

Project Developer
Solarworx

Solarworx is a German manufacturer of modular off-grid solar products that provide reliable, affordable and sustainable energy solutions to rural households and entrepreneurs.



Total Project Budget
EUR 310 095

EEP Africa Financing
EUR 208 680

Project Partners
LittleSun Zambia

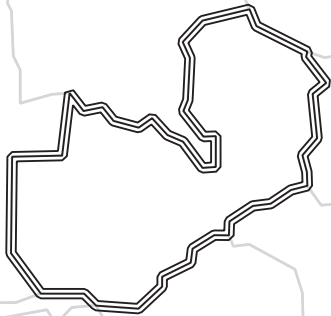
Type
Pilot project
Mini-grid stand-alone

Project Code
ZAM16986



Technology
Solar PV

Location
Zambia



SOLAR SMART GRID

This project will pilot a decentralized smart grid based on interconnecting solar home systems (SHS). Solarworx and its local partner LittleSun will install SHS that can be stacked like Lego bricks in high-density communities. These will then be connected to form a decentralized 60V solar smart grid. The solution enables power trading between producers of excess electricity and consumers. This power trading supports productive use appliances (up to Tier 4) across the grid. The cost for each connection is considerably lower than for AC mini-grids, enabling bottom-of-the-pyramid households to receive a grid-like electricity connection. This innovative technology has been tested in the lab and EEP Africa financing will enable it to be piloted in a real operating environment.



Outcome and Impact

The project aims to distribute up to 300 SHS/connection points to rural households, which will upgrade SHS owners to small-scale independent power producers (prosumers) and extend access to higher tiers of electricity in the community. With 45 kW clean energy capacity, this project will reduce GHG emissions by 100 tCO_{2e} per year. The partners aim to recruit 50% women sales agents.

EEP Africa is a financing facility for early-stage clean energy projects in Southern and East Africa. It is hosted and managed by the Nordic Development Fund (NDF) with funding from Austria, Finland and NDF.