Case Study

HySeas

Scottish Enterprise commissioned a feasibility study to evaluate the technical and commercial viability of using hydrogen fuel cells to enable the development of zero-emission ferries.

The purpose of the project was to investigate the possibility of further developing the reductions in emission from the pioneering diesel/electric hybrid RORO ferry.

Deliverables

- Assessment of H_2 storage methods, quantities, refuelling strategy, and budgets
- Outline design of shore-based infrastructure

Achievements

- Pioneering deployment of the technology in the marine environment
- First of its kind in the UK

Benefits

- Self-supporting sustainable transport system

PROJECT INFORMATION

We provided technical input into the development of the on-board hydrogen storage infrastructure and the integration of the fuel cell into the propulsion system.

Our main role was the investigation of the shore-based hydrogen infrastructure involving storage quantities, methods and refuelling strategy while considering the hydrogen supply chain whether locally produced from renewable sources or remote production and associated distribution. Also included was the need for the system to be suitably reliable to support the lifeline service the ferries provide.

"They can't get rid of the electricity they make; it's going to waste. This way, a ferry could charge overnight in the harbour and the islands would be paid for the electricity the ferries use."

- *Andy Crossan, Project Director at CMAL*

T +441316654047
W www.logan-energy.com

Logan Energy
hydrogen technologies