

ptimum Integration of Battery Energy Storage

EUROPEAN UNION ENERGY DAY CLEAN ENERGY SOLUTIONS FOR DECARBONISATION ECONOMIC GROWTH AND JOBS



<u>TECHNOLOGY</u> INNOVATION FOR THE <u>LOCAL</u> SCALE <u>OPTIMUM</u> INTEGRATION OF BATTERY ENERGY <u>STORAGE</u> (TILOS)



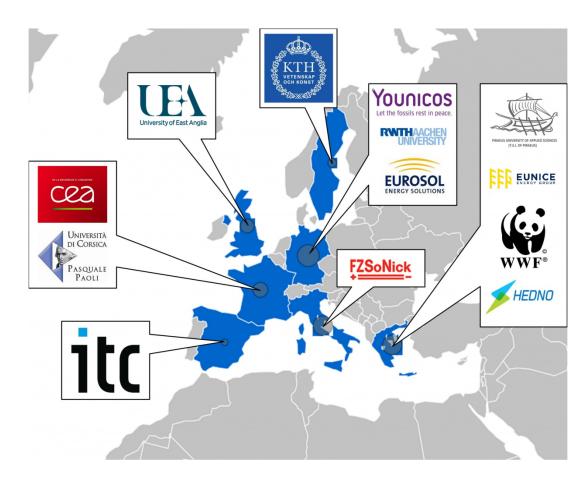
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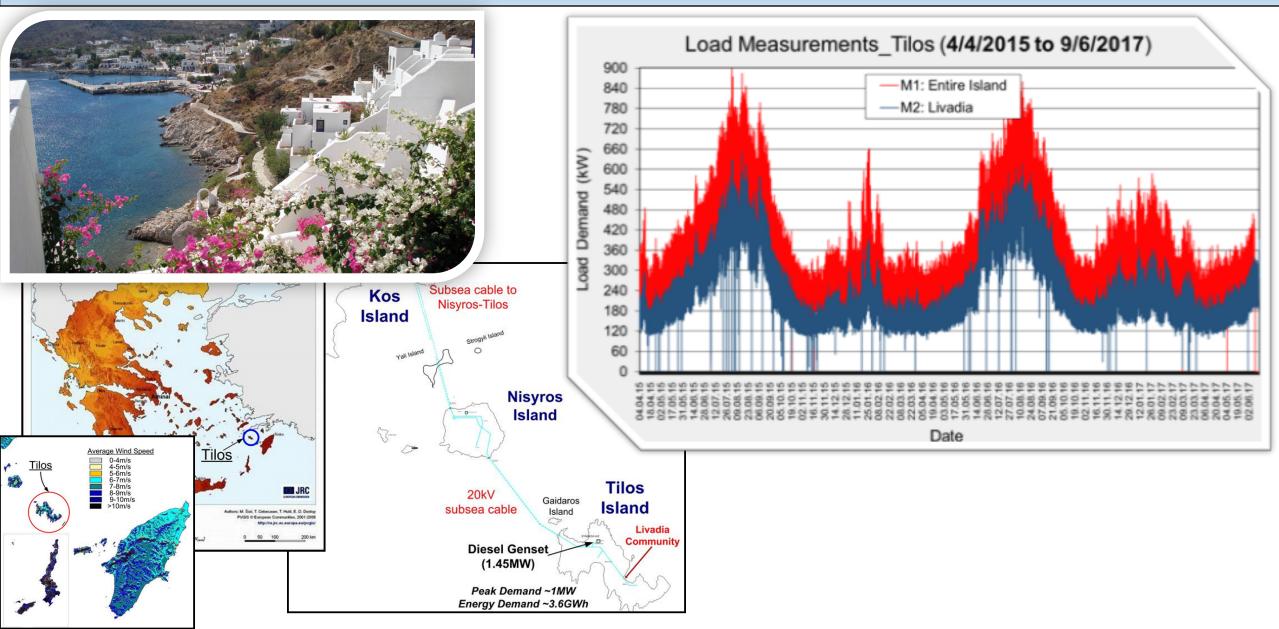
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- <u>Framework</u>: Horizon 2020
- <u>Call</u>: Local / small-scale storage-LCE-08-2014
- <u>Score/Ranking</u>: 14/15 (1st among 80 proposals)
- <u>Budget</u>: 15M€ (11 M€ funding)
- <u>Consortium:</u> 13 partners / 7 European countries
- <u>Duration</u>: 4 years (2/2015-2/2019)



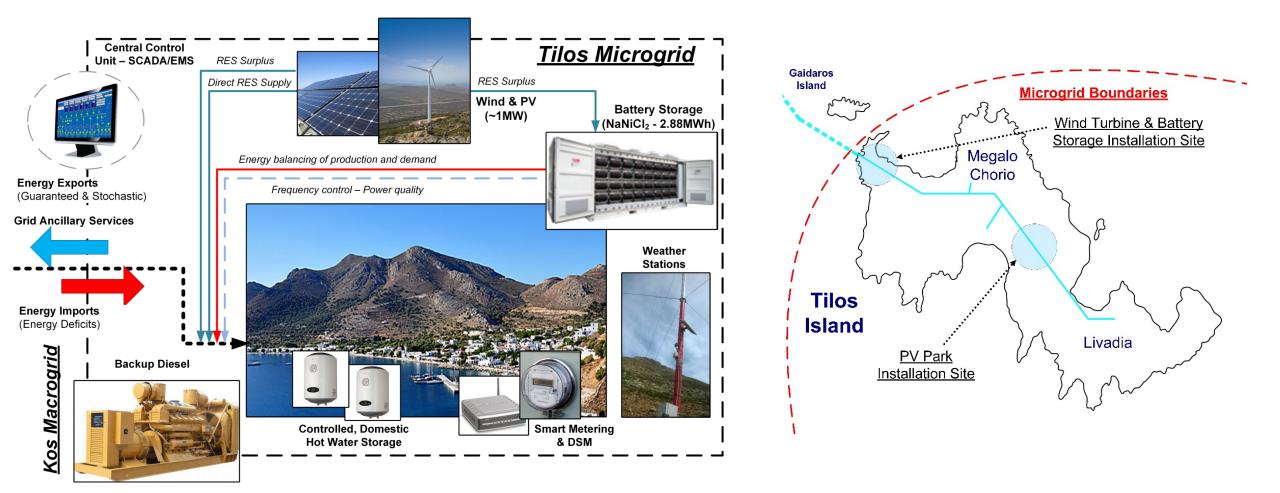


THE ISLAND OF TILOS



- Development of a <u>Smart Microgrid</u> on the island of Tilos
- Development of the first ever <u>Battery-based Island HPS</u> in the Mediterranean
- Roll-out of <u>Smart Meters and DSM Devices</u> in the Tilos residential sector
- Design & implementation of <u>Novel DSM Strategies</u>
- Design & implementation of an <u>Advanced Energy Management System</u>
- Encounter <u>Supply Security</u> issues for Tilos island
- Achieve <u>Energy Autonomy (oil reduction</u>) in the order of <u>70%-75%</u>
- Achieve Energy Exports to the system of Kos dedicated to Peak Shaving

TILOS Smart Microgrid



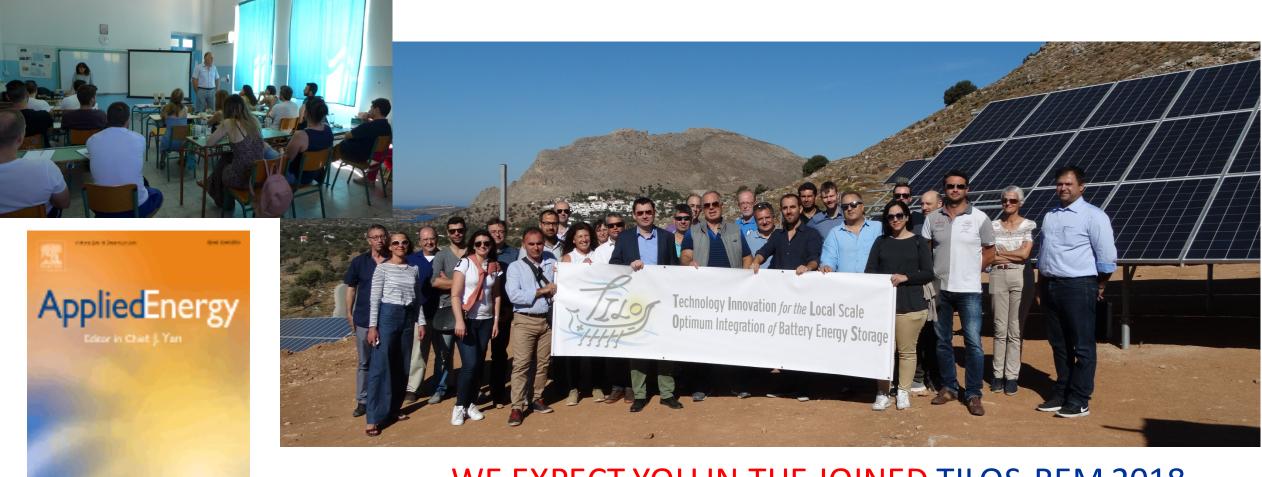
PROJECT STATUS

- Two Prototypes developed (BESS & DSM device)
- First ever Production License for a battery-based HPS
- RES & Battery Storage units installed
- 80/150 Smart Meters & DSM panels installed
- System commissioning by end of 2017 System fully operational in 2018



PROJECT STATUS

JOIN US IN TILOS 2nd SUMMER SCHOOL DURING JUNE 2018



WE EXPECT YOU IN THE JOINED TILOS-REM 2018 INTERNATIONAL CONFERENCE IN RHODES OCTOBER 2018



Technology Innovation *for the* Local Scale Optimum Integration *of* Battery Energy Storage

Thank you for Your Attention