# **Energy Performance Certificate**

## Address of dwelling and other details

Gowrie House 6 South Drive

Liff

Dundee DD2 5SJ Dwelling type:

Mid-terrace house

Name of approved organisation: RICS

RICS088764

Membership number: Date of certificate:

22 March 2009

Reference number:

2511-2427-9100-0070-1022

Total floor area:

180 m<sup>2</sup>

Main type of heating and fuel:

Boiler and radiators, mains gas

## This dwelling's performance ratings

This dwelling has been assessed using the RdSAP 2005 methodology. Its performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide ( $CO_2$ ) emissions.  $CO_2$  is a greenhouse gas that contributes to climate change.

### **Energy Efficiency Rating** Current Potential Very energy efficient - lower running costs C (69-80) 67 67 (55-68)(39-54) F (21-38) (1-20)Not energy efficient - higher running costs EU Directive 2002/91/EC Scotland

The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

Environmental Impact (CO2) Rating Current Potential Very environmentally friendly - lower CO: emissions (92 plus) 100 (81-91) C (69-80) 61 61 (55-68)E (39-54)F Not environmentally friendly - higher CO; emissions EU Directive Scotland 2002/91/EC

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating the less impact it has on the environment.

Approximate current energy use per square metre of floor area: 217 kWh/m² per year

Approximate CO<sub>2</sub> emissions: 36 kg/m<sup>2</sup> per year

#### Cost effective improvements

Below is a list of lower cost measures that will raise the energy performance of the dwelling to the potential indicated in the tables above.

Not applicable

A full energy report is attached to this certificate



Information from this EPC may be given to Energy Saving Trust to provide advice to householders on financial help available to improve home energy efficiency.

For advice on how to take action and to find out about offers available to help make your home more energy efficient, call 0800 512 012 or visit www.energysavingtrust.org.uk

## **Energy Report**



The Energy Performance Certificate and Energy Report for this dwelling were produced following an energy assessment undertaken by a member of RICS. This is an organisation which has been approved by the Scottish Ministers. The certificate has been produced under the Building (Scotland) Amendment Regulations 2006 and a copy of the certificate and this energy report have been lodged on a national register.

Assessor's name:

Paul Taylor

Company name/trading name:

J & E Shepherd

Address:

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Related party disclosure:

## Estimated energy use, carbon dioxide (CO2) emissions and fuel costs of this home

	Current	Potential 217 kWh/m² per year	
Energy use	217 kWh/m² per year		
Carbon dioxide emissions	6.5 tonnes per year	6.5 tonnes per year	
Lighting	£87 per year	£87 per year	
Heating	£769 per year	£769 per year	
Hot water	£237 per year	£237 per year	

Based on standardised assumptions about occupancy, heating patterns and geographical location, the above table provides an indication of how much it will cost to provide lighting, heating and hot water to this home. The fuel costs only take into account the cost of fuel and not any associated service, maintenance or safety inspection. This certificate has been provided for comparative purposes only and enables one home to be compared with another. Always check the date the certificate was issued, because fuel prices can increase over time and energy saving recommendations will evolve.

#### About the building's performance ratings

The ratings on the certificate provide a measure of the building's overall energy efficiency and its environmental impact, calculated in accordance with a national methodology that takes into account factors such as insulation, heating and hot water systems, ventilation and fuels used.

Not all buildings are used in the same way, so energy ratings use 'standard occupancy' assumptions which may be different from the specific way you use your home.

Buildings that are more energy efficient use less energy, save money and help protect the environment. A building with a rating of 100 would cost almost nothing to heat and light and would cause almost no carbon emissions. The potential ratings in the certificate describe how close this building could get to 100 if all the cost effective recommended improvements were implemented.

#### About the impact of buildings on the environment

One of the biggest contributors to global warming is carbon dioxide. The way we use energy in buildings causes emissions of carbon. The energy we use for heating, lighting and power in homes produces over a quarter of the UK's carbon dioxide emissions and other buildings produce a further one-sixth.

The average household causes about 6 tonnes of carbon dioxide every year. Adopting the recommendations in this report can reduce emissions and protect the environment. You could reduce emissions even more by switching to renewable energy sources. In addition there are many simple everyday measures that will save money, improve comfort and reduce the impact on the environment. Some examples are given at the end of this report.

# Summary of this home's energy performance related features

The following is an assessment of the key individual elements that have an impact on this home's performance rating. Each element is assessed against the following scale: Very poor / Poor / Average / Good / Very good.

Elements	Description	Current performance Energy Efficiency Environmental	
Walls	Sandstone, as built, no insulation (assumed)	Poor	Poor
Roof	Pitched, 250 mm loft insulation	Good	Good
Floor	Suspended, no insulation (assumed)	-	
Windows	Single glazed	Very poor	Very poor
Main heating	Boiler and radiators, mains gas	Very good	Very good
Main heating controls	Programmer, TRVs and boiler energy manager	Good	Good
Secondary heating	None	-	-
Hot water	From main system, no cylinderstat	Good	Good
Lighting	Low energy lighting in all fixed outlets	Very good	Very good
Current energy efficie	ncy rating	D 67	
Current environmental impact (CO <sub>2</sub> ) rating			D 61

## Low and zero carbon energy sources

These are sources of energy (producing or providing electricity or hot water) which emit little or no carbon dioxide into the atmosphere.

There are none applicable to this home.

### Recommended measures to improve this home's energy performance

None

#### Further measures to achieve even higher standards

The further measures listed below should be considered in addition to those already specified if aiming for the highest possible standards for this home. Some of these measures may be cost-effective when other building work is being carried out such as an alteration, extension or repair. Also they may become cost-effective in the future depending on changes in technology costs and fuel prices. However you should check the conditions in any covenants, warranties or sale contracts, and whether any legal permissions are required such as a building warrant, planning consent or listed building restrictions.

Enhanced environmental impact (CO <sub>2</sub> ) rating			C 77
Enhanced energy efficiency rating		B 81	
3 Solar photovoltaic panels, 2.5 kWp	£159	B 81	C 77
2 50 mm internal or external wall insulation	£109	C 75	C 71
1 Replace single glazed windows with low-E double glazing	£135	C 71	D 67

Improvements to the energy efficiency and environmental impact ratings will usually be in step with each other. However, they can sometimes diverge because reduced energy costs are not always accompanied by a reduction in carbon dioxide (CO<sub>2</sub>) emissions.