

Project profile



Client

Randwick Village Hall

Products

Dimplex SI 17 TE ground source heat pump

Partners

Ecovision Systems

Hall cheers for Dimplex heat pumps

It's 'hall cheers' for Dimplex heat pumps following a major grant-aided refurbishment that transformed a community building in Gloucestershire into what's set to be the UK's first carbon neutral village hall.

Randwick Village Hall near Stroud, has received wide acclaim and 100% grant funding from a variety of sources including the government's Low Carbon Buildings Programme (LCBP2) and Stroud District Council for its extensive £70,000 programme of improvements. Identified as an exemplar energy project by Severn Wye Energy Agency, the hall has its heating system and hot water for showers provided by a Dimplex SI 17 TE ground source heat pump installed by Ecovision which requires 75% less energy to run than the original system.

The heat pump runs continuously so there are no heating 'highs and lows' and the hall's electricity bills have already been reduced by 25%. Even during the cold winter of 2008/09 when the temperature did not rise above freezing for two weeks, the hall remained warm, with no need for supplementary heating. The heat pump synchs with the photovoltaic panels on the roof that can generate up to 7,000kW hours a year, with any surplus from the heating system exported to the national grid. The savings on heating energy alone were in excess of £300 during the first six months of operation, and plans are in place to

generate an estimated extra £1,200 p/a in revenue from selling excess energy and renewable obligation certificates (ROCs).

Val Flack, secretary of Randwick Village Hall and Playing Fields Committee said: "We wanted to have a truly sustainable building and we chose Ecovision because they offered the best service and a total turnkey solution, as well as being local. And even better, when we found that the Low Carbon Buildings programme would pay 50% of the ground source heat pump, it seemed like a good thing! Ecovision and the Dimplex heat pumps are really great things and we are thrilled with the results, it's everything we wanted," she said.

Dimplex's head of renewables, Chris Davis added: "There's substantial funding available for village halls and not for profit organisations seeking to reduce fuel costs and energy emissions and Randwick is a superb example of what can be achieved. There's up to 50% funding available for heat pumps via the Low Carbon Buildings Programme Phase 2 and this can often be boosted by funds from landfill tax grants, local authority funding and regional environmental initiatives."

Randwick's carefully planned 'Energy Efficiency Scheme' for the refurbishment involved a wide variety of initiatives designed to deliver a highly sustainable project, with the lowest possible carbon footprint. Measures included PVC double glazing with thermal insulating "k" glass which has helped to reduce the main hall's heat loss by 30%, low energy lighting and infra-red people sensors, insulation for the roof and cavities. Plus the hall has an environmental policy to encourage recycling, saving around £250 a year, as well as the use of eco cleaning products, composting and even encouraging hall users to car share or travel on foot or cycle.

The Dimplex heat pump is housed in the hall's plant room, with collectors concealed beneath the adjacent playing fields. The heated water from the high output SI 17 TE, one of comprehensive range of Dimplex heat pumps, is directed into a high tech radiator system which includes integral micro fans for optimum heat transfer.

To encourage community awareness and interest in the scheme, details of the energy saving measures are displayed on a meter outside the hall's entrance that provides real time information on the performance of the PV cells, the heat pump and the amount of carbon saved.



Dimplex, Millbrook House, Grange Drive, Hedge End, Southampton SO30 2DF
Tel: 0845 600 5111 • Email: marketing@dimplex.co.uk
www.dimplex.co.uk