MASERA
Microgrid for Affordable and Sustainable Electricity in Remote Areas

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MASERA MICROGRID IN THE REIDS DEMONSTRATION CLUSTER
EDF R&D has signed a Research Collaboration Agreement with NTU to develop an innovative microgrid solution in the REIDS microgrids cluster in Singapore. ENEDIS is supporting EDF in the project execution. Other French and Singaporean partners are involved (startups, vendors, contractors).

OUR OBJECTIVES
MASERA aims at offering a better quality of life to local communities, through access to sustainable, affordable and reliable electricity, leveraging innovative technologies.

- Develop low-cost approach
- Propose innovative controls
- Promote new flexible loads
- Ensure resiliency and reliability
- Develop a complete solution (design, construction, O&M...)

MASERA: FROM THE REIDS CLUSTER TO INDUSTRIAL APPLICATIONS
Benefiting from its sound expertise and references in the microgrids area, EDF will leverage the REIDS infrastructure, as well as the active collaboration with NTU and ENEDIS, to derive industrial solutions based on the MASERA demonstrator.

In France, ENEDIS will benefit from this international experience to develop new services towards local authorities and local communities.

INNOVATION INSIDE
MASERA demonstrates that innovative and rugged solutions can be complementary, ensuring overall efficiency and affordability.

Integration of second-life EV batteries with new zinc-air batteries (EDF spin-off).

Advanced EDF control and energy management systems, ensuring standardization, interoperability, remote control and cybersecurity.

Maximization of renewable energy generation leveraging local flexibilities (active loads and energy storage).