

# Off-grid solutions

MAKING ISOLATED PLACES ENERGY SELF-SUFFICIENT  
IN BRITTANY (FR)



MICROGRID, STORAGE,  
PRODUCTION OF RENEWABLES  
& ENERGY MANAGEMENT SYSTEM

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BRETAGNE<sup>BE</sup>  
OCEAN PO'//ER

# A Local Energy Loop

## OUR OUESSANT ISLAND DEMONSTRATOR

### REPLICABLE FOR ALL ISOLATED TERRITORIES

The isle of Ouessant in western France has already committed to its energy transition through the implementation of a local energy loop based on a plan which aims to:

- Produce energy locally from sustainable sources: Tidal turbine, offshore wind, PV solar plants.
- Reduce energy consumption: replacement of energy-intensive appliances, renovation of lighting in public areas and in buildings, distribution of LED lamps to users.
- Enhance electric mobility: through an upcoming project for charging stations, fuelled by sustainable production.
- Raise awareness, training and participation of users and the public in general to replace fossil fuels with renewable energy sources.

**THE GOAL FOR THE ISLE OF OUESSANT IS TO ACHIEVE 100% PRODUCTION OF SUSTAINABLE ENERGY BY 2030.**

This project aims to implement a range of solutions for managing energy based on smart grid technologies and associated with the production of marine energy (through Sabella D10 tidal turbine), making the most of the current of Fromveur. The aim: validate this

autonomous energy solution so as to promote and market it in similar isolated areas.

To guarantee the balance between the consumption and production of renewable energies, the island's energy system management is optimised by an energy storage system.

Residents are regularly consulted and involved in the decision-making process both for the production of green energy, for its storage and also for a reduction in consumption.

**IN VIVO EVALUATION OF THE BUSINESS MODEL WITH THE AIM OF DUPLICATING THE PROJECT IN FRANCE OR ABROAD.**

- Real scale testing of the technological elements.
- Accompany inhabitants and inform visitors to the island.
- Provision of the data on island characteristics through an open data website.

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