

## Case Study

### 5 Bed Refurbishment

# Young family seek to lower fuel bills



## Setting the scene

**A young family of four living in a five bedroomed, executive home in Northumberland, were desperately seeking ways to reduce their fuel bills. Due to it's location, there is no mains gas supply to the property, so the family have used an LPG boiler to heat their home for a number of years.**

Using an LPG system to heat a home, proves very expensive to run. With rising fuel costs set to drive their heating bills up further still, the couple were prompted to look for a cost-effective alternative.

Built in 1999, this 200m<sup>2</sup> house has all the thermal qualities you'd expect of a house this age and stood to benefit greatly from the use of a more efficient heating system. Other alternatives to LPG, such as wood, solar power and biomass, proved either insufficient for their needs or too involved to install, run and maintain.

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### 5 Bed Refurbishment

**This family saves around £520 a year with the advanced efficiency of Ecodan, using free energy from the outside air to provide central heating and hot water for significantly less money.**

Replacing a 75% efficient, expensive to run LPG boiler, this family found Ecodan to be much more efficient and effective to run. Running costs were almost halved. Changing to Ecodan, has meant this family are no longer reliant on the increasingly expensive LPG system to heat their home. With annual savings of a massive 45%, they're able to reduce their average heating bills from £1,100 to £580.

By installing large, efficient radiators fitted with TRV's, the Ecodan system works perfectly to ensure their home is warm enough without the need for any additional heating. Ecodan easily meets the demand for hot water, as well as delivering a more even temperature throughout the home for maximum comfort.



## Ecodan heats this family home for almost half the running cost of LPG

### Installation summary

- 1999 5 bed detached house
- Total living space 200m<sup>2</sup>
- Originally heated by 75% efficient LPG boiler
- Replaced with 14kW Ecodan
- 200 litre indirect unvented cylinder
- larger radiators with TRV fitted throughout
- Installation took 2 days

### Significant savings

Running costs reduced by 45% saving over £520 per year  
Carbon emissions significantly reduced

### How it works

**Ecodan** is an air source heat pump and the technology inside it is very similar to that of a domestic fridge - transferring heat from one place to another - the back of your fridge is warm because it is removing heat from inside the fridge out into the room.

In the case of the Ecodan air source heat pump, it removes warmth from the air outside and transfers it inside the home to heat radiators and provide hot water.

**The multi-award winning Ecodan** - is brought to you by Mitsubishi Electric, one of the world's leading experts in creating comfortable living environments. For more information visit [www.mitsubishielectric.co.uk/heating](http://www.mitsubishielectric.co.uk/heating)

