

## THE 3 STEPS REPLICATION STRATEGY OF THE ISLANDER PROJECT

*One of the main pillars of the ISLANDER project is its replication strategy. It entails 3 steps and aims at fostering the replication and upscaling of innovative Smart Grid solutions in EU islands.*

### ISLANDER to pave the way for the decarbonisation of EU islands

The Islander project which started in October 2020 and runs until 2024 will demonstrate the implementation of renewable energy sources and energy storage systems as well as the development of a central energy management platform on the German island of Borkum. The consortium is composed of 11 partners from 7 European countries and the project is co-funded by the European Commission with nearly € 7 million. To maximise its impacts, the ISLANDER project aims to replicate its results to the widest possible adopters through a 3-wave replication strategy: First step replication in Followers in Croatia, Greece, and UK; Second step replication in the related archipelagos; and Third step replication in other EU islands.



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**Port of Lefkada (Lefkada, Greece)**



© Orkney Sky Cam, courtesy of EMEC  
**EMEC Caldale substation and hydrogen plant (Orkney, UK)**



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**3D picture of Orlec PV power plant (Cres, Croatia)**



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**Town of Skopelos (Skopelos, Greece)**

### Complementary Follower islands: Orkney, Cres, Lefkada and Skopelos

The 4 Follower islands of ISLANDER are Orkney represented by partner EMEC, Cres represented by partner REAK and Lefkada and Skopelos represented by partner DAFNI. All islands have initiated several measures to shift from fossil fuels toward sustainable resources and are different stages of their energy transition. Orkney is the most advance in terms of renewable penetration having a share of over 100% of renewables in the island electricity mix.

Community-led energy engagement is paramount, including over 700 private micro wind turbines. The island of Cres in Croatia experiences high level of solar irradiation, creating significant potential for solar energy generation. The biggest solar power plant in Croatia will soon be operational on the Cres Island: the "Orlec Trinket" solar park will have an installed capacity of 6.5 MW. The 2 islands of Lefkada and Skopelos are connected to the national Greek power transmission network. Due to the constantly growing tourist demand and the significant cooling needs, both islands experience an increase in energy consumption in summer. The project team will support them in their path towards island decarbonisation and improved grid management.

All islands will collaborate and help each other to reach their specific objectives and contribute to the wide adoption of ISLANDER results. EMEC, representing the island of Orkney, overviews this task.

## Outlook - next activities planned in 2021

The next few months will see partners carry out an in-depth analysis of the current status of the energy makeup of the Follower Islands. Including the potential for renewable energy generation, assessing the existing electricity supply and electricity distribution networks, energy demand for transport, electricity and heating/cooling as well as gathering key datasets and learnings from past and current projects. This information will provide the blueprint for comparative studies between Borkum and Follower Islands which will be prioritised to design an overall replication strategy.

If you are interested in the ISLANDER project and its activities, please do not hesitate to contact us or follow our social media channels. We also invite you to visit our webpage [islander-project.eu](http://islander-project.eu) that will be soon online.