New Energy Solutions Optimised for Islands

EUROPEAN ISLANDS FACILITY

The project will improve the system's flexibility and make it possible to envisage a carbon-free future for the island.

The EU Islands Facility NESOI is pleased to introduce the clean energy projects receiving its support:

Hydroelectric Pumping Storage





• The project consists in a feasibility study for integrating a micro-hydro pumping plant on San Pietro Island (municipality of Carloforte). As the island includes an energy community of about 30 dwellings with rooftop PV, the objective is to use the excess of PV energy to drive pumps and stock sea water in an upper reservoir (already constructed).

HPS

• The possibility to include more energy sources (for instance wind turbines) will be considered to design the optimal hydro plant that can guarantee further implementations.

How will the EU Islands Facility NESOI support the project?

- Assessment of the key project sizing drivers
- · Identification of suitable technological options given existing project sizing requirements
- Definition of the required environmental permitting procedures
- Cost Benefit analysis and socio economic and environmental impact evaluation
- Definition of the technical, economic and financial, fiscal project inputs
- Risk analysis and identification of available mitigation strategies
- Assessment of existing procurement options
- Financial modelling and identification of target scenario
- Identification of financing/funding options
- Action plan and identification of project monitoring procedures
- Technical feasibility including inspections, measurements, field tests & dynamic simulations





The town of Carloforte

(Source: sardegnaturismo.it)



