



Partnership Explores “Clean Energy” For Boats



PURE Energy Centre Limited working in partnership with NAFC Marine Centre.

PURE Energy Centre Ltd (PEC), a renewable energy company based in Unst, Britain's most northerly Island, is pioneering research into creating the UK's first hydrogen powered boat. It is hoped that this project will address some of the environmental issues associated with the marine transport sector which currently contributes significantly to global emissions and water pollution by oil/petrol leakage.

If the research proves successful, PEC, in partnership with the NAFC Marine Centre based at Scalloway in Shetland, hopes to build a prototype version of the boat. The craft, powered by hydrogen fuel cells, is seen as a great hope for clean energy as it uses hydrogen to generate electricity - water being the only waste product. This unique collaborative partnership has been brought together by the innovative HI Links project, led by the UHI Millennium Institute.

PURE Energy Centre Ltd (PEC) is a commercial spin out of the PURE project which has already created the world's first community owned facility in Unst producing hydrogen directly from wind power. PEC has identified a potential market for hydrogen powered boats and in order to explore this market opportunity, they have acquired additional expertise, specifically in the area of boat building and design.

PEC approached UHI Millennium Institute's HI Links project which supports collaborative development projects between small businesses in the Highlands and Islands and Scotland's academic/research sector. HI Links, in turn, provided financial support in the form of a feasibility grant and put PEC in touch with the NAFC Marine Centre to look at ways of forging a unique partnership, which could change the face of boat development in years to come. NAFC has a thriving engineering section with the skills and experience required for this project. They also have well-equipped workshops ideally set up to support the project in order to produce modelling or one-off practical engineering solutions.

Dr Joe Irvine, project leader of the Hi-Links initiative commented;

"This demonstrates how the north of Scotland, and in particular the outer islands, is spearheading innovative applications associated with Scotland's burgeoning renewable energy industry. The partnership between PEC and the NAFC Marine Centre, brokered by HI Links through its feasibility funding scheme, could reap innumerable benefits as the research looks at ways of bringing a hydrogen fuel cell powered boat closer to reality - with all the environmental benefits that brings. HI Links Feasibility grants are currently available to assist small businesses in the Highlands and Islands."

Daniel Aklil, Managing Director of the Pure Energy Centre said; *"It is with these types of innovative projects that Scotland and the outer islands can lead the world in both hydrogen and renewable technologies. The help from UHI Links has been invaluable. The team has been very supportive of the work done and we have been very pleased to work with NAFC in this unique work."*

Peter Dryburgh, Director of the NAFC Marine Centre said; *"The NAFC Marine Centre is dedicated to supporting and developing the Marine Industries in Shetland and the Highlands & Islands of Scotland. This project facilitated by Hi Links has been a welcome collaboration between ourselves and the Pure Energy Centre, which we hope to continue."*

"**HI Links** is a project supported by a SEEKIT grant from the Scottish Government, Highlands and Islands Enterprise and UHI"

