

THE KENYA OFF-GRID SOLAR ACCESS PROJECT (KOSAP)

The Kenya Off-Grid Solar Access Project (KOSAP) is a flagship project of the Ministry of Energy, financed by the World Bank aimed at providing electricity and clean cooking solutions in the remote, low density, and traditionally underserved areas of the country. The Project is part of the government's commitment to provide universal access to electricity in Kenya by 2022, universal access to modern energy services for cooking by 2030 as well as the impetus for growth in achieving Vision 2030. The Project is implemented jointly by the Ministry of Energy, Kenya Power and Lighting (KPLC) as well as Rural Electrification and Renewable Energy Corporation (REREC).

Beneficiaries

The Project targets to reach approximately. 277,000 households (1.3 million people), community facilities: schools; health facilities and administrative offices as well as 380 community boreholes in the 14 Counties of West Pokot, Turkana, Marsabit, Samburu, Isiolo, Mandera, Wajir, Garissa, Tana River, Kilifi, Kwale, TaitaTaveta and Narok.

It will also facilitate the installation of 250,000 solar home systems in the 14 Counties and selling of 150,000 clean cooking stoves in 7 Counties of West Pokot, Turkana, Isiolo, Samburu and Marsabit, Kwale, TaitaTaveta and Kilifi.

Duration and Funding

The Six year Project was launched in July 2017 and will complete by June 2023. It is funded to the tune of \$USD 150 Million (approximately KSh 15 Billion) by the World Bank.

Scope of the Project

Component 1: Mini-grids for Households and Public Facilities

As the target counties are not served by the national grid, mini-grids will be constructed to be the main source of energy. A total of 151 mini-grids will be constructed in 12 of the 14 Counties. The mini-grids will then be used to provide electricity to community facilities, enterprises and households. The mini-grids will be constructed in areas that have a population of 100 households and sufficient existing or potential business and institutional load.

- Mini-Grid Project Sites in Kilifi County
 - i. Bombi
 - ii. Chakama
 - iii. Kirepwe

Component 2: Stand Alone Solar Home Systems

The vast majority of off-grid population in the 14 counties is dispersed and requires individual system solutions (Solar Home Systems- SHS). Under this component the Project aims to establish sustainable supply chains for marketing and sales of solar home systems in KOSAP Counties. While the Private Sector Actors have penetrated the solar market in other parts of the country they have not made the same in-roads in the 14 Counties. The Project has established a Results Based Financing and Debt Facility (RBF) which will provide incentives to solar businesses to extend and expand their reach in the 14 Counties.

Under this component the project aims to deliver 250,000 Stand-alone Solar home Systems and 150,000 high tier clean cooking solutions. SNV Netherlands Development Organisation in partnership with SunFunder are the Facilities Manager.

Types of Support under the RBF and Debt Facilities

There are three Facilities available for access by private companies:

1. Results-Based Financing (SSP RBF) Facility (KES 1.2 billion) for Solar Service Providers
2. Debt Facility (KES 3 billion) for Solar Service Providers
3. Challenge Fund and Results-Based Financing (RBF) Facility (KES 0.5 billion) for Clean Cooking Solutions Service Providers (CCS SPs)

For further information on these Facilities and application process, please visit www.kosap-fm.org.

Component 3A: Stand Alone Home Systems for Public Facilities

Under this, community facilities developed by the Ministry of Health, Ministry of Education and the Ministry of Interior will be supplied with power for optimum performance.

To achieve this, a private sector contractor will be procured by KPLC for each service territory to supply, install and maintain stand-alone solar systems in community facilities.

List of Public Facilities To Be Electrified Under KOSAP in Kilifi County

COUNTY	HEALTH FACILITY NAME	FACILITY TYPE
<i>Kilifi</i>	<i>Kasemeni</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Baricho</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Mwangatini</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Gandini-Sublocation Assistant Chiefs Office</i>	<i>ACC Office</i>
<i>Kilifi</i>	<i>Gandini P.School</i>	<i>School</i>
<i>Kilifi</i>	<i>Kadaina Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Matolani Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Adu Secondary school</i>	<i>School</i>
<i>Kilifi</i>	<i>BwagaMoyoSecondary School</i>	<i>School</i>
<i>Kilifi</i>	<i>Viragoni Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Midoina Dispensary</i>	<i>Medical</i>

<i>Kilifi</i>	<i>Mulunguni Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>LangoBaya Assistant Chiefs office</i>	<i>ACC Office</i>
<i>Kilifi</i>	<i>Kurawa Secondary School</i>	<i>School</i>
<i>Kilifi</i>	<i>Baricho Secondary School</i>	<i>School</i>
<i>Kilifi</i>	<i>Kawala Secondary School</i>	<i>School</i>
<i>Kilifi</i>	<i>Waresa Secondary School</i>	<i>School</i>
<i>Kilifi</i>	<i>Karimboni Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Gandini Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Muryachakwe Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Shujaa Mekatilili Secondary School</i>	<i>School</i>
<i>Kilifi</i>	<i>Watala Secondary School</i>	<i>School</i>
<i>Kilifi</i>	<i>Sokoke Health Dispensary</i>	<i>Medical</i>
<i>Kilifi</i>	<i>Chamari Dispensary</i>	<i>Medical</i>

Component 3B : Solar Water Pumps for Community Facilities

About 380 boreholes associated with community facilities in the 14 Counties will benefit from the installation of solar powered water pumps. This will increase sustainable access to water supply by equipping new boreholes and retrofitting existing diesel –powered boreholes.

The Rural Electrification Agency and Renewable Energy (REREC) which is in charge of implementing this aspect of the project will hire private sector contractor to supply, install and maintain stand alone solar systems for the community facilities. This will enhance the sustainability of these facilities as operational cost associated with diesel based systems will be avoided.

List of Boreholes and Booster Pumps to be electrified in Kilifi County

Item No.	Station Name/Community Name	Sub County
1	Makata Kaole Kolewa BP	Kilifi South
2	Tsalu Booster Pump	Kilifi South
3	Shariani well Kwa Akida BH	Kilifi South
4	Mzambaraoni well Kwa Abdalla Borehole	Kilifi South
5	Kenga baya-Chasimba Bore Hole	Chonyi
6	Vwevvesi Chonyi-vwevesi well	Chonyi
7	Ngombeni Well Kwa Bula	Chonyi
8	Kayafungo Tsangatsini BH	Kaloleni
9.	Jibana Tsunguni BH	Kaloleni
10	Jibana Nyalani BH	Kaloleni
11	Mwandaza jibana-Mwokonzi BH	kaloleni
12	Mwandaza jibana-Mkangani Mwakanga Walea BH	kaloleni
13	Mtondia well Kwa Ngonyo-Tezo	Kilifi North
14	Bejeni kwa kalama kavyele-Chumani BH	Kilifi North

15.	Kwa Katana Chome- Majaoni borehole BH	Kilifi North
16.	Ngerenya forest Mwambai kwamundu-Ngerenya BH	Kilifi North
17.	Kwa Julius Shem-Chumani BH	Kilifi North
18.	Kwa muyechumani BH	Kilifi North
19.	Deche Chinyaka well-Roka Maweni(Kadenge Paka)	Kilifi North
20.	Kwa James kaingu-Roka polytechnic(Roka maweni)	Kilifi North
21.	Kwa jola (Tezo Agriculture)-Tezo BH	Kilifi North
22.	Msabahakwa Mwasaha BH	Malindi
23.	Sea Breeze (Msamahayajuu) BH	Malindi
24.	MusolonikwaJasho BH	Malindi
25.	Takaye Kwa Diwani-Ponda BH	Malindi
26.	Palakumi BP	Ganze
27.	Mweza BP	Ganze
28.	Mwaeba Mbonga BP	Ganze
29.	Dungicha BP	Ganze
30.	Mrima wa Ndege BP	Ganze
31.	Majengo centre(Mambrui Milano)	Magarini
32.	Mambrui Milimani BH-Gahaleni	Magarini

Key:

BH-Borehole

BP – Booster Pump

NOTE: Kindly note the boreholes investigations study is still on-going and the final list of boreholes sites that will be fitted with solar will be communicated after the end of the investigations exercise. This is just a Provisional List.

Component 4 A: Capacity Building for Counties

Training under KOSAP is aimed at enhancing the capacity of the targeted county governments. The County government's role in the energy sector is defined under the Constitution as "county planning and development, including-electricity and gas reticulation and energy regulation." Given that the County Governments have been in existence for less than six years, there is need to enhance their Capacity in order to undertake this function effectively.

Trainings for the County Government are focused on Energy Management, Renewable Energy and Sustainable Resource Management, Tariff Rates and Cost Recovery Requirements, Environmental and Social Management, among others.

- **List of Trainees from Kilifi County**

<i>Course</i>	<i>Trainees</i>
Environmental Impact Assessment for Projects(EIA)	1
Project Monitoring and Evaluation	2
Supervisory Skills Development	6
Energy Resource Mapping	1
Total	10