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Case Study
27 May 2024



CHALLENGES AND CONSEQUENCES OF THE LAKE TURKANA WIND POWER (LTWP) PROJECT ON INDIGENOUS PEOPLES' LAND

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INTRODUCTION

On May 10, 2024, Ekai Lokiru¹, a community leader of the El Molo ethnic group in Marsabit County, Kenya, expressed concern about the appeal process launched by the consortium behind the Lake Turkana Wind Power (LTWP) project—the largest wind farm in Africa—in response to a 2021 court ruling against the LTWP. The lawsuit, filed on October 14, 2014, was brought by six ethnic representatives from Marsabit County, who claimed illegalities in the way the land for the project had been acquired (Figure 1). They were seeking, among other things, the cancellation of land titles granted to the LTWP, with the aim of cancelling the project and revoking the illegal transfer of land.

The prolonged and costly legal battle led to significant frustration and division among the ethnic groups living around Lake Turkana, particularly as the LTWP consortium attempted to mitigate opposition by implementing corporate social responsibility (CSR) initiatives. However, Ekai’s concerns, shared by other ethnic individuals in the Lake Turkana region, remained focused on securing land rights and recognition for Indigenous peoples by the Kenyan government and the involved corporations.

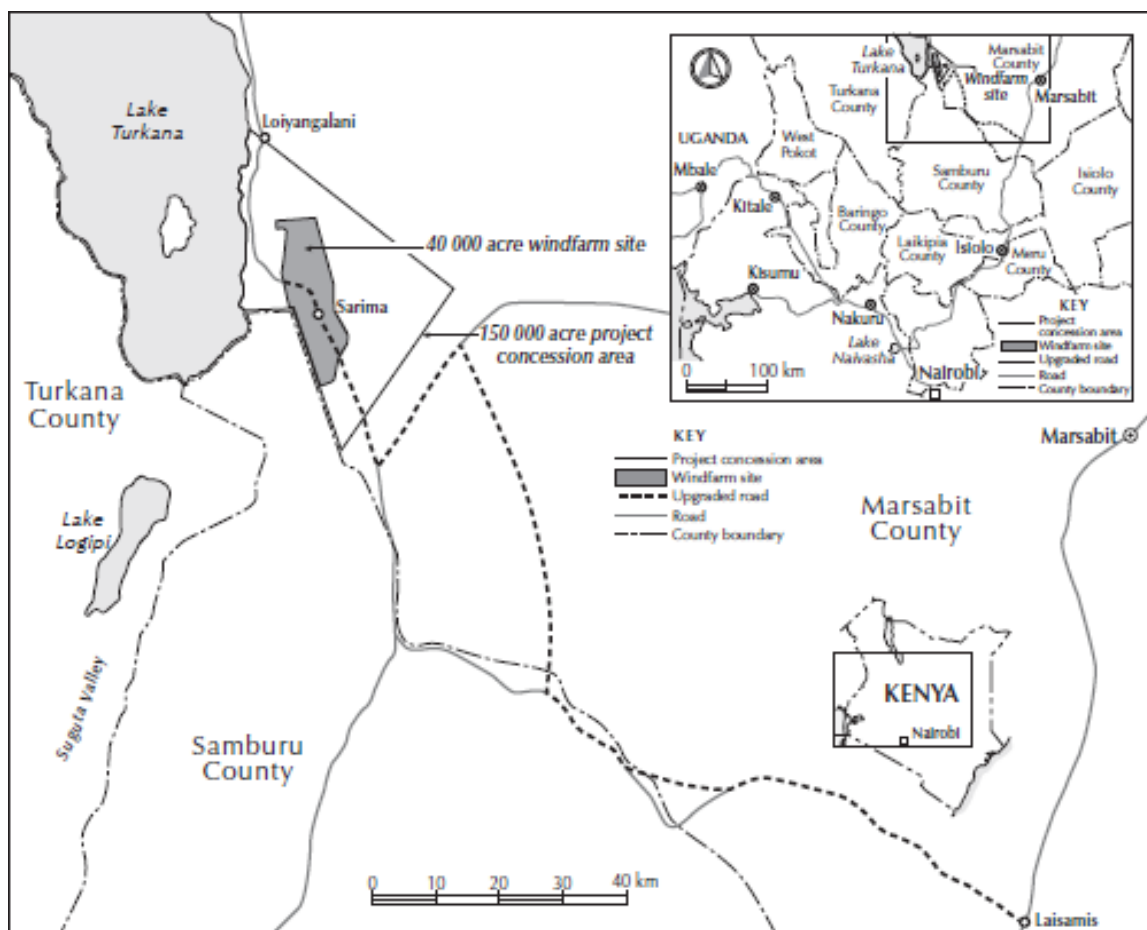


Figure 1. Spatial context: location of Lake Turkana and the LTWP project (4).

¹ All names of the individuals interviewed for this case were changed to safeguard their privacy and confidentiality.

LAKE TURKANA'S ETHNIC COMMUNITIES

Ekai Lokiru was a member of the El Molo ethnic community, which, along with the Turkana, Rendille, and Samburu communities, was one of four ethnic communities that inhabited the Lake Turkana region of Marsabit County in northwestern Kenya (see Figure 1). Lake Turkana was the world's largest permanent desert lake and its largest alkaline lake. The El Molo had long based their lives around the lake, first as hunters of crocodiles and hippos and later as fishers. The region also had a “history of pastoralist migrations” (1) and the local ethnic groups all shared a deep connection to the land, manifesting in an intricate interplay between culture, spirituality, and the environment (2,3). Ekai Lokiru narrated:

The Turkana, Samburu, Rendille and El Molo people rely on pastoralism, fishing, and small-scale agriculture—activities deeply embedded in the region's traditions and history.

The local ethnic communities were reliant on fishing and small-scale agriculture (see Figures 2 and 3). These activities not only supported their livelihoods but were also deeply embedded in the region's traditions and history, as recognized by the UNESCO World Heritage Centre in 2018 (3).



Figure 2. Mobile camps and goat herds of Turkana ethnic community in Serima Village. *Image courtesy of Friends of Lake Turkana. Used with permission.*

Despite its rich cultural heritage, the Lake Turkana region faced significant socioeconomic challenges. Ekai Lokiru noted that the area faced severe water shortages, which affected both their daily life and economic activities. This issue was exacerbated by the harsh local climate and irregular rainfall, which often led to periods of food insecurity. A representative from a nongovernmental organization (NGO) in Kenya highlighted that Lake Turkana's remoteness further restricted access to essential services, such as healthcare and education, and hindered economic opportunities, adding strain to the lives of its inhabitants. Lake Turkana's communities, as well as their lifestyles, were highly vulnerable. The Turkana community had a particularly high poverty index of 96% (5,6). The El Molo, the smallest ethnic group in Kenya, faced the extinction of their language and customs due to external pressures of modernity. Still, these communities sought to actively preserve their cultural identities by performing and documenting their traditional practices. Ekai Lokiru illustrated:

...we continue to celebrate our culture through traditional dances and music, which I have documented in audio-visual formats. As an organization, we are dedicated to preserving our culture while ensuring that our livelihoods remain unaffected by external influences.

In the midst of these challenges, Lake Turkana had an abundance of natural resources that were ideal for electricity generation. Recognizing this potential, the Kenyan government, in collaboration with national and international investment partners, initiated the LTWP project. This project aimed to harness the area's unique wind resources to produce sustainable energy (see Annex 1: Key Milestones of the LTWP Project).



Figure 3. Member of Turkana ethnic community herding goats in Serima Village. *Image courtesy of Friends of Lake Turkana. Used with permission.*

THE LAKE TURKANA WIND POWER (LTWP) PROJECT

The LTWP project served as an integral part of Kenya’s energy transition initiatives (see Annex 2: Key Energy Policies and Plans in Kenya). With 365 wind turbines and a capacity of 310 MW, it was the largest wind farm in Africa and accounted for nearly 17% of Kenya’s total electricity generation capacity (7,8). The project, which was primarily designed to supply electricity to cities like Nairobi, was initially conceived in 2005, with construction spanning four years from 2014 to 2017. It finally began supplying power to the grid on March 6, 2019, after delays in installing the necessary transmission line (9). To facilitate access, 208 km of off-site roads were constructed between the town of Laisamis and the village of Sarima, in addition to 130 km of on-site roads (10,11) (see Figures 4 and 5).

The LTWP project was Kenya’s largest private investment, involving stakeholders from the UK, Denmark, and Finland. Vestas, a Danish wind turbine manufacturer, had a 12% stake in the project. The stakeholders included Finnfund (the Finnish Fund for Industrial Cooperation) and the Danish Climate Fund (through the Investment Fund for Developing Countries), with additional support from regional entities such as the African Development Bank and European Investment Bank (see Annex 3: Equity Distribution Among LTWP Consortium Partners and Annex 4: Debt and Mezzanine Distribution for LTWP Lenders). The LTWP won several accolades, including the “African Renewables Deal of the Year” in 2014 by Thomson Reuters Project Finance International, and was nominated for more. A representative from one investor reflected: “...the [LTWP] project was successfully delivered on time and within budget. From a technical standpoint, it stands as a success story.”



Figure 4. Wind turbines of the LTWP. *Image courtesy of Friends of Lake Turkana. Used with permission.*



Figure 5. A goat herd grazes near the wind turbines of the LTWP. *Image courtesy of Friends of Lake Turkana. Used with permission.*

CSR AND PROJECT BENEFITS

The LTWP website listed various direct and indirect benefits of the project (see Annex 5: Proposed Benefits of the LTWP Project). These benefits included impacts of the wind farm itself, such as “[adding] renewable energy equivalent to 17% of Kenya’s installed electricity generating capacity” and “[reducing] the country’s reliance on fuel imports from neighbouring countries” (8,12), which contributed toward national-level goals of energy resilience. However, because the power generated by the LTWP project fed into the national grid, which mainly supplied cities like Nairobi, it did not provide electricity to the ethnic groups at Lake Turkana. A European investor explained:

Regarding our engagement with local communities, there hasn’t been a significant focus on their direct benefit from the project since the primary objective is to feed the grid in Kenya. While we have considered measures like installing solar panels for the local community, there hasn’t been a concerted effort or initiative to connect them directly to the grid under local terms.

Despite this, the LTWP website did report some more immediate benefits for the local communities, such as job creation through employment opportunities at the wind farm and infrastructure development through the construction of access roads, which increased connectivity to the rest of Kenya. In addition, the project claimed to provide community and health support by facilitating the harmonious living of different Indigenous communities, increasing security, and supporting better healthcare services.

Benefits to the local communities also arose through the initiatives of the NGO associated with the LTWP consortium, Winds of Change (12). Winds of Change undertook “sustainable community development projects throughout the Project’s Area of Influence” (13). These projects centered around constructing school facilities, donating furniture, establishing and upgrading health infrastructure, improving access to potable water through reverse osmosis systems and water boreholes, and supporting “miscellaneous community projects” that included food provision, sports tournaments, and peace initiatives. Although reports commissioned by project stakeholders like Finnfund highlighted the positive impacts of these initiatives, such as a reduction in poverty, increased employment, and improved access to healthcare (14), Ekai Lokiru questioned the extent of these benefits. Regarding employment, Ekai stated:

...of course, we saw a few individuals from our area getting involved. They were employed, but it was not adequate. We also asked about skill development. [...] Were there any plans for scholarships so that our local youth could also get trained, especially in renewable energy technology? [...] They mostly talked about our people not being skilled enough for skilled employment, and that’s what they promised [skilled employment]. But it ended up being empty promises because not a single person, not a single youth, [...] benefited from any scholarship programs.

A report from an international consulting firm with an office in Kenya suggested that the impact may have been time-limited, and/or that certain groups may have benefited from the project more than others (e.g., 49% of respondents of a survey used to study the socioeconomic impacts of the LTWP project were of Samburu origin, while only 2% were El Molo; 43% of respondents had college education whereas 21% had no education) (14). Ms. Wanjiku Mwangi, a member of an NGO in Kenya, commented:

...but then it was that tricky part of CSR—who was supposed to provide this for the citizens? And if companies did it—because they were not doing it for free—they then deducted it from their profits, from the monies that they paid to the government. So, when they were deducting their taxes, they looked at the cost of investments and all those things. And so, in the end, it was not of no benefit. If you could see it as a benefit to the community, but at the end of the day, it was a benefit to the company because when they were making any remittances to the government, they indicated this as the cost of doing business.

Therefore, although the range of benefits was broad, with the developers conscious to maximize benefits for all stakeholders, some questioned whether the benefits were as wide-reaching as they could have been.

PASTORALISM AND COMMUNAL LAND USE

The lifestyles of Lake Turkana’s ethnic groups were deeply intertwined with the land. Historically, they were nomadic or semi-nomadic hunter-gatherers or pastoral communities, continually moving themselves and their herds along established routes to new grazing areas and water sources with seasonal climate changes (3,6,15).

Ekai Lokiru reflected that all of Lake Turkana’s ethnic groups had their own attachment to the land. The El Molo, for instance, comprised seven clans, which were identified and differentiated by specific traditional names. Every clan had its own reasons for being attached to the land, with the same land having different spiritual significance for each clan. The Samburu also considered the land ‘our place (nkop ang)’ (4), a relational concept that involved connections between the community, livestock, and divinity, reaching

beyond the mere physicality of space and resources. Nevertheless, the El Molo and other ethnic groups at Lake Turkana typically viewed land as a communal entity, for shared and collective use.

Thus, these nomadic and semi-nomadic communities cohabited under a complex form of land-use patterns, with land considered a multifaceted resource for economic, cultural, and spiritual purposes (3,4). Their nomadic or semi-nomadic lifestyles were not merely a practical strategy for survival; they were a holistic way of engaging with the environment, resulting in a profound connection to—and communal perception of—the land (4). Ekai Lokiru reflected:

Among most communities, land was viewed as a communal entity. Unrestricted mobility and communal land usage was a defining element of subsistence for the ethnic groups of Lake Turkana.

This perspective highlights the integral role of land, not just as a resource, but as a foundation for cultural identity and societal structure (4,15). Consequently, the clash between traditional lifestyles and modern development projects—between the human and infrastructure development needs of land—inherently posed a complex challenge, and one that threatened the resilience of Lake Turkana’s ethnic communities.

“DEFINITION” OF INDIGENOUS PEOPLE

Ekai Lokiru reflected that one of the key issues of the 2014 lawsuit revolved around the land rights of the local communities. Several international standards existed to protect the rights of Indigenous and tribal peoples, such as ILO Convention 169, which was one of the most important international legal and normative frameworks concerning Indigenous and tribal peoples’ rights (16). Although Kenya had not ratified ILO 169, several of the companies behind the LTWP consortium were from countries who had, including Denmark, the Netherlands, and Norway.

Ms. Wanjiku Mwangi explained that the Kenyan constitution recognized some ethnic groups as “marginalized,” which meant their rights, including to their land, had to be upheld. However, the constitution did not clearly define Indigeneity—the state of being Indigenous—or officially recognize communities as Indigenous. The difficulty of determining which communities were Indigenous led to diverging designations depending on the context, making international standards for Indigenous peoples complex to address and enforce. Ms. Amina Omondi, working for a Kenyan NGO, elaborated:

The understanding of who qualifies as Indigenous varies, and it really depends on whom you ask. In Kenya, for example, there’s no widely accepted legal definition for Indigenous communities. [...] This is compounded by the debate over who is truly Indigenous.

Among the communities living around Lake Turkana, the Turkana, Samburu, Rendille, and El Molo ethnic groups were all recognized as part of Kenya’s “42 tribes” (17), but only the El Molo were recognized as Indigenous and “marginalized” owing to their hunter-gatherer lifestyle. The other communities were seen as “the most dominant tribes” in northern Kenya (7). The El Molo self-identified as Indigenous, but self-identification was not widely recognized as a valid characteristic of Indigeneity, and it was often not properly assessed to ensure the correct human and land rights for genuine Indigenous peoples.

Ms. Wanjiku Mwangi expressed concern that the Kenyan constitution’s avoidance of the terms “Indigenous” and “Indigeneity” may have been a strategic approach by the Kenyan government to avoid a level of commitment and obligation to international standards on Indigeneity. Indeed, Indigenous groups in Kenya were often denied their rights because they were considered ineligible or because the government paid them little attention—intentionally or unintentionally—when devising energy transition projects like the LTWP.

COURT CASE: LAND RIGHTS

The Trust Land Act of 1962 was in place when the planning of the LTWP project was underway, which provided values and principles for land management. Through this act, the land used by the communities was held in trust by Marsabit County Council, the local governing body. However, the County Council converted the land to private land to set it aside for the wind farm, under the premise that it was “owned by no one.” The fact that the land was held in trust for the local communities, which deemed this notion inaccurate, was neglected.

The Trust Land Act was replaced by the Community Land Act in 2016—long after construction of the LTWP began (18). Nevertheless, prior land conversions were still subject to the new Act (Art. 34(2)). Importantly, the new Act stated that the privatization of community land (previously referred to as trust land) required the approval of the community the land was registered with (Art. 23).

A county government shall not sell, dispose, transfer, convert for private purposes or in any other way dispose of any unregistered community land that it is holding in trust on behalf of the communities for which it is held. (Art. 6(8) of the Community Land Act, 2022)

Although this new act undoubtedly strengthened the land rights of communities, the complexity of land governance remained, as highlighted by Ekai Lokiru:

The land occupied by the LTWP project is community land. [But,] It does not belong to a specific community but is owned collectively by [multiple] communities [...], including the Turkana, Samburu, Rendille, and El Molo.

Thus, businesses and local governments aiming to alienate land for development must first understand this complexity. Furthermore, the communities should be consulted long before making any decision about the location of a development project. This right to free, prior, and informed consent (FPIC) is an international standard included in ILO 169 and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). A representative from a European NGO explained:

[The right to] FPIC [means] you have to inform people in a language that they understand... you have to actually have a dialogue and, in the end, have the consent from these people so they have the right to say yes and no.

The LTWP consortium drew up an Indigenous Peoples Policy Framework outlining the specific requirements for stakeholder engagement and emphasizing the need to seek broad community support. This document was commended by the consultancy firm, Scott Wilson, for demonstrating sensitivity to effective community engagement (7). However, the interpretation and application of the term “Indigenous peoples” was questionable. While the El Molo community was recognized as Indigenous, other communities like the Turkana, Rendille, and Samburu were not (7,12). Thus, the use of the term “Indigenous” essentially deemed the framework unapplicable to the majority of the affected communities. This drew criticism, as it deviated from widely accepted international standards (15).

Not only did the company’s assessment indicate a lack of understanding of the affected communities, but there were also no records substantiating the LTWP consortium’s claim that stakeholder consultations began a year after its submission of the initial application (19). In fact, according to different observers, these consultations took place only after the land had already been acquired, with some individuals only then learning about the project (20). This corroborated the experience of Ekai Lokiru.

As a result, the plaintiffs in the litigation process—the affected communities—asserted improper land acquisition without proper consultation or consent, seeking compensation and land restitution (21). Meanwhile, the defendants argued that the land acquisition process had been fair and transparent (21). Despite positive project outcomes highlighted by the LTWP consortium, including community engagement initiatives and UNFCCC registration, the legal dispute persisted (22,23). Indeed, the ruling by the Kenyan Supreme Court stated that the lawful procedures were not followed (24), raising uncertainties about the project’s future. However, subsequent legal developments meant that the case was reopened amid local opposition (12).

CHALLENGES AND CONSEQUENCES OF THE LTWP PROJECT

Various external observers and members of Lake Turkana’s ethnic communities reported that the LTWP project posed challenges to their traditional lifestyles. These included the direct impact of territorial disruptions. The pastoral communities traditionally moved their livestock along established routes in search of water and grazing areas, which was a necessary part of life in the arid environment around Lake Turkana. However, these movements were disrupted by the infrastructure development associated with the project (see Figure 6), affecting the traditional resilience and adaptability of these communities (6,12). Furthermore, Ekai Lokiru explained that the water-based lifestyle of the El Molo community, who based their survival on fishing and traditional boat-making, was under threat owing to increasing restrictions on access to the Lake Turkana shore.



Figure 6. Wind turbines and transmission lines of the LTWP. *Image courtesy of Friends of Lake Turkana. Used with permission.*

Another indirect consequence of the LTWP project was the exacerbation of pre-existing conflict among Lake Turkana’s ethnic communities. The historical importance of the land was complicated by the legacy of colonial endeavors that sought to confine people to specific areas. The resulting territorialization led to identities becoming more concrete across the region, contributing to already lingering conflicts over resources and territorial boundaries (4,15). Land encroachment, paired with insufficiently targeted and balanced CSR activities, further fueled such conflicts. Ekai Lokiru argued that “[The LTWP’s CSR activities] led to perceptions

of favoritism in social benefits, particularly employment. When one community feels more favored than the other, it naturally escalates violence.” Moreover, he contended that “ethnic violence can be attributed to the project itself.”

CONCLUSIONS

By 2024, the LTWP had been supplying the national grid with green energy for over five years. However, the ethnic communities in the area still lacked access to this energy, and their land and ethnic rights had not been restored. Reflecting on the legal struggles, Ekai Lokiru noted that only one of the plaintiffs who had initially submitted the lawsuit was still alive. The appeal launched by the LTWP consortium against the ruling, which favored the ethnic communities, merely served to prolong the court case, deepening the sense of fatigue among the communities who were fighting to cancel the project and reclaim the illegally obtained land.

As the Kenyan government and national and international firms involved in the LTWP project celebrated the achievements of constructing the largest wind farm in Africa, despair weighed heavily on Ekai Lokiru. Their success had come at the expense of the land and human rights of Lake Turkana’s ethnic groups. Amidst the celebrations, Ekai Lokiru pondered how the government and firms could develop a better understanding of the ethnic communities’ context, and how they could better protect and respect their fundamental human rights. The urgency for a resolution that acknowledged and compensated the losses of these communities was critical, prompting a reevaluation of the costs of progress and the value of justice.

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1. KEY MILESTONES OF THE LTWP PROJECT

Event	Date	Description
Development phase	2005	Initial conception of the LTWP project.
	2009	Land lease agreement for 150,000 acres in Marsabit County.
	2009–2014	Community consultations conducted.
	Mar 2014	Financial closure achieved with specific debt and equity structure.
	Dec 2014	Formal end of the development phase.
Construction phase	Oct 2014	Construction begins.
	Jul 2015	Ground-breaking ceremony by President Kenyatta.
	2015	Vestas-Google agreement for a 12.5% stake in LTWP.
	Oct 2014–Feb 2016	Road construction, encountering community protests.
	Mar 2016	First wind turbine erected.
	Mar 2017	Final wind turbine erected. A total of 365 wind turbines delivered by the Danish firm Vestas.
	Sept 2018	Completion of 430 km transmission line to Suswa substation.
Operational phase	Mar 2019	Full commercial operation begins.
	Jul 2019	Official project launch by President Kenyatta.
Legal and social impacts	Oct 2014	Initial court case against 2009 land lease.
	Apr–May 2015	Ethnic conflicts in project area.
	Apr 2018	Court case updated, declared of great public importance.
	Jan 2020	Court case resumes.
	Feb 2020	Google-Vestas contract terminated.
	Mar 2024	BlackRock acquires stakes previously held by Vestas, Finnfund, and IFU.
CSR, community engagement	2015–Present	Winds of Change foundation activities initiated.
External reviews and assessments	2009, 2011	Environmental and social impact assessments.
	2016	Danwatch report on social impacts.
Employment and investment	During construction	Approximately 2500 workers hired.
	Post-construction	200 full-time staff at the power station.
	Total investment	Project cost between 613 million and 623 million EUR.

	Oct 14, 2014	Filing of plaint.
	Nov 5, 2014	Court information on land utilization.
	Mar 9, 2016	Court visits and report.
Court case timeline	Nov 9, 2016	Court ruling.
	Mar 15, 2017	Directions for future proceedings.
	Oct 19, 2021	End Court case in favor the ethnic groups.
	Mar, 2022	LTWP filed a Notice to Appeal.

Reference: The Authors, based on archival data

2. KEY ENERGY POLICIES AND PLANS IN KENYA

Policy/Plan	Description
Kenya Vision 2030	A long-term development blueprint emphasizing sustainable development, with the energy sector playing a crucial role. It focuses on transitioning towards renewable energy sources such as geothermal, wind, and solar power to achieve economic, social, and political stability.
Least Cost Power Development Plan (LCPDP)	Prepared by the Ministry of Energy, this plan details the strategy for power sector development with a strong emphasis on renewable energy sources. It is regularly updated to align with the changing dynamics in the energy sector and Kenya's commitment to sustainability.
National Climate Change Action Plan	This action plan highlights Kenya's strategies to combat climate change. It focuses on transitioning to a low-carbon and climate-resilient development pathway, including measures to increase renewable energy generation and improve energy efficiency.
Kenya's Renewable Energy Master Plan	A comprehensive roadmap for scaling up renewable energy in Kenya. It aims to increase the share of renewable energy in the national grid and in off-grid areas, aligning with commitments under the Paris Agreement on climate change.
The Energy Act of 2019	Provides the legal framework for energy-related activities in Kenya, including the development, management, and regulation of renewable energy resources. It supports the transition to a sustainable energy future.
National Energy and Petroleum Policy	Updated to address contemporary energy challenges, this policy aims to ensure affordable, reliable, sustainable, and competitive energy for national development, with an emphasis on diversifying energy sources and increasing the share of renewable energy.
Kenya's commitments under the Paris Agreement	As a signatory to the Paris Agreement, Kenya has committed to reducing its greenhouse gas emissions. Its Nationally Determined Contributions (NDCs) include various strategies in the energy sector to meet these commitments.

Reference: (25–27)

3. EQUITY DISTRIBUTION AMONG LTWP CONSORTIUM PARTNERS

Institution (consortium partner)	Origin	Financing provided (€, million)	% of equity held
Aldwych International	UK	37.7	30.2%
KP&P Africa B.V.	Netherlands	33.0	26.5%
Norfund	Norway	15.3	12.3%
Finnfund	Finland	15.3	12.3%
Vestas Wind Power AS	Denmark	15.3	12.3%
IFU	Denmark	7.7	6.1%
Sandpiper Limited	Mauritius	0.3	0.2%
Total equity		124.6	100%

Reference: (1)

Abbreviations: Norfund: Norwegian Investment Fund for Developing Countries; Finnfund, Finnish Fund for Industrial Cooperation Ltd.; IFU, Danish Investment Fund for Developing Countries.

4. DEBT AND MEZZANINE DISTRIBUTION FOR LTWP LENDERS

Institution†	Nature of financing	Financing provided (€, million)	% of total financing	Origin
AfDB	Tranche A – AfDB facility	115.0	20.4%	Multilateral
AfDB	Tranche B – AfDB ECA facility*	20.0	3.5%	Multilateral
EIB	Senior loan C**	100.0	17.7%	EU
EIB	Senior loan A	50.0	8.85%	EU
EIB	Senior loan B	50.0	8.85%	EU
FMO	Tranche C – DFI facilities	35.0	6.2%	Netherlands
Proparco	Tranche C – DFI facilities	20.0	3.5%	France
ICCF	Tranche C – DFI facilities	30.0	5.3%	EU
DEG	Mezzanine	10.0	1.8%	Germany
PTA Bank	Mezzanine	5.0	0.9%	Financial arm of COMESA
East-African Development Bank	Mezzanine	5.0	0.9%	EAC
EU-AITF	Preference shares***	25.0	4.4%	EU
Standard Bank UK and Nedbank	Co-arrangers (EIB loan)	50.0 (each)	8.85% (each)	UK / South Africa
Total financing		565	100%	

†Abbreviations: AfDB, African Development Bank; EIB, European Investment Bank; FMO, Netherlands Development Finance Company; ICCF, Interact Climate Change Facility; DEG, German Investment and Development Corporation; EU-AITF, EU-Africa Infrastructure Trust Fund.

*Covered by Denmark's Export Credit Agency (EKF) guarantee.

**Covered by an EKF guarantee.

***This financing is a preference share, regarded as junior to other subordinated debt in the financial structure (1).

Note: Mezzanine financing is a blend of debt and equity financing, uniquely positioned in the risk spectrum between senior debt and equity. It allows lenders to convert their debt into equity interest if the borrower defaults, typically after the repayment of senior lenders like venture capital companies. A key characteristic of mezzanine debt is its incorporation of equity instruments, often called warrants. These warrants enhance the value of debt and offer more flexibility in dealings with bondholders. Mezzanine financing is commonly used in acquisitions and buyouts, and it can help new owners gain priority over existing ones in bankruptcy scenarios (28).

5. PROPOSED BENEFITS OF THE LTWP PROJECT

Benefit category	Description of benefits
Energy resilience	The LTWP contributed to energy resilience by diversifying Kenya's energy sources. Unlike biofuels, wind energy does not depend on seasonal feedstock availability and avoids supply shortages or cost volatility. With its marginal cost of electricity generation, wind energy can potentially reduce energy prices, being dispatched first on the merit order curve when wind availability is favorable.
Job creation	The LTWP was a significant source of employment. According to the LTWP website, approximately 3000 people worked on the project through its various stages, with 329 people employed at the site in 2024. A substantial majority (85%) were from Marsabit County, where the project was located, ensuring local employment benefits.
Infrastructure development	The construction of 208 km of off-site roads enhanced connectivity in Marsabit County. This infrastructure development reduced transportation times, particularly during the wet season, and increased the utilization of bus services and goods transport. A socio-economic study found that transportation costs had decreased, and access to trade had improved, benefiting the local economy.

Reference: (7,8,23,29)



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