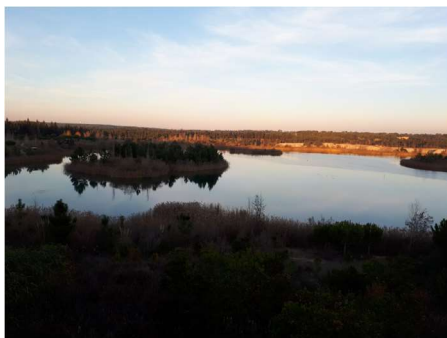




RES IN RURAL ENVIRONMENTS - BIOVILLA PORTUGAL, LISBON METROPOLITAN AREA, PALMELA

This pilot aims at creating energy independence and the long-term sustainability of the Biovilla's buildings, a "living-lab" directly involving different types of actors and target public. The implementation of this project allows to test and assess a group of technological, pedagogical and economical/business solutions and procedures.

It's created a digital platform that discloses, through a monitor displayed in the main hall, the energy consumption in the project buildings. This platform, linked to energy monitoring equipment, shows real time energy consumption data to the users of the intervened buildings, contributing to the dissemination of data that allow better planning and behavioral change towards the utilization of the project facilities and equipment.

It is expected to raise the awareness, knowledge and motivation of rural communities for the innovative aspects of the EE procedures and the RES technology, besides the benefits of behavioral changes in day-to-day life, demonstrating viability of some measures, the consequent environmental benefits and promoting green business.

Within this pilot case were purchased a photovoltaic pumping system (two groups of solar pumps and photovoltaic panels that can be moved and take advantage of all the water stored in 4 wells) for agriculture, a solar grill and a solar stove as well as solar food dehydrator. The monitoring system is implemented with smart gadgets like smart TV, with connection with smart phones. The official tender and procedures have been finished in summer 2018.

The Dehydrator installed is used for food conservation (processing organic products) but also for seed management: it allows to accelerate natural seeds processes (which take years to be ready) in order to reintroduce native seeds all over Portugal in areas affected by forest fires and the subsequent increase of Biodiversity in a national reforestation campaign.

Macro objective:

Increase the energy independence, implement behavioral changes, create new opportunities for green entrepreneurship and enhance the quality, attractiveness and competitiveness of the rural communities while contributing for the GHG emissions' reduction and new jobs' creation

Specific objectives:

- Increase the EE and RES in the pilot buildings;
- reduce the energy consumption costs; raise the consciousness of the community;
- increase the valorisation of local and natural resources;
- Contribute to the local energy mix,
- Create local green energy business and diversification of the rural economy.

RES potential to be exploited:

21 383 kWh/y solar radiation

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