

# CASE STUDY: AIR SOURCE HEAT PUMP REPLACING OIL IN YORKSHIRE



In 2010, Sam and Sue Sykes replaced their oil heating system with an air source heat pump from Ice Energy. Living in an off-gas location 1,000 feet up in the Pennines, they are now in the process of applying for their Renewable Heat Incentive (RHI) payments.



## What prompted you to investigate air source heat pumps?

"We undertook a major refurbishment of our home which included relocating the kitchen, installing internal wall insulation (50%) where possible plus the installation of solar PV panels and an air source heat pump to replace the oil boiler.

"As part of the project we wanted to improve the internal space and reduce energy consumption by using renewable energy sources.

"A further consideration for us was the rising price of oil and our dissatisfaction with the peak and trough effect of an oil boiler as well as our overall commitment to CO2 reduction. There were also potential economic benefits from a then uncertain RHI scheme."

## How did you find the installation process?

"Our property is situated within the Peak District National Park which means there are no permitted development rights. As a result the location of the air source heat pump was subject to planning limitations and had to be hidden beneath a veranda. The result was that there was considerable communication between Ice Energy, Mitsubishi Electric (to ensure technical compliance with clearances, etc) and the planners.

"We used conventional radiators because the solid floors and low ceilings couldn't accommodate underfloor heating.

"In the end, installation of the air source heat pump was straight forward although we did have some issues aligning the work of the domestic plumbing team with the commissioning of the heat pump."

## What has it been like living with your air source heat pump?

"Brilliant. My wife was a reluctant convert who thought the equipment "looked like an old fridge abandoned on the drive!" and who didn't believe it could work. She is now an advocate.

"We allow the intelligent controls to do their job so effectively it's a leave alone system that looks after itself. We have survived three winters including 2010 - 11 when there was a period of -10C for 10 days with a record low of -18C. The air source heat pump worked hard but kept the house warm at an even temperature of 19C.

"We do have 2 wood burning stoves in different rooms for back up room heating and to provide a focal point during the winter and have our own wood source."

## What would you say are the benefits of air source heat pumps?

"For us one of the main benefits of an air source heat pump is a far better quality of heat and the overall comfort within the house. Then there are the cost savings, low maintenance and reliability. When we did have a couple of minor issues, both were quickly and effectively remedied by Ice Energy and Mitsubishi."



## How have you benefited from the Renewable Heat Incentive (RHI)?

"We are just in the process of applying for the Renewable Heat Incentive and as legacy applicants, the application is currently being reviewed."

"So far the application process has been reasonably straight forward."

## Why did you choose Ice Energy to provide your air source heat pump?

"Extensive research, testimonies from trusted sources, national reputation. Ice Energy also appeared to be ahead of the game and not fly-by-nights jumping on the bandwagon."

## What has the service been like from Ice Energy and would you recommend them to others?

"I would have preferred the whole air source heat pump installation to have been done by Ice Energy as this would have resolved some of the issues at the interface between the heat pump and the domestic system but circumstances did not allow."

"Other than that, Ice Energy have always been easy to contact, good at returning phone calls and getting the right person with appropriate knowledge / authority on the phone. They have been very efficient in dealing with issues - and friendly."

"We would definitely recommend them and already have several times."

### KEY FACTS

#### Property type:

Detached farmhouse built c1880 with solid stone walls in Yorkshire Pennines

#### Installation date:

June 2010

#### Product installed:

14kW Mitsubishi Ecodan Air Source Heat Pump / 2.03kW solar PV system

#### Distribution system:

Conventional radiators

#### Previous heating system:

Oil boiler

#### Cost saving:

Total energy costs reduced by approx a third

To find out how you could benefit from heat pumps and the Renewable Heat Incentive call us free on **0808 145 2340** or visit [www.iceenergy.co.uk](http://www.iceenergy.co.uk)

