

Barn conversion benefitting from low heating costs

A barn conversion near Attleborough, South Norfolk, is benefitting from year-round heating and hot water at low running costs, thanks to a ground source heat pump installed by Finn Geotherm.

When homeowner Paul Withey set about converting a 100 year old barn into a contemporary four bedroom home, he thought the rural location meant he would be tied to a conventional oil boiler for heating and hot water. However, following a recommendation from his architects, he began to investigate ground source and quickly realised it provided the ideal alternative. With government funding available under the domestic Renewable Heat Incentive (RHI) scheme, opting for a ground source heat pump system was even more attractive.

Finn Geotherm specified and installed a Lämpöässä Vmi 11 ground source heat pump with integral 480 litre thermal store to meet all the 3,000 sq ft barn's heating and hot water needs. The system was installed with a secondary return to provide almost instant hot water, and a water softener added due to the hard water area.

By involving Finn Geotherm during the planning stages of the project, Paul was able to incorporate a plant room for the heat pump inside his home and get the required 700 metres of ground loop laid in his garden before any landscaping took place. The heat pump connected directly into the barn's underfloor heating circuit.

Paul Withey, homeowner, said: "I can't speak highly enough of my heat pump system and the service I've received from Finn Geotherm. Our home is constantly warm throughout – there are no cold spots and every room is always warm. We've had two winters with the system now and I have been very impressed with both its performance and the running costs. Our heating and hot water bills are significantly less than we were used to paying for oil fired heating in our old house and we don't have the additional hassles of ordering deliveries to make sure we don't run out of fuel.

"The RHI payments really made the choice a no brainer. Our system will have been paid for by the RHI in seven years and during this time – and for years afterwards – we are receiving all our heating and hot water at an extremely low cost."

Key benefits:

- Future-proof, sustainable system
- Great return on investment
- Consistently warm home
- Extremely low heating and hot water bills
- Government payments through RHI

