STORAGE RESEARCH INFRASTRUCTURE ECO-SYSTEM

RI Information sheet 2022

Organisation, RI name

Technology(ies) of Energy Storage (that can be assign to the facility, e.g. electrochemical, chemical, thermal, cross-cutting, ….)

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Project Acronym	StoRIES
Call	H2020-LC-GD-2020
Grant Agreement No.	101036910
Project Start Date	01-11-2021
Project End Date	31-10-2025
Duration	48 months

1. Photo

2. Geographical coordinates (˚, “, … N/S, E/W)

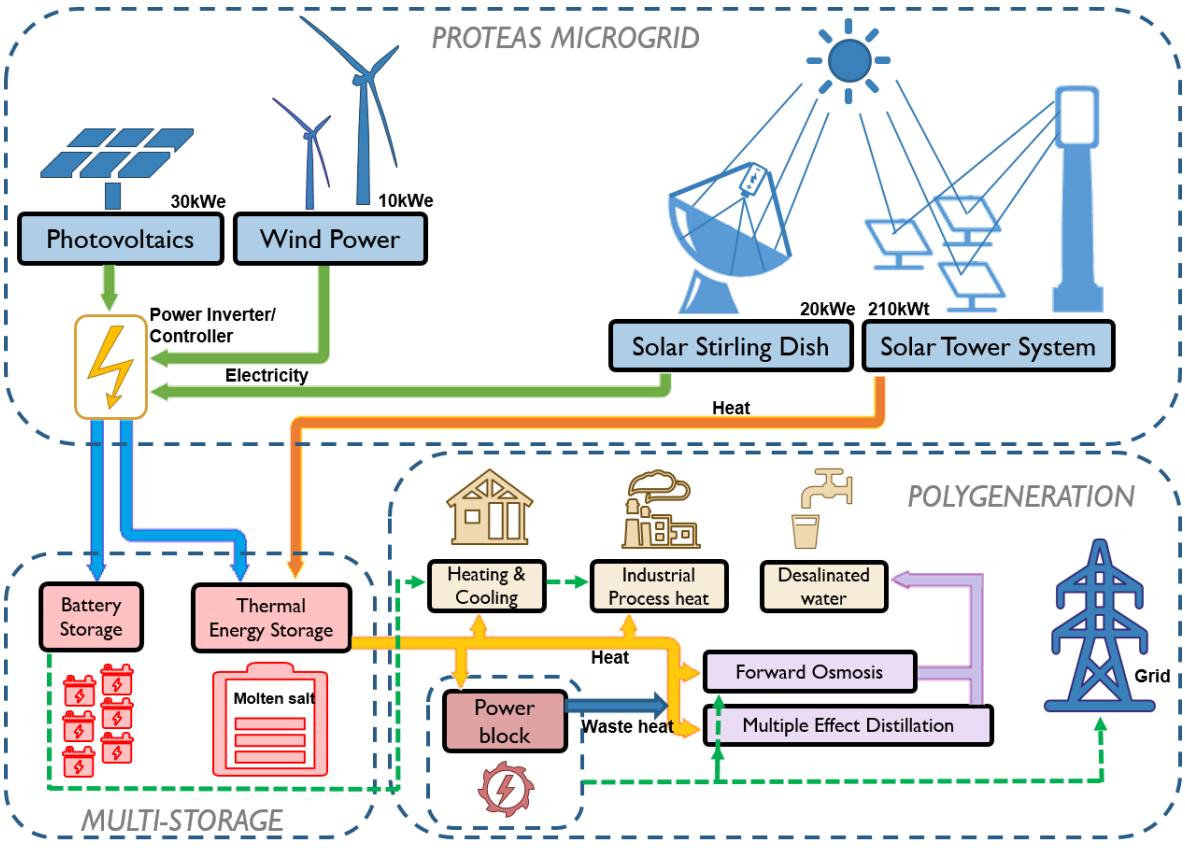
34.707261, 33.261239

3. Description of the research infrastructure for the webpage

The PROTEAS Facility is the largest research infrastructure in Cyprus and the only one of its kind in the Eastern Mediterranean. It is devoted to research, development and testing of Renewable Energy Sources with emphasis on Concentrating Solar Thermal (CST), Thermal Energy Storage (TES) and thermal Desalination of Sea Water (DSW) technologies for bridging the gap between fundamental research and industrial needs.

This project has received funding from the European Union’s Horizon 2020
Research and Innovation Programme under Grant Agreement N. 101036910

PROTEAS is a State of the art, Multi-purpose facility for the advancement of molten salt TES technologies and its hybridization with batteries and other forms of energy storage. Poly- generation of heat and electricity using an array of renewable energy technologies (CST, Wind, PV) and integration of these energy technologies with molten salt TES, batteries and seasonal water storage. Optimal solar radiation and environmental conditions, monitored via a state of the art BSRN station. PROTEAS is complemented and enhanced by the Thermal Energy Storage Lab (TESLA) at the main Campus of CyI at Athalassa where instrumentation, controls development and material studies are being conducted.



4. Availability of the research infrastructure

(Please indicate time periods in which infrastructure will not be available for StoRIES in the next 2 years – if already known)

…

5. Special considerations (confidentiality / NDA agreements, insurance requirement, special training, HSE training)

…

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6. Energy storage technology that can be analysed/studied by using the research infrastructure

- Electrochemical ☐
- Chemical ☒
- Thermal ☒
- Mechanical ☐
- Superconducting Magnetic ☐
- Cross-cutting ☐ (Specifically: …)

7. Key words for the webpage

CSP, Solar Thermal, Solar Stirling, Polygeneration, PVs, Wind Turbine, Desalination, Process Heat, Hybrid Energy storage, Smart Grids

8. TRL level (if applicable):

- 1-3 ☒
- 4-6 ☒
- Above ☐

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