

ENGINEERING  
TOMORROW

*Danfoss*

Case story | Solihull, United Kingdom

## Replacing expensive heating systems with a heating solution

Rocial housing tenants in the West Midlands are celebrating savings on their heating bills following the installation of Danfoss ground source heat pumps.

**High**

annual efficiency.  
minimises energy  
consumption.

95-105

[www.heatpumps.danfoss.co.uk](http://www.heatpumps.danfoss.co.uk)



Solihull Housing Association decided to trial a range of renewable technologies at its properties to reduce carbon emissions and help tenants avoid fuel poverty. In a pilot project for Solihull Housing Association, five ground source heat pumps have been installed in a block of flats, with solar thermal panels and air source heat pumps at some of the other 10,500 council properties. The installation was carried out under a framework agreement with British Gas that specified Danfoss' 6kW DHP-H Opti Pro systems.

Each pump has an integral 180 litre hot water tank and is powered with energy sourced from by 125m deep vertical boreholes which have been drilled in land behind the block. The heat pumps supply all the space and hot water for the one and two-bedroom homes and were installed in the airing cupboard of each flat, replacing the



**Since the heat pump has been in, it is always lovely and warm even through the coldest days of the winter. Our average heating and hot water bill has dropped by more than half from £130 a month to just £60.**

**Tenants Sharon and Leslie Minshull**



existing hot water cylinders, with no loss of living space. Radiators were fitted in place of the bulky storage heaters and the building's insulation was also improved to maximise their efficiency. Robin Dunlevy, Solihull Metropolitan Borough Council's Home

Energy Conservation Officer, said: *"We selected ground source heat pumps for these flats because they were not connected to mains gas and the electric storage heaters were not very energy efficient. These systems were also expensive to run for tenants and the heaters were often inadequate in the winter. After consultation with residents, five households in the block were keen to try a ground source heat pump system and we have had some really good feedback."*

Tenants Sharon and Leslie Minshull have been delighted with their new heating system. Mrs Minshull says: *"We've lived here for 11 years and with the storage heaters, I was always cold – I used to have to wrap blankets around myself when I was sitting on the settee. Since the heat pump has been in it is always lovely and warm, even through the coldest days of the winter."*