research programme seeks to explore and support socially inclusive, low-carbon, and climate-resilient development pathways at multiple levels.

Relevant work

- SEI Latin America leads the Initiative for the Inclusive Development of Renewable Energy in La Guajira —IDEAR Guajira, a collaborative platform to accelerate renewable energy deployment while guiding the process towards more equitable and socially beneficial outcomes in La Guajira, Colombia. IDEAR has four areas of work: supporting access to information; building local capacities through the co-design of training programmes; promoting peer-to-peer learning networks; and informing public sector decision-making at different levels.
- The SEI Initiative on Gridless Solutions explores alternative technologies for the delivery of critical services like energy, sanitation, and freshwater. The focus is on small-scale, decentralised, and modular solutions that can be used to address a wide spectrum of complex socio economic challenges, making societies more resilient and prepared for the unexpected. SEI Africa delivered a collaborative case study on the political economy of mini-grid development and deployment in Kenya and Tanzania.
- The role of risk mitigation in renewable energy investments in Sub-Saharan Africa is a research project that explores the effectiveness of financial risk mitigation in attracting private investment in renewable energy in Sub-Saharan Africa. It focused on Southern Africa in 2022, Western Africa in 2023, and Eastern Africa in 2024.
- SEI's Harvesting the sun twice project assesses the potential to provide access to agrivoltaic (AV) systems across rural communities in Eastern Africa.

INSPIRE

Initiative for Social Performance in Renewable Energy (INSPIRE) is a newly founded non-profit company in South Africa with a status as a non-profit and public benefit organisation. INSPIRE's objective is to advance social development in renewable energy through building capacity and developing systems and relationships which support a transformational and just renewable energy transition. In a short period, INSPIRE has successfully positioned itself as a pre-competitive learning partner to the renewable energy sector and has proactively built robust networks and relationships within government and industry.

INSPIRE team members and collaborators have long nurtured civil society's capacity to engage with and participate in the renewable energy sector in SA and built academic networks and capacity associated with the sector's maturity journey. INSPIRE's international exchanges have been created through its participation in the Resource Exchange convened by Resolve and the emerging Global South Alliance for a Just Transition to Renewable Energy (JustRE).

The organisation's key ambitions are to cultivate leadership for a people-centred transition; enhance capacity within the renewable energy ecosystem to maximise local development and transformation potential; professionalise social performance in renewable energy; promote best practices; and deepen the development impact of South Africa's renewable deployment. INSPIRE's practitioner-led networks and well-developed relationships with the public, local community, and private stakeholders position INSPIRE as a trusted, influential, and impartial convenor in the renewable energy ecosystem.

Relevant work

- INSPIRE's Trust Matters project creates a platform for community shareholders in South Africa's renewable energy sector to come together and strengthen their capacity to establish and operate sound community development organisations.
- The Xazulula — Trauma-informed social performance project is an emerging focus area of work. Developed in collaboration with the Centre for Mental Wellness and Leadership, Xazulula aims to foster trauma-informed community leadership and corporate social performance practice essential in creating enabling conditions for active community participation in just energy transitions.
- The Community of Practice — Shaping the Future of Community Impact Investing in REIPPP project is also piloting a new approach to social performance.. The project is working with corporate social performance practitioners and community shareholders in co-designing and implementing a learning and collaboration forum focussing on enhancing the strategic impact of the sector's community investments into education.
- INSPIRE is an implementation partner of the Fostering Inclusive Growth through Climate Change Champions project. This project focuses on integrating public and private development priorities with community-driven climate action.

Iniciativa Climática de México (ICM)

ICM is a non-profit organisation established in January 2016 as a re-granting, think-tanking, advocating, and convening organisation committed to reducing Mexico's greenhouse gas (GHG) emissions. The experience of the ICM team preceded the creation of ICM, as they operated from 2012 to 2015 as the Mexican chapter of the Latin America Regional Climate Initiative (LARCI), an LLC based in the US that administered grants in Mexico and Brazil and incubated the creation of ICM.

This experience has positioned ICM as the most important strategic re-granter in the climate change field in Mexico. This has contributed to advancing climate mitigation priorities related to the national climate mitigation policy, decarbonisation of the energy matrix, and sustainable and low-carbon transportation. Moreover, the ICM team works collaboratively to ensure that all projects are strong in every component (from technical to social and political), enabling ICM's unique mix of think tanks, advocacy, and project implementation. ICM has secured a strategic position as a climate and energy influencer, with no other Mexican organisation playing such a neutral yet highly influential role nationally, regionally, and internationally. ICM has nurtured resistance to anti-climate government policies while creating the technical, policy, and political foundations for leadership in the medium to long term. Evidence of ICM and its partners' success can be found in several significant policy wins, such as the 2022 NDC proposal with 88 mitigation measures modelled and assessed through cost-benefit, climate justice, and gender.

Relevant work

- Communities and Renewable Energy Project (CER) was a multi-year project between August 2017 and August 2020 by ICM in alliance with the Civic Collaboration Center (CCC) and Latin American Faculty of Social Sciences (FLACSO) Mexico, with a grant from the United States Agency for International Development (USAID). The project contributed recommendations and guidelines for more participatory, inclusive, and transparent management of the energy sector and the development of utility-scale renewable energy projects.

- Ejido Solar is an idea developed by ICM to change the ownership paradigm of renewable energy projects in Mexico. Through a multi-year project funded by the British Embassy through Mexico UKPACT, ICM has developed a mechanism whereby rural communities (known as ***ejidos***) can become owners of a distributed generation project (less than 500 kW). The profits from the project are to be shared within the community with a view to gender equality and social inclusion. ICM is currently working with the government of Sonora to develop the benefit-sharing scheme for 40 distributed generation plants in the state's mountainous region.

- Net Zero Decarbonisation Pathways for Mexico to 2060 by Civil Society is an in-depth study conducted by ICM to help the country set a net zero commitment. The energy, water, and land sectors have been modelled to set an ambitious, science-based pathway for the country. Each energy sub-sector, such as the electricity system, was thoroughly analysed from a technical, political, economic, and justice perspective.

- Just Energy Transition away from Fossil Fuels is a multiyear project to promote energy transition actions in Mexico. Through re-granting, ICM helped strengthen the SCO sector in Mexico. In addition, science-based studies were made to define a just energy transition pathway for the electricity sector. In that analysis, a novel model was developed to include justice criteria in the regionalisation of the power system.

Join us

Our network provides a supportive platform to all practitioners working towards the just deployment of the energy transition. Our mission is to amplify voices, share knowledge, and connect. We would love to hear from you about your work.

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