ENERCOUTIM Alcoutim Solar Energy Association
A Platform for Testing & Demonstration of Solar Technologies

Workshop on RES and new technologies for energy production

Flávio Martins  fmartins@ualg.pt
António Mortal  amortal@ualg.pt
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SITE CHARACTERIZATION

- Close to Faro International Airport (70 Km; 1:30)
- Low density region 5.1 Inhab/Km²
- Agricultural based
- Good Solar Radiation
SITE CHARACTERIZATION

Good Solar Radiation for PV testing

Direct Normal Irradiation (DNI) and Global Horizontal Irradiation (GHI) in kWh/m2/day
THE ENERCOUTIM CONCEPT

Mission: to promote, develop, and support renewable energy projects and decarbonization of the economy and to attract and advance further technology developments in the sector

Enercoutim is a non-profit organization managing the SolarLab.

Pioneer in a new business model for Portugal – Solar Demonstration Platform – a 42 hectares (expansion ongoing) infrastructure ready to host the deployment of new PV plants (currently with 4 MW of CPV installed)
THE ENERCOUTIM CONCEPT

Promotion of New Technologies and New Business Models

Platform Expansion

Solar Lab - Projects of R&D

Industrialization

Social Entrepreneurship

Spin off Projects and New Business Models

ENERGY INNOVATION
THE SOLAR LAB ECOSYSTEM

SolarLab is an anchor to enable interoperability between buildings, machines and persons, through the creation of value added services based on IoT (Internet of the Things) devices.
THE SOLAR LAB

“An outdoor Testing & Demonstration platform with unique irradiation conditions in Europe”
THE SOLAR LAB

SolarLab outdoor testing & demonstration platform is supported by a 200 sqm NZEB where data loggers, IT server and other enabling tools are installed.

To measure environmental parameters, SolarLab is equipped with a Kipp & Zonen complete weather station with Pyranometer, Pyrheliometer, Pyrgeometer, wind speed and direction sensors, rain gauge, temperature, humidity and baro transmitter.

SolarLab is also a demo site for Horizon 2020 Research & Innovation projects (E.g. VICINITY and SHAR-Q) making part of a regional Energy and Energy Efficiency ecosystem where prototype equipment and new business models are tested and demonstrated.
THE SOLAR LAB SERVICES

Real-time measured data remote monitoring (provided to customer via web platform);

Grid-Tied & Off-Grid environment;

Video streaming of devices under test provided to customer;

Benchmarking Assessment;

Product Development & Prototype Testing.

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HOSTED H2020 PROJECTS

VICINITY (Open virtual neighbourhood network to connect IoT infrastructures and smart objects)

The aim is to cross leverage available resources and systems and to create value through community-scale VICINITY enablement and promote sustainable energy in the Municipality as well as between the citizens.
HOSTED H2020 PROJECTS

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HOSTED H2020 PROJECTS

Generation and Demand sides could be obtained and matched by gathering data from sensors and building information models that will allow for resources optimization, delivery of value add services to the community through interlinking the data from various sources.

SolarLab is hosting one of the demonstration sites of VICINITY project. It targets the management of a municipal-scale smart energy system IoT enabled within the municipal setting.
HOSTED H2020 PROJECTS

The SHAR-Q project will establish a bottom-up framework that connects the storage capacities of the neighbourhooding and wide regional energy ecosystems into a decentralized collaboration network, that mitigates the requirement on the overall EES capacities needed to ensure grid stability.
THE SOLAR LAB SOCIOECONOMIC COMMITMENT
MORE INFORMATION:

Headquarters: Centro de Artes e Ofícios, Rua das Tinas 1ºE
8970-064 Alcoutim – Portugal

Office: Av. 24 Julho Nº52 – 2ºE
1200-868 Lisboa – Portugal

+351 218 084 024
geral@enercoutim.eu
www.enercoutim.eu
THANK YOU

Flávio Martins
fmartins@ualg.pt

António Mortal
amortal@ualg.pt