

Countryside barn conversion kept warm with ground source

A contemporary barn conversion in the rural North Norfolk countryside is benefitting from renewable heating thanks to Finn Geotherm.

Located near Swanton Novers National Nature Reserve, the four bedroom barn conversion was built by homeowner Michael Grand. A building supervisor by trade and with four other self-build projects already under his belt, Michael worked alongside Rutland Builders to transform the 1980s concrete beamed former grain store into a stunning home with spectacular field views.

When it came to heating, the rural location of the barn gave Michael something to think about. Michael explains: "The barn is off the gas grid so I looked at all the options. I'd had oil heating in my previous homes which was expensive to run and with this project to create my 'forever home', I wanted heating that was cheaper and self-sufficient. I did some research on heat pumps and my plumber CCHP also suggested the technology as an ideal choice for my project. I contacted Finn Geotherm and spoke to them initially about installing an air source unit."

After completing a full site survey, Finn Geotherm recommended a ground source heat pump would be better suited to the property with its underfloor heating system. With land around the home in which to lay a collector loop, although it would be more expensive, a ground source heat pump would be more efficient and also generate a much greater income for Michael under the Domestic Renewable Heat Incentive.

Finn Geotherm specified and installed a Lämpöässä VM11 heat pump (a monoblock unit – the same size as an American style fridge-freezer) with integrated 480 litre thermal store, capable of generating on demand and delivering up to 240 litres of hot water in one hit. A 600 metre ground array, laid in two 300 metre loops, was installed under the lawn. Michael has complemented his heat pump with the addition of solar panels on the barn roof

Michael sums up: "I'm really pleased with my ground source heating. I am very happy with the recommendations made by Finn Geotherm to ensure the system fitted was the most suitable one for my home and my requirements. The installation went smoothly and the heat pump is working perfectly. The house is always warm – I installed a wood burning stove as part of the renovations but never actually need to light it!"

Key benefits

- Self-sufficient, hassle free heating
- Great returns from the RHI
- No impact on appearance of the property or garden
- Consistently warm home

