

ROREPOWER

ROBUST AND REMOTE POWER SUPPLY



Project ID:	824953
PRD 2023:	Panel 4 – H2 end uses – stationary applications
Call topic:	FCH-02-3-2018: Robust, efficient long term remote power supply
Project total costs:	EUR 4 220 093.75
Clean H₂ JU max. contribution:	EUR 2 999 190.26
Project period:	1.1.2019–31.12.2023
Coordinator:	Teknologian tutkimuskeskus VTT Oy, Finland
Beneficiaries:	3E Energy Oy, European Fuel Cell Forum AG, SolydEra SpA, Sunfire Fuel Cells GmbH, Sunfire GmbH

<https://rorepower.com/>

PROJECT AND OBJECTIVES

The overall objective of this project is to further develop and demonstrate solid oxide fuel cell (SOFC) systems for off-grid power generation in markets – such as oil and gas infrastructure in remote regions – with harsh climate conditions (from – 40 °C to 50 °C), and the power supply of telecommunication towers, especially in emerging countries (e.g. telecommunication base stations or microwave transceivers). A total of 36 units had been installed at the customer sites by the end of 2022. RoRePower is further strengthening and building the European value chain for fuel cell technologies.

PROGRESS AND MAIN ACHIEVEMENTS

- A total of 36 units had been installed at the customer sites by the end of 2022.
- All customer sites have been identified.

FUTURE STEPS AND PLANS

The remaining RoRePower units will be installed before summer 2023.

QUANTITATIVE TARGETS AND STATUS

Target source	Parameter	Unit	Target	Achieved to date by the project	Target achieved?
	Electrical efficiency	%	> 35	> 35	✓
	Operation in harsh conditions	°C	– 40	– 40 can be achieved with the project solutions	✓
AWP 2019	Maintenance frequency	months	15	13.7	⚙️
	Long-term desulphurisation	months	15	15	✓
	System start-up in harsh conditions	°C	– 40	– 40 can be achieved with the project solutions	✓