

GLENURQUHART CENTRE



Project name: Glenurquhart Centre energy savings project

Technology: 2 x 12kW Valliant air source heat pumps (ASHPs)

Location: Drumnadrochit, Inverness-shire

Funding: EU Interreg COBEN Project funded the feasibility study (£4,750) and the ancillary and distribution installation for a new wet heating to be supplied by the new ASHPs and heat recovery system (£17,071). 50% of the COBEN funding is through the Scottish Government's Community and Renewable Energy Scheme (CARES).

Date installed/operational: February 2020

During 2017 and 2018, a steering group of local community representatives and stakeholders from Drumnadrochit developed a local energy plan. This was funded as part of the Delivering Community Benefits of Civic Energy (COBEN) project.

The COBEN project is an EU Interreg (North

The COBEN project is an EU Interreg (North Sea Region) funded programme and supported by 50% match funding through the Scottish Government's Community and Renewable Energy Scheme (CARES).

Drumnadrochit's local energy plan provided a focus for immediate and longer-term opportunities to prioritise activities needed to develop the community's existing and future energy needs.

Community consultation workshops with local volunteer ambassadors and a community-wide survey showed several key issues that the community wished to see addressed.







These were:

- projects that reduced energy costs, with minimal impact on the local environment
- transport projects that prioritised the most vulnerable households, with minimal impact on the local environment
- projects that seek to use energy generated locally.

It was also considered important that the people who should benefit from any energy projects should be householders and community groups in the first instance. The people to benefit from transport projects should be householders and local-intra local energy plan area commuters, as well as those travelling further afield.

The plan identified thirteen actions for the community to progress. This included carrying out a feasibility study at the Glenurquhart Centre and adjacent new properties to look at options for using additional solar photovoltaic (PV) supply and battery storage. It also sought to promote the use of heat pumps in new dwellings.

The Glenurquhart Centre, which opened in 2000, is run by Glenurquhart Care Project, a community-run charity. The charity provides day care services to elderly and vulnerable people in the local community. Since 2000, several energy saving initiatives have been undertaken including installing 42 solar PV panels (250W), loft insulation, and LED lighting. Heating relied on electrical night storage heaters and electric panel heaters. Hot water was provided by storage cylinders fired



by electric immersion heaters. It was accepted practice to remove excess heat by opening the kitchen windows.

A Zero Waste Scotland Resource Opportunity Assessment was completed for the Centre in November 2018.

PROJECT AIMS AND OBJECTIVES

The project had three key aims:

- to reduce the building's energy running costs
- to increase the facility's sustainability
- to increase awareness amongst the staff and service users about energy efficiency and renewable energy.



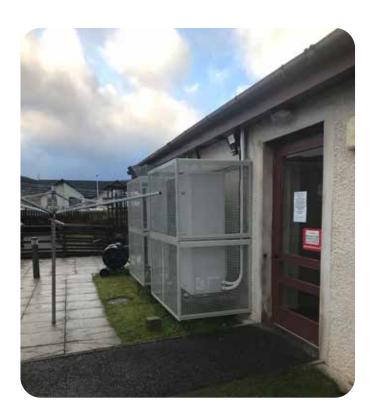




OUTCOMES AND ACHIEVEMENTS

A feasibility study was carried out in July 2019 to determine the best energy system for the building. The study recommended that the building's storage heaters and hot water immersion heaters be replaced with a new air source heat pump system, and that a heat recovery system could also be installed in the kitchen. Due to the increased efficiency of the heat pumps, increasing the size of the solar PV system would not be a significant benefit.

In February 2019, the new wet heating system was installed, alongside two Valliant 12kW air source heat pumps. A heat recovery system for the kitchen was also installed. Highland-based McInnes Group installed the systems with minimal impact to the centre's day care services.





The purchase and installation of the heat pumps was funded through grant awards from Soirbheas, The Pebble Trust and the charity's own funds.

Carbon savings are expected to be an estimated 4,836kg each year and 96.727t over 20 years, in addition to significant energy cost savings. The Glenurquhart Care Project is also eligible to receive payments through the non-domestic Renewable Heat Incentive (RHI) over the first seven years. This has allowed the charity to realise additional income to support centre running costs.









LESSONS LEARNED

A spokesperson from Glenurquhart Centre identified several learning points.

- Finding the right solution "We initially requested funds to replace the old storage heaters with modern efficient storage heaters, but by working with Local Energy Scotland we came to the conclusion that the air source heat pumps and a wet system would provide the best overall solution."
- How it is implemented is important "One of the reasons for requesting a like-for-like replacement in the first instance was to minimise the impact on our day-to-day activities in the centre, which is used to provide day care to the elderly and vulnerable. By working with the contractor and setting the need to have the majority of work done in the evenings and weekends, we were able to deliver the system whilst the centre was operational."

- Using funding as a catalyst "Funding through COBEN acted as a catalyst to finding match funding from other sources, some of which were very close by and new to the Glenurquhart Centre."
- Increasing awareness to staff and residents

 "The whole exercise was an opportunity for us to explain to service users what we were doing and why, and the impact it would have on our environment and the climate emergency. This went down well with service users and staff."
- Link to local energy plan "Without the initial work done on the local energy plan, we would probably not have identified this opportunity. It is pleasing to note other community initiatives are benefitting from funding as a direct result of the local energy plan, and this will hopefully continue."

To find out more about funding from the Community and Renewable Energy Scheme, visit localenergy.scot/funding



