# **Energy Performance Certificate**

### Address of dwelling and other details

Flat 9 Dwelling type: Top floor flat

2 MacKinnon Crescent Name of approved organisation: NHER Accreditation Scheme

Kirkliston Membership number: NHER005982
Edinburgh Date of certificate: 03 April 2014
EH29 9GB Reference number: N/A (PRRN 45

Reference number: N/A (PRRN 4502843)
Type of assessment: SAP, new dwelling

Total floor area: 62 m<sup>2</sup>

Main type of heating and fuel: Boiler and radiators, mains gas

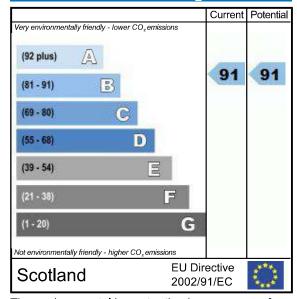
# This dwelling's performance ratings

This dwelling has been assessed using the SAP 2009 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<sub>2</sub>) emissions. CO<sub>2</sub> is a greenhouse gas that contributes to climate change.

# Energy Efficiency Rating Current Potential Very energy efficient - lower running costs (92 plus) A (81 - 91) B (69 - 80) C (55 - 68) D (21 - 38) F (1 - 20) G Not energy efficient - higher running costs EU Directive

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 (CO<sub>2</sub>) Rating



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: 60 kWh/m² per year Approximate current  $\rm CO_2$  emissions: 12 kg/m² per year

2002/91/EC

### **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 table(s) above.

Not applicable

Scotland

A full energy report is appended to this certificate



Remember to look for the Energy Saving Trust Recommended logo when buying energy-efficient products. It's a quick and easy way to identify the most energy-efficient products on the market.

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** 

N.B. THIS CERTIFICATE MUST BE AFFIXED TO THE DWELLING AND NOT BE REMOVED UNLESS IT IS REPLACED WITH AN UPDATED VERSION

# **Energy Report**



The Energy Performance Certificate and Energy Report for this dwelling were produced following an energy assessment undertaken by a member of the NHER Accreditation Scheme. This is an organisation which has been approved by the Scottish Ministers. The certificate has been produced under the Building (Scotland) Amendment Regulations 2006.

Assessor's name: Ms Hazel Black

Company name/trading name: Environmental Economics Ltd
Address: , 8, Cardiff Road, Luton, LU1 1PP

Phone number: 01582 544250

Fax number:

E-mail address: epc@environmental-economics.co.uk

Related party disclosure: No related party

# Estimated energy use, carbon dioxide (CO<sub>2</sub>) emissions and fuel costs of this home

	Current	Potential	
Energy use	60 kWh/m² per year	60 kWh/m² per year	
Carbon dioxide emissions	0.7 tonnes per year	0.7 tonnes per year	
Lighting	£44 per year	£44 per year	
Heating	£214 per year	£214 per year	
Hot water	£71 per year	£71 per year	

The figures in the table above have been provided to enable prospective buyers and tenants to compare the fuel costs and carbon emissions of one home with another. To enable this comparison the figures have been calculated using standardised running conditions (heating periods, room temperatures, etc.) that are the same for all homes, consequently they are unlikely to match an occupier's actual fuel bills and carbon emissions in practice. The figures do not include the impacts of the fuels used for cooking or running appliances, such as TV, fridge etc.; nor do they reflect the costs associated with service, maintenance or safety inspections. Always check the certificate date because fuel prices can change 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 on 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.

NHER Plan Assessor 5.4 (SAP 9.90)

B 87

# 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 by the national calculation methodology; 1 star = very poor (least efficient), 2 stars = poor, 3 stars = average, 4 stars = good and 5 stars = very good (most efficient).

Element	Description	Current pe	Current performance	
Liement		Energy Efficiency	Environmental	
Walls	Average thermal transmittance 0.25 W/m²K	****	****	
Roof	Average thermal transmittance 0.09 W/m²K	****	****	
Floor	(other premises below)	-	-	
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 5.0 m³/h.m² (assumed)	****	****	

### **Current energy efficiency rating**

Current environmental impact (CO<sub>2</sub>) rating

B 91

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.

# 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. The following are provided for this home:

Solar photovoltaics

# Recommended measures to improve this home's energy performance

None.

# Further measures to achieve even higher standards

None.

# About the cost effective measures to improve this home's performance ratings

Not applicable.

### About the further measures to achieve even higher standards

Not applicable.

# What can I do today?

Actions that will save money and reduce the impact of your home on the environment include:

- Ensure that you understand the dwelling and how its energy systems are intended to work so as to obtain the maximum benefit in terms of reducing energy use and CO2 emissions. The papers you are given by the builder and the warranty provider will help you in this.
- If you have a conservatory or sunroom, avoid heating it in order to use it in cold weather and close doors between the conservatory and dwelling.
- Check that your heating system thermostat is not set too high (in a home, 21°C in the living room is suggested) and use the timer to ensure you only heat the building when necessary.
- Turn off lights when not needed and do not leave appliances on standby. Remember not to leave chargers (e.g. for mobile phones) turned on when you are not using them.
- Close your curtains at night to reduce heat escaping through the windows.
- If you're not filling up the washing machine, tumble dryer or dishwasher, use the half-load or economy programme.

  Minimise the use of tumble dryers and dry clothes outdoors where possible.

Recommendations