



Living lab South Africa

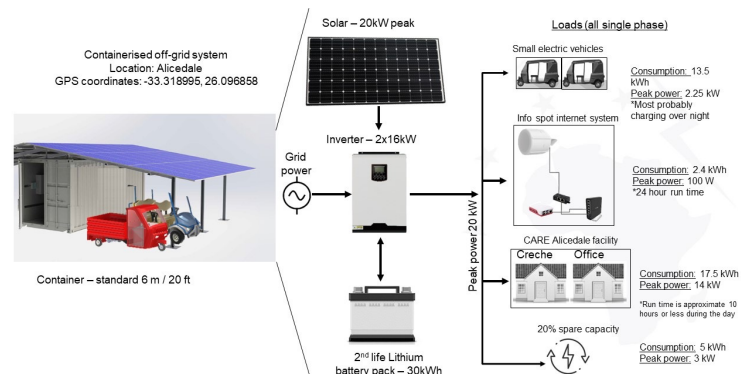
SOUTH AFRICA

Alicedale



Containerised off-grid solar system

The validation demo in close cooperation with the selected SME GREEN Solar Academy will test, validate and evaluate the performance of a containerised off-grid solar energy system comprising PV panels in combination with second-life EV batteries for energy stationary storage, for community energy access, and to charge a small fleet of micro utility EVs. Information Spots will extend The energy hubs by providing free access to information on energy usage, maintenance and business opportunities. A significant aim of the project is to investigate the performance of these batteries, the technical and financial viability of such systems, and the scalability and replicability of this use case. The demonstration will also identify the commercial case for local authorities to invest in these solutions and study the repurposing potential of retired EV batteries for energy storage and as a means to create new jobs.



Containerised system and passenger vehicle

Technologies tested

The Container size: 20 ft / 6 m; the Inverter capacity: 2 x 16kW, hybrid, single phase

The PV canopy (mounted off container for additional shelter below): 20 kWp

The Second life EV battery: 30 kWh

The Containerised system is completed with InfoSpot component.

The containerised system includes an e-mobility component _ Utility vehicles and person transport.

Leading Partners

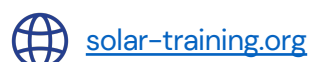


Strategic Partners:

NELSON MANDELA
UNIVERSITY

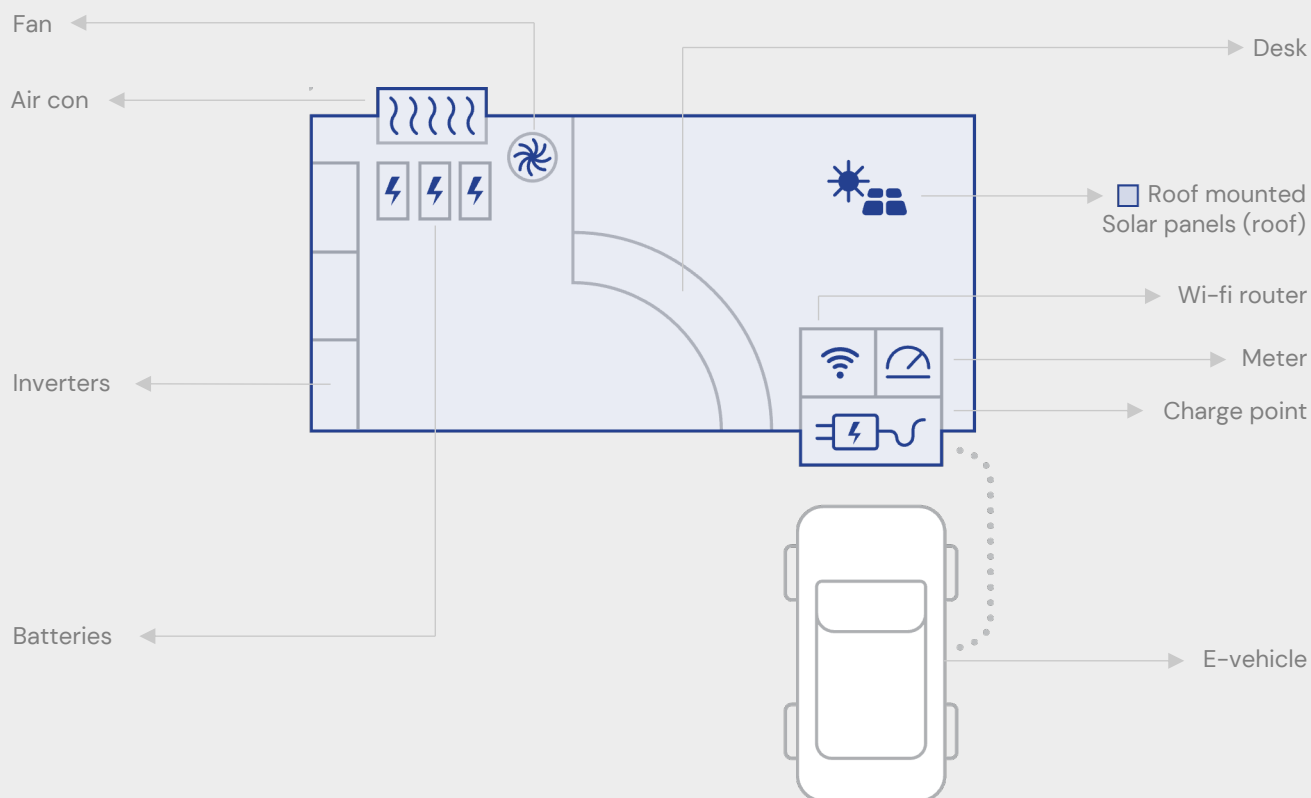
eNtsa

The national eYilo eMobility Programme is an initiative of the Technology Innovation Agency (Act No. 26 of 2008), hosted by Nelson Mandela University's engagement entity, eNtsa.



SOUTH AFRICA

Alicedale



Asset(s)	Total number	Specifications
Revov Battery energy storage system	—	30 kWh
Solar system	—	16.32 kWp
Inverters	—	15 kW

The solar roof will charge 2 electric vehicles that are for rent. Power will also be provided to any business partner in the Centre. Surplus of energy is stored in the 30 kWh 2nd life battery energy storage system, originating from EV battery packs.