Green Islands
for sustainable cohesion policy

CULLETTIVITÀ DI CORSICA
COLLECTIVITÉ DE CORSE

RENEWABLE ENERGY AND ENERGY EFFICIENCY

Nérée 2 : Using the marine thermal energy

OP ERDF-ESF 2014-2020
Priority axis 4 "Support the transition to a low-carbon society"

Objectives

The Holiday Village "U Livanti" is pursuing several goals by developing the use of innovative renewable energies such as marine thermal energy conversion.
First, using this energy for all the thermal needs in water will allow a significant reduction in fossil fuels consumption, which, in turn, will lead to significant cost savings.
This is also the opportunity to recognize "U Livanti" as a pioneer in this field via a European eco-label approach and ISO 26000 certification.

1. The heat energy collected and reconcentrated is transferred to the multichannel exchangers of the technical room by the coolant consisting of fresh water in closed circuit
2. Marine thermal energy is concentrated and collected via the immersed multi-channel probe heat exchangers or under the sand.

Sustainable development goals

7 Affordable and clean energy
12 Responsible consumption and production
13 Climate action

Partners Involved

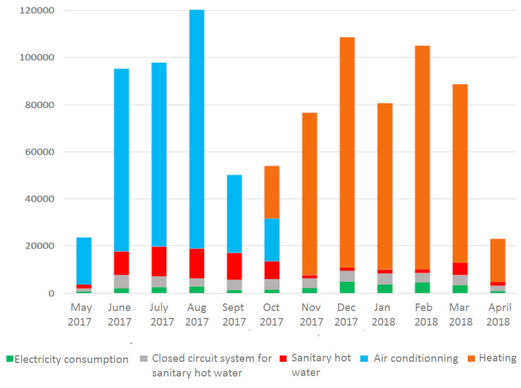
The Agency for the Environment and Energy Management (ADEME) has financially contributed to the project.

Project description

For the last 4 years, the Holiday Village "U Livanti" (Propriano area) has invested in renewable energy and more especially in the marine thermal energy conversion in order to cover the need for hot and cold water for air conditioning, heating and sanitary water. "U Livanti" wishes to develop this further with the establishment of a heat transfer fluid thermal distribution network called Nérée 2. This network will be made up of:
• A power plant using the ocean thermal energy conversion technology with a power of 320 kW, including heating/air-conditioning decoupling cylinders with a capacity of 2000l and a sanitary hot water combi-stratified storage reservoir with a capacity of 2000l;
• 2 x 2,20m multi-channel probe heat exchangers;
• A network serving the various buildings.

Expected Results

By covering 34% of all the needs in thermic water for the Holiday Village, this project will reduce CO2 emissions by more than 210 tCO2 equivalent per year. The project, in fact, is aiming to reach an annual production of thermal renewable energy replacing electricity estimated at more than 275MWh.



Timeline: 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024

Funding

€ 178.313,00 Total funding
€ 72.684,96 EU funding

Contact

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