

# CASE STUDY



## **Project Title**

2.5kW Wind Turbine System  
2.08kWp Solar Photovoltaic System  
8kW Ground Source Heat Pump

## **Client**

Bennett

## **Installation date**

2007-2009

## **Technical Information**

- 2.5kW Proven Energy Wind Turbine
- SMA Windy Boy 2.5kW Inverter ( wind )
- 16 Kyocera KC130 (130Wp) panels
- 1 Fronius IG20 Inverter ( PV )
- Danfoss DHP-8 (8kW) Ground Source Heat Pump



## **Energy Generation**

2.5kWp PV system = 1600 kWh per year  
2.5kW wind turbine = 2000 kWh per year  
8kW ground source heat pump = 18,473 kWh saving per year on heating and hot water

## **Environmental Benefits**

Our client will save around 11,919 kg of carbon dioxide (CO<sub>2</sub>) emissions per year

## **Installation**

On-site installation work took 10 days in total to complete and commission

## **Funding**

- Low Carbon Building Programme (PV) ([www.lowcarbonbuildings.org.uk](http://www.lowcarbonbuildings.org.uk))
- The Scottish Community & Householder Renewables Initiative (Wind) ([www.est.org.uk/schri](http://www.est.org.uk/schri))

For more information about renewable energy grant funding see [www.est.org.uk/schri](http://www.est.org.uk/schri) or call 0800 138 8858

## **Project Support**

Solar and Wind Applications Ltd provided support for: system designing, grant funding applications, photomontage work, planning permission, consultation with client and Distribution Network Operator, and system installation and commissioning.



## **Business Awards Winner: Innovation and Technology**

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