



REPOWER, POWERING RURAL COMMUNITIES

RePower is an ambitious four-year project funded by the European Commission, pioneering the use of plug-and-play microgrids.

The project aims to change the development of microgrids in African off-grid communities from the current dependence on diesel generators towards modular plug and play (PnP) compatible microgrid plants with enhanced renewable energy storage (BESS) and energy management systems (EMS). Additionally, to augment generation capacity, the plants incorporate combined heat and power systems that utilise agricultural waste biomass as feedstock (BCHP).



“This is not only about electricity, it is about driving socio-economic opportunities and securing a sustainable future for all.”

REPOWER PROJECT GOALS



IMMEDIATE ACCESS TO ELECTRICITY

for 20,000 off-grid consumers by 2027



A DRAMATIC REDUCTION IN THE WAITING TIME

for electricity connection, thanks to our modular microgrids



MICROGRID RELIABILITY & RESILIENCE - CUTTING COSTS

from approximately 1€/kWh¹ to just €0.3-€0.4



CRUCIAL GUIDANCE DOCUMENTS

to foster microgrid development and improve regulatory frameworks within Africa



DIRECT COMMUNITY INVOLVEMENT

ensuring a sustainable energy cycle in local industries, from farming to food processing



CREATION OF TRAINING HUBS

cultivating a new generation of energy technicians

¹NREL 2022 <https://data.nrel.gov/submissions/79>



SUMMARY OF MICROGRID SITES' SPECIFICATIONS

LOCATION	PV	BESS	BCHP (MAX. OUTPUT)	PRODUCTIVE USES
Madagascar	1 x 96 kWp	2 x 116 kWh (Total 223kWh)	80 kWe, 107 kWth	- 10 solar water pumps - 40 solar streetlights
Niger	49 kWp	1x 116kWh	-	- 1 Solar cooling system (Cooltainer) - 15 Solar water pumps - 40 Solar streetlights - 3 Water purification systems
Senegal	252 kWp	4x 116kWh (Total 464kWh)	-	- 1 Solar cooling system (Cooltainer) - 10 Solar water pumps - 40 Solar streetlights - 1 Water purification system

CONSORTIUM

STAY CONNECTED.
SIGN UP TO THE
REPOWER
NEWSLETTER

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