



# **Meaden Project**

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**Identifying the right Project**

**Process**

**System detail**

**Customer expectations**



## Identifying the right project

- **Property with area for Ground array/boreholes, and access for equipment**
- **Replace of Oil/LPG/Direct Electric**
  - **Possible benefits compared to gas system**
- **Ability to invest for 5 to 7 years**
- **MCS accredited install/installer/product**
  - **Insulation improvements**
  - **Those hoping to claim RHI**





## Process

- **Some form of marketing to home owner, which raises their interest in Renewable Heating or Ground Source Heatpump Technology**
- **General independent advice is sparse**
- **Home owner may make an enquiry to MCS website or to a local Installer, or to equipment manufacturer.**
- **MCS installer to communicate with the Home owner to establish the heating requirements.**
  - **Heatloss**
  - **Hot water usage**
  - **Budget**
  - **Ground conditions**
  - **Site constraints**
  - **Access**
  - **Location of equipment**
  - **Size and location of radiators**

## Process

- MCS installer to communicate with Manufacturer to match product to requirements
- MCS installer/manufacturer to produce a specification
- Specification to be communicated to Home owner

## RHI

- Green Deal Assessment (GDA)
- Possible insulation improvements
- Energy Performance Certificate (EPC)



## System detail

- Remote 400-year old farmhouse near Peterborough
- Aim to create sustainable home to minimise monthly outgoings
- Off-gas property

- geoTHERM exclusive 8kW ground source heat pump
- 300 litre buffer tank
- Integral 175 litre DHW store
- Eligible for cash back under RHI



## System detail

1.5 acres of land

Ground conditions

= Clay/silt water saturated 1.7W/mk

2300 FLEQ hours

Horizontal loops

= 2 x 225m

1m apart, 1.2m deep via trenching machine

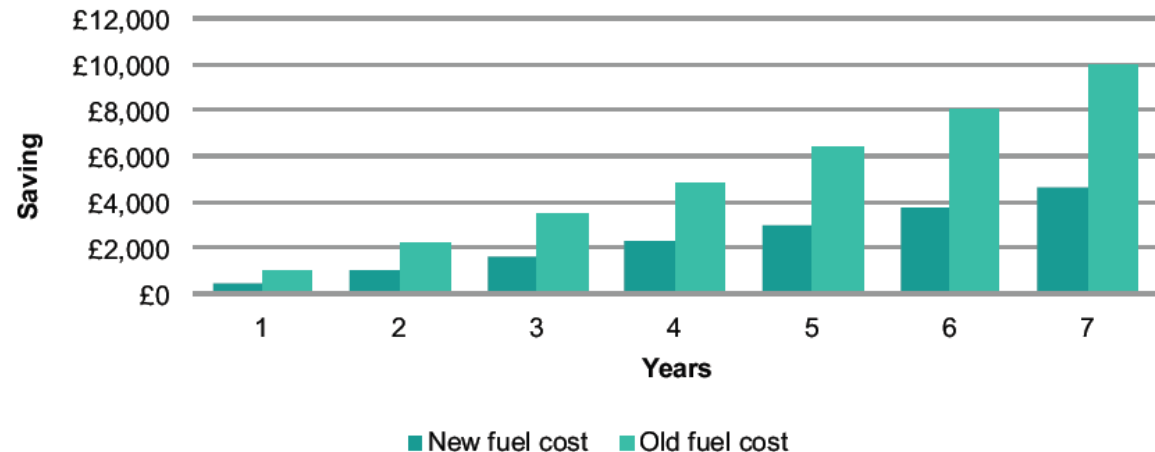




## Customer expectations

- Sustainable home
- Cost as little possible
- Significant running cost savings
- Hassle free installation
  - MCS installer
  - Service backup from Vaillant
  - Design/Installation support for installer from Vaillant

Fuel cost saving over 7 years



As a company with both proven technology and a proven heritage, we really felt that we could rely on Vaillant. The fact that we were able to visit one of their Centres of Excellence and actually view the product and speak to the experts really helped to reassure us that we were making the right decision.



Emma Meaden, homeowner  
<http://themeadenproject.wordpress.com>





## Customer expectations

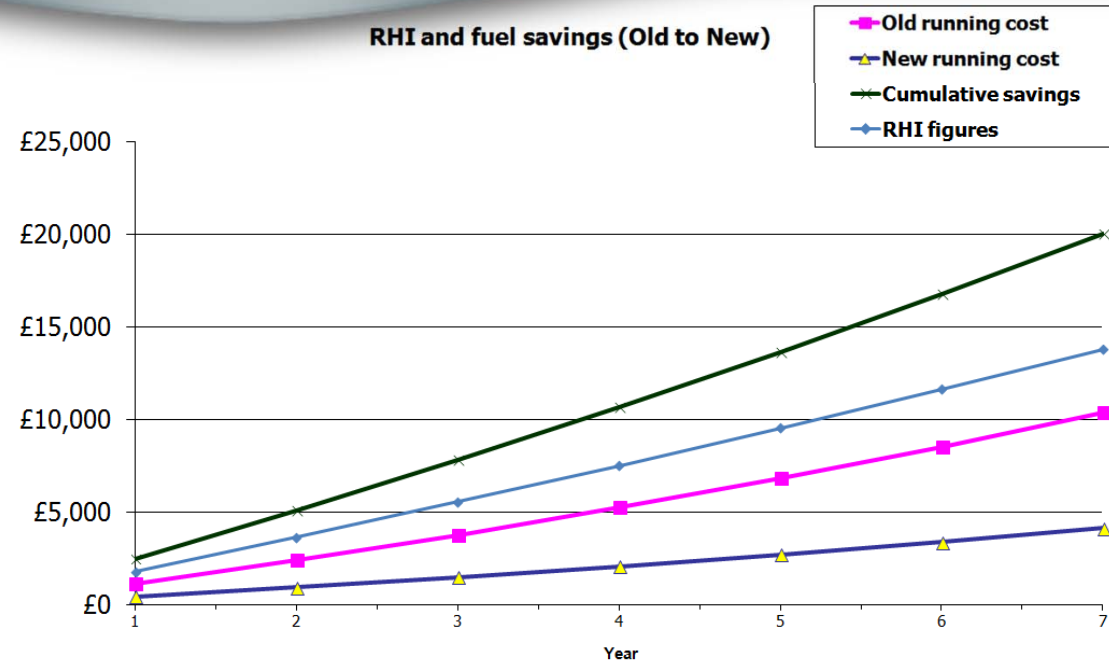
Annual fuel saving (vs oil)  
**£1561**

Projected lifetime  
fuel cost saving  
**£32,125**

RHI cash back (over 7 years)  
**£13,156 – £18,111**

System payback  
**5 years**  
(approx)

RHI and fuel savings (Old to New)



## WHY VAILLANT?

Alex Driver  
Orangehouse Renewables

"All the way through the project, Vaillant gave us access to a wealth of technical experience and expertise, and we came to view them as not just

a supplier or a manufacturer, but as a trusted partner. The geoTHERM is a quality product built to last, and we have complete faith in the technology to deliver year after year."

Because  **Vaillant** thinks ahead.

[www.vaillant.co.uk](http://www.vaillant.co.uk)