



CASE STUDY

Financial & Support Instruments for Fuel Poverty in Social Housing (FinSH)

Stroud District Council Ground Source Heat Pumps

Project overview

Stroud District Council (SDC) is a local authority in the county of Gloucestershire maintaining some 5, 500 council owned dwellings.

In 2007 the Authority installed, as a pilot scheme, new hot water and central heating systems in seven of their properties using ground source heat pumps (GSHPs).



With the success of the pilot scheme in terms of tenant satisfaction and savings in overall utility bill costs, SDC in keeping with the Council's policy of providing 'a green environment for its tenants and other residents' decided to continue with further installations in another area of the county to a further ten properties. These were selected on the bases that mains gas was not available and the majority of council properties had a solid-fuel heating system.

These installations were completed by March 2009.

Drilling rig operating in front garden (Picture courtesy of Stroud DC)

Grants

In addition to the Council's own funding, grants were obtained from both the Low Carbon Building Programme (LCBP), Phase 2 and the energy suppliers Carbon Emission Reduction Target (CERT). Approximately 80% of the properties qualified for the LCBP2 grants and 20% for the CERT grant.

Grant levels were approximately 50% of the cost of the drilling and heat pump installation costs - the internal plumbing not qualifying.

Technology

Both of the schemes completed to date were installed using the bore-hole method for the heat-loop.

Barriers

A problem associated with drilling 90 metre deep bore-holes in the front of properties is the potential for mess and disturbance this creates to the tenants. This was overcome by close and careful site management and constant dialogue with the tenants.

Some tenants were sceptical about the system and the benefits. There was some concern that they would miss their solid fuel fires. The council overcame this by installing flicker flame electric fires with the added benefit of the convected radiant heat along-side the conventional radiators fed by the heat-pump. Tenants clearly did not miss carrying the solid fuel from an outside store.

To achieve full benefit the properties have had to have top level insulation. This was achieved by checking and upgrading where necessary using CERT funding for the loft and wall insulation, with improvements also made to windows, doors and other openings in the building fabric.

Whilst SDC has an ongoing programme of upgrading their existing water and heating systems, without the continued support of grants for this kind of technology the capital outlay for this form of installation could be prohibitive.



Sump pit to catch initial waste water (Picture courtesy of Stroud DC)

Highlights

The tenants have reported to be satisfied, and sometimes pleasantly surprised, at the benefit of a comfortable warm environment without the inconvenience of supplying solid or oil fuel. Predominantly they are aware of the noticeable saving in overall fuel costs, typically stating that whilst their electricity costs are similar to previous bills they do not have to pay the previously substantial bills for solid fuel or oil.

Due to the success of the original projects and the continued availability of third party finance, approval was sought and the necessary finances were allocated to proceed with a possible further 45 properties in the forthcoming two financial years, up to 2011.

Through public advertising the Council is encouraging any private residents, within the same catchment area to take advantage of bulk purchase opportunities by offering installations of GSHPs via the same contractor. Where this specific heat pump package is not suitable, they are also being encouraged to choose local installers to make other energy efficiency improvements including solar thermal and biomass installations. Tackling fuel poverty requires a cross-tenure approach. Many council homes have been purchased through 'Right to Buy' and all the council-built estates are part of mixed-tenure neighbourhoods. It is not normally possible for a council to invest in securing the benefits of renewable heating systems for vulnerable private sector households due to high installation costs. By working across the tenures this is being made possible.

Replication

CERT funding under the current programme is available from the 6 major energy suppliers in the UK, details of which are found below. Grants can vary between companies and are dependant on the tenant's circumstances, property type, and the change in fuel supply. In some circumstances they can be greater than that available through LCBP2.

The Low Carbon Building Programme grants (Phase 2) - funded by *BERR* - are available until the end of June 2009, by working with accredited specialist contractors. Applicable grants are 50% of the cost for the heat pump installation, but this does not include internal modifications to the existing water and heating system.

Further Information

The Local Authority has been very conscious of the desirability of informing and involving both tenants and employees of new developments in their service standards. After the initial project commencement an in-house seminar was organised to present the opportunities that the systems offered.

Tenants were regularly informed about the project progress and the possibilities for involvement via mailed newsletters. The Council hand delivered 500 invitations to a 'road show', involving both private owners and council tenants and this was attended by over 100 households. The road show included presentations from equipment manufacturers and suppliers, contractors, energy suppliers, Severn Wye Energy Agency and council officers.

Contact Details

CERT

The 6 energy suppliers who provide CERT funding in the UK and their contacts are:

- British Gas—David Newitt—07979 569 871
- E-ON—Alan Clews—07753 896 359
- EDF Energy—Nigel French—01273 428 641
- Npower—Bob Jackson—01905 340 616
- ScottishPower—Claire Grover—01702 714 067
- Scottish & Southern—Paul Smith 02392 277 231

Low Carbon Building Programme

<http://www.lowcarbonbuildings.org.uk/home/>

Stroud District Council

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