



**MICROGRID
KNOWLEDGE**

CONFERENCE SERIES

Microgrid 2019
CONFERENCE

Visioning the Future in Somalia:

**Clean, Decentralized and
Affordable Energy**

SOLARGEN

We are SolarGen Technologies

- A leading renewable energy and water solutions provider in East Africa, established in 2010.
- We offer a best in class combination of products, integration, know-how and services. We take this expertise and experience wherever there is a demand in the region.



Who We Serve

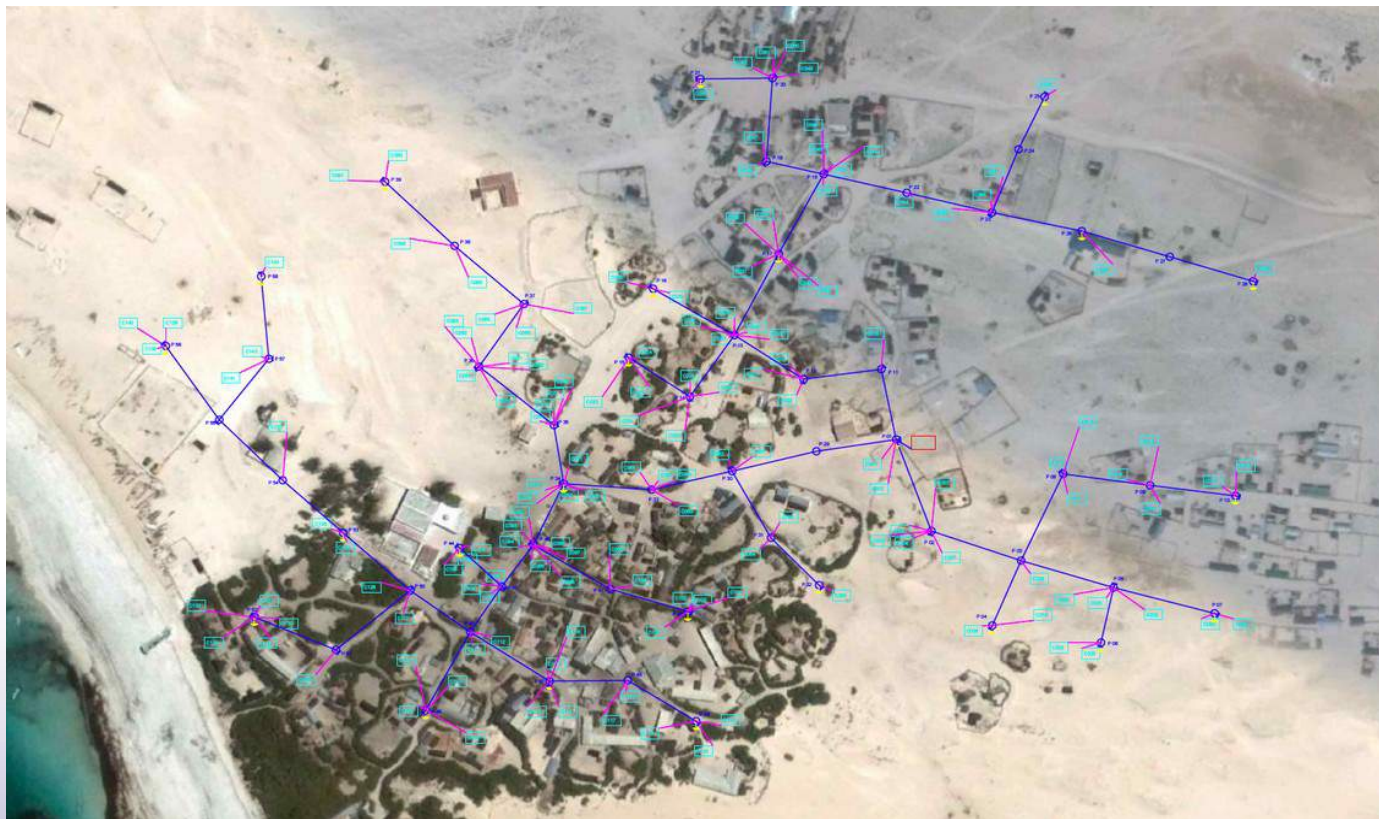
- ❖ **Rural/urban Somali households and small businesses**
- ❖ **Commercial and industrial ventures**
- ❖ **Public institutions vital to delivering basic services to all Somalis**



#innovation but #replication

- ❖ Myanmar and its international partners are embracing mini-grids, as the country opens up from years of economic isolation
- ❖ Jordan has partnered with UNHCR to build megawatt scale mini-grids to power refugee camps and integrate them into the national grid
- ❖ Hundreds of millions of dollars invested by the World Bank and others in mini-grids in Kenya, Uganda, and Tanzania

AND NOW ⇒ Community Grids





Mini-Grid for Midnimo Resettlement in Kismayo

Type	PV-battery with diesel back-up
Size	38kWp PV 192 kWh battery 40 KVA diesel generator (back-up)
Distribution	LV Single Phase
Metering	Prepaid (mobile money enabled)
Commissioning	July 2018
Connections	~ 110

Mini-Grid for Refugee Returnees

The American Refugee Committee and SolarGen developed a system to power 100 households and 5 public facilities for a block of houses at the Midnimo resettlement scheme.

ARC had already constructed two-bedroom homes for refugees returning from Dadaab camp in Kenya.



Mini-Grid for Refugee Returnees

The only electricity option was to purchase power from local entrepreneurs with diesel generators.

The two local utilities in Kismayo charge households between \$0.90 and \$1/kWh. So even if they had extended operations, most households would have been unable to afford the electricity.



Mini-Grid for Refugee Returnees

Midimo is the first community in Somalia to receive 100% of its energy needs from a solar + battery storage system. The project now serves as a successful pilot for other areas identified as places for refugees to return in Somalia.



Community Owned and Managed

Through participatory engagement with leaders of the community, they have decided to set up their own business and establish a tariff of \$0.50/kWh. Financial models demonstrate that at this tariff the community should be able to afford long-term maintenance and replacement costs for the system.



Scaling Solutions in Somalia

We completed two other mini-grid installations in 2018.

We are finalizing feasibility studies on two more community grids now in rural and inaccessible towns.



Our Team Thanks You

Let's work together.

Contact us at:

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