

# PUBLIC PRIVATE PARTNESHIP (PPP) ENERGY TRANSMISSION INFRASTRUCTURE PROJECT TO BE UNDERTAKEN BY CONSORTIUM OF AFRICA 50 AND POWERGRID CORPORATION OF INDIA

## 1. INTRODUCTION

KETRACO has procured the development of two high-voltage transmission lines and associated substations (Transmission Lines or Project) through a Privately Initiated Proposal (PIP), in accordance with Section 61 of the PPP Act, 2021. The PPP Committee, at its 55th Ordinary Meeting held on 24th July 2025, reviewed the project and financial risk assessment report and approved the execution of the Project Agreement. The Project Agreement was subsequently approved by the KETRACO Board on 7th August 2025, and legal clearance for its execution was obtained from the Attorney General on 10<sup>th</sup> Sept 2025. KETRACO submitted the negotiated project agreement to the regulator, (EPRA), for review and clearance on 22<sup>nd</sup> September 2025. The clearance to proceed and provisional tariff was issued by the regulator, EPRA on 16<sup>th</sup> October 2025. Having met all the requisite approvals and clearance as per the PPP Act Cap 430 and the Energy Act Cap 314, the Project Agreement was signed on 15<sup>th</sup> December 2025.

### The Transmission Lines are: -

- The 400kV Lessos-Loosuk transmission line and associated substations
- The 220kV Kibos-Kakamega-Musaga transmission line with associated substations, LILOs and 132kV interties

The route for the 400kV Lessos-Loosuk transmission line mainly traverses Samburu and Baringo, Nandi and Elgeyo Marakwet Counties, while the 220kV Kibos-Kakamega-Musaga transmission line mainly covers Kisumu, Vihiga and Kakamega Counties. The substations are expected to be in Samburu County (Loosuk), Nandi County (Lessos), Kisumu County (Kibos), Kakamega county (Kakamega and Musaga). The map of Kenya with these Transmission Lines is given in Figure 1:

The Project is part of the Grid expansion projects as planned in the sector and Company plans i.e., Least Cost Power Development Plan and KETRACO Transmission Master Plan.

- 400kV Lessos-Loosuk transmission line – This project will provide and alternative evacuation path for power generated from renewable energy sources in Northern Kenya. The Project will increase system stability by sectioning the 430km 400kV line (Loiyangalani – Suswa) and by creating a 400kV loop that will form part of the backbone for the Kenya's Transmission Grid. The Project will additionally enhance security of supply for Western Kenya through Lessos substation. The project will traverse North Rift geothermal complex and shall provide the main evacuation path for power generated in this area.
- 220kV Kibos-Kakamega-Musaga transmission line – This project will extend 220kV Grid and introduce high voltage power supply to Kakamega County thereby reinforcing the medium voltage network in the area. This will enhance efficiency, increase system adequacy and reliability in Kakamega County. The project will reinforce the 132kV network at Musaga.

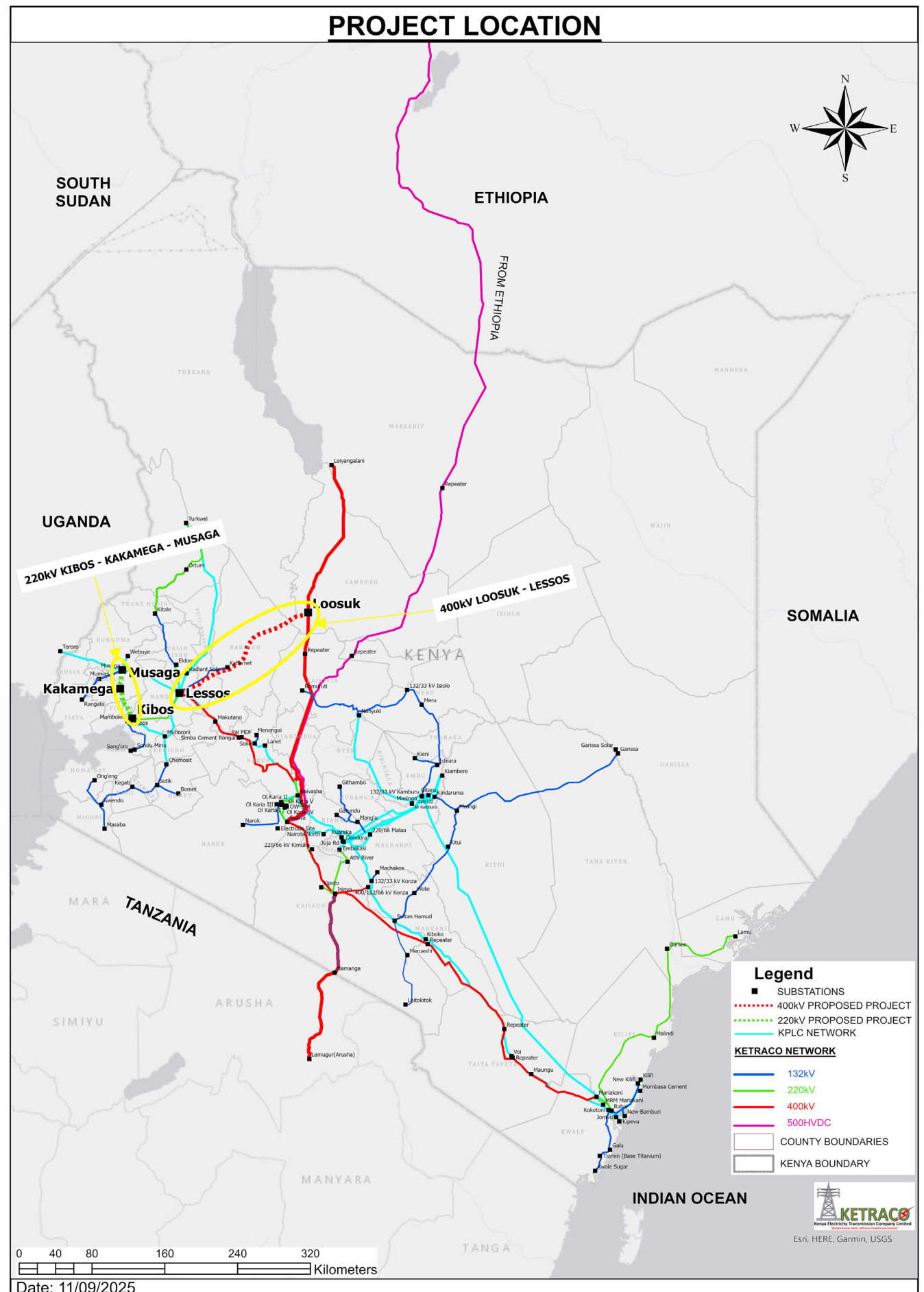


Figure 1: Transmission Grid Map 2029 Network

Specific benefits of the Project include:

- i. Integration of Affordable Geothermal Power (300 MW) from Baringo–Paka–Silali Fields: The Lessos–Loosuk line will facilitate the evacuation of clean, reliable, and low-cost geothermal energy, significantly reducing dependence on expensive thermal power generation and lowering the overall cost of electricity for consumers.
- ii. Enhanced Evacuation of Renewable Energy from Lake Turkana Wind Project: The Lessos–Loosuk line provides a strategic alternative transmission route for wind-generated power from the Lake Turkana Wind Power Project, improving system flexibility, enhancing reliability, and mitigating risks of curtailment in case of outages on existing lines.
- iii. Support for Baringo County Special Economic Zone (SEZ) and Industrial Growth: The Lessos–Loosuk line passes adjacent to the proposed Baringo County Special Economic Zone/Industrial Park, enabling reliable and high-capacity power supply to attract investors, spur industrial development, and stimulate economic growth in the region.
- iv. Improved Power Supply for Western Kenya through the Kibos–Musaga–Kakamega transmission line: The development of this line will strengthen power supply and increase available capacity in Vihiga, Kakamega, and surrounding counties, addressing existing voltage instabilities and supporting planned and future industrial and commercial growth.
- v. Reduction of Distribution Losses and Improved Grid Efficiency: By enabling shorter, more efficient medium-voltage distribution routes in Western Kenya, the Kibos–Musaga–Kakamega project will reduce technical power losses, improve grid reliability, and enhance the overall quality and stability of electricity supply to households, businesses, and industries.

2. THE NATURE OF THE PROJECT AND KEY TERMS OF THE PROJECT AGREEMENT.

Particulars	Terms
Contracting Authority	Kenya Electricity Transmission Company Limited (KETRACO)
Private Party	Consortium of Africa50 and PowerGrid Corporation of India
Project Company	A Company will be established in accordance with the Companies Act, Cap 486 Laws of Kenya to undertake the PPP Project
Project Scope	<ul style="list-style-type: none"><li>i. the design, construction, financing and commissioning of the Transmission Lines</li><li>ii. the operation and maintenance of the Transmission Lines</li><li>iii. the transfer and handover of Transmission Lines free and clear of all Encumbrances at the end of the concession period.</li></ul>
Duration of the Agreement	30 years from the Effective Date.
Roles and Responsibility of KETRACO	<ul style="list-style-type: none"><li>i. Cooperate with Project Company in accordance with the Project Agreement.</li><li>ii. Make availability payments to the Project Company based on performance.</li><li>iii. Assist the Project Company in procuring permits, licenses, and permission related to the Project where needed.</li><li>iv. Assist access to all necessary infrastructure facilities and utilities.</li><li>v. Cooperate with Project Company and Independent Expert in performing tests.</li></ul>

Roles and Responsibility of Private Party	<ul style="list-style-type: none"><li>i. Procure, at its own cost and expense, finance for and undertake the design, engineering, procurement, construction, operation and maintenance of the Project.</li><li>ii. Procure all requisite rights in respect of the Site, including the Public Rights of Way, in accordance with the provisions of this Agreement and Applicable Law.</li><li>iii. Obtain all Applicable Permits necessary for the construction, operation and maintenance of the Transmission Lines.</li><li>iv. Procure, as required, the appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems used or incorporated into the Project.</li></ul>
Financial Terms	Refer to No. 5 and 6 below.
Success Fee	The Project Company will pay a success fees of 1% of the Project Cost to the PPP Directorate.
Performance Security	<p>To guarantee performance, the Project Company will provide the following performance securities;</p> <ul style="list-style-type: none"><li>i. Performance Security to cover the Project Company's performance obligations from the Effective Date to Completion DateHand Back Guarantee at the Project Expiry Date.</li></ul>
Scheduled Completion Date	The Project Company will complete Project within thirty (30) months after the Effective Date of the Project Agreement.
Project Commencement	Project Commencement shall occur within twelve (12) months of the Signature Date
Insurance	The Project Company shall effect and maintain at its own cost, during the Construction Period and the Operation Period all required Insurances.
Project Management	KETRACO and Project Company shall jointly appoint an Independent Expert (IE) to assist in the implementation of the Project.
Hand Back of Project Assets	At expiry of project term, the Project Company shall transfer all Projects' assets to KETRACO in good condition and free of any encumbrances at no cost to KETRACO or to GoK.
Local Content Requirements	The Project Company is required to comply with the local content requirements under the Public Private Partnerships Act (Cap 430), Energy Act (Cap 314), National Construction Authority Act (Cap 118) and other applicable laws.
Applicable Laws	Laws of Kenya

3. THE WORKS TO BE DEVELOPED OR PUBLIC SERVICES TO BE PERFORMED UNDER THE PROJECT.

The Private Party will undertake the following Public Functions:

Project 1: Establishment and operation of approximately 180km 400kV double circuit line between Loosuk and Lessos with associated substations at Loosuk (Switch Station) and new 400/220kV substation at Lessos. This Project will also include the implementation of a Line In Line Out on the existing 400kV Loiyangalani–Suswa line at Loosuk.

Project 2: Establishment and operation of approximately 73km of 220kV double circuit line from Kibos to Musaga through Kakamega, new 220/33kV substation at Kakamega, new 220/132kV substation at Musaga, 220kV bay extension at Kibos and 132kV intertie to existing network at Musaga.

4. THE PROJECT PROPONENT.

The Project’s proponent is a Consortium of Africa 50 and PowerGrid Corporation of India Limited. The Projects are to be procured and implemented as a privately initiated proposal (PIP) under the provisions of Sections 40 – 44 of the PPP Act Cap 430.

- a Africa50 is an international organization established as a pan-African infrastructure investment platform owned by 33 African governments, the African Development Bank and 3 African financial institutions to develop and invest equity in infrastructure projects, including transmission projects, in Africa that are bankable and can be financed by the private sector, having its headquarters at Tour Ivoire 3, 8 éme étage, Marina de Casablanca, Boulevard des Almohades, Casablanca, Morocco (Africa50); and
- b Power Grid Corporation of India Limited a Government of India Enterprise incorporated under the Indian Companies Act, 1956 and having its registered office at B-9, Qutub Institutional Area, Karwaria Sarai, New Delhi and its Corporate office at “Saudamini”, Plot No. 2, Sector – 29, Gurugram, Haryana, India (Power Grid), and is one of the top 3 transmission utilities globally. It is engaged mainly in transmission of bulk power across different states of India. Power Grid transmits about 50% of the total power generated in India on its transmission network.

5. THE AMOUNT OF ANY PUBLIC FUNDS COMMITTED TO THE PROJECT.

There are no public funds committed by the Government of Kenya; this being a PPP project, the total amount shall be sourced and invested by the Private Party. The total project cost currently stands at USD 311 million (Kesh.40.4 billion). Table 1: Total Project Cost (in USD millions)

Project Cost	Loosuk to Lessos - 400 KV	Kibos to Musaga - 220 KV	Combined
Total Capex	214.02	97.45	311.47

6. THE PROJECT TARIFF.

The Project benefits as outline above will result in an exponential increase in power demand, reduction of technical losses, and improved grid resilience which will traditionally lead to improved quality of supply and subsequent tariff reduction. The project tariff will cover the following key aspects.

- Capital service and recovery costs on both debt and equity components.
- Operating and maintenance (O&M) costs
- Financial and insurance costs.
- Taxes and other statutory charges

From the above inputs the total levelized annual revenue requirement is USD 43.12 Million (Kesh. 5.6 billion) net of taxes during the concession period for both Transmission Lines.

7. ANY GOVERNMENT SUPPORT MEASURES PROVIDED TO THE PROJECT

This shall be guided by the Government Support Measures (GSM) Policy of October 2018.The GSM Policy provides guidance on the issuance of Government support measures in support of investment programmes with public interest.

For the Projects, the GSM proposed will be in the form of a letter of support (LoS) that will outline the procedures to be followed in the event of a termination as a result of a political event, how the Projects’ assets will be transferred to the Government and the Project Company compensated.

8. THE SOCIAL AND ECONOMIC BENEFITS OF THE PROJECT.

The implementation of these Transmission Lines will accrue several social and economic benefits to the citizens of Kenya. These benefits include: -

- a) Creation of job opportunities  
The Private Party will create opportunities for job employment and provision of

services to Kenyan citizens and businesses as outlined below:

- i. Local consultants to carry out feasibility, environmental and social safeguard studies related to the Project.
- ii. Local consultants to implement the environmental and social safeguard plans.
- iii. Local sub-contractors will be engaged to carry out significant portions of the project work, thereby creating job opportunities within the community.
- iv. Construction materials, and site-related requirements will be sourced from Kenyan suppliers, with a preference for on enterprises owned by women, youth, and persons with disabilities to ensure that economic benefits are widely and fairly distributed.
- v. The Project will give priority to employing Kenyan citizens across unskilled, semi-skilled, and skilled categories, including junior and middle-level roles, during both construction and operations. This approach ensures the upskilling and knowledge transfer to the Kenyan people.

- b) Capacity building  
The Project Company shall transfer technology and know-how to the Kenyan citizens through professional and on-the-job-training.

- c) Compensation for affected assets  
The Project Affected Persons (PAPs) will be fully compensated, at market values, for the partial or total loss of their assets, i.e. land parcels, structures and any damage to crops and trees. In addition, any loss of business and loss of income will be compensated as part of the livelihood restoration programs. Displaced persons shall be fully resettled.

- d) Corporate Social Responsibility  
The Project Company will consult the affected communities on the appropriate CSR projects to be implemented. This will depend on the community needs

- e) Reliable power supply  
The Transmission Lines will connect the host counties to the National Electricity Grid, hence ensuring reliable power supply to the different parts of the respective counties. It is expected that with reliable power supply: -

- Investment flows and job opportunities in the host counties will increase.
- The standards of formal and semi-formal education will improve in the host counties as electricity will lead to extended learning hours and support electricity intensive learning areas such as woodwork, metalwork, among others.
- Healthcare services will improve given the impact if electricity on vaccine refrigeration, equipment sterilization and emergency procedures among others.
- Business expansion and new business formation will be facilitated given the impact of electricity on improved lighting, machinery operations and communications technologies.
- The growth of the agriculture sector will be spurred at both subsistence and commercial levels given positive impacts on farm mechanization, value addition, food processing and storage, modernization of livestock farming and irrigated farming resulting in doubling yields from rain-fed agriculture.

9. MONITORING PERFROMANCE DURING THE DURATION OF THE PROJECT.

The Private Party will design, construct, finance operates and maintain the Project for a specified period not exceeding thirty years. During the construction period, an Independent Expert, jointly appointed by KETRACO and the Project Company, will provide oversight to ensure satisfactory achievement of defined output specifications following which a completion certificate shall be issued to the Project Company. During the operation period, the Project Company is required to make the Transmission Lines available for use for at least 98% of the time each month. Where this is achieved, the Project Company will be paid full amount of the availability-based payment due. Lower than 98% availability will attract penalties per the Project Agreement. Before the expiry of the concession period, a handover survey will be conducted for each Transmission Line and any maintenance or restoration required will be implemented to ensure that the quality of the Transmission Lines at handover is satisfactory and can provide service for more years post the concession period.