PRESS RELEASE

Shapinsay Development Trust - Orkney Islands

Shapinsay renewable energy project could help slash farm costs



Shapinsay renewable energy project could slash farm costs by producing synthetic agricultural diesel and fertiliser locally

A pioneering project to use 'spare', curtailed electricity from Shapinsay's community wind turbine to produce synthetic diesel suitable for farm transport and urea for use as fertiliser has won £25,000 in development grant funding. The award has been made to the Shapinsay Development Trust by the Scottish Government's Local Energy Challenge Fund (LECF) and will be used to develop the project in collaboration with partners so that a Round 2 application to the LECF can be made in February 2016.

At present the cost of shipping both diesel and fertiliser to Shapinsay is high. It's hoped to showcase a solution to the problem by connecting a The Community owned turbine in Shapinsay has been subject to curtailment along with many others in Orkney. Community meetings established islander's resolve to address the loss of income which this causes and to establish 'behind-thewire' solutions. The Development Trust have been working to develop options. hydrogen producing rapid response PEM electrolyser to the Island's community owned turbine which will kick in at times of curtailment. Using expertise developed by collaborative partners, the Fischer-Tropsch (FT) process will be used to produce synthetic diesel by combining stored hydrogen with carbon dioxide captured from the

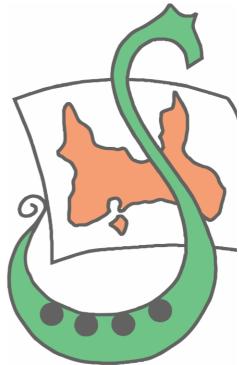
production process of a local Orkney business.

The project will also combine nitrogen from the air with hydrogen to produce ammonia which can then be further combined with additional carbon dioxide to produce urea which is used as fertiliser throughout the isles

This ground-breaking project is intended to prove the viability of the process at a multi kilowatt / single megawatt scale and to develop a commercially sound process which can be applied to an equipment package which will benefit islands elsewhere.

Further announcements about the partners involved will be made in due course.

The LECF received 67 applications this year but only 23 projects were approved for feasibility and development support.



Nic. Thake - Service Manager for the Shapinsay Development Trust says "we are delighted that the Challenge Fund have found our proposal a suitable candidate for development and hope that the outcome will benefit not only us but also other islands in Orkney and those further afield as well."

For further information please contact:

Nic. Thake - Service Manager - Shapinsay Development Trust

01856 711734 / 07570 102049 / SDTSM@shapinsay.org.uk

Image and Logo Resources - <u>https://www.dropbox.com/s/lhcezrjnjsbzq6k/Shapinsay</u> <u>%20Images%20and%20SDT%20logo.zip?dl=0</u>

LECF announcement - <u>http://www.localenergyscotland.org/funding-resources/funding/local-</u> energy-challenge-fund/2015-phase-one-projects/wind-to-agri-energy/

Scottish Government Announcement - <u>http://news.scotland.gov.uk/News/Renewable-energy-goes-to-town-1b1d.aspx</u>