

The North Harris Trust Hydro-electric Scheme

Introduction

The North Harris Trust represents a community of over 700 people living in the Outer Hebrides. The community undertook a community land buy-out in 2003, and purchased 62,000 acres of land to manage in the interests of the people who live there.

The Trust has been developing a hydro-electric scheme on their land which will sell electricity to the grid to generate a sustainable income and allow further regeneration projects to proceed.

They started their hydro project in 2009 with a feasibility study looking at hydro options on North Harris Trust land. The site on the river at Bunavoneader was identified as having remnants of an old hydro scheme which powered a whaling station over 100 years ago. The feasibility study was then followed by surveys for migratory fish, otters and mussels. In March 2010 the Trust invited local households to an open evening at the Harris Hotel with the hydro plans on display and received an overwhelmingly positive response from the community.



Equipment

This project is not yet at capital stage.

The North Harris Trust is planning to install a 100kW hydro turbine in 2013/14. The construction will include an intake weir just upstream from the old dam, and a turbine house below the road bridge. The Trust has carried out six months of flow measurements and also compared this with rainfall data taken at a nearby site. They have secured both planning permission, water extraction approval and a grid connection for their project and have chosen a construction partner. The availability of capital finance has changed significantly since the project outset, particularly as the Trust can no longer use public grant funding if they wish to access the Feed-in-Tariff scheme. The community needs to secure further finance in order to proceed with the construction.



Cost and Grant Funding

Total project cost	£650,000	Pre-development funding of £26, 256 was obtained from: Highlands & Islands Enterprise Scottish Government CARES
Potential bank finance	£520,000	
Secondary funding source	£130,000	

Emission Savings

As this project is not yet installed, these savings are estimated:

Estimated kWh savings p.a.	418,000
Annual CO ₂ savings (tonnes)	180
Lifetime CO ₂ savings (tonnes)	4500

Local Impact

The Outer Hebrides is one of the most vulnerable areas in population and employment terms in Scotland, and Harris has the fastest declining population in this region. North Harris has basic demographic problems of general depopulation, lack of young families and a subsequent decrease in the number of children living there.

The demographic problems are down to a lack of job opportunities, a lack of variety of employment, increasingly expensive housing and the consequent lack of social amenity. The number of local businesses and range of services provided have decreased at an alarming rate within the last twenty years, with a resulting loss of opportunity. The ability to retain the benefits of economic activity in Harris and the future capacity to take advantage of such opportunities is therefore reduced. An example of this is a reduction of 30% in the number of retail outlets serving North Harris over a twenty year period.

The North Harris Trust needs to generate a long-term, sustainable revenue to secure the future of their community. The hydro scheme at Bunavoneader will provide the Trust with a significant income to invest the community development plans which include:

- Creating employment, training and development opportunities within the community to allow local people the opportunity to live, work and remain in Harris.
- Improving housing availability and creating land release opportunities to enable local people to live in Harris and encourage new residents.
- Reduce energy consumption in the community by improving energy efficiency, reducing fuel poverty and creating local business opportunities.
- Developing North Harris's natural and environmental assets for the benefit of the community and visitors - through the provision of enhanced amenity, health benefits and employment opportunities.



David Wake from the North Harris Trust said:

“CES and CARES allowed us to come together with a number of other community groups for the study –and benefit from economies of scale. This has given us the confidence to now progress the scheme towards financial close. We have negotiated the project through planning, water extraction and grid connection approvals –with the help of the technical team at CES. As a small community group without the skills or resources to take on a project like this, we are indebted to CES and CARES”.

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