

## Case Study

# Office Barn Conversion, Sevenoaks

## The facts:

**Property Type:**  
Barn Conversion

**Property size:**  
Approximately 160 m<sup>2</sup>

**Product supplied:**  
8kW Kensa Compact  
Heat Pump with single  
compressor

**Application:**  
100% space heating and  
cooling within the  
property, complementing  
underfloor heating for  
heating and fan coils for  
cooling.

**Installation:**  
Two 40m long 2m deep  
trenches with slinky  
closed loop ground  
arrays.

**Cost Savings:**  
Significant savings over  
existing oil heating

**Fuel Displaced:**  
Oil

**CO<sub>2</sub> Reduction :**  
46% saving over oil  
(based on data from the  
DTI and BRE)



### 'Environmentally friendly IT office conversion'

When it came to turning an old stable block near Sevenoaks in Kent into a sophisticated IT office, the company was determined not to have a polluting oil or gas boiler, and wanted an environment-friendly alternative. After much investigation they decided that a ground source heat pump was the only answer because it reduced their carbon footprint, was cheap to run, and never needed any servicing or maintenance.



An 8 kW heat pump was fitted and was connected to 2 x 40 m slinky ground array placed in the adjacent field and were installed by the client's own groundwork contractor.



The system not only provides heating to the office using a "wet" underfloor system, but is a reverse cycle heat pump which can provide cooling in summer using fan coils.

## £Grants

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## Project partners

**Clients' own contractor**  
heat pump and ground array  
installation

