
COBENEFITS STUDY

August 2022

Community expectations of energy development projects: A pilot case study of Lamu and Marsabit Counties in Kenya

Assessing the co-benefits of decarbonising the power sector

Executive report



Imprint

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Technical implementation: Rocio Diaz-Chavez, Carol Mungo, Javan Ochido, Elvine Kwamboka, Mbeo Ogeya — Stockholm Environment Institute Africa

Editors: Grace Mbungu, Sebastian Helgenberger, Laura Nagel — IASS Potsdam

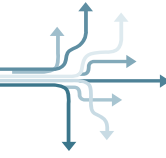
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Executive Summary



This study focused on understanding the priorities and expectations of different energy projects (coal and wind) from the perspectives of host communities in Lamu and Marsabit Counties, Kenya. The case studies included the proposed wind farm and coal power plant in Lamu as well as the Lake Turkana Wind Power Project (LTWP) in Marsabit County. In the development of energy projects, host communities are often directly and indirectly affected or at the tail-end of value chains. Access to basic modern services such as clean energy, infrastructure, education, and health services remains a fundamental challenge in current and proposed large-scale energy host communities in Kenya, despite promises to improve such conditions, especially in remote and marginalised communities. Assessing the socio-economic performance of energy projects at the local level is therefore important to ensure that local host communities are not left behind during the pursuit of broader, national-level development processes.

Against this background, the overall objective of this study was to understand the priorities and expectations of energy development projects from the perspectives of host communities in Lamu and Marsabit Counties, Kenya. In Lamu County, the focus was to understand the potential social performance of the proposed Kenwind and Amu Coal Power plant project in Lamu West Constituency. Based on these findings, and guided by the social performance indicators identified by Lamu stakeholders, an assessment was conducted of the LTWP in Marsabit County, to put into perspective the potential outcomes from proposed large-scale energy development projects in Lamu County, in view of local community economic and social development. It was also an objective of this study to understand the reasons

behind the presence or absence of support for renewable energy (wind) and fossil (coal) projects in Lamu.

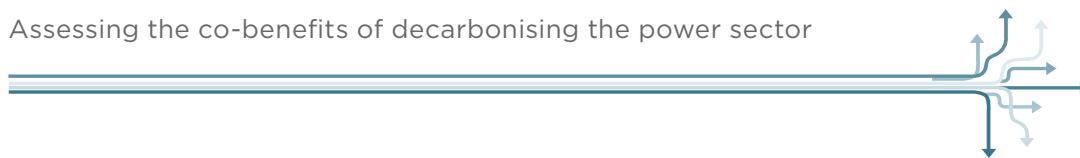
While the proposed Lamu coal plant and wind farm projects have stalled due to community resistance and legal battles on the grounds of lax socio-economic and environmental impact assessments, the findings of this study highlight fundamental gaps in the understanding of the role of energy in enhancing socio-economic development and the general well-being of local host communities. The findings also underscore the numerous potential opportunities when energy development processes are intentionally designed and implemented with the well-being of local host communities at the core and in collaboration with all relevant stakeholders.

The findings further identify opportunities for policy makers to invest in the capacity of local institutions in the regions where energy projects are located. Strengthening institutional capacities will help in assessing government policies and measures intended to ensure access to reliable and affordable energy services for all. In addition, the study proposes trust-based strategies, as stakeholders persistently voiced concerns around the issue of trust and the extent to which information is disclosed at the community level. The findings of this study are important at a time when Kenya is clear on its goal of delivering an energy system that is climate friendly and sustainable in order to guarantee the well-being of current and future generations. The results provide an outlook on the process of decentralising decision-making on energy development, as provided in the 2010 constitution and the 2019 Energy Act¹. Key messages from the study are presented below.

¹Energy Act, 2019, available at: <https://www.epra.go.ke/download/the-energy-act-2019/>

Main findings

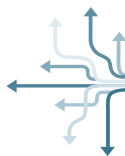
- There is an acute lack of evidence on the socio-economic performance of energy development and implementation processes, for both fossil and renewable energy, to inform and support climate protection and sustainable development objectives, especially at the level of local communities that host such projects.
- Energy development and implementation processes have the potential to contribute to the social and economic development of local host communities but, to achieve these objectives, projects must be intentionally designed and implemented with this objective in mind.
- The proposed coal and wind plants at Lamu are to be hosted by communities with limited access to energy services, and whose livelihoods and survival risk being compromised if energy projects disrupt essential livelihood activities such as farming, fishing, and tourism.
- Local host communities have expectations of gaining direct benefits from the proposed wind and coal power plants, such as access to affordable healthcare, increased income-generating opportunities, and access to affordable and reliable electricity.
- Despite the limited local access to energy, there is no provision or requirement for the proposed energy projects to ensure local access to affordable and reliable electricity, nor processes for establishing enabling conditions to guarantee socio-economic benefits.
- Religious and cultural traditions are deeply rooted in Lamu County. This provides an opportunity to prioritise and capitalise on religion and culture as mediators for the advancement of socio-economic benefits from energy projects.
- There is evidence from local host communities and relevant stakeholders that expectations of energy access, local economic development and value creation from the development and implementation of the LTWP largely remain unmet.
- There are strongly divergent views on the support (or lack of) for fossil-fuel-based and renewable energy projects, depending on stakeholders' category, influence, location, and interest.
- In both Lamu and Marsabit, there is a deep lack of trust among local communities concerning the objectives of both coal and wind projects, due to the lack of engagement and limited access to information about the advantages and disadvantages, and potential and actual benefits of energy projects for local host communities.
- Delays and cancellations of renewable energy projects will remain the norm in Kenya, unless all relevant stakeholders are involved in a timely and rigorous manner, and socio-cultural and environmental considerations are seriously considered in the planning, design, and implementation processes.



Policy opportunities

- **Harmonising international climate commitments with national action plans:** Opposing energy development options in Lamu County — namely coal versus wind power — demonstrate that local energy planning is not aligned with national and international climate policy. National Action Plans should support International Climate Change Agreements, not counteract them. Genuine harmonisation of policies and implementation plans will avoid such contradictions and serve to adjust climate commitments with the fulfilment of energy needs and the support of local communities.
- **International investments should strengthen climate action, not contradict it.** As the contested coal power project in Lamu has shown, the lure of international investment is accompanied by the risk of neglecting environmental and climate policy targets. Local resistance and court rulings have also proved the importance of national legislation and voicing local concerns in aligning international investment with national and local policies. Governments should not allow the interests of investors to take precedence over those of local communities, nor contravene their own policies. Climate-action-oriented procurement guidelines should be considered in order to align international investments with the Paris Agreement and related national and local social and economic policies.
- **Involving local host communities in energy planning to maximise social performance:** Political deliberations and planning processes on climate action in the energy sector need to consider the social performance of energy projects and social and economic co-benefits. The activism demonstrated in Lamu has halted the proposed coal power plant, and one of the main investors has even recognised that the plan was a mistake². While balancing energy needs at a national level requires fine-tuning of needs versus impacts, it is also important to take into account the needs, expectations, and aspirations of local host communities; and to listen to and address the grievances of affected stakeholders.
- **Ensuring long-term energy security for citizens by considering climate change risks and resilience:** Besides incorporating social performance criteria, investments in large energy projects should also consider criteria pertaining to climate change risks and resilience/adaptation, in line with the National Adaptation Plan 2015–2030, to ensure long-term energy security for Kenya's citizens. Power plants located on small islands (such as in Lamu County) should consider predicted sea level rise and higher temperatures, which may present risks to the secure operation and cooling of thermal power plants.

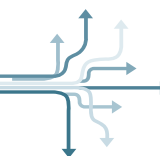
² <https://chinadialogue.net/en/energy/lamu-kenyan-coal-project-chinese-investors-take-environmental-risks-seriously/>



Key policy messages

- **Key policy message 1: Increasing the social performance of energy sector investments is important to reconcile climate action with community needs.** Frameworks such as the Social Performance Index (SPI) (IASS, 2021b), can contribute to highlighting the benefits or disadvantages of energy projects and investments while incorporating the voices and aspirations of local communities.
- **Key policy message 2: There is an acute lack of evidence on the social performance of energy investments in Kenya.** To support decision making, particular importance should be placed on the creation of decent jobs, income generation opportunities, productive use of energy by local value chains, benefit-sharing plans, consideration of human rights, fairness and accountability by law, and community co-design of climate action and sustainable development.
- **Key policy message 3: International investments should strengthen climate action and increase social performance for communities.** Procurement guidelines oriented towards climate action and increasing social performance for local communities should be considered, to align international investments with the Paris Agreement and related national and local policies.





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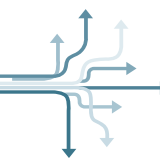
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1. Energy development and climate protection actions in Kenya

Kenya has an ambitious plan to develop an economy based on low-carbon energy, to support its transition to a middle-income country in which all Kenyans enjoy a good quality of life as stipulated in its Vision 2030 (Government of Kenya, 2008). In support of this ambition, Kenya has attracted increasing investment flow from both public and private sectors to develop its energy resources. Kenya has an installed capacity of 2,819 megawatts (MW) of electrical power, including a recently installed capacity of 310 MW of wind in 2019. In view of climate protection, its 2020 updated Nationally Determined Contributions (NDC) (UNFCCC, 2020) set out an ambitious mitigation plan to reduce greenhouse gas (GHG) emissions by 32% by 2030 relative to the business-as-usual scenario of 143 million metric tons of carbon dioxide-equivalent (MtCO₂e). Against this background, Kenya has embraced renewable energy development to meet energy demand and as a key action area for climate change mitigation.

Policy landscape and legal framework

Kenya's main strategic development document is Kenya Vision 2030, with aspirational goals for a better society by the year 2030. The government's "Big 4 Agenda" focuses on the development of four pillars of the economy: food security and nutrition, affordable universal healthcare, affordable housing, and enhancing manufacturing. Kenya is a signatory to the Paris Agreement and has developed the Climate Change Act (CCA) of 2016 to promote climate-resilient, low-carbon economic development, while the National Climate Change Action Plan (NCCAP) 2018–2022 presents Kenya's potential pathways for low-carbon development. The Plan includes eight priority areas, with responsibility for implementation shared between the national and county-level administrations.

The National Adaptation Plan 2015–2030 aims to enhance Kenya's climate resilience towards the achievement of Vision 2030. The Least Cost Power

Development Plan³ targeted expansion of solar and wind, and the introduction of a coal power plant to safeguard national energy security. Furthermore, the feed-in-tariff scheme allows private investors to sell wind electric power to the national grid at a fixed tariff of USD0.11/kWh for 20 years. This rate remains one of the cheapest on the continent. The Ministry of Energy has introduced energy auctions and net metering, which is expected to favour wind and solar generation over geothermal⁴ (see Updated Least Cost Power Development Plans (LCPDP: 2017–2037) (Ministry of Energy and Petroleum, 2018). The government has also put in place a zero-rated import duty for wind energy equipment. Similarly, it has removed value added tax (VAT) from imported renewable energy equipment and accessories (Ministry of Energy-Kenya, 2013). These regulatory frameworks provide an enabling environment for the further development of the wind sector with an innovative approach of encouraging citizens to invest in it.

Renewable energy development

As of 2019, renewables accounted for more than 89% of grid electricity in Kenya's energy mix (Kenya Power, 2019) with projected potential for over 90% in 2020 with the commissioning of the Kipeto wind and Garissa solar projects. Geothermal presently dominates the renewable energy landscape in terms of total installed capacity of 865 MW, followed by hydro at 826 MW, with wind supplying 336 MW and solar 55 MW, whereas the cumulative installed capacity of fossil-based power plants is 769 MW (Kenya Power, 2019). With the commissioning of the Lake Turkana Wind Power (310 MW), Garissa solar and (50 MW), and Kipeto wind power (100 MW) projects, renewables are expected to provide 95% of the grid electricity mix (Kenya Power, 2021). Indeed, this progressive transition to renewable energy puts Kenya amongst the leaders in pursuance of decarbonisation of the electricity generation sector, as shown in Table 1.

³ The Least Cost Power Development Plan is available at: <https://communications.bowmanslaw.com/REACTION/emsdocuments/LCPD%202021.pdf>

⁴ Auction-based mechanism for new power projects in Kenya, available at: <https://reglobal.co/kenyas-new-energy-auction-system-to-favour-wind-and-solar-investments-ahead-of-geothermal/>

Fossil fuel development

Despite the known negative impacts of fossil-fuel development, Kenya has ambitions and supports policies for the fossil energy sector. While the mood in government has shifted due to a series of legal defeats and intense activism at the local and national levels against the Lamu coal power plant, the government has not made a clear or final statement on its status. Coal-powered power generation is a major contributor to GHG emissions and atmospheric pollutants that are harmful to human health and the environment (IPCC,

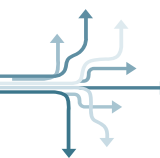
2018). Emissions from coal-fired power plants commonly include acidifying gases such as sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon monoxide (CO), along with particulate matter (PM), especially that with diameters smaller than 10 and 2.5 µm (PM₁₀ and PM_{2.5} respectively). The World Health Organization (WHO) estimates that indoor and outdoor air pollution is responsible for about 7 million premature deaths annually at the global level (WHO, 2020). Other fossil fuel explorations persist in Turkana, and natural gas deposits have been discovered in Lamu and coal deposits in Kitui.

Technology	Capacity (MW) at 30.06.2019			
	Installed (MW)	Effective (MW)	Installed (%)	Effective (%)
Hydro	826	805	30.46%	30.62%
Geothermal	663	655	24.44%	24.91%
Thermal	808	769	29.79%	29.26%
Co-generation	28.0	23.5	1.03%	0.89%
Solar	50.94	50.9	1.88%	1.93%
Wind	336	326	12.39%	12.38%
Total	2,712	2,629	100%	100%

Table 1:
Installed and
effective
renewable
energy capacity
(MW) in Kenya,
2019

Source: ICLEI,
2020





2. The missing social link in Kenya's large-scale energy development strategies

While the positive impacts of renewable energy development, and the implementation and use of renewable energy for people and the planet are widely recognised, the direct contribution of local renewable energy projects to local community well-being has received limited attention. And while the Paris Climate Agreement and the 2030 Agenda for Sustainable Development, with its Sustainable Development Goals (SDGs), have been rightfully celebrated as global milestones towards securing livelihoods and opportunities now and in the future, they lack societal ownership and traction among communities, who are decisive in supporting and driving the necessary sustainability transformation. The needs and aspirations of current and future generations need to be taken into consideration to achieve just and long-term sustainability (IASS, 2021a).

In Kenya, while some environmental management reports have provided information on the social and economic impacts of energy projects (both positive and negative), and while project plans incorporate some aspects of social and economic development, the implementation approach tends to view social economic performance as an add-on to energy development projects, rather than as an intentional goal. For example, the Environmental and Social Impact Assessments (ESIA) submitted to the World Bank (2009) for the proposed Marsabit County wind farm and the Lamu coal power plant highlight potential social and economic benefits of both energy projects, such as employment opportunities for the local community, rehabilitation of roads, and support for improvement of social services such as water purification and construction of medical centres (World Bank Group, 2009, URS, 2011, and AfDB, 2011). However, the current evidence shows that there are limited benefits (or else there are no plans to communicate, monitor, improve, and/or sustain such benefits) for local host communities. The same has been reported within communities that host geothermal plants, with residents expressing discontent with unfulfilled promises from project implementation (Mariita, 2002). Gaps and discrepancies are also evident in the current energy and climate policy and

implementation processes in Kenya, as summarised below:

Despite rich renewable energy resources, fossil fuels continue to be explored in Kenya.

Kenya is a signatory to the Paris Agreement, and developed the Climate Change Act (CCA) of 2016 to promote climate-resilient, low-carbon economic development. The National Climate Change Action Plan (NCCAP) 2018–2022 presents Kenya's low-carbon development pathway options. The Plan includes eight priority areas, with the national and county-level governments sharing responsibility for its implementation. In its updated NDC, Kenya aims to achieve a 32% reduction in economy-wide greenhouse gas emissions by 2030, compared to 143 million metric tons of carbon dioxide-equivalent (MtCO₂e) emitted under a business-as-usual scenario. The 2017–2037 Least Cost Power Development Plan targets the expansion of solar, wind, and the introduction of a coal power plant to safeguard national energy security. Continued development of coal energy represents an inconsistency in Kenya's ambitious plans to develop renewable energy and counteracts its progress towards climate protection objectives.

While almost 95% of grid power is renewables-based, it only reaches 26% of rural households.

As of 2019, renewables accounted for more than 90% of Kenya's grid electricity mix after commissioning the 310 MW Lake Turkana Wind Power and 50 MW Garissa solar projects, progressing towards 95% in 2020 by commissioning the 100 MW Kipeto wind farm. Nevertheless, household access to electricity is 88% in urban areas and only 26% in rural areas, demonstrating marked urban/rural inequality. As such, the various policy instruments related to climate change actions and energy access lack inclusive, "pro-poor" targets when assessing large investments in power generation. The government is currently addressing this inequality with its rural electrification drive, but to move with the speed and urgency required to close this access inequality gap, large-scale investments in power generation must also incorporate plans to deliver or support local access to affordable and reliable energy services, especially for host communities.

There is an acute lack of evidence to support decision making on the social performance of Kenya's energy system for both fossil-based and renewable electricity.

Some assessments, particularly on bioenergy, have examined sustainability indicators (UNEP, 2020). Yet, various policies seem to contradict each other while trying to achieve their targets. In particular, the focus on meeting energy demand through electrification based on fossil fuels conflicts with climate change targets.

Support for broader socio-economic sustainable development:

Kenya has abundant RE resources, which it is aggressively developing for its broader economic development. Kenya has been slow to exploit the abundant socio-economic potential presented by its progressive renewable energy development pathways, both with its large-scale energy development and small-scale renewable energy, especially in its aim of meeting the energy needs of underserved rural communities and to propel the country to becoming “a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment” as outlined in its main strategic sustainable development agenda, Vision 2030 (Government of Kenya, 2008). The government's *Big 4 Agenda* focuses on developing four pillars of the economy: food security and nutrition, affordable universal healthcare, affordable housing, and enhancing manufacturing. While Kenya is making progress in these sectors, a recent report by the Presidential Taskforce on the Review of Power Purchase Agreements (PPAs) shows that many Kenyans can either not access electricity or are burdened by high costs (Government of Kenya, 2021), thereby limiting their development potential.

Imperative to assess energy development approaches:

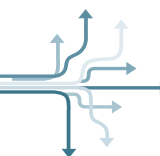
Sustained access to reliable and affordable energy services is one of the main drivers of social and economic development. Energy projects present a multitude of potential benefits and opportunities for development, but if poorly conceived or implemented may also have negative impacts. Both opportunities and potential negative impacts should be evaluated in the context of people's needs and

aspirations, especially those of host communities, to ensure that projects are intentionally designed in ways that mitigate potential negative impacts and also enhance social performance at the individual and local community levels (IASS, 2021a).

Few policy makers, developers, or implementers have approached energy development from the perspective of assessing what such activities and outcomes could bring to the communities that host energy projects, specifically from the perspective of potential large-scale energy host communities, in developing country contexts. Understanding why some fractions of society support the development of coal power plants over renewable energy projects such as wind could provide policy makers and proponents of renewable energy with the necessary data and insight to design and implement socially beneficial renewable energy projects, thereby ultimately overcoming current pretexts for the continued development of fossil fuels projects.

Against this background, the COBENEFITS project assessed the potential and community expectations for the social performance of energy development projects (IASS, 2021a). The assessment examined the planned coal and wind power projects in Lamu County, building on local experiences with the existing Turkana wind park in Marsabit County. In doing so, it focused on the following questions:

- Who are the key stakeholders in the energy development and implementation processes in Kenya?
- What are the social expectations and driving forces for and against the support of coal power plants in Kenya in terms of its perceived and potential social performance?
- What are the social expectations and driving forces for and against the support of renewable energy sources in terms of its perceived and potential social performance?
- What are potential barriers to social performance?



3. Approach and methodology

Social Performance approach

This study applied a social performance approach to assessing proposed energy projects (IASS, 2021a). In essence, this puts the needs and well-being of people — including current and future generations — at the centre of energy development, related investments, and activities. Unlike conventional approaches based on the principle of “do no harm” and that assess energy development impacts after the completion of projects, the social performance approach advocates for intentionally designing and implementing energy systems and related implementation and management processes, in a manner that aligns with the needs and priorities of individuals and communities in order to maximise direct and indirect socio-economic benefits, especially among project host communities.

The social performance of energy sector investments refers to direct and positive social impacts (both monetary and non-monetary) on the well-being of individuals and communities during the development and implementation of energy projects and the access to locally generated energy. Social performance can be used to compare how different energy options (e.g., a renewable wind park or coal-mining site) effectively and comprehensively improve the lives of people and local communities. (IASS, 2021a).

As shown in Figure 1, such impacts can accrue during the development or implementation of an energy project. The impacts can either be direct or indirect and can take monetary or non-monetary forms.

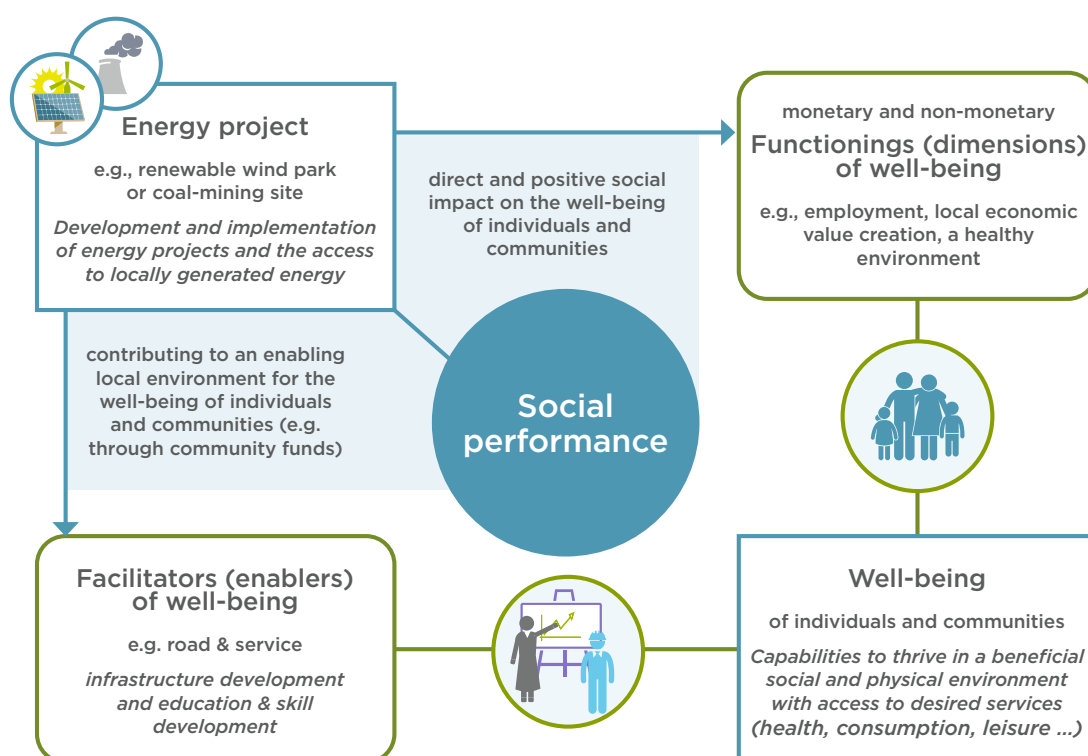


Figure 1: Social performance of energy development – schematic representation | Source: IASS, 2021a

Social performance can be measured by assessing the contributions of energy project development, implementation, and the use of monetary or non-monetary **functionings of well-being** (e.g., employment or a healthy environment). In addition, energy projects also can contribute to an enabling local environment (e.g., through community funds), with positive or negative effects on these functionings, which can be measured as **facilitators of well-being** (IASS, 2021a). The social performance approach is applied in this study because it can be used to compare how different energy options (e.g., the wind and coal projects examined in this study) effectively and comprehensively contribute (or fail to contribute) to the socio-economic development and well-being of individuals and local host communities.

Energy projects in Kenya present potential for socio-economic performance in support of sustainable development and climate protection efforts. The extent of positive and negative impacts can differ between energy projects. The nature of impacts (positive or negative, short- or long-term, direct or indirect, etc.) can be influenced by several factors, such as project design, implementation, and management, as well as the nature of the energy resource being developed.

Transdisciplinary case study methodology

The study applied a mixed and collaborative method approach, including stakeholder interviews, focus group discussions, observations, and an in-depth literature review. The research process was co-designed with the COBENEFITS Council Kenya, a transdisciplinary committee that advises the COBENEFITS project (Table 2).

Overall, this pilot study on assessing social performance benefited from the engagement with, and of, different stakeholder groups in Lamu and Marsabit. The insights highlighted societal contextual issues and personal aspirations, bringing attention to community expectations, outcomes, and gaps in the socio-economic performance of energy projects in Kenya. A comprehensive literature review on Kenyan energy development and climate action policies and processes was conducted to identify the status of contributions made by energy projects, policies, and activities toward enhancing the well-being of local host communities.

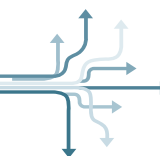
Name	Function
Izael Da Silva	Vice Chancellor Research & Innovation, Strathmore University
Omar Elmawi	Lamu Office, DeCOALonize Kenya
Jalle Gesile	Renewable Energy Officer, Marsabit County
Isacko Jirma	Director, CARITAS Marsabit
Isaac Kiva	Director, Renewable Energy, Ministry of Energy
Peter Ng'ang'a	Head, Winds of Change Foundation
George Nyagwa	Renewable Energy Officer, Lamu County
Eva Sawe	Council of Governors (CoG)
Tameezan wa Gathui	Chair, Women in Sustainable Energy and Entrepreneurship (WISEe)
COBENEFITS Focal Point Kenya	
Sarah Odera	Director, Strathmore Energy Research Centre (SERC)
Patrick Mwanzia	Researcher, Strathmore Energy Research Centre (SERC)

Table 2:
Members of the
COBENEFITS
Council Kenya

Source: own

The methodology centred on the consecutive development of social performance categories, i.e. context-specific functionings and facilitators of community well-being, along the following steps:

1. Preliminary social performance categories, co-designed with the project's advisory committee (COBENEFITS Council) and informed by the literature;
2. Refined social performance categories, based on focus groups and interviews in the case study areas;
3. The resulting list of social performance categories served as basis for defining indicators and identifying the social performance of the LTWP as experienced in Marsabit County and the expected social performance of wind and coal power projects in Lamu County.



Interviews and on-site focus group meetings were a vital part of the data collection processes because they provided first-hand accounts of the potential (Lamu) and actual (Marsabit) priorities and expectations of local host communities (see annex). A long-list of 15 social performance categories was identified by the community:

- Access to affordable healthcare
- Creation of decent jobs (direct and indirect)
- Tourism
- Increased income-generation opportunities
- Public participation and social inclusion for inclusive decision making
- Co-developing risk-mitigation measures with the community
- Consideration of human rights
- Accountability by law
- Information and communication
- Access to clean and affordable electricity
- Improved local infrastructure
- Access to quality formal (vocational) and non-formal (civic) education
- Productive use of energy
- Clear benefit-sharing plan

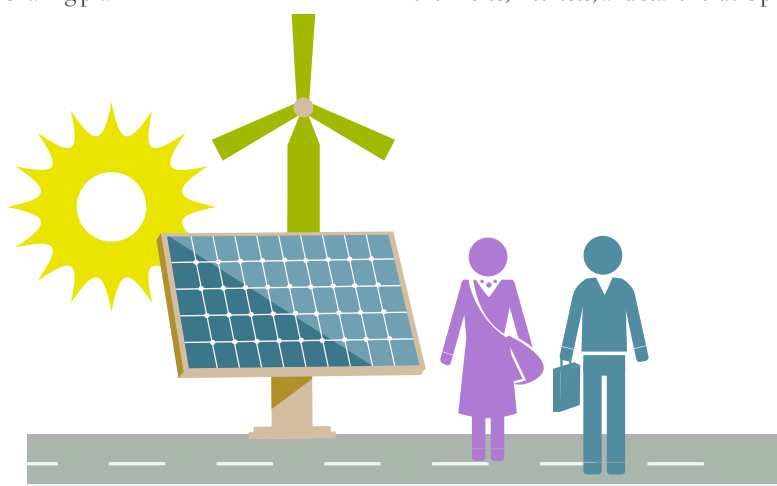
- National-level benefits — carbon credit revenues, tax income, foreign exchange.

Based on the long-list, key social performance categories depicting local community priorities for energy development (coal and wind) were condensed and prioritised by stakeholders based on rankings obtained through an online survey as well as an in-person validation workshop, for in-depth analyses in the case studies.

Stakeholder mapping

Building on a stakeholder mapping exercise conducted with the COBENEFITS Council, a total of 19 institutions, representing a diverse range of stakeholders, were involved in the study. The stakeholder mapping was conducted in view of the social performance of local energy projects, and representation of important interests, needs, and/or conflicts. Important consideration was placed on identifying vulnerable and marginalised groups. The identified stakeholders were further categorised into four groups in respect of representation, influence, location, and interest, as seen in Figure 2.

A comprehensive stakeholder list was developed and validated by the implementing research team together with a local partner, Save Lamu⁵, and in consultation with the local project (coal and wind) communities. The process included an analysis of stakeholder roles and interests, priorities, needs, conflicts, and power dynamics. This process was important because it helped the research team to identify and include diverse stakeholders, but also to actively seek representation from vulnerable, marginalised, and underserved groups in the community. Table 3 shows the nature of institutions, their roles, interests, and stakeholders presented.



⁵<https://www.savelamu.org/>

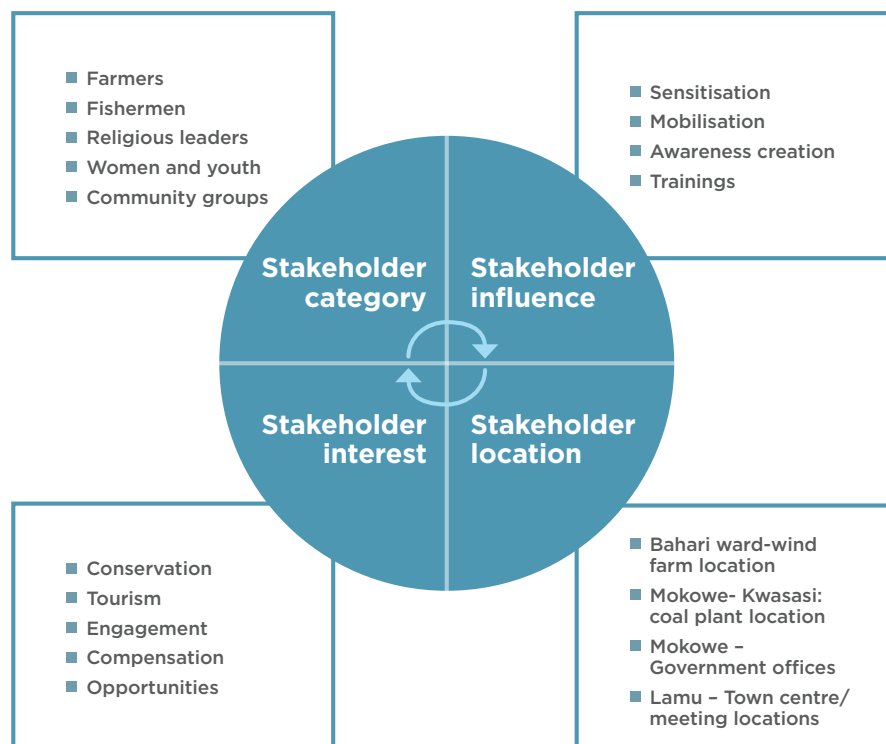
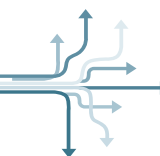


Figure 2: Stakeholder characteristics in Lamu | Source: SEI, 2021

Institutions	Roles	Interests	Stakeholders represented
Community groups	Upholding community culture, values, and belief systems; Champion community interests	Inclusivity; improved livelihoods; protection of natural and physical environment	Religious groups, youth, women, farmers, fishermen, indigenous people, PLWD, conservancies
NGO/civil society organisations	Watchdog; Mobilisation; sensitisation; civic education; awareness	Legal rights of the community; reaching the marginalised	General and project host communities
Government and its respective representing institutions	Providing services to the public	Guided by respective stipulated mandates, such as provision of energy, protection of forests	General public

Table 3: Stakeholder mapping: results
Source: own



4. Context of the case studies

4.1 Marsabit case study

The county of Marsabit is located in northern Kenya and has a total area of 70,961 km². It shares an international boundary with Ethiopia to the north, and borders Lake Turkana to the west, Samburu County to the south, and Wajir and Isiolo Counties to the east. It has a population of around 410,000 people (Table 4).

Energy needs and expectations for access to reliable and affordable electricity for domestic and productive uses remain high throughout Marsabit County (Table 5 and Table 6). For this to be realised, investments would be required in additional transmission and distribution networks to reach host communities and the county at large.

Population	Households	Main income-generating activities
410,000	77,500	Agriculture, tourism, trade

Table 4:
Profile — Marsabit
County, Kenya

Source: KNBS, 2019

Electricity	Solar	Firewood	Gas (LPG)	Paraffin/ Kerosene	Biogas	Charcoal
0.6%	0.3%	84.8%	4.6%	1.1%	0.4%	8.3%

Table 5:
Household cooking fuels
in Marsabit County

Source: KNBS, 2019

Electricity	Solar	Firewood	Gas (LPG)	Paraffin/ Kerosene	Candle	Torch (dry cells)
21.3%	27.7%	14.2%	1.6%	5.7%	0.9%	28.4%

Table 6:
Household lighting
fuels in Marsabit
County

Source: KNBS, 2019
other fuels < 1%

The Lake Turkana Wind Project in Marsabit County

Preparation and early planning of the wind farm began in 2005 with Kenyan and Dutch partners (LEDS and USAID, 2017). The Lake Turkana Wind Power Project (LTWP) is located in Laisamis, constituency, Marsabit County, northwest Kenya. The project has three main objectives: construction of the wind farm; construction, rehabilitation, and maintenance of the 208 km C77 road; and local community socio-economic development and benefit-sharing through corporate social responsibility (CSR) activities (Finnfund, 2020, and

AfDB, 2016). These objectives present a clear signal that the LTWP had built-in intentions to not only generate wind power (a potential contributor to social performance due to its climate protection advantages), but also to enhance the socio-economic development and well-being of local host communities (IRENA, 2019). Below, we present the results of our assessment on the progress and contributions of these objectives to the local community's well-being. The assessment is informed and guided by the Social Performance Approach (IASS, 2021a) and Social Performance Index (SPI) (IASS, 2021b) introduced earlier in the methodology chapter.

The construction of the Lake Turkana Wind farm began in 2014 and was completed in 2017. The line carrying the resulting power was not completed until July 2019, marking the start of full operation. The construction of the transmission line was the responsibility of the Kenyan Government through the state-owned power transmission line company KETRACO (URS, 2011). The wind farm covers 160 km² (almost 40,000 acres), comprises 365 wind turbines, and is expected to have a life-span of 25 years. It is owned and operated by Lake Turkana Wind Power Limited (AfDB, 2011). The power produced is bought at a fixed price by Kenya Power (KPLC) over a 20-year period in accordance with the Power Purchase Agreement (PPA) (Reuters, 2010). The

project is located on trust land owned by local authorities, used by indigenous pastoralists. This means that all the land is held by the relevant local authority, in trust for the local inhabitants. The tribes that communally use land in this area include El Molo, Rendille, Samburu, Turkana, and other indigenous and pastoralist communities in southeast Marsabit County. The wind farm represents one of Kenya's largest investments in renewable energy (RE) at a cost of KES 70 billion (EUR 625 million) (Finnfund, 2020). It is also the largest wind farm on the African continent, with both actual and strategic benefits for Kenyans and the continent of Africa, with potential to transform Africa's renewable energy landscape (Cusick, 2016).

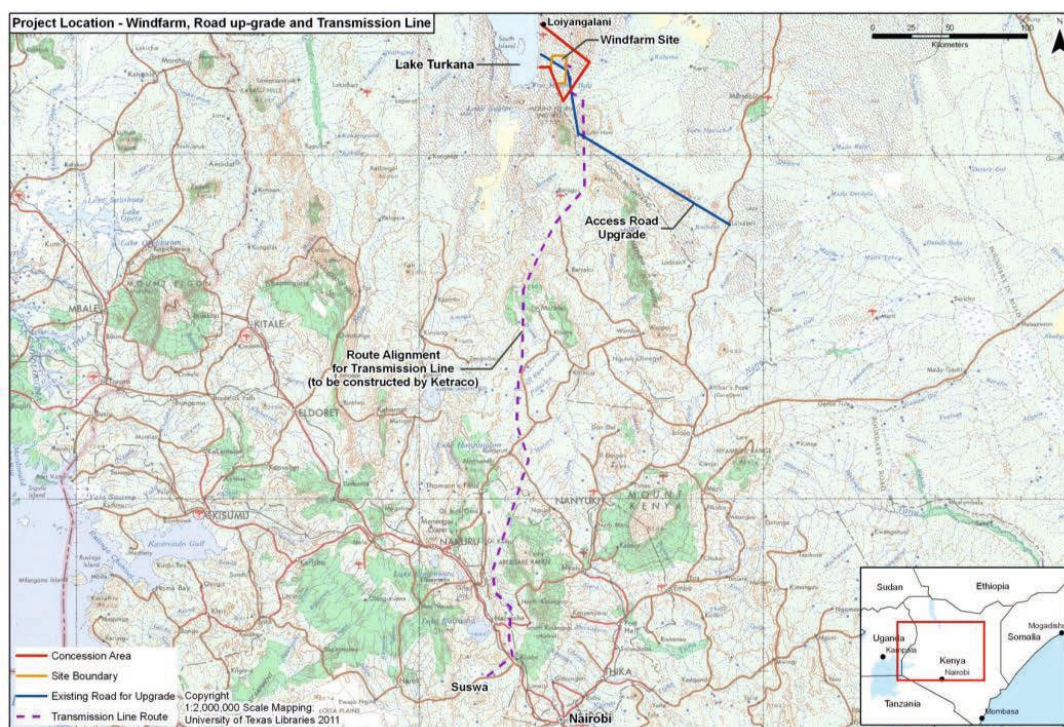
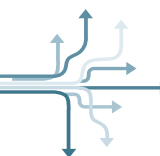


Figure 3: Location of Lake Turkana Wind Farm | Source: AfDB, 2011



The wind power project currently contributes 310 MW to the national energy grid, equivalent to 17% of Kenya's energy needs, making significant contributions to energy security and access, and to broader economic development. The wind farm is a Clean Development Mechanism (CDM) project and is registered under the UNFCCC Certified Emission Reduction (CER) scheme, which allocates carbon credits for each tonne of CO₂ that is abated (under the auspices of the Kyoto Protocol; LEDS and USAID 2017; Finnfund, 2020). Qualification as a CDM project involves a rigorous and public registration and issuance process, with approval granted by the Designated National Authorities (DNA),

which for Kenya is the National Environment Management Authority (NEMA). The project is expected to mitigate an average of 740,000 tonnes of CO₂ per year (Finnfund, 2020). Carbon credits are also expected to generate approximately EUR 6 million annually, that could go to community development through investment from corporate responsibility programmes. Among other contributions, which will be discussed later in this chapter, the construction of the wind farm generated both direct and indirect jobs for the local host communities as well as in the wider Marsabit County.



Street in Loiyalangani Town, host of the wind farm © AFP

The project also constructed the C77 road (covering 208 km) in 2014 with a maintenance agreement for three years (2014–2018) (AfDB, 2011). In addition to the employment opportunities for local people, the road played an important role in promoting trade, security, and tourism within Marsabit County and beyond. Since 2018 the road infrastructure has deteriorated due to lack of ongoing maintenance, with most sections

inaccessible during heavy rains. The LTWP now only maintains a small section of the road between Sedar Airstrip and the wind firm. This was said to limit tourism opportunities around the Lake Turkana National Reserve as well as trade and easy movement of people between towns. The figure below shows the section of the C77 road leading to Lake Turkana, a prime tourist destination in Turkana.



Road access to Lake Turkana © SEI

Limitations of the case study

There were no available baseline data for LTPW to serve as a basis for impact assessment; therefore, it is difficult to fully determine the social performance of the project (impacts on improved livelihood conditions and well-being) for local host communities. The Environmental and Social Impact Assessment submitted to the World Bank (2009) covered some of the general impacts associated with this type of large energy project, but did not provide specific data on socio-economic impacts, and lacked specific current indicators that could better describe the baseline conditions and potential for the socio-economic impacts of the project. Consequently, the current project represents an attempt to obtain reliable evidence to generate an accurate picture of the project's impacts on the local community's well-being.

4.2 Lamu case study

Lamu County is located on Kenya's north coast and is one of the six counties in the country's coastal region. The county comprises an archipelago of 65 islands with rich biodiversity, unique ecosystems, and cultural value. Lamu is best known as a tourist area and one of Kenya's most fully preserved socio-cultural counties, with the Old Town considered one of the oldest and best-

preserved Swahili settlements in East Africa. In a nod to this heritage, United Nations Educational, Scientific and Cultural Organization (UNESCO) designated Lamu Old Town a World Heritage site in December 2001⁶. According to the 2019 national census, Lamu has a population of 141,909, with a poverty rate of 15.6% (Knoema, and KNBS, 2017). The Lamu community primarily relies on tourism activities and natural resources as their main sources of livelihood. These include farming, fishing, and mangrove harvesting, resulting in a symbiotic relationship between people and their environment.

Lamu County is the centre of large infrastructure development projects that include the Lamu Port–South Sudan–Ethiopia Transport (LAPSSET) corridor⁷. The project was officially launched at Magogoni, the site of the new Lamu port, in 2012, followed soon thereafter by the proposed 1,050 MW Amu coal-fired power plant, and the Lamu Wind Power Station planned in Kiongwe, Bahari Ward, Mpeketoni (Lamu West), the focus of this study.

This study focusses on access to electrification. Access to electricity was limited to those respondents residing in the vicinity of Lamu Old Town. Access is mainly from the national grid through the KPLC whose office is located along the main street in the town centre.




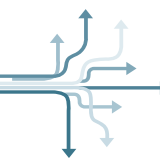
		
Population	Households	Main income-generating activities
131,000	38,000	Fishing, tourism, trade

Table 7:
Lamu County, Kenya
Source: KNBS, 2019

⁶Lamu County government: <https://lamu.go.ke/about-us/>

⁷The LAPSSET Corridor development is an infrastructure project bringing together Kenya, Ethiopia, and South Sudan. It consists of seven infrastructure projects: Berth port at Lamu (Kenya); interregional highways; crude oil pipeline; interregional standard gauge railway lines; three international airports; three resort cities; and a multipurpose High Grand Falls Dam along the Tana River.



Kenya Power and Lighting Company (KPLC) office along the main street of Lamu Old Town © SEI

There is no grid electricity in villages, including within Bahari Ward where the proposed wind farm would be located. Households in these villages continue to use basic sources of energy, including kerosene and candles for lighting. The use of decentralised energy services, such as solar panels for lighting and productive purposes, is low. A limited number of solar panels were observed on household roofs in Kwasai Ward, with more predominate use observed and reported in tourist hotels.

One of the Kenyan Government's (national and local) goals is to increase access to clean electricity. A signature programme contributing to this goal is the Kenya Off-Grid Solar Access Project (KOSAP), which is a flagship project of the Ministry of Energy and supported by the World Bank. Lamu is one of the counties benefiting from this programme through installation of minigrids in Kiwayu, Mkokoni, and Ndau Island; and stand-alone

solar home systems (Lamu County Gov., 2019). Overall, Lamu County has among the lowest rates of access to clean energy for domestic cooking and lighting, as shown in Tables 8 and 9 below.



Dwelling in Kwasai Ward with solar panel on roof © SEI

Electricity	Solar	Firewood	Gas (LPG)	Paraffin/Kerosene	Biogas	Charcoal
0.7%	0.3%	60.6%	9%	1.6%	0.5%	27.3%

Table 8:
Household cooking
fuels in Lamu County

Source: KNBS, 2019

Electricity	Solar	Firewood	Gas (LPG)	Paraffin/Kerosene	Candle	Torch (dry cells)
43.2%	34.1%	1.4%	0.1%	11%	1.4%	8.3%

Table 9:
Household lighting
fuels in Lamu County

Source: KNBS, 2019
other fuels = 3%



Solar panels at the Lamu Jetty in Lamu Old Town © SEI

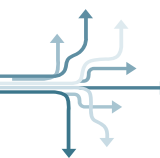
Observations and reports from residents also indicated attempts by the local authorities to use solar energy for street lighting. The photo above shows solar panels at the Lamu Jetty which were installed to complement efforts by KPLC in providing streetlights. The solar lamps have been out of service since 2018 due to technical failures and lack of maintenance.

Technology failures, such as that highlighted above, can present a challenge to the adoption and eventual transition to off-grid energy sources, with potential consequences for the race to achieve SDG 7, and more specifically to address the major gaps in energy access throughout Lamu County.

The Lamu Coal Power Project

The Lamu Coal Plant project, a potential 1,050 MW coal-fired thermal power station, was first proposed in 2013 UN Perspectives 2018. Its proposed location is the Kwasai area of Hindi/Magogoni sub-county, Lamu

County (AfDB, 2011), which is approximately 21 km north of Lamu Old Town and within the LAPSET corridor. In September 2014, the Kenyan Government awarded the contract for the Lamu Coal Plant to Amu Power Company (Pier and Lisa, 2020). In accordance with the County Government Act of 2012 and based on the devolution of power provided in the new constitution, the County Assembly of Lamu unanimously approved the coal-fired power plant in 2015 (The Standard, 2015). The project was expected to require approximately 387 hectares of land and to cost USD 2 billion for construction of the plant and ancillary facilities. The proposed land, which was allocated by the national government is tenured as community land and held in trust by the County Government of Lamu (AfDB, 2011). The power generated would be evacuated to Nairobi East Control Centre via an overhead, double circuit 400 kV transmission line (TL). The TL is an associated facility to the coal power plant and would be developed by the Kenya Electricity Transmission Company (KETRACO).



The project was halted in 2019 — in part due to opposition by environmentalists and community lobby groups that expressed major environmental (marine life, heritage sites, and land) and social (land and health) concerns, and due to the international political economy surrounding coal production in Kenya (Pier, 2020). Several reports cited serious social impacts, including air and water pollution and loss of livelihoods (UN Perspectives, 2018). The National Environment Tribunal (NET) subsequently cancelled the licence and indicated that the Environment Management Authority (NEMA) had “issued the environmental impact assessment (EIA) licence to Amu Power Company Ltd. without following the law” and was not in accordance with the Climate Change Act. The introduction of a coal-fired power plant in Lamu could exacerbate greenhouse gas emissions and lock Kenya into fossil-fuel-intensive energy systems for decades (Keles & Yilmaz, 2020; Study, 2021). The average operational lifetime of a coal power plant is between 20 and 35 years (Cui et al., 2019). These long-term adverse impacts disproportionately affect project host communities, who are often marginalised, vulnerable, and of low socio-economic status.

Overall, while fossil fuels are the predominant form of generation for electricity in Africa (Blimpo and Cosgrove-Davies, 2019), the proposed plant in Lamu would be the first ever coal power station in Kenya. The current suspension of the project provides an opportunity for the government and Kenyans to re-evaluate its social, economic, and environmental benefits.

Kenwind power project for Lamu

The Lamu Wind Power Station is planned to be located in Kiongwe, Bahari Ward — Mpeketoni (Lamu West), approximately 20 km from the proposed Lamu Port. The power station will be owned and operated by Kenwind Holdings Ltd., a Kenyan corporation. Kenwind Holdings is a subsidiary of Electrawinds, a Belgian energy company that is collaborating in the project. The plan for the project includes the construction of 38 turbines with an expected power output of 90 megawatts (MW) which will be evacuated via a new 323 km, 220 kV power line from Lamu to Rabai, and integrated into the national grid (Business Daily Africa, 2020). The project has experienced extensive delays (so

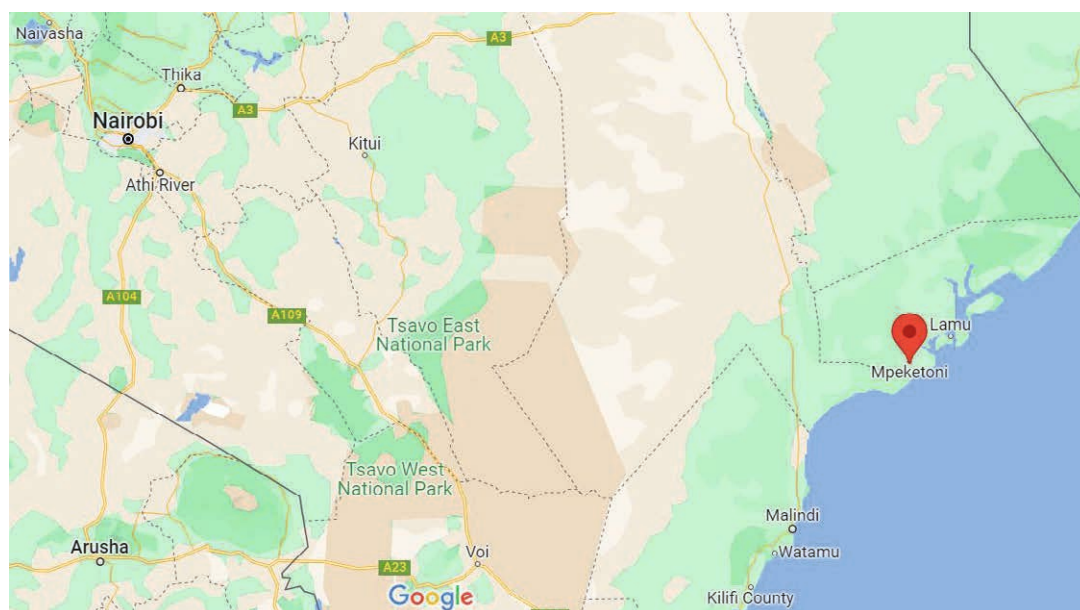


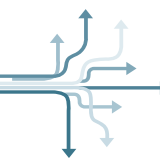
Figure 4: Location of the proposed wind farm in Mpeketoni, Lamu County | Source: GoogleMaps, location based on Citizen Digital, 2016

far, 9 years since its proposal) due to disputes with local host communities, the local and county governments, and other interested developers.

In March 2017, Cordisons International Ltd., an American wind-energy developer, issued a legal challenge to Kenwind Holdings Ltd.'s right to the 11,000 acres (17 sq miles) of land earmarked for the wind farm. In May 2018, Kenwind Holdings Ltd. prevailed in court and retained the right to develop the power station. Following that ruling, the developers signed a 20-year

power purchase agreement with Kenya Power and Lighting Company, the country's electricity transmission and distribution monopoly (ibid.). In June 2020 the Local Assembly halted the project due to resettlement land ownership disputes and unlawful interferences of the investor in land resettlements matters (Africa Energy Portal, 2020). The project is expected to occupy 3,206 acres of land (ibid.), which would result in the displacement of 600 families (Business Daily Africa, 2020).





5. Case study results

5.1 Community experiences in Marsabit County: major social performance priorities and indicators from the Lake Turkana Wind Power Project

Evidence on the social performance of energy projects is important because it can support decision making at the local, county, and national levels. For example, the assessment of an operational wind farm such as the Lake Turkana Wind Power Project (LTWP) helps to sensitise and validate community expectations and the potential impacts (positive or negative) of other proposed wind projects such as that in Lamu. Assessment is also useful because it can inform the design, implementation, and management of renewable energy projects with potential for social performance, especially in respect of enhancing the well-being of local host communities and beyond. Such an assessment also contributes to the broader socio-economic evidence base on the extent to which renewable energy development contributes to sustainable development and climate change mitigation efforts. In this section, we present evidence on the social performance of the LTWP based on a review of the literature and complementary primary data obtained from site visits and key informants' interviews with community representatives.

Creation of decent jobs (direct and indirect)

Employment opportunities (direct and indirect) represent one of the main co-benefits of renewable energy development (IRENA, 2019). It follows that potential employment opportunities from the LTWP were one of the community's key expectations. According to a socio-economic impact assessment of the LTWP conducted in 2020, the project employed 2,500 people during the construction phase, 75% of whom were from Marsabit County (Finnfund, 2020). Employment opportunities declined substantially after the completion of the road and wind farm. By April 2020, only 339 people were employed by the LTWP, including both on site and in the Nairobi office (Finnfund, 2020). In respect of improved socio-economic and general well-being, the effects could be minimal because most jobs were said by community

representatives to be low-skilled and low-paid roles such as cleaners, housekeepers, and security officers.

Accounts from local representatives and on-site observations paint a mixed picture of the extent and distribution of these benefits. Reports from local informants show that those employed at the wind farm are in the non-technical and semi-skilled sectors such as security guards, housekeepers, and catering services.

“The community had expected to be empowered because of the project but, since its inception to date, there has not been any change in the social economic welfare of the community, especially in local institutions like schools, both ECD, primary and secondary.

In addition, social economic benefits relating to the wind power project were at a personal level — for households employed by the project. Finally, the community expected scholarship, bursaries, electricity power in the town and villages but none of this has been achieved.”

(Teacher representing the professional group)

The grievances voiced by community representatives included a lack of inclusive employment opportunities based on gender, age, and people with disabilities, as well as overall unmet expectations of community employment. As highlighted by the IRENA report on gender and renewable energy development (IRENA, 2019), such challenges are not limited to Kenya. A recent study conducted in the context of the COBENEFITS project in South Africa also identified extensive gaps in gender-inclusive employment (IASS/IET/CSIR Study, 2022). More targeted research is needed on these fronts to determine the extent of fair and just employment practices and potential opportunities for improvement of equitable and just employment opportunities, especially among local host communities.

Improved local economic activities and income-generation opportunities

The LTWP has had a positive impact on local economic activity in particular, and has added value to fish products due to improved road infrastructure and access.

Broader economic opportunities were said to have declined due to lack of ongoing road maintenance and limited need for services after construction of the wind farm was completed. The C77 road constructed by LTWP was crucial in promoting fishing business with active markets as far as Busia during the period of its maintenance by the project (2014–2018). In addition to increased fish trade, the products also attracted added value due to reduced transportation time, thereby

increasing the incomes of fishers and traders. The fishermen of the Turkana Lake initially sold dried fish at lower prices due to poor local road networks, but with the construction of C77, they were able to increase their prices from KES 30 to KES 300 per kg. The study found that the wind project had not led to anticipated income opportunities from rental fees for staff housing. This is primarily because LTWP staff are located within the company's premises, and hence no rental incomes are generated for locals or investors. Nevertheless, the report on the socio-economic impacts of the LTWP noted higher living standards among plant employees, who earn significantly higher salaries than the Kenyan minimum wage. It also indicated a high market rate for investment in other income-generating activities such as livestock keeping (Finnfund, 2020).



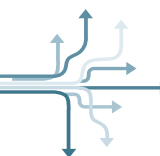
Left: Fish for sale on the shore of Lake Turkana © SEI
Right: A compound (manyatta) of the fishing community © SEI

Community benefit-sharing

Energy projects such as the LTWP can serve different social performance purposes at the national, county, or national levels. In this study, we specifically focused on impacts on the well-being of local host communities. The desired community expectations of the LTWP relate to improved energy access, employment opportunities, infrastructure development (roads and healthcare centres), improved community engagement and participation, and local economic development from project development and associated services, specifically from the CRP (corporate responsibility schemes, LTWP, 2009). The specific benefits included semi-skilled and unskilled jobs during road construction and construction of staff houses. Other indirect jobs were related to material production and possibly spin-

off activities such as accommodation and small-scale trading, e.g., sand harvesting and water supply to the labour force within the sand and murram mines (LTWP, 2009).

The social and sustainability performance standard review of the projects (conducted in 2011) assessed sustainability, considering different issues such as: risk management; labour and working conditions; pollution prevention and abatement; community health and safety, and security; land acquisition and involuntary resettlement; biodiversity conservation and sustainable natural resource management; indigenous people; and cultural heritage (URS, 2011). The findings were generally positive, identifying minimal adverse impacts. The review did not address issues of water competition, resource availability, rehabilitation of sand and murram



mines, workers' welfare, and community disturbance during transportation, nor the potential for social economic development. Evidence from community respondents and observations during the present study show that the LTWP has made attempts to improve the social economic conditions and well-being of the host communities, but that many community expectations remain unmet. Below we present evidence on the social performance of the LTWP.

Access to energy for productive uses and local value chains

The desired outcome from the LTWP is increased installed capacity from renewable energy in order to improve access to reliable and affordable electricity. Despite the wind farm contributing to Kenya's renewable energy input to the national grid (Kenya Power, 2021), there is no evidence of the project's direct contribution to energy/electricity access for local communities. This accounts for one of the most visible and often mentioned unfulfilled community

expectations by community representatives. The LTWP supported the Sarima Health Clinic with solar technology to power a small refrigerator used for storing drugs and as a source of lighting, enabling the clinic to carry out minor surgeries and provide 24-hour emergency services (Finnfund, 2020). Challenges remain, due to unreliable solar batteries and expensive solar inverters.

Considering the persistently low access to energy, and in the interest of meeting SDG 7 and other important sustainable development targets, access to clean, reliable, affordable energy remains a priority for the Loiyangalani township and the broader Marsabit County to support socio-economic activities and improvements in community well-being. For this to be realised, and to correct what is an obvious injustice, additional investments would be required for energy transmission and distribution networks to reach host communities and the county at large.



Solar inverter batteries in Sarima Health Clinic © AFP

Community infrastructure development

The development of local social service infrastructure, such as roads, helps to integrate towns and counties with other cities and business/markets at low cost. Infrastructure services are necessary to raise production and business productivity by minimising production and transport costs. The LTWP supported these goals through the construction of the 208 km C77 highway,

constructed in 2014, by assuming responsibility for maintaining the road for three years between 2014 and 2018, thereby boosting trade, security, and tourism. Currently, only a small section of the road between Sedar Airstrip and the wind farm is being managed by the LTWP. Over 90% of the 208 km of the C77 highway is no longer being maintained, making it impassable during the rainy season.



Loiyangalani Secondary School © SEI

Positive contributions of the LTWP to community development and well-being were visible and reported by interviewees. Examples include a school mentorship programme by Winds of Change (WoC), the CSR arm of the LTWP, and attendance at school meetings by WoC. Likewise, Sarima Health Clinic and Loiyangalani Secondary School (see above) were linked to the LTWP through their support for the construction of the school laboratory and the provision of a clinic container complete with solar panels and water pump (LEDs and USAID, 2017; Finnfund, 2020). Another visible and reported improvement in Loiyangalani involved improvements in information and communication technology and infrastructure. Through LTWP influence, Safaricom and Telkom installed the first telecommunication infrastructure in Loiyangalani in late 2013/early 2014, improving mobile network coverage. Telecommunication poles have been installed by different telecommunication companies, not only improving communication but also security and mobile money transactions, among others. Security was also said to have improved, as noted by a community representative:

“At least through the wind power project the pastoralist communities around Loiyangalani have experienced peace and security due to the presence of Administration Police Reservists drawn from the local communities.”

(Person with disability)

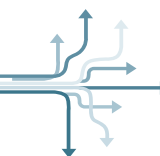
The lawsuit⁸ between certain Marsabit County residents and the Government of Kenya over the land continues to threaten security and stability in the area. Five years before the wind farm’s inauguration, some of the affected communities sued the government for irregular allocation of community land in the Sarima area of Loiyangalani District. The land issue is accompanied by other grievances related to the project, such as increasing crime and reportedly unfulfilled promises to the communities. Therefore, while CSR activities have improved some social services, other important community expectations appear not to have been met.

Community engagement and participation

Meaningful participation and engagement — especially for communities historically excluded from energy development and broader socio-economic development and their associated benefits — is very important for the success and sustainability of the project. Kenya has introduced constitutionally⁹ stipulated processes for community engagement, which projects — including energy projects — must follow. In respect to energy development, public participation is especially important for conducting the Environmental and Social Impact (ESI) assessments as required by the Environmental Management and Co-ordination Act (EMCA) to ensure comprehensive assessment and consideration of socio-economic and environmental aspects in project development. Inclusive participation is essential for ensuring the equitable distribution of

⁸ See lawsuit by locals against Lake Turkana Wind Power over land allocation & community participation slowing down project, available at: <https://www.business-humanrights.org/de/latest-news/kenya-lawsuit-by-locals-against-lake-turkana-wind-power-over-land-allocation-community-participation-slowing-down-project/>

⁹ Public participation features prominently in the 2010 Kenyan constitution and is included as part of the state’s obligation in respect of environmental and resource management. See p. 43 of the 2010 Kenyan constitution, available at: https://www.constituteproject.org/constitution/Kenya_2010.pdf?lang=en



benefits and risks associated with energy development projects for local host communities, especially from corporate social responsibility schemes.

The LTWP developed a Stakeholder Engagement Plan (SEP), which built upon previous stakeholder engagement work undertaken during the project's conceptualisation, feasibility studies, planning and impact assessment processes (LEDs and USAID, 2017). Conversely, interviewees indicated that local leaders were involved in the project consultations through the Community Liaison from LTWP. Allegations arose that these community engagements were — and continue to be — conducted selectively. Youths, women, and people with disabilities were especially poorly represented or else excluded altogether from these processes. As a youth representative noted:

“There was little engagement of the group in the project and if it was, it was very selective and most of the signatories to the agreement to support the project were upended, given that most of the people selected to sign for the project were illiterate.

In addition, the project negatively affected the culture of the local communities. For example, Sarima village was fenced off, and this did not augur well as it restricted free movement of livestock. Also, the residents feel that their grazing land was taken away from them, yet they cannot see any benefits from the project.”

(Youth group representative)

Summary of key social performance parameters of the Lake Turkana Wind Power project

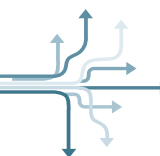
Social performance category	Indicators	Examples
Functionings of community well-being		
Creation of decent jobs (direct and indirect)	■ Number of newly employed within the host community and broader Marsabit County	■ 2,500 jobs during construction phase, of which 75% were from Marsabit County; 339 currently employed
	■ Employment of both skilled and unskilled locals	■ Employment of locals is mainly in semi-skilled and unskilled roles such as housekeeping and security guards
Improved local economic activities and income-generation opportunities	■ Increase in local businesses along the project site	■ Increased business reported along the new road and the host town
	■ Increase in number of businesses in all sectors such as fishing, agriculture, tourism	■ Increased activity and ease of fish trading
		■ Increased fish prices due to added value and demand, mainly during the construction phase
Community benefit-sharing	■ CSR and community investment plan developed and agreed by implementing agency and (relevant) stakeholders	■ Increased local business such as retail shops, and phone services, money transfer, and banking services (M-pesa)
		■ CSR projects on water, school, security, and support for the health clinic (no continuity was mentioned by the community)
		■ Creation of a CSR fund and mentoring programmes
		■ Limited community engagement and awareness of activities and benefits

Table 10:
Long list of social performance parameters of the Lake Turkana Wind Power project

Source: own

Concerns were raised about the initiation and management of the CSR activities, particularly with regard to the definition and communication of such activities and associated benefits to the local community.

Social performance category	Indicators	Examples
Facilitators of community well-being		
Access to energy for productive uses and local value chains	<ul style="list-style-type: none"> Affordable, reliable electricity supply Increase in connectivity infrastructure for households and businesses 	<ul style="list-style-type: none"> There is no sub-station to connect the local community to the wind power
		<ul style="list-style-type: none"> Increased use of solar energy, due to improved incomes and awareness
		<ul style="list-style-type: none"> Solar installation support for local school and health clinic
		<ul style="list-style-type: none"> Overall expectations for affordable, reliable electricity from the generated wind power have not been met
Community infrastructure development	<ul style="list-style-type: none"> Construction of new road and maintenance of existing roads Improved social service infrastructure 	<ul style="list-style-type: none"> Social amenities supported with modern equipment, schools, water, and healthcare services
		<ul style="list-style-type: none"> Significant improvement of the C77 road during the construction phase of the project
		<ul style="list-style-type: none"> Improved ICT and banking services
		<ul style="list-style-type: none"> Observed and reported deterioration of the C77 road since 2018
Community engagement and participation	<ul style="list-style-type: none"> Development of a community participatory plan Adequate information to the community Appointment of community liaison officer Active participation of the community in all stages of the project 	<ul style="list-style-type: none"> Formal stakeholder engagement plan during project conceptualisation
		<ul style="list-style-type: none"> Establishment of a community liaison team/and steering committee
		<ul style="list-style-type: none"> Limited community engagement and participation in CSR activities and on-going everyday LWTP activities
		<ul style="list-style-type: none"> Limited information to the local community



5.2 Community expectations in Lamu County: major social performance priorities and indicators from energy development

The main objective of this study was to assess community expectations and priorities surrounding the proposed wind and coal energy projects in Lamu. An additional aim was to compare community expectations between renewable energy projects and fossil fuel projects. Lastly, potential barriers and untapped opportunities for facilitating the sustainable achievements of community-identified expectations as well as other potential benefits of energy development for host communities were identified.

Creation of decent jobs (direct and indirect)

Respondents had significant expectations of job creation and of fair employment and recruitment opportunities. Respondents indicated that the wind plant would have high potential to create decent jobs in comparison to the coal plant. Some of the job opportunities mentioned included security duties, transport of materials to the plant site, in addition to other formal and informal jobs at the plant. These low expectations match the lack of awareness and knowledge concerning the potential functions, benefits, and disadvantages of the proposed power plant as well as the educational and skill sets available at the host community levels.

How do you expect the proposed coal plant to contribute to your current job creation situation?

“I haven’t even thought of how the coal looks like; I cannot say what it looks like and how people do jobs, only [that] materials will be transported to the site either by using ships or road.”

(MECOBY Group)

How do you expect the proposed wind farm to contribute to your current job creation situation?

“Maybe it will generate job opportunities, but only for those who are educated.”

(Lamu Women Alliance)

Improved local economic activities and income-generation opportunities

Respondents linked income-generation opportunities to job opportunities whose income can be used to start small businesses. Respondents also had high expectations of the potential for the wind project to support significant income-generating activities in Lamu. Some of the highlighted prospective income opportunities include tenders to supply materials, and opening of restaurants and grocery shops near the project sites. In contrast, respondents worried that the proposed coal plant would result in water and environmental pollution, thereby destroying current income streams such as farming and fishing.

Community benefit-sharing

The community considered the opportunities with regards to job creation, especially with the wind plant construction, to having a direct positive impact on access to healthcare, notably the construction of new hospitals or clinics, access to electricity, and improved tourism activities. In contrast, with respect to the coal power plant, both local government and community members raised concerns about whether the promised benefits would materialise, and about the fair distribution of the potential benefits, risks, and opportunities.

How do you expect the proposed coal plant to contribute to your current situation with access to affordable healthcare?

“I don’t know much about coal; what I heard is the project is very dangerous to human beings. It will not help me to afford healthcare.”

(Bawe CBO)

How do you expect the proposed wind farm to contribute to your current situation with access to affordable healthcare?

“Not much contribution. Not beneficial for the community ... the loss is more than the gain.”

(Lamu Women Alliance)

Respondents were interested in how the development of both plants would contribute and perform on matters related to tourism. Tourism is the largest contributor to Lamu's economy, and is the source of many household livelihoods due to the area's myriad rich archaeological and cultural resources. Respondents indicated that the wind plant would make a significant contribution to the current tourism situation in Lamu, especially because the proposed location is close to a beach and the Kipini conservancy which hosts wildlife and opportunities for tourists. The wind plant is expected to perform better than coal with respect to improving tourism activities, due to its strategic position for sites that are attractive for tourism. The wind turbines are also expected to attract local tourists. Conversely, expectations were low concerning the potential positive impacts of coal on tourism. In this respect, respondents were either unsure about the potential positive contribution or expressed concerns that the coal plant would be detrimental to local tourism.

How do you expect the proposed coal plant to contribute to your current tourism industry?

“Coal will totally destroy tourism, as more damage will occur to the ocean – killing millions of sea creatures, where most of the tourists come to Lamu for snorkelling and the like. So if fish are killed, where will the tourists go for snorkelling?”

(Community member)

How do you expect the proposed wind farm to contribute to your current tourism industry?

“It will look funny when turbines are moving while generating power, so tourists will be very interested in visiting; also, it is adjacent to the beach and Kipini.”

(MECOBY Group)

Communities were concerned about the negative impacts of the coal plant on their livelihoods and health and well-being, especially about chronic diseases associated with harmful wastes and emissions from the

coal power plant affecting air quality, water, and foods such as fish.

Consideration of human rights

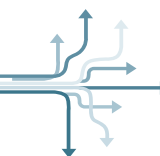
Consideration of human rights was another social performance category that was ranked highly by respondents. Evaluation of land for the construction of both wind and coal projects as well as full compensation of affected persons/households were some of the indicators highlighted as measures for consideration of human rights. For example, respondents expressed the need for full disclosure and dissemination of information about land acquisition and resettlement, as well as full compensation for all affected households/community members before the start of the project. The appointment of a community human rights supervisory body, in the form of a community steering committee and/or a community liaison officer with oversight of government and developers' activities was another indicator identified by respondents as a commitment to upholding human rights in both projects.

Fairness and accountability

Land acquisition and distribution, fair distribution of job opportunities, as well as the consideration of environmental and social impacts, as stipulated by the law and as underscored in the social and environmental assessment reports for both projects, were the main issues of concern. Potential for impunity and lack of accountability was exposed by the gaps in the environmental and social impact assessment (ESIA), which resulted in the halting of the wind farm over land matters and cancellation of the coal development licence by the National Environmental Tribunal (NET) due to irregularities in the environmental impact assessment (EIA). In view of these events, and to ensure fairness and accountability by developers, respondents expressed the need for rigorous community engagement and involvement in both projects, a community legal network, and legally binding agreements to formally acknowledge and address matters relating to both project activities. Finally, respondents expressed the need for community support and capacity building to enhance their participation in natural resource management and protection.

Access to energy for productive uses and local value chains

Access to energy services for productive uses was also among one of the seven social performance categories that scored above 50% in the validation workshop.



Respondents had expectations that the majority (60%) of households, businesses, and social amenities would gain electricity access from the power generated by the wind project. Respondents identified the need for energy to support productive livelihoods and income-generating activities such as cold food storage services in slaughterhouse, as well as for agriculture and fish products. Overall, respondents indicated interest in the use of solar panels, with cost and lack of awareness identified as the main barriers to access. As one respondent described:

“We used to hear that to own a solar panel that connects to a black and white TV, it could cost about KES 80,000¹⁰. However, we understand that it can last for a long time (and) maybe it is cheaper in the end. But I do not have a lot of experience with it.”

(Ahmed, 2021)

Community engagement and participation

The basis for constructing appropriate mitigation measures lies in public consultations, where full disclosure and timely engagement of the community are important. However, a lack of community engagement was identified in both the wind and coal power projects. In this regard, respondents expressed the need for community-driven mitigation planning involving all relevant stakeholders, as well as capacity building to ensure widespread participation and awareness of potential benefits, opportunities, and the rights of host communities.

Summary of key social performance parameters of the proposed wind and coal power projects in Lamu

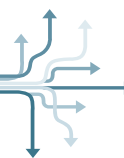
Social performance category	Lead indicator	Secondary indicators
Functionings of community well-being		
Creation of decent jobs (direct and indirect)	Increased employment rate in Lamu	■ Number of technical and support staff comprised of locals
		■ Opportunities for transporting materials to the site
		■ Access to information on types of jobs that can be created
		■ Number of newly employed locals
		■ Number of skilled and non-skilled locals working in the coal plant
		■ Increase of road infrastructure in Lamu
		■ Type of recruitment conducted locally
Improved local economic activities and income-generation opportunities	Number of companies registered in Lamu	■ Number of small businesses opened
		■ Number of insurance companies opened to insure small businesses and to provide health cover
		■ Diversification of businesses
		■ Increase in companies operational in Lamu

Table 11:
Long list of social performance parameters of the proposed wind and coal power projects in Lamu

Source: own

¹⁰ A person working in Kenya typically earns around 147,000 KES per month. Salaries range from 37,100 KES (lowest average) to 656,000 KES (highest average, source: www.salaryexplorer.com).

Social performance category	Lead indicator	Secondary indicators
Functionings of community well-being		
Community benefit-sharing	Reduced price of electricity	■ Balanced allocation of benefits (e.g., profit) versus risks (e.g., losses or damage)
		■ Co-development of CSR plan
		■ Formulation of compensation plans
		■ Development of legally compliant mitigation plans
		■ Allocation (percentage share) of benefits (e.g., profit) versus risks (e.g., losses or damage) between community and developers
		■ Uptake of contributions from the community
Consideration of human rights	Incidences of health problems or environmental degradation	■ Incidence of morbidity and mortality attributed to the project
		■ Level of damage to nature
		■ Level of fear of emergence of new diseases
Fairness and accountability	Number of legal measures upheld	■ Transparency and legal compliance
		■ Implementation of relocation and compensation plans
		■ Compliance with legal obligations and community-specific commitments
		■ Balance of benefits and risks
Facilitators of community well-being		
Access to energy for productive uses and local value chains	Number of homes newly connected to electricity	■ Number of houses prepared to receive electricity from the grid
		■ Reduced electricity tariffs
		■ Reduced frequency of blackouts/power outages
		■ Availability of energy options
		■ Number of commercial initiatives opened, powered by the plant
		■ Minimal environmental degradation
		■ Affordable energy for diversified uses
Community engagement and participation	Number and diversity of public participants	■ High-quality and comprehensible information shared
		■ Quantity and quality of information shared
		■ Inclusive public participation
		■ Number of residents aware of the merits and demerits of the project
		■ Number of local organisations involved in mobilisation for public participation
		■ Types of instruments used to inform the community about the project



5.3 Potential barriers to social performance

The social performance expectations and other potential socio-economic benefits presented by a proposed energy development, such as employment opportunities, improved livelihoods, energy access, education, and healthcare services are neither simple nor straightforward. Therefore, while there were many community expectations envisioned from the construction of both the wind and coal power plants in Lamu, potential barriers to their achievement were also identified, as highlighted below.

Project design and implementation

Local energy projects affect the lives and livelihoods of host communities in both positive and negative ways. Therefore, balancing energy needs at national and local levels requires the fine-tuning of diverse needs, aspirations, and opportunities. This includes ensuring that energy development to meet national needs does not come at the cost of local host community needs and aspirations. In the case of Lamu, it was evident that the objectives of both the proposed wind and coal power plants were not aligned with the needs and aspirations of local host communities for protection of sustainable livelihoods and long-term well-being. For example, the proposed coal plant is an obvious contradiction to Kenya's climate protection commitments, while a wind plant that fails to guarantee direct access to energy services by a host community that is in dire need of electricity access for domestic and productive uses is inconsistent with the government's efforts to achieve the SDGs (especially SDG 7) and other national sustainable development goals such as Vision 2030.

Unless climate-action and sustainable development goals are intentionally pursued in energy development and aligned at all levels of society, including international, national, county, and local levels, the often-cited potential benefits and social performance of various energy resources for people and the planet, are likely to remain elusive. To manage the potential for unmet expectations, the co-benefits of such projects and potential community needs and aspirations should be mapped and communicated in collaboration with all relevant stakeholders and formalised through existing community structures. Procurement guidelines oriented towards climate action and social performance for local communities should also be considered in order to ensure alignment of international investments with the Paris Agreement and related national and local goals. Overall, this study has shown that contextuality

warrants particular attention in energy policy design and implementation process, to ensure that both local and national goals are addressed and sustained.

Land acquisition and resettlement

In contrast to the views of respondents from Lamu Island, those from Mleyi Village, Bahari Ward are strongly opposed to the proposed wind farm project. The main reason cited is the pending issue of both resettlement and relocation of the more than 150 farmers who have lived in the area for more than 20 years. The current compensation and resettlement proposals are tied to legal land ownership. In communities such as those in Lamu, land ownership is often not through the legal framework of title deeds but through customary entitlements to land, passed from one generation to the next. The lack of formal title deeds and the failure to consider local customary/informal land ownership practices have left affected communities anxious about their lives and livelihoods, and therefore in strong opposition to the wind farm and their potential relocation. It is estimated that 4,700 artisanal fishers will be directly or indirectly affected by the coal plant (Accountability Counsel, 2019). Beyond the value of livelihoods and income, land is of religious, social, and cultural significance to the people of Lamu. For example, mangrove trees are used for several purposes in the coastal areas, including roofing for traditional coastal homes. A project that endangers these valued socio-cultural practices, which is the case for both the proposed coal and wind farms, is likely to be highly contested.

Limited trust from host communities

Respondents cited limited, inaccurate, and inconsistent information about both the proposed coal and wind plants. For example, the residents were concerned about repeated changes to the wind plant's name, from Electrowind, Kenwind, Bahari wind to Milele Energy (the current project investors). This had largely led to mistrust. As noted by one respondent: *"Trust in knowing and understanding the process has been an issue in the project, with all the changes. The lack of trust in the process makes me not trust wind energy as a good source of energy"*. (KII1 Bahari Ward, 2021). While the development of wind is preferred over coal, current resistance to the project at the community level, due to lack of trust, demonstrates a missed opportunity for both the developers and government to capitalise on the current support for wind to meet both sustainable development and climate change mitigation commitments.

Limited stakeholder engagement

The necessity and role of public participation is stipulated in the Kenyan constitution. However, accounts from respondents indicate limited stakeholder consultation and engagement. This is evident from the high levels of local activism and protests (leading to the National Environment Tribunal cancelling the coal project's operating licence), and the current community grievances over land that have resulted in the delay of the wind farm.

Absent or isolated stakeholder engagement by both the developer and the government appears to be a common trend in both the coal and wind power projects. The organisation Save Lamu has emerged as the core entry point for community interaction, engagement, and community involvement in energy projects. While low levels of literacy locally, coupled with inadequate access to education services, limits the capabilities of host communities to assess the merits and demerits of the proposed energy projects and to hold government or developers accountable, this should not be used as an excuse for lack of engagement. Instead, this should be seen as an opportunity to develop community capacity, to facilitate capacity-building, and create awareness; such actions should serve to prepare and encourage residents to participate and to take active roles in energy development projects. Contextual conditions and capabilities should guide the development and implementation of stakeholder engagement processes.

Proposals made by one respondent, for closing such engagement gaps, included the use of the local language to reach the broader community:

“Use our local language to conduct education and awareness in the community”

(Lamu Empowerment Youth Group, 2021)

The evidence shows that capacity building and awareness creation conducted by local and international NGOs in Lamu in relation to the coal plant had given the community a better understanding of such projects and encouraged active participation with energy matters. As one interviewee noted:

“If we had lost the case, the community of Lamu would still be equipped to take personal mitigation measures against the dangers we were made aware of”

(Lali, Shimo La Tewa Creek Conservancy, 2021).

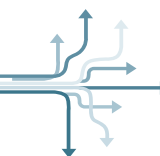
Overall, despite limited community knowledge of energy systems and the disagreements on land-related issues around wind energy development, respondents had higher expectations that the development of the proposed wind farm would deliver greater benefits than coal, such as improved tourism activities, education and skills development, and new opportunities for young people in the community. The main concern around the development of the proposed coal plant was the potential adverse impacts on current lives and livelihoods, such as interference with farming, tourism, and fishing activities as well as impacts on health and well-being. Disruption of current lifestyles and livelihoods should be avoided or mitigated. Instead, energy development should aim to improve the conditions of current and future generations, especially in Lamu where basic services, including energy services, are chronically lacking.

Tribal conflicts

There is lingering concern regarding (tribal) conflicts, which may emerge in the event that the proposed wind project proceeds without adequately considering the needs of current residents of Mpeketoni, the proposed resettlement location. Mpeketoni is already inhabited by the native Swahili community. Land ownership and demarcation in Mpeketoni has often brought tension and contention between the Swahili people and new arrivals. Potential influx of new residents, further potential disruption to the livelihoods of the Swahili people, and their relocation for development of the wind project are all issues of high concern. Furthermore, social cohesion is threatened in Mpeketoni because some residents are accused of willingly giving their land for resettlement, whereas the wider community expects unity in protesting the proposed land acquisition by the developers.

Education, skills, and knowledge of energy sources and project development

Lack of knowledge, education, and appropriate skills are likely to pose a barrier to meeting expectations for local value creation such as job creation and employment opportunities.



The low literacy levels and lack of knowledge about various energy systems were also shown to influence the level of support for energy development in Lamu. For example, there was limited awareness of the advantages, disadvantages, benefits, and opportunities presented by both coal and wind energy. This lack of knowledge, for example about the design and potential impacts of various energy projects on the community, resulted in false expectations, such as the current expectation that both coal and wind project would directly benefit household energy access conditions. In the absence of a local sub-station dedicated to meeting community energy needs, this expectation is unlikely to be met by either project. This unmet expectation is already evident within the LTWP¹¹ host communities, where — despite the presence of the largest wind farm in Africa — communities continue to experience chronic lack of clean, reliable, affordable electricity services to support lives and livelihoods.

According to the ESIA (AfDB, 2016), the proposed coal plant in Lamu was anticipated to create approximately 1,800 direct skilled and unskilled employment opportunities for the local community and migrant workers. Around 1,000 direct jobs were set aside for persons born in Lamu, with additional free technical skills-training in preparation for employment (AfDB, 2016). Both wind and coal development require high and specialised skill levels; consequently, without an enabling environment for capacity building and skill development, host communities are unlikely to accrue potential benefits. Such benefits might instead be limited to unskilled short-term, low paying jobs, a potential source of frustration for the community with potential negative consequences for the developers and the sustainability of the project.

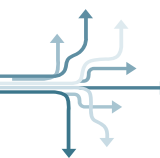


Farmer on his ancestral land. In the background are cashew trees, his main source of income. © SEI

¹¹ <https://ltwp.co.ke/>

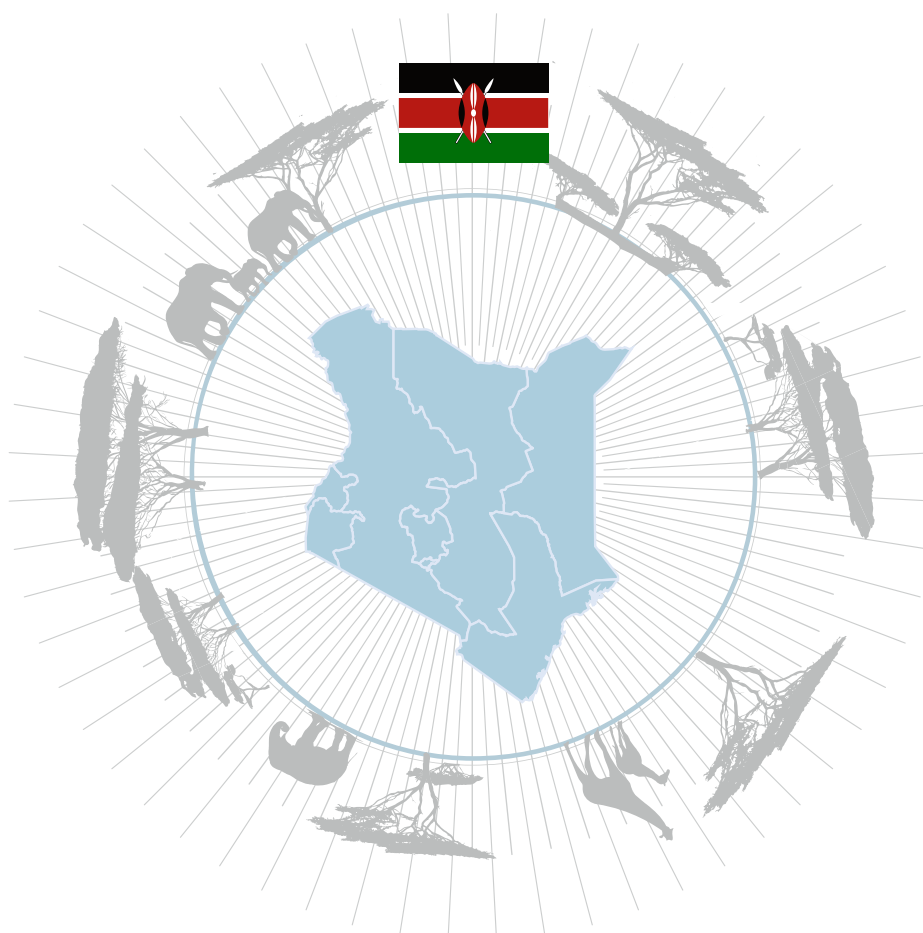
6. Policy opportunities

- **Harmonising international climate commitments with national action plans:** Opposing energy development options in Lamu County — namely coal versus wind power — demonstrate that local energy planning is not aligned with national and international climate policies. National Action Plans should strengthen International Climate Change Agreements, not counteract them. Genuine harmonisation of policies and implementation plans will avoid contradictions and thereby contribute to adjusting climate commitments through the fulfilment of energy needs and the support of local communities.
- **International investments should strengthen climate action, not contradict it:** As the contested coal power project in Lamu has shown, the lure of international investment is accompanied by the risk of neglecting environmental and climate policy targets. Court rulings and local resistance have also proved the importance of national legislation and expression of local concerns in aligning international investment with national and local policies. Governments should not allow the interests of investors to take precedence over those of local communities nor contravene their own policies. Climate-action-oriented procurement guidelines should be considered to align international investments with the Paris Agreement and related national and local social and economic policies.
- **Involving local host communities in energy planning to maximise social performance:** Political deliberations and planning processes on climate action in the energy sector need to consider the social performance of energy projects and social and economic co-benefits. The activism witnessed in Lamu has halted the proposed coal power plant and one of the main investors has even recognised that the plan was a mistake. While balancing energy needs at a national level requires fine-tuning of needs versus impacts, it is also important to take into account the needs, expectations, and aspirations of local host communities, as well as listen to and address the grievances of affected stakeholders.
- **Ensuring long-term energy security for citizens by considering climate change risks and resilience:** Besides including social performance criteria, investments in large energy projects should also consider criteria pertaining to climate change risks and resilience/adaptation, in line with the National Adaptation Plan 2015–2030, to ensure long-term energy security for Kenya's citizens. Power plants that utilise watercourses or coastal locations (such as that in Lamu County, located on a small island) should consider future sea level rise and higher temperatures, which may represent risks to the secure operation and cooling of thermal power plants.



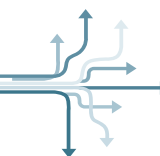
Key policy messages

- **Key policy message 1: Increasing the social performance of energy sector investments is important to reconcile climate action with community needs.** Frameworks such as the Social Performance Index (SPI) (IASS, 2021b) can contribute to highlighting the benefits or disadvantages of energy projects and investments while incorporating the voices and aspirations of local communities.
- **Key policy message 2: There is an acute lack of evidence on the social performance of energy investments in Kenya.** To support decision making, particular importance should be placed on the creation of decent jobs, income-generation opportunities, productive use of energy by local value chains, benefit-sharing plans, consideration of human rights, fairness and accountability by law, and community co-design of climate action and sustainable development.
- **Key policy message 3: International investments should strengthen climate action and increase social performance for communities.** Procurement guidelines oriented towards climate action and increasing social performance for local communities should be considered, to align international investments with the Paris Agreement and related national and local policies.



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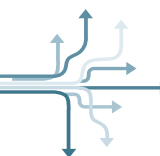
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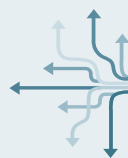
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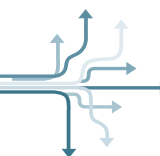
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Annex





Annex 1: Stakeholder mapping and involved stakeholder groups

Amu BMU	Lamu Youth Alliance
Amu BMU	Lamu Youth Alliance
Amu Council of Elders	Maendeleo ya wanawake (Women's Development)
Baraza la Imam (CIPK: Council of Imams and Preachers of Kenya)	Chairlady — women's group
Beach Management Unit (BMU)	Mpeketoni Environmental Conservation and Beautification (MECOBY) Group
Chairperson Inter-religious	Persons Living with Disability (PLWD)
Council of Elders	Sauti ya Wanawake — Lamu East
Jicho La Lamu	Shimo La Tewa Creek Conservancy
Kililani farmers	Sisters for Change
Kililani Women Group — Secretary	Treasury Amu BMU
Lamu Coastal Indigenous Peoples Rights for Development (LCIPRD)	Voice of Justice
Lamu Empowerment youth group	

Table A.1:
Interviewed
community groups

Source: own

Non-Governmental/Civil Society Organisation	Government
Bawe CBO	Department of Social Development, Lamu
Lamu Women Alliance	Energy and Petroleum Regulatory Authority (EPRA)
Mtangawanda Mangrove Restoration Women Group	Kenya Forest Service (KFS)
Natural Justice	Lamu Municipality
Save Lamu	National Environment Management Authority (NEMA), Mokowe and Nairobi offices

Table A.2:
Interviewed
non-governmental/civil
society organisations and
government stakeholders

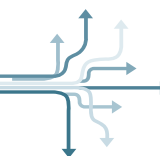
Source: own

Annex 2: Stakeholder matrix

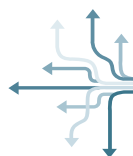
Stakeholder name	Impact – How much do the coal and wind projects impact stakeholders? (Low, medium, high)	Influence – How much influence do stakeholders have over the coal and wind project? (Low, medium, high)	What is important to the stakeholder?	How could/does the stakeholder contribute to the coal and wind projects?
Amu Council of Elders	Medium	Medium	Maintaining the cultural heritage of Lamu	Together with project developers: identifying mitigation measures that uphold cultural values.
Baraza la Imam (Council of Imam and Pastors in Kenya-CIPK)	Medium	High	Upholding local religious values of the people of Lamu	Use their influential platform to discuss with the community the merits and demerits of projects.
Shimo La Tewa Creek Conservancy	High	High	Improving access to electricity among households in Lamu East, as 80% of people have no access to electricity. General conservation of the environment.	Mobilising the community to seek government support in bringing infrastructure for grid electricity to their community.
Voice of Justice	Medium	High	Conducting civic education among the community on respective laws and legislation important for the community.	Providing pro bono legal advice to the community, particularly during the coal project. Informing communities of their constitutional rights, including rights to safe and clean environment.
Lamu Coastal Indigenous Peoples Rights for Development (LCIPRD)	High	High	Utilising indigenous knowledge throughout the project phases to ensure the rights of the people are upheld.	Contributing to dialogue engagements and disseminating information to champion community interests.
Beach Management Unit (BMU)	High	High	Ensuring that projects do not endanger the livelihoods of fishers and those who depend on the beach as their source of livelihood.	Mobilising boat owners, crew, traders, ice makers, etc. to identify ways of mitigating project impacts, especially pollution. BMU represented the community to oppose the proposed coal project.
Lamu Youth Alliance	Medium	High	Advocating that the future prospects of Lamu youth are not be compromised by the coal and wind projects; projects should not be detrimental to their current socio-economic status but provide opportunities for a better future.	Bringing together young people to champion environmental-related matters. The Alliance has been a frontline opponent of the proposed coal plant.

Table A.3

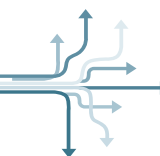
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Stakeholder name	Impact – How much do the coal and wind projects impact stakeholders? (Low, medium, high)	Influence – How much influence do stakeholders have over the coal and wind project? (Low, medium, high)	What is important to the stakeholder?	How could/does the stakeholder contribute to the coal and wind projects?
Save Lamu	High	High	Voicing concerns of the people of Lamu, including the most vulnerable groups, for inclusion in decision making.	An umbrella organisation representing different organisations and supporting members in conducting grassroots-level sensitisation and national-level advocacy for or against energy projects
Prefers to remain anonymous	Low	Medium	Conserving and managing all public natural resources.	Promoting citizenry
Mpektoni Environmental Conservation and Beautification (MECOBY) Group	High	Medium	Ensuring environmental conservation and efficient land use for the Mpektoni community.	Conducting grassroots environmental education and generating awareness; participating in consultation meetings
Bawe CBO	High	Low		The CBO is in Bahari Ward, the location earmarked for the wind farm. Conducting assessments of project impacts (both positive and negative) is important for community understanding, acceptance, and developing mitigation strategies.
Businessperson (independent tourism)	High	Low	Generating income from tourism activities that Lamu offers to outsiders.	As a resident of Kwasasi (the location earmarked for the proposed coal plant), it is important to join groups and existing structures for inclusion and public consultation, to be part of the process.
Sauti ya Wanawake – Lamu East	High	High	Creating a safe space for women to discuss grassroots issues that affect them, and to become a forum that contributes to the fight for women's and children's rights.	Bringing marginalised women in the community to the centre of decision making.
Natural Justice	Low	High	Conducting research on environmental and human rights law while supporting local communities.	Tracking process of the Lamu Coal Plant EIA and supporting the community in conducting advocacy.



Stakeholder name	Impact – How much do the coal and wind projects impact stakeholders? (Low, medium, high)	Influence – How much influence do stakeholders have over the coal and wind project? (Low, medium, high)	What is important to the stakeholder?	How could/does the stakeholder contribute to the coal and wind projects?
Kwasasi Farmers Self Help Group	High	High	Bringing together farmers whose livelihoods suffered during implementation of the road linking Lamu Port and Kwasasi.	Following-up on the energy projects, to ensure compliance with relocation and compensation agreements for farmers.
NEMA – Mokowe office	Low	High	Supervising and coordinating all environment matters in Lamu County	Conducting the ESIA with the headquarters, depending on the level of the project
NEMA – Nairobi office	Low	High	Supervising and coordinating all environment matters in Kenya	Mandating project developers to conduct ESIA, and issuance of licenses to developers.
Energy & Petroleum Regulatory Authority (EPRA)	Low	High	Taking the lead in the formulation, review, and enforcement of rules and regulations for the energy sector.	Providing energy generation licenses to project developers such as Amu Coal Power Plant and Kenwind Holdings Ltd.



Annex 3: Weighting and ranking of indicators

List of ranked criteria		Percentage/weighting		
Criteria		Least important	Neutral	Most important
1	Access to affordable healthcare			100
2	Creation of decent jobs (direct and indirect)		11	89
2	Tourism		11	89
3	Increased income-generation opportunities		22	78
3	Public participation and social inclusion for inclusive decision making		22	78
3	Co-developing risk-mitigation measures with the community	11	11	78
3	Consideration of human rights	11	11	78
4	Accountability by law		22	78
4	Information and communication	11	11	78
5	Access to clean and affordable electricity		33	67
6	Improved local infrastructure		44	56
7	Exploration of non-hazardous energy sources with few to no negative impacts	11	44	44
7	Access to quality formal (vocational) and non-formal (civic) education		56	44
7	Use of indigenous knowledge	11	44	44
7	Social and recreation centres	22	33	44
8	Productive use of energy		67	33
8	Clear benefit-sharing plan	11	56	33
8	Impartial feasibility studies	22	44	33
9	National-level benefits — carbon credit revenues, tax income, foreign exchange	11	78	11
10	Community engagement on social impacts such as land resources, access, and pollution management	11	11	7

Table A.4

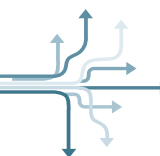
Source: own

Social performance categories and indicators for the Lamu and Marsabit case studies (long list)

Social performance category	Indicators	Examples
Functionings of community well-being		
Creation of decent jobs (direct and indirect)	■ Number of newly employed within the host community and broader Marsabit County	■ 2,500 jobs during construction phase, of which 75% where from Marsabit County; 339 currently employed
	■ Employment of both skilled and unskilled locals	■ Employment of locals is mainly in semi-skilled and unskilled roles such as housekeeping and security guards
Improved local economic activities and income-generation opportunities	■ Increase in local businesses along the project site	■ Increased business reported along the new road and the host town
	■ Increase in number of businesses in all sectors such as fishing, agriculture, tourism	■ Increased activity and ease of fish trading
		■ Increased fish prices due to added value and demand, mainly during the construction phase
Community benefit-sharing	■ CSR and community investment plan developed and agreed by implementing agency and (relevant) stakeholders	■ Increased local business such as retail shops, and phone services, money transfer, and banking services (M-pesa)
		■ CSR projects on water, school, security, and support for the health clinic (no continuity was mentioned by the community)
		■ Creation of a CSR fund and mentoring programmes
Co-developing risk-mitigation measures with the community	■ CSR and community investment plan developed and agreed by implementing agency and (relevant) stakeholders	■ Limited community engagement and awareness of activities and benefits
	■ Participatory-developed mitigation plan covering all sectors affecting the community	■ No participation reported in the development of mitigation plans or implementation and monitoring plan of the ESIA
Consideration of human rights	■ Capacity building at the community level on compensation policies	■ An HIV/AIDS awareness and education awareness campaign with the local community
	■ Justice and fair compensation of households/community members before the start of the project	■ Establishment of community liaison committee (meeting monthly with LTWP representatives)
	■ Establishment of community steering committee, newsletters, and community liaison officer	■ Limited information dissemination and networking at the community level (limited to community liaison committee)
Accountability by law	■ Just and fair representation in community engagements	■ Limited community engagement and participation, and no report of fair and just representation of community members (instead: reports of avoiding direct community engagement)
	■ Conduct environmental and social impacts assessments (ESIA)	■ Ongoing conflicts and lawsuits between the government and locals over land acquisition and unfair and unjust compensation
	■ Clear implementation of EIA report by the project developers	■ According to African Development Bank (2011 report), ESIA produced for project approval was conducted in accordance with the law and national standards
Accountability by law	■ Formation of community legal network	■ No information on legally binding documents
		■ Limited community engagement when agreeing concession area (150,000 acres) with the government

Table A.5:
Long list of social performance parameters of the Lake Turkana Wind Power project

Source: own



Social performance category	Indicators	Examples
Facilitators of community well-being		
Access to energy for productive uses and local value chains	<ul style="list-style-type: none"> Affordable, reliable electricity supply Increase in connectivity infrastructure for households and businesses 	<ul style="list-style-type: none"> There is no sub-station to connect the local community to the wind power Increased use of solar energy, due to improved incomes and awareness Solar installation support for local school and health clinic Overall expectations for affordable, reliable electricity from the generated wind power have not been met
Community infrastructure development	<ul style="list-style-type: none"> Construction of new road and maintenance of existing roads Improved social service infrastructure 	<ul style="list-style-type: none"> Social amenities supported with modern equipment, schools, water, and healthcare services Significant improvement of the C77 road during the construction phase of the project Improved ICT and banking services Observed and reported deterioration of the C77 road since 2018
Community engagement and participation	<ul style="list-style-type: none"> Development of a community participatory plan Adequate information to the community Appointment of community liaison officer Active participation of the community in all stages of the project 	<ul style="list-style-type: none"> Formal stakeholder engagement plan during project conceptualisation Establishment of a community liaison team/and steering committee Limited community engagement and participation in CSR activities and on-going everyday LWTP activities Limited information to the local community
Access to affordable healthcare	<ul style="list-style-type: none"> Improved and moderately equipped healthcare facilities Access to medical insurance and healthcare services 	<ul style="list-style-type: none"> On-site clinic for employees and their dependents, with efficient medical services Company (LTWP) medical insurance that covers employees and their dependents Overall improved healthcare access due to better road networks and support for local health centres Reported increase in HIV cases
Tourism	<ul style="list-style-type: none"> Increased tourist numbers in Marsabit County 	<ul style="list-style-type: none"> Improved road network, enhanced access to tourism attraction sites such as Lake Turkana The wind farm is a tourist attraction in itself
Access to quality formal (vocational) and non-formal (civic) education	<ul style="list-style-type: none"> Number of modern schools constructed Number of sponsorship opportunities available and accessible to residents 	<ul style="list-style-type: none"> Improved school infrastructure Training and exhibition sessions conducted by wind project developers Support for mentorship programmes through Winds of Change (WoC)

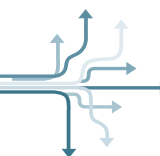
Social performance category	Indicators	Examples
Facilitators of community well-being		
County- and national-level benefits	■ Support for national climate actions and sustainable development efforts	■ National pride as the host of the largest wind farm in Africa
	Contributions to:	■ Contribution to climate mitigation efforts and nationally determined contributions (NDCs)
	■ National economic development and	■ Support for delivering United Nations Sustainable Development Goals (SDGs)
	■ Energy security and independence	■ Contribution to national GDP through carbon credit revenues, tax income, and foreign exchange
		■ Contribution to national energy security and independence

Long list of social performance parameters of proposed wind and coal power projects in Lamu County, Kenya

Social performance category	Lead indicator	Secondary indicators
Functionings of community well-being		
Creation of decent jobs (direct and indirect)	Increased employment rate in Lamu	■ Number of local technical and support staff
		■ Opportunities in transporting materials to the site
		■ Access to information on types of jobs that can be created
		■ Number of newly employed locals
		■ Number of skilled and non-skilled locals working at the coal plant
		■ Improved road infrastructure in Lamu
		■ Type of recruitment conducted locally
Improved local economic activities and income-generation opportunities		■ Number of small businesses opened
		■ Number of insurance companies opened to insure small businesses and provide health cover
		■ Diversification of businesses
		■ Increase in companies operational in

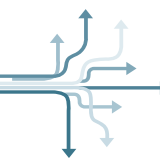
Table A.6:
Long list of social performance parameters of the Lake Turkana Wind Power project

Source: own



Social performance category	Lead indicator	Secondary indicators
Functionings of community well-being		
Community benefit-sharing	Reduced price of electricity	<ul style="list-style-type: none"> Balanced allocation of benefits (e.g., profit) versus risks (e.g., losses or damage) Co-development of CSR plan Formulation of compensation plans Development of legally compliant mitigation plans Allocation (percentage share) of benefits (e.g., profit) versus risks (e.g., losses or damage) between community and developers Uptake of contributions from the community
Consideration of human rights	Incidences of health problems or environmental degradation	<ul style="list-style-type: none"> Incidence of morbidity and mortality attributed to the project Level of damage to the natural environment Level of fear of emergence of new diseases
Fairness and accountability	Number of legal measures upheld	<ul style="list-style-type: none"> Transparency and legal compliance Implementation of relocation and compensation plans Compliance with legal obligations and community-specific commitments Balance of benefits and risks
Co-developing risk-mitigation measures with the community	Timely engagement of the community	<ul style="list-style-type: none"> Incorporating contributions from the community Full disclosure on the extent of damage Frequency of complaints and grievances from the community Number of people who relocate from Lamu due to fear of negative impacts
Facilitators of community well-being		
Access to energy for productive uses and local value chains	Number of homes newly connected to electricity	<ul style="list-style-type: none"> Number of houses prepared to receive electricity from the grid Reduced electricity tariffs Reduced frequency of blackouts/power outages Availability of energy options Number of commercial initiatives opened, powered by the plant Minimal environmental destruction Affordable energy for diversified uses

Social performance category	Lead indicator	Secondary indicators
Facilitators of community well-being		
Community engagement and participation	Number and diversity of public participants	■ High-quality and comprehensible information shared
		■ Quantity and quality of information shared
		■ Inclusive public participation
		■ Number of residents aware of the merits and demerits of the project
		■ Number of local organisations involved in mobilisation for public participation activities
		■ Types of instruments used to inform the community about the project
Access to affordable healthcare	Number of hospitals or clinics constructed	■ Modern and affordable health facilities
		■ Increased income level to afford health-care
Improved infrastructure	Construction of new roads (km)	■ Length of newly surfaced (tarmac) roads and pavements
		■ Maintenance of existing roads
Tourism	Tourists visiting and boosting local economy	■ Increased number of tourists in Lamu
		■ Number of tourism activities such as snorkelling etc. that will be carried out
Access to quality formal (vocational) and non-formal (civic) education	Increased education level and skilled individuals in Lamu	■ Number of modern schools constructed
		■ Number of sponsorship opportunities available and accessible to residents
Information and communication	Availability of Internet technology	■ Availability of information in various forms suited to the community
National-level benefits — carbon credits revenues, tax income, foreign exchange	Amount of revenue and tax gained for the county government	■ Enhanced national- and county-level collaborations in energy and other development projects
		■ Type of agreement made with the national government



Farmers using a solar irrigation pump outside of Kitale, Kenya. © Jeffrey M Walcott/IWMI
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COBENEFITS

Unlocking social and economic co-benefits for a just and sustainable energy future

The COBENEFITS project supports national authorities and knowledge partners in countries worldwide to connect the social and economic co-benefits of decarbonising the power sector to national development priorities and to mobilise these co-benefits for early and ambitious climate action. The project supports efforts to develop enhanced NDCs with the ambition to deliver on the Paris Agreement and the 2030 Agenda on Sustainable Development (SDGs) and to enable a Just Transition.

COBENEFITS facilitates international mutual learning and capacity building among policymakers, knowledge partners, and multipliers through a range of connected measures: country-specific co-benefits assessments, online and face-to-face training, and policy dialogue sessions on enabling policy options and overcoming barriers to unlock the identified co-benefits in the target countries.

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Contact

Sebastian Helgenberger, Institute for Advanced Sustainability Studies (IASS)
sebastian.helgenberger@iass-potsdam.de

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