

# Kenya Off-Grid Solar Access Project for Underserved Counties



For nearly a decade, the Lighting Africa program has been enabling access to off-grid lighting and energy products in Kenya by catalyzing the market. The impact of these activities has been significant; approximately **8.7 million Kenyans** are currently meeting their basic energy needs through quality-verified solar products, with nearly a third of unconnected households using off-grid energy solutions – up from 2% in 2009.

The North and North Eastern regions of Kenya, however, are lagging behind, with much lower penetration of off-grid solar than the Kenyan average. These regions are also scoring much lower on a number of development indices, for example; poverty levels are at 70%, while electricity access is only at 7%.

In light of this disparity, the World Bank launched the North & North Eastern Development Initiative (NEDI) to increase investments to the region and complement the ongoing government efforts to improve equity as well as reduce extreme poverty.

The Kenya Off-Grid Solar Access Project for Underserved Counties (KOSAP) is the World Bank’s energy sector’s contribution to NEDI, and is being implemented by the Ministry of Energy and Petroleum (MoEP), Kenya Power and Lighting Company (KPLC), and the Rural Electrification Authority (REA), with support from Lighting Africa, between 2018 – 2023, in fourteen counties.

## Objective

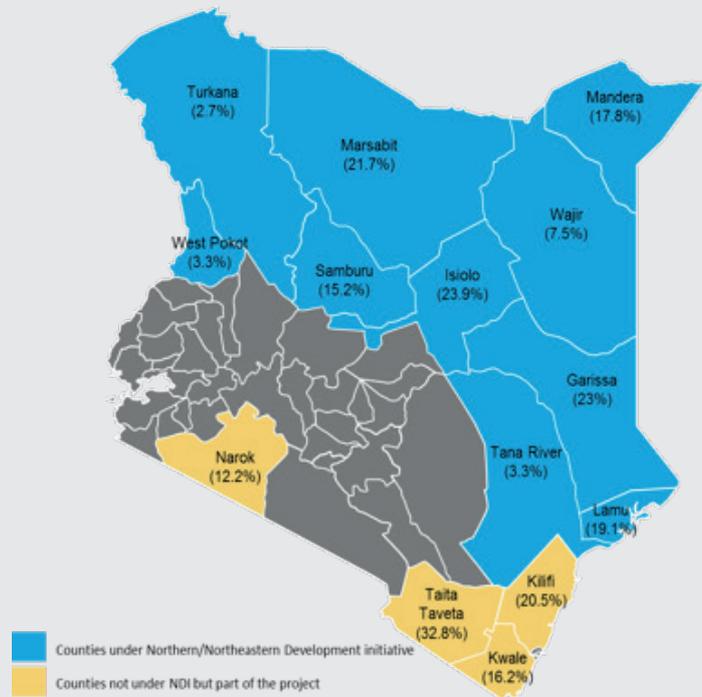
KOSAP aims to increase access to modern energy services – electricity and modern cooking solutions– in households, businesses, and community and public facilities in fourteen underserved counties in Kenya.

## EXPECTED RESULTS BY 2023:



## Areas of implementation

The 14 counties where KOSAP is being implemented (Garissa, Isiolo, Kilifi, Kwale, Lamu, Mandera, Marsabit, Narok, Samburu, Taita Taveta, Tana River, Turkana, Wajir, and West Pokot) collectively represent 72 percent of the country's total land area and 20 percent of the country's population. Their population is highly dispersed, at a density four times lower than the national average. There are profound infrastructure deficits, including lack of access to roads, electricity, water, and social services.



## ACTIVITIES

- Electrification of areas where electricity supply through mini-grids represents the least-cost option
- Off-grid electrification of households where a stand alone solar system is the most appropriate
- Transition from low-efficiency baseline stoves to cleaner, higher-efficiency improved stoves
- Provision of electricity services to community facilities in remote areas
- Financing solar-powered pumping systems to increase sustainable access to water supply
- Consumer education and citizen engagement activities

## Incentives for Solar Service Providers (SSPs)

KOSAP provide incentives for SSPs currently operating in the more densely populated areas of Kenya to will expand to underserved counties. This will include a results-based financing (RBF) facility, competitively awarded, to compensate SSPs for initial, ongoing incremental, and opportunity costs associated with an expansion of operations in underserved counties. A debt facility will also be established to support SSPs in meeting up-front costs associated with getting hardware inventory into the market, and medium-term consumer financing to enable households to pay off the systems over time.

## Consumer Education

In order to ensure that consumers are aware of the new technologies that will be available to them a consumer education campaign will be carried out, including both mass media tools, and providing opportunities for one-on-one engagement with the products and to interact with service providers.



## Contacts

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