This project has been funded by the Scottish Government's Community and Renewable Energy Scheme (CARES).

Ullaspool – The Solar Swimming Pool

Introduction

Ullaspool is a non-profit distributing charitable body which works in partnership with the Highland Council. The Ullaspool community owned and run swimming facility provides an outstanding resource for the village of Ullapool and for the wider communiities of the far north west of Scotland. Ullaspool have around 1500 members.

Due to the nature of the community service they provide a high energy load is required all year round. Prior to the addition of a renewable energy system, the group relied on fossil fuels and over the years rising energy prices began to compromise the economic viability of the pool.

In 2006 a group formed to investigate alternative energy solutions available to the swimming pool. The group consisted of Ullaspool board of directors, the centre manager and the local Community Powerdown Officer, and was supported from the outset by Community Energy Scotland's local officer. They investigated and anaylsed their energy consumption and embarked on learning visits to other swimming pools in Scotland to look at renewable solutions which had been adpoted. Following this and after much discussion and deliberation, the Ullaspool group decided to progress with the installation of a sizeable evacuated tube solar thermal panel array. This provides the oil boiler with a preheat for the pool water and for showering.

Equipment: Solar Thermal, Kingspan/Thermomax DF100 Direct Flow Evacuated Tubes (120 tubes per bank at approximately 8.7m width) 720 tubes in total

Project details

- The group tendered for the installation of a solar thermal array using the tender facility on the Community Energy Scotland website. The project was also directly highlighted to accredited MCS installers.
- The tenders were scored and companies were invited to interview to further discuss their proposals.
- The project management was overseen by the Ullaspool Board of Directors and the local Community Powerdown officer
- The group also conducted a structural survey on the roof to check the ability of the roof to withstand any extra forces added by the addition of the panels.

Cost and Grant Funding

Total Project cost	£ 136,670	The remaining funding was obtained through: EU LEADER funding £20857.40 (15.3%) Own resources £2576 (1.88%)
CARES grant	£ 113,237	
CARES grant Percentage	82.9%	

Emission Savings

Estimated kWh savings p.a.	117,556 (equiv to 6,700litres of oil)
Annual CO_2 savings (kg)	17500
25 yrs Lifetime CO_2 savings (kg)	437500

This project has been funded by the Scottish Government's Community and Renewable Energy Scheme (CARES).

Project Monitoring

A metering display is located in the foyer of the building. This displays the energy production from the panels for the general public and user groups. This metering is also available online as part of the Community Energy Scotland monitoring programme and can be accessed by staff at the pool to monitor the production by the system.

Local Impact

This community pool is a highly valued and important amenity for the communities of the North West corner of Scotland. The solar project has helped support the future sustainability and economic viability of this community resource. Fuel for the oil powered heating system was the single largest annual cost to the pool and projections indicated cost increases in the medium to long term. Finding ways to help reduce oil consumption and move away from reliance on this resource was vital to the continued survival of the pool and for the services it provides.

Lessons Learned

As part of the initial feasibility research we had a visual inspection done on the roof to assess if it was structurally suitable to support the solar panels. The engineers gave the all clear at this stage, but when the actual installation of solar panels was started some serious structural problems were discovered with the roof and the whole project was put on hold. One year and one new roof later the pool and panels were up and running, but not without some serious effort on part of the community and all those involved. Although in this case the problems would have been hard to spot prior to construction works starting, it goes to show that it is vital to conduct a careful and thorough feasibility investigation before works start.

Sam Planterose, Ullaspool

> **"This project has been the start of a new lease of life for the pool. Although we had to go back before we could go forward, the pool is now running better than ever."**

For further information, contact:

Community Contact ("Ullaspool"):

Name: Sam Planterose
Phone number: 01854 612884

Email: sam.planterose@highlifehighland.com

Community Energy Scotland Contact:

Melanie MacRae
The Links, Golspie Business Park, Golspie,
Sutherland, KW10 6TA

01408 635 101

melanie.macrae@communityenergyscotland.org.uk