Brussels, 06 October 2020

PRESS RELEASE: Launch Horizon 2020 project "ROBINSON"

ROBINSON will focus on developing integrated energy solutions to decarbonise islands

The Horizon 2020 project ROBINSON – *Smart integration of local energy sources and innovative storage for flexible, secure and cost-efficient energy supply on industrialized islands* - has officially started on 1 October 2020. The project, funded by the EU Research and Innovation Programme Horizon 2020 under Grant Agreement n. 957752, has an overall budget of approximately € 8,4 million and will run for 4 years, between October 2020 and September 2024.

ROBINSON's main mission is to develop an integrated energy system to help decarbonise islands. Islands often find it challenging to ensure a clean, secure and cost-effective supply of energy. The key is to decrease dependency on fossil fuels and become energy self-sufficient through a mix of renewable energy generation and storage infrastructure.

To this end, the 18 partners of the consortium will work together to develop and deploy an integrated, smart and cost-efficient energy system coupling thermal and electrical networks, which will optimise the utilisation of local renewable energy sources. The system will be demonstrated on the island of Eigerøy (Norway) and lab-scale level replication studies will be conducted for the island of Crete (Greece) and the Western Isles (Scotland). Further replicability in other (European) islands and remote areas will be guaranteed by the modularity of the Energy Management System (EMS) that will be developed throughout the project.

The ROBINSON EMS will ensure an efficient and smart integration of all distributed energy resources (DER), energy surpluses, and storage capacities available on the island, while considering demand-side response, power balancing, weather forecast and market-related costs. This integrated system will ensure a reliable, cost-efficient and resilient energy supply contributing to the decarbonisation of the European islands by helping to decrease CO_2 emissions.

Technological innovation is deeply rooted into the ROBINSON concept. Through the development of the optimised EMS, ROBINSON will integrate newly developed and/or adapted technologies, such as a small gas turbine based combined heat and power; anaerobic digester assisted by bioelectrochemical systems to enable the conversion of liquid waste into biomethane; a mobile innovative wind turbine; a gasifier to covert bio-waste; as well as hydrogen-related technologies (electrolyser and storage system).

The 18 partners from 10 different European countries involved in ROBINSON are: European Turbine Network - Project coordinator (BE); LEITAT (ES); NORCE Norwegian Research Centre AS (NO); Eigersund Næring og Havn KF (NO); Aurelia Turbines (FI); Paul Scherrer Institute (CH); Università degli Studi di Genova (IT); Energy Innovation AS (NO); Dalane Energi (NO); RES-T UG Renewable Energy System & Technology (DE); Prima Protein AS (NO); Funditec (ES); Hysytech (IT); Environmental Research Institute, North Highland College UHI (UK); Comhairle nan Eilean Siar (UK); Technical University of Crete (EL); Region of Crete (EL); Stratagem Energy LTD (CY).

More information on the project can be found here: https://cordis.europa.eu/project/id/957752

Project Details

Project Grant Agreement: 957752

Start Date: 01/10/2020

Project Duration: 48 months

Project Budget: €8,369,532.50

Project Coordinator: Ugo Simeoni, email: us@etn.global

Info: info@robinson-h2020.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under GA n. 957752.

Partners