

Energy Performance Certificate



Bella Haf, BETWS-Y-COED, LL24 0AP

Dwelling type: Detached house
Date of assessment: 21 June 2015
Date of certificate: 03 July 2015

Reference number: 2498-4030-7366-3375-3990
Type of assessment: SAP, new dwelling
Total floor area: 194 m²

Use this document to:

- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

Estimated energy costs of dwelling for 3 years:

£ 3,372

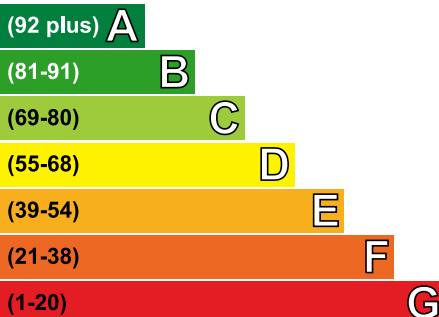
Estimated energy costs of this home

	Current costs	Potential costs	Potential future savings
Lighting	£ 267 over 3 years	£ 267 over 3 years	Not applicable
Heating	£ 2,601 over 3 years	£ 2,601 over 3 years	
Hot Water	£ 504 over 3 years	£ 507 over 3 years	
Totals	£ 3,372	£ 3,375	

These figures show how much the average household would spend in this property for heating, lighting and hot water. This excludes energy use for running appliances like TVs, computers and cookers, and any electricity generated by microgeneration.

Energy Efficiency Rating

Very energy efficient - lower running costs



Not energy efficient - higher running costs

Current	Potential
79	96

The graph shows the current energy efficiency of your home.

The higher the rating the lower your fuel bills are likely to be.

The potential rating shows the effect of undertaking the recommendations on page 3.

The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

Actions you can take to save money and make your home more efficient

Recommended measures	Indicative cost	Typical savings over 3 years
1 Solar photovoltaic panels, 2.5 kWp	£5,000 - £8,000	£ 759
2 Wind turbine	£15,000 - £25,000	£ 1,590

Summary of this home's energy performance related features

Element	Description	Energy Efficiency
Walls	Average thermal transmittance 0.25 W/m ² K	★★★★★
Roof	Average thermal transmittance 0.12 W/m ² K	★★★★★
Floor	Average thermal transmittance 0.22 W/m ² K	★★★★☆
Windows	High performance glazing	★★★★★
Main heating	Boiler and radiators, mains gas	★★★★☆
Main heating controls	Time and temperature zone control	★★★★★
Secondary heating	None	—
Hot water	From main system	★★★★☆
Lighting	Low energy lighting in all fixed outlets	★★★★★
Air tightness	Air permeability 7.0 m ³ /h.m ² (assumed)	★★★☆☆

Thermal transmittance is a measure of the rate of heat loss through a building element; the lower the value the better the energy performance.

Air permeability is a measure of the air tightness of a building; the lower the value the better the air tightness.



Current primary energy use per square metre of floor area: 148 kWh/m² per year

Low and zero carbon energy sources

Low and zero carbon energy sources are sources of energy that release either very little or no carbon dioxide into the atmosphere when they are used. Installing these sources may help reduce energy bills as well as cutting carbon. There are none provided for this home.

Recommendations

The measures below will improve the energy performance of your dwelling. The performance ratings after improvements listed below are cumulative; that is, they assume the improvements have been installed in the order that they appear in the table. Further information about the recommended measures and other simple actions you could take today to save money is available at www.direct.gov.uk/savingenergy. Before installing measures, you should make sure you have secured the appropriate permissions, where necessary. Such permissions might include permission from your landlord (if you are a tenant) or approval under Building Regulations for certain types of work.

Recommended measures	Indicative cost	Typical savings per year	Rating after improvement
Solar photovoltaic panels, 2.5 kWp	£5,000 - £8,000	£ 253	 B85
Wind turbine	£15,000 - £25,000	£ 530	 A96

About this document

The Energy Performance Certificate for this dwelling was produced following an energy assessment undertaken by a qualified assessor, accredited by Stroma Certification. You can get contact details of the accreditation scheme at www.stroma.com, together with details of their procedures for confirming authenticity of a certificate and for making a complaint. A copy of this EPC has been lodged on a national register. It will be publicly available and some of the underlying data may be shared with others for compliance and marketing of relevant energy efficiency information. The Government may use some of this data for research or statistical purposes. Green Deal financial details that are obtained by the Government for these purposes will not be disclosed to non-authorized recipients. The current property owner and/or tenant may opt out of having their information shared for marketing purposes.

Assessor's accreditation number: STRO006374
Assessor's name: Mark Pickering
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Related party disclosure: No related party

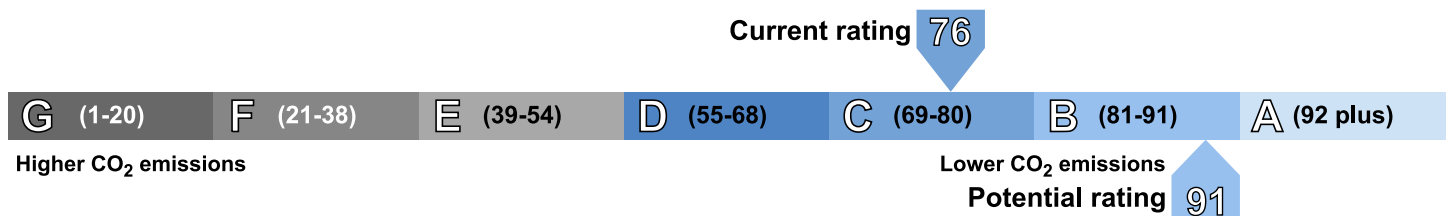
Further information about Energy Performance Certificates can be found under Frequently Asked Questions at www.epcregister.com.

About the impact of buildings on the environment

One of the biggest contributors to global warming is carbon dioxide. The energy we use for heating, lighting and power in homes produces over a quarter of the UK's carbon dioxide emissions.

The average household causes about 6 tonnes of carbon dioxide every year. Based on this assessment, your home currently produces approximately 5.1 tonnes of carbon dioxide every year. Adopting the recommendations in this report can reduce emissions and protect the environment. If you were to install these recommendations you could reduce this amount by 2.8 tonnes per year. You could reduce emissions even more by switching to renewable energy sources.

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating the less impact it has on the environment.



Your home's heat demand

This table shows the energy used for space and water heating by an average household in this property.

Heat demand

Space heating (kWh per year)	15,796
Water heating (kWh per year)	3,463