



SOLAR HEATED HOT WATER

CATEGORY: ENERGY CASE STUDY YEAR: 2007

Business Details:

8 St Aidens Park
Fourstones
Hexham

<http://www.8staidans.co.uk>



Description:

Janet Elsworth operates a small bed and breakfast, which provides accommodation for visitors interested in Hadrian's Wall. The business has particular links with local guides who can provide expert tours of the roman history of the area. The accommodation has four diamonds and is situated close to roman remains on Stangate roman road. In addition the business has undertaken measures to help preserve the environment and has recently installed solar panels to reduce hot water related carbon dioxide emissions and take advantage of the good summer light in the area.



Economic

Installing the solar panels through Sunuser 157 Burlinghope Lane Leeds LS7 2DQ was an expensive option compared to other solar systems. Overall the cost was £9525 per annum more than double the cost of Solartwin or other systems. That said the system was working well with an approximate saving of up to £300 per annum based upon a 6.5 square metre collector. Payback for this unit was 31 years which is too long to be economic but standard systems are closer to 6-10 years as a rule



Environmental

The environmental benefits of these types of solar panels are through the absorption of solar radiation for heating water. They should be cheaper than photovoltaic systems and be more cost effective (excluding potential grants). Based upon information gathered the likely benefits are up to 3 tonnes of carbon dioxide per annum.



Social

The social benefits from adopting solar power relate to the overall community benefits of being self sufficient in energy and through financial savings, which can support local communities. A local solar contractor should be considered as this allows the local economy to benefit and promotes local social responsibility.

WEB

Solartwin: <http://www.solartwin.com>
Viridian solar: <http://www.viridiansolar.co.uk>
Firstlight Energy: <http://www.firstlightenergy.com>
Centre for alternative technology: <http://www.cat.org.uk>
Clearskies: <http://www.clear-skies.org/Households/RecognisedProducts.aspx>