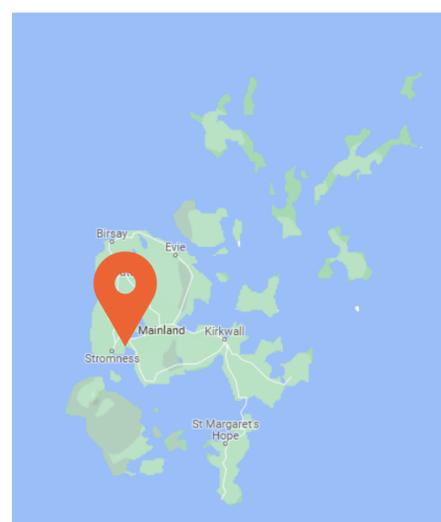


# Orkney Islands

**Aim:** *Create economic benefit for the community and tackle fuel poverty*



North Scotland, UK



## Stakeholders involved in the project

The first renewable energy projects in the Orkney Islands were small community wind turbines. However, the multitude of projects (involving power, heat, and transport and using innovative technologies) has necessitated collaboration and partnerships with several local, national, and international stakeholders. Key stakeholders involved in the projects that drive the energy transition are Community Energy Scotland, European Marine Energy Centre (EMEC), Orkney Islands Council, the Orkney Renewable Energy Forum (OREF), and Rousay, Egilsay and Wyre Development Trust.

## Financial streams for financing the project

Diversification of projects helps to get financing at different scale. While initially the citizens invested in over 500 small and medium-sized wind turbines for their farms or gardens, other large infrastructure projects were financed through different sources coming from the local authority, the network operator, or through participation in funded research projects.



## Technologies used in the project

The diversification of technologies used and implemented in the Orkney Islands in the different projects allows the island archipelago to become a sustainable island and testbed of the energy transition. Wind turbines have been a key technology while the region has also integrated marine technologies, smart-grids, flexibility services, electric and hydrogen vehicles, and innovative heating technologies at household level.

## Project achievements

The first projects were initiated by the community to tackle the local depopulation and create economic benefits for the community. This has partially been achieved, supporting the local economy, creating jobs, and keeping energy costs affordable for the islanders. Unfortunately, the community wind turbines still suffer from curtailment and Orkney Islands suffer from the highest energy poverty rate in the UK, due to infrastructure constraints and harsh weather conditions. Nonetheless, the Orkney Islands have come far in their aim and local energy transition. In 2016, the Orkney Islands generated over 120% of their electricity needs. Therefore been awarded third place for the "EU RESPonsible Island Prize".



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To learn more:

<http://www.oref.co.uk/>

<https://www.h2020smile.eu/the-islands/the-orkneys-united-kingdom/>

<https://smart-beejs.eu/>