



ULLAPOOL COMMUNITY TRUST RENEWABLE HEAT FOR LOCHBROOM

INFORMATION PACK

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1 Introduction

Welcome to the Ullapool Community Trust, Renewable Heat for Lochbroom Project information pack. Please have a look through the following 9 pages where we have provided details of the projects' aims, information regarding how the project will work, and what you need to do to save a significant amount of money on a new renewable heating system.

2 Project Outline

Ullapool Community Trust has developed the Renewable Heating for Lochbroom Project to support householders in the area to benefit from a Government initiative which gives grants to help UK communities afford renewable heating.

Ullapool Community Trust is one of only 4 organisations in Scotland who have been successful in their initial application to the Renewable Heat Premium Payment (RHPP) Communities Scheme for the community in and around Ullapool. The Trust now has until November 16th to gather details of householders who are interested in installing renewable heating systems and complete the final application. If there is enough interest and various conditions are met then those involved could receive a significant grant towards the cost of installing renewable heating systems.

With Scottish Government interest free loans also available, the project could make renewable heating more easily available and affordable for many householders in the area.

Renewable technologies that are supported under the scheme include:

- Solar thermal panels
- Heat pumps (air to water, ground source or water source)
- Biomass Boilers

3 Ullapool Community Trust's Role

Ullapool Community Trust (UCT) is a development trust and a community-led organisation that, through discussions with local people and groups, identifies pressing local economic, social and environmental concerns and develops projects to address the issues and benefit the community. In September 2012, following extensive consultation, the Ullapool Community Growth Plan was adopted which included a focus on community renewable energy projects. This has led to UCT developing the Renewable Heat for Lochbroom project.



More information on UCT's history, objectives and past and present projects is available at www.ullapoolcommunity.org.

UCT's aims for this project are to:

- support local householders to install high quality renewable heating systems;
- deliver clusters of installations to help make renewable heating systems affordable and encourage local businesses to install and support renewable energy systems;
- maximise carbon reduction and energy cost savings through access to other energy saving home improvement measures.

Ewan Young the UCT development officer will be managing and administering the project, so please contact him if you have any queries at any stage. You can contact him by –

Phone – 07878 155 623

Email – sustain@ullapoolcommunity.org

Post/In person – Ullapool Community Trust, Harbour Buildings, the Pier, Ullapool, IV26 2UH

On Site Generation Ltd, a local renewables consultancy and installation company, has been contracted to support the Trust to develop the project application and assess the suitability of renewable heating systems for the households that express an interest in the scheme.

Contact Jason Leon at On Site Generation on:

Phone – 01854 612 184 (home) 07815 938 446 (mobile)

Email – Jason.leon@onsitegeneration.co.uk

As the project progresses, UTC will continue to promote and support renewables in the Ullapool area through a second initiative, the Pure Power for Lochbroom project. UCT are currently recruiting for a development officer who will be in post for two years and take forward the project. The development officer will support local people interested in domestic renewable energy systems and energy efficiency measures by providing advice and assistance throughout the planning and installation process.



4 How the Project works

- Stage 1 Get involved - Call, email or otherwise contact Ewan Young, Jason Leon, or a board member to register your interest. Registering interest does not mean you have committed to anything, just that you are interested.
- Stage 2 Tell family, friends and neighbours about the project, as the more people that are involved the greater the savings and grants available to those involved.
- Stage 3 Jason Leon will be in touch to arrange a short **home visit survey** and discuss the renewable options that could be installed. Following the survey you will be asked to confirm your interest in being part of the project so that UCT can include you in the overall grant application.
- Stage 4 UCT will carry out an assessment of local Microgeneration Certification Scheme accredited renewables installers that have expressed an interest in supporting the project. This will help householders find a local, approved installer that is supporting the scheme and is able to provide a discounted quotation for the installation work.
- Stage 5 In early December we will receive confirmation of the RHPP funding support that will be available and hold an evening event to provide all the details regarding Stages 6 to 9, to everyone involved. We will be able to confirm the value of your funding voucher, installers will be able to answer technical questions and the Energy Saving Trust will be able assist you to apply for an Energy Saving Trust interest free loan.
- Stage 6 Get quotes and permissions organised.
- Stage 7 Install your new renewable heating system before April 2013.
- Stage 8 Claim your funding back.
- Stage 9 Enjoy the warmth and savings of your new renewable heating system.



5 Renewable Heating Technologies

5.1 Solar Thermal

Solar water heating can be used for domestic water heating and for large-scale applications such as at Ullaspool. It is usually the easiest to apply and lowest cost renewable heating installation for your home and can work as an add-on to standard oil, LPG or electric heating systems and in conjunction with other renewable heating systems such as biomass boilers and heat pumps.

A typical Scottish solar water heating system should provide nearly 100% of domestic hot water demand in the summer months and around 50% over the course of the year, so they are particularly good for families and other high or seasonal (summer) hot water users.



You will need a southerly facing roof, wall or piece of ground for the panels or evacuated tubes and new hot water storage tank.

Full systems are likely to cost between £4,000 and £5,500.

Solar water heating is now classed as permitted development, although planning permission may be required on a listed building or in a conservation area. A Building Warrant may also be required.

For more info please visit the On Site Generation or Energy Saving Trust websites.



5.2 Heat Pumps

Heat pumps use a refrigerant to absorb heat from the outside air or ground and pump it to the inside of a building to provide heating and hot water. Heat pumps are powered by electricity, but are more efficient than conventional electrical heating systems.

The most common types are Air Source Heat Pumps (ASHP) and Ground Source Heat Pumps (GSHP). ASHPs do not require a ground loop so are cheaper to install and require less space. They source heat from the outside air, which fluctuates more than the ground temperature in the winter and are therefore usually a little less efficient than GSHPs. GSHPs collect heat via a 'ground loop', which is a length of HDPE pipe buried in a ground trench or borehole. GSHP tend not to fit in the average garden but can be ideal for crofts.



Heat pumps are not suitable for all properties. They work more efficiently with a low temperature heating system and are therefore suited to **energy efficient, well insulated buildings**. There is however scope for flexibility in the system design – heat pumps can be used with radiators and can be 'docked' with existing heating systems to assist the heat pump during very cold weather. In order to establish the right size of heat pump for your home, a detailed heat loss assessment is required.

Costs very much depend on the type and size of the system and quotes can often be difficult to compare. For guidance expect cost in the region of:

- ASHP: £6-10,000
- GSHP: £10-18,000

GSHPs are now classed as permitted development however planning permission may be required for an ASHP.

For more info please visit the On Site Generation or Energy Saving Trust websites.



5.3 Biomass heating

A well designed and maintained biomass stove or boiler can be up to 90% efficient. Modern biomass heating can be fed and lit and cleaned automatically, controlled by thermostats and timers to keep your home at just the right temperature whatever the weather.

Traditional open fireplaces are very inefficient only 20% of the heat generated reaches the room, the rest is lost up the chimney.



There are two main options available:

- Boilers that provide heating and hot water for the whole house using logs or pellets
- Stand-alone stoves that provide heating to individual rooms, often as a secondary heating system. These are available with back boilers to provide hot water.

Only automatically fed systems are eligible for grant funding as part of this project.

Costs are very difficult to summarise as every system is different:

- Stand-alone stoves may cost around £1,500-£3,000.
- A typical log or pellet boiler may cost between £10-20,000.

Running costs will depend on the cost of logs or pellets.

Planning permission and a building warrant may be required.

UCT have recently set up a trading arm Lochbroom Woodfuels which hopes to begin selling logs in 2013. It is possible that it may also distribute other biomass products such as pellets in the future if a viable market exists.

For more information have a look at the following websites:

Wood Energy Scotland: www.usewoodfuel.co.uk

Energy Saving trust: www.energysavingtrust.org.uk/scotland/Generating-energy/Choosing-a-renewable-technology/Wood-fuelled-heating



6 Funding Support

6.1 Summary

Householders could:

- Save 15-20% of the installation cost through the project voucher scheme;
- Make additional bulk buying savings through their installer;
- Apply for an Energy Saving Trust loan of up to £10,000, interest free over 8 years;
- Qualify for the Renewable Heat Incentive (RHI) to provide a further subsidy from 2013.

Local businesses will not qualify for a grant but can also be supported with bulk buying savings, EST loans and the RHI.

Local businesses could:

- Receive an installer discount;
- apply for a free energy review;
- Organise up to £100,000 interest free or low interest loan;
- Qualify for a RHI subsidy to pay for the cost of the renewable installation. Available now.

6.2 Project Voucher Scheme

The funding mechanism for this project depends on the overall score that UCT can achieve in its funding application. This in turn depends on the number and type of systems being installed, where they are being installed and the carbon savings likely to be achieved. It's complicated and will all be explained at the evening event.

We hope to achieve funding vouchers for the following sort of figures:

Solar water heating	£ 750
Air source heat pumps	£1,500
Ground source heat pumps	£2,000
Biomass boilers	£2,000



6.3 Installer Discounts

UCT will carry out an assessment of local Microgeneration Certification Scheme accredited renewables installers that have expressed an interest in supporting the project. This should help householders find a local, MCS approved, installer that is supporting the scheme and is able to provide a discounted quotation for the installation work. The bulk discount that installers may offer will obviously depend on the number of systems they are going to install, so pass the word!

UCT also hopes that this project will encourage more local companies to be involved in renewables and increase the capacity to support renewables into the future.

6.4 Energy Saving Trust Home Renewables Loan Scheme

The Energy Saving Trust is offering renewable energy loans funded by the Scottish Government.

Interest free loans of up to £10,000 are available for renewable heat generating systems such as heat pumps, biomass boilers and solar thermal. These renewable heat loans will have a repayment period of up to 8 years.

Electricity generating technologies – Interest free loans of up to £2,000 for electricity generating renewables systems such as solar PV, wind turbines and micro hydro are also available. These renewable electricity loans will have a repayment period of up to 4 years.

The loan scheme operates on a first-come first-served basis so please apply as soon as you can.

6.5 Renewable Heat Incentive (RHI)

The RHI is a UK Government subsidy scheme which aims to help households replace their existing fossil fuel-based heating systems with a renewable alternative. The UK Government published their consultation on domestic RHI in September 2012 with a target that RHI starts in the summer of 2013.

The key proposals in the consultation are:

- Indicative tariff ranges for air source heat pumps (6.9-11.5p/kWh), biomass boilers (5.2-8.7p/kWh), ground source heat pumps (12.5-17.3p/kWh) and solar thermal technologies (17.3p/kWh) that are MCS certified and meet relevant required standards



- Payments for householders over seven years for each kWh of heat produced for the expected lifetime of the renewable technology and based on deemed heat usage
- Tariff levels set to provide a better return for householders living off the gas grid

The UK government has also indicated that people who have installed equipment under RHPP 1 or 2 should be eligible for support through the RHI providing they meet the eligibility criteria of the full RHI. Further details are contained with the UK government's Department for Energy and Climate Change (DECC) consultation on the Renewable Heat Incentive: consultation on proposals for a domestic scheme.