

Energy Performance Certificate (EPC)

157 CAIRNGORM DRIVE, ABERDEEN, AB12 5PN

Dwelling type: Ground-floor flat
Date of assessment: 02 April 2013
Date of certificate: 02 April 2013
Total floor area: 61 m²

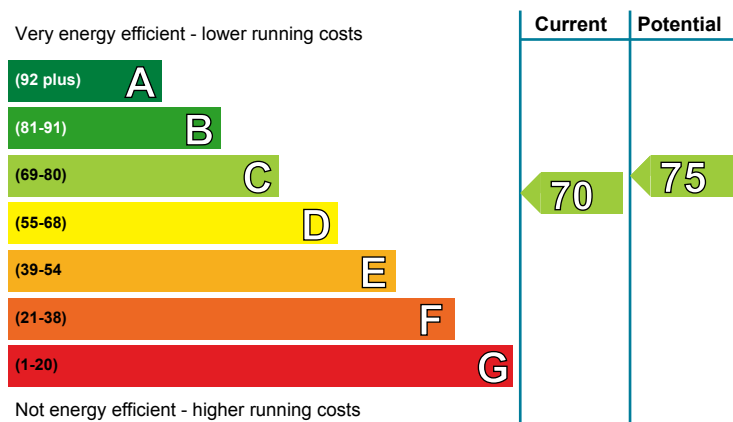
Reference number: 9000-2120-0529-8101-1473
Type of assessment: RdSAP, existing dwelling
Primary Energy Indicator: 211 kWh/m²/year
Main heating and fuel: Boiler and radiators, mains gas

You can use this document to:

- Compare current ratings of properties to see which are more energy efficient and environmentally friendly
- Find out how to save energy and money and also reduce CO₂ emissions by improving your home

Estimated energy costs for your home for 3 years*	£1,743	See your recommendations report for more information
Over 3 years you could save*	£297	

* based upon the cost of energy for heating, hot water, lighting and ventilation, calculated using standard assumptions

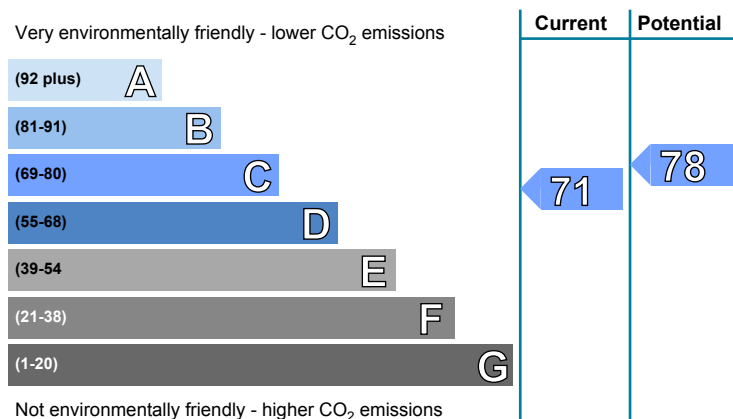


Energy Efficiency Rating

This graph shows the current efficiency of your home, taking into account both energy efficiency and fuel costs. The higher this rating, the lower your fuel bills are likely to be.

Your current rating is **band C (70)**. The average rating for a home in Scotland is **band D (61)**.

The potential rating shows the effect of undertaking all of the improvement measures listed within your recommendations report.



Environmental Impact (CO₂) Rating

This graph shows the effect of your home on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating, the less impact it has on the environment.

Your current rating is **band C (71)**. The average rating for a home in Scotland is **band D (59)**.

The potential rating shows the effect of undertaking all of the improvement measures listed within your recommendations report.

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

Recommended measures	Indicative cost	Typical savings over 3 years	Available with Green Deal
1 Add additional 80 mm jacket to hot water cylinder	£15 - £30	£45	✓
2 Heating controls (room thermostat)	£350 - £450	£33	✓
3 Condensing boiler	£2,200 - £3,000	£135	✓

A full list of recommended improvement measures for your home, together with more information on potential cost and savings and advice to help you carry out improvements can be found in your recommendations report.



The Green Deal may allow you to make your home warmer and cheaper to run at no up-front capital cost. See your recommendations report for more details.

THIS PAGE IS THE ENERGY PERFORMANCE CERTIFICATE WHICH MUST BE AFFIXED TO THE DWELLING AND NOT BE REMOVED UNLESS IT IS REPLACED WITH AN UPDATED CERTIFICATE

Summary of the energy performance related features of this home

This table sets out the results of the survey which lists the current energy-related features of this home. 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). The assessment does not take into consideration the condition of an element and how well it is working. 'Assumed' means that the insulation could not be inspected and an assumption has been made in the methodology, based on age and type of construction.

Element	Description	Energy Efficiency	Environmental
Walls	Cavity wall, filled cavity	★★★★☆	★★★★☆
Roof	(another dwelling above)	—	—
Floor	Suspended, insulated	—	—
Windows	Fully double glazed	★★★☆☆	★★★☆☆
Main heating	Boiler and radiators, mains gas	★★★★☆	★★★★☆
Main heating controls	Programmer, TRVs and bypass	★★★☆☆	★★★☆☆
Secondary heating	None	—	—
Hot water	From main system	★★★★☆	★★★★☆
Lighting	Low energy lighting in 83% of fixed outlets	★★★★★	★★★★★

The energy efficiency rating of your home

Your Energy Efficiency Rating is calculated using the standard UK methodology, RdSAP. This calculates energy used for heating, hot water, lighting and ventilation and then applies fuel costs to that energy use to give an overall rating for your home. The rating is given on a scale of 1 to 100. Other than the cost of fuel for electrical appliances and for cooking, a building with a rating of 100 would cost almost nothing to run.


As we all use our homes in different ways, the energy rating is calculated using standard occupancy assumptions which may be different from the way you use it. The rating also uses national weather information to allow comparison between buildings in different parts of Scotland. However, to make information more relevant to your home, local weather data is used to calculate your energy use, CO₂ emissions, running costs and the savings possible from making improvements.

The impact of your home on the environment

One of the biggest contributors to global warming is carbon dioxide. The energy we use for heating, lighting and power in our homes produces over a quarter of the UK's carbon dioxide emissions. Different fuels produce different amounts of carbon dioxide for every kilowatt hour (kWh) of energy used. The Environmental Impact Rating of your home is calculated by applying these 'carbon factors' for the fuels you use to your overall energy use.

The average Scottish household produces about 6 tonnes of carbon dioxide every year. Based on this assessment, heating and lighting this home currently produces approximately 2.5 tonnes of carbon dioxide every year. Adopting recommendations in this report can reduce emissions and protect the environment. If you were to install all of these recommendations this could reduce emissions by 0.6 tonnes per year. You could reduce emissions even more by switching to renewable energy sources.

Estimated energy costs for this home

	Current energy costs	Potential energy costs	Potential future savings
Heating	£1,188 over 3 years	£1,014 over 3 years	
Hot water	£423 over 3 years	£300 over 3 years	
Lighting	£132 over 3 years	£132 over 3 years	
Totals	£1,743	£1,446	

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 such as TVs, computers and cookers, and the benefits of any electricity generated by this home (for example, from photovoltaic panels). The potential savings in energy costs show the effect of undertaking all of the recommended measures listed below.

Recommendations for improvement

The measures below will improve the energy and environmental performance of this 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 to take today to save money is available from your local Energy Saving Scotland advice centre which can be contacted on 0800 512 012. Before carrying out work, make sure that the appropriate permissions are obtained, where necessary. This may include permission from a landlord (if you are a tenant) or the need to get a Building Warrant for certain types of work.

Recommended measures	Indicative cost	Typical saving per year	Rating after improvement		Green Deal
			Energy	Environment	
1 Add additional 80 mm jacket to hot water cylinder	£15 - £30	£15	C 71	C 72	✓
2 Upgrade heating controls	£350 - £450	£11	C 72	C 74	✓
3 Replace boiler with new condensing boiler	£2,200 - £3,000	£45	C 75	C 78	✓

Measures which have a green deal tick ✓ are likely to be eligible for Green Deal finance plans based on indicative costs. Subsidy also may be available for some measures, such as solid wall insulation. Additional support may also be available for certain households in receipt of means tested benefits. Measures which have an orange tick ✓ may need additional finance. To find out how you could use Green Deal finance to improve your property, visit www.energysavingtrust.org.uk/scotland or contact the Scottish Green Deal advice service at your local Energy Saving Scotland advice centre on 0800 512 012.

Alternative measures

There are alternative improvement measures which you could also consider for your home. It would be advisable to seek further advice and illustration of the benefits and costs of such measures.

- Air or ground source heat pump
- Micro CHP

Choosing the right improvement package

For free and impartial advice on choosing suitable measures for your property, contact your local Energy Saving Scotland advice centre on 0800 512 012 or go to www.energysavingtrust.org.uk/scotland.

About the recommended measures to improve your home's performance rating

This section offers additional information and advice on the recommended improvement measures for your home

1 Hot water cylinder insulation

Increasing the thickness of existing insulation by adding an 80 mm cylinder jacket around the hot water cylinder will help maintain the water at the required temperature; this will reduce the amount of energy used and lower fuel bills. The jacket should be fitted over the top of the existing foam insulation and over any thermostat clamped to the cylinder. Hot water pipes from the hot water cylinder should also be insulated, using pre-formed pipe insulation of up to 50 mm thickness, or to suit the space available, for as far as they can be accessed to reduce losses in summer. All these materials can be purchased from DIY stores and installed by a competent DIY enthusiast.

2 Heating controls (room thermostat)

The heating system should have a room thermostat to enable the boiler to switch off when no heat is required. A competent heating engineer should be asked to do this work. Insist that the thermostat switches off the boiler as well as the pump and that the thermostatic radiator valve is removed from any radiator in the same room as the thermostat. Building regulations generally apply to this work and a building warrant may be required, so it is best to obtain advice from your local authority building standards department and from a qualified heating engineer.

3 Condensing boiler

A condensing boiler is capable of much higher efficiencies than other types of boiler, meaning it will burn less fuel to heat this property. This improvement is most appropriate when the existing central heating boiler needs repair or replacement, however there may be exceptional circumstances making this impractical. Condensing boilers need a drain for the condensate which limits their location; remember this when considering remodelling the room containing the existing boiler even if the latter is to be retained for the time being (for example a kitchen makeover). Building regulations generally apply to this work and a building warrant may be required, so it is best to obtain advice from your local authority building standards department and from a qualified heating engineer.

Low and zero carbon energy sources

Low and zero carbon (LZC) 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.

LZC energy sources present: There are none provided for this home

Your home's heat demand

For most homes, the vast majority of energy costs come from heating the home. Where applicable to your home, the table below shows the energy that could be saved by insulating the attic and walls, based upon the typical energy use for this building. Numbers shown in brackets are the reduction in energy use possible from each improvement measure.

Heat demand	Existing dwelling	Impact of loft insulation	Impact of cavity wall insulation	Impact of solid wall insulation
Space heating (kWh per year)	4,834	N/A	N/A	N/A
Water heating (kWh per year)	2,952			

Addendum

About this document

The Energy Performance Certificate and Recommendations Report for this dwelling were produced following an energy assessment undertaken by an assessor accredited by BRE, an Approved Organisation appointed by Scottish Ministers. The certificate has been produced under the Energy Performance of Buildings (Scotland) Regulations 2008 from data lodged to the Scottish EPC register.

Assessor's name:	Ian Robert Park
Assessor membership number:	BREC000113
Company name/trading name:	Marjandi Energy Saving Solutions Ltd
Address:	10 Polmuir Gardens Aberdeen AB11 7WE
Phone number:	07515 259 942
Email address:	info@marjandi.co.uk
Related party disclosure:	No related party

This Certificate and report will be available to view online by any party with access to the report reference number and to organisations delivering energy efficiency and carbon reduction initiatives on behalf of the Scottish and UK Governments. If you are the current owner or occupier of this building and do not wish this data to be shared with third parties for purposes other than the sale or rental of the property, please notify the assessor listed above and your data will be restricted accordingly. Further information on this and on Energy Performance Certificates in general can be found at www.scotland.gov.uk.

Opportunity to benefit from a Green Deal on this property

When the Green Deal launches, it may enable owners and occupiers to make improvements to their property to make it more energy efficient. Under a Green Deal, the cost of the improvements is repaid over time via a credit agreement. Repayments are made through a charge added to the electricity bill for the property.

To see which improvements are recommended for this property, please turn to page 3. You can choose which improvements you want to install and ask for a quote from an authorised Green Deal provider. They will organise installation by an authorised Green Deal installer. If you move home, the responsibility for paying the Green Deal charge under the credit agreement passes to the new electricity bill payer.

For householders in receipt of income-related benefits, additional help may be available.

To find out more, visit www.direct.gov.uk/savingenergy or call 0300 123 1234.

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