



Renewable Energy
for Self-Sustainable
Island Communities

REACT H2020

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Flexibility 2.1: From Demand Response to Renewable Energy Communities

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The Project



REACT is a 4-year research project funded by the EU's **Horizon 2020** Programme.

Its objective is to **achieve island energy independency** through maximal **exploitation of renewable energy** sources, its optimal utilisation by managing the energy consumption and available storage assets via **demand response platforms**, and **engaging end-users** as key players in a local **energy community**.



The Consortium

The REACT consortium is composed of **24 partners** from **11 EU countries**. Partners provide the necessary capabilities to carry out demo activities in islands (island **authorities**, **DSO/ESCO** and **technology providers**) as well as **R&D institutions** for delivering the necessary expertis for the REACT platform deployment and integration.

CONSORTIUM PARTNERS



The Challenge

Geographical islands suffer from several barriers in the traditional electrical grid model

This affects the island's energy security & increases energy costs that are up to 400% higher than on the mainland



If islands are not grid-connected they are highly dependent on fossil fuels



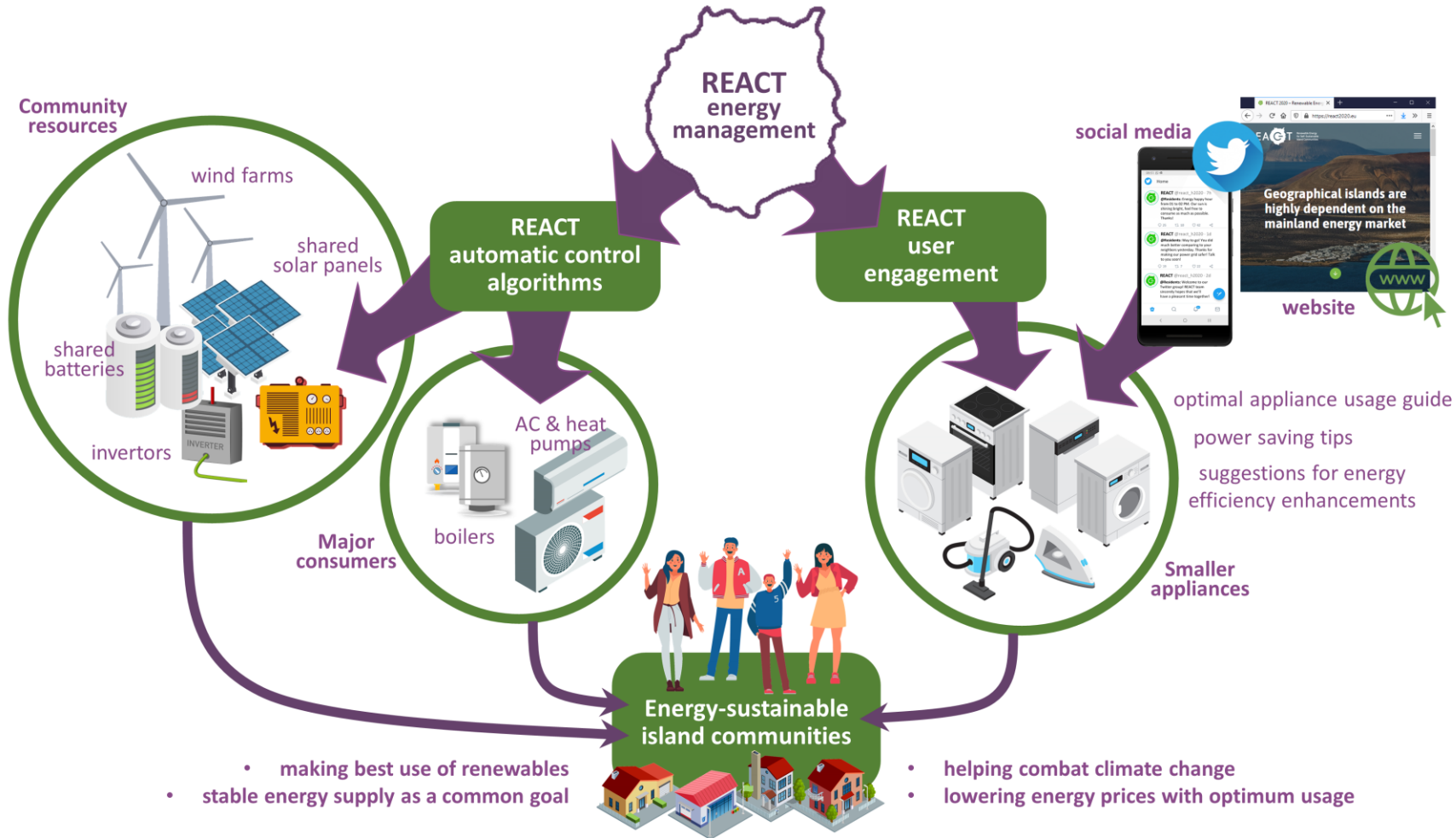
If islands have a grid connection they are dependent on imported energy



Islands have highly variable seasonal load profiles due to tourism



The proposed solution



Current status

- **Selection of participant** buildings and **sizing of the installations**
- Development of the central **cloud-based REACT platform**, currently collecting **data from** already installed **legacy systems** (electric smart meters) thanks to the **Energy Gateway Application** developed
- Implementation of **user engagement** activities towards the creation of **energy communities**
- **Delays** in the installation of equipment due to **COVID-19** related mobility restrictions and the approval of technical projects



THANK YOU FOR YOUR ATTENTION

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More information on:

<https://react2020.eu/>



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