

## Case Study

3 Bed Semi-detached  
Refurbished

# 1955 home needs renewable energy heating



### Setting the scene

**With their existing gas boiler system reaching the end of its useful life cycle and proving very inefficient, the family living in this 1950's house were looking for an effective replacement. With diminishing effectiveness and poor carbon emissions, it was important to replace this ageing system with one that would provide an increase in performance and energy efficiency.**

Being environmentally aware, this family were keen to take advantage of a heating system using renewable energy. They needed to find a system that would readily satisfy the heating and hot water demands of a family of 5 whilst reducing running costs and carbon emissions. Other heating alternatives using renewable energy, such as solar power and biomass, were considered but discounted for proving either ineffective or too high maintenance. A powerful, renewable energy solution was required. With inconsistent levels of comfort coupled with escalating gas bills, this home stood to benefit substantially from a more efficient means of heating.



## Case Study

### 3 Bed Semi-detached Refurbished

**An older house benefits from a new lease of efficiency.**

**Unlike the ageing gas system that was previously installed, Ecodan uses the latest technology to harvest renewable energy from the outside air to provide central heating and hot water. Easy to install the advanced efficiency of Ecodan, is perfect for this 1950's home.**

Using Ecodan to replace the inefficient gas boiler and installing larger radiators to work with the lower flow temperatures, means this home enjoys constant comfort levels for a fraction of the cost of the old gas boiler. Able to supply all the heating and hot water this property needs, Ecodan is the ideal, low carbon replacement these homeowners needed.

Changing to Ecodan has cut this homes carbon footprint by 44% and improved the efficiency to significantly reduce the annual running costs. Low cost, low noise and minimal maintenance make Ecodan a viable alternative to gas.



## Ecodan more than halves heating bills and emissions

### Installation summary

- 1955 3 bed semi-detached house
- Total living space 102m<sup>2</sup>
- Mains gas supply available
- 1970's 60% efficient gas boiler removed
- Replaced with 8.5kW Ecodan
- Installed new, larger radiators fitted with TRV
- 140 litre indirect unvented cylinder
- Installation took 2 days

### Significant savings

Running costs reduced by 38% saving over £500 in 6 months  
Carbon emissions reduced by 44%

### 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)**

