# Energy Performance Certificate (EPC)

**Dwellings** 

**Scotland** 

8118-1220-3109-0051-4906

#### 14 EARN'S HEUGH WAY, ABERDEEN, AB12 3RX

Dwelling type:

Top-floor flat

Date of assessment:

09 October 2018

Date of certificate:

15 October 2018

Total floor area:

42 m<sup>2</sup>

Primary Energy Indicator:

291 kWh/m²/year

Reference number:

Type of assessment:

Approved Organisation: Main heating and fuel:

RdSAP, existing dwelling Elmhurst

Boiler and radiators, mains aas

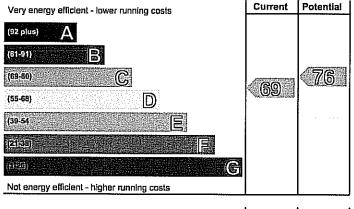
#### You can use this document to:

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 CO<sub>2</sub> emissions by improving your home

Estimated energy costs for your home for 3 years* £1,509	See your recommendations
Over 3 years you could save* £387	report for more information

<sup>\*</sup> based upon the cost of energy for heating, hot water, lighting and ventilation, calculated using standard assumptions

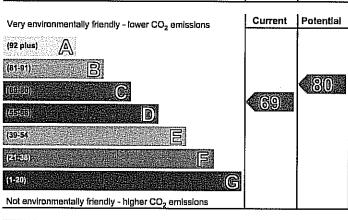


## Energy Effection Rating

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 (69). The average rating for EPCs 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 (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

Your current rating is band C (69). The average rating for EPCs 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 Cavity wall insulation	£500 - £1,500	£192.00	<b>Ø</b>
2 Add additional 80 mm jacket to hot water cylinder	£15 - £30	£24.00	0
3 Condensing boiler	£2,200 - £3,000	£117.00	<u> </u>

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, as built, partial insulation (assumed)	★★★☆☆	****
Roof	Pitched, 150 mm loft insulation	<b>★★★★☆</b>	<b>★★★★☆</b>
Floor	(another dwelling below)		·
Windows	Fully double glazed	<b>★★★☆☆</b>	***
Main heating	Boiler and radiators, mains gas	<b>★★★★☆</b>	<b>★★★★☆</b>
Main heating controls	Programmer, room thermostat and TRVs	<b>★★★★☆</b>	<b>★★★★☆</b>
Secondary heating	None	_	<del></del>
Hot water	From main system	<b>★★★★☆</b>	<b>★★★★☆</b>
Lighting	Low energy lighting in all 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, CO<sub>2</sub> 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 calculated emissions for your home are 51 kg CO<sub>2</sub>/m<sup>2</sup>/yr.

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 2.1 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 0.7 tonnes per year. You could reduce emissions even more by switching to renewable energy sources.

Estimated en	ergy costs for this home		
	Current energy costs	Potential energy costs	Potential future savings
Heating	£1,023 over 3 years	£741 over 3 years	
Hot water	£384 over 3 years	£279 over 3 years	You could
Lighting	£102 over 3 years	£102 over 3 years	save £387
	Totals £1,509	£1,122	over 3 years

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 the Home Energy Scotland hotline which can be contacted on 0808 808 2282. 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			ndicative cost Typical saving per year		Rating after improvement	
		indicative cost			Environment	Green Deal
1	Cavity wall insulation	£500 - £1,500	£64	<b>۩73</b>	<b>€</b> 74	0
2	Add additional 80 mm jacket to hot water cylinder	£15 - £30	£8	€C 73	<b>⟨</b> C 75	0
3	Replace boiler with new condensing boiler	£2,200 - £3,000	£39	۩ 75	<b>€</b> 78	0
4	Replacement glazing units	£1,000 - £1,400	£17	∢© 76	<b>€</b> 80	0

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.greenerscotland.org or contact the Home Energy Scotland hotline on 0808 808 2282.

### 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.

- External insulation with cavity wall insulation
- Biomass boiler (Exempted Appliance if in Smoke Control Area)

## Choosing the right improvement package

For free and impartial advice on choosing suitable measures for your property, contact the Home Energy Scotland hotline on 0808 808 2282 or go to www.greenerscotland.org.



## 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 Cavity wall insulation

Cavity wall insulation, to fill the gap between the inner and outer layers of external walls with an insulating material, reduces heat loss; this will improve levels of comfort, reduce energy use and lower fuel bills. The insulation material is pumped into the gap through small holes that are drilled into the outer walls, and the holes are made good afterwards. As specialist machinery is used to fill the cavity, a professional installation company should carry out this work, and they should carry out a thorough survey before commencing work to ensure that this type of insulation is suitable for this home and its exposure. They should also provide a guarantee for the work and handle any building standards issues. Further information about cavity wall insulation and details of local installers can be obtained from the National Insulation Association (www.nationalinsulationassociation.org.uk).

#### 2 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.

#### 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 check with your local authority building standards department and seek advice from a qualified heating engineer.

#### 4 Replacement glazing units

Replacing existing double-glazed units with new high-performance units. Building regulations require that replacement glazing is to a standard no worse than previous; a building warrant is not required. Planning permission might be required for such work if a building is listed or within a conservation area so it is best to check with your local authority.

## 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

You could receive Renewable Heat Incentive (RHI) payments and help reduce carbon emissions by replacing your existing heating system with one that generates renewable heat and, where appropriate, having your loft insulated and cavity walls filled. The estimated energy required for space and water heating will form the basis of the payments. For more information go to www.energysavingtrust.org.uk/scotland/rhi.

Heat demand	Existing dwelling	Impact of loft insulation	Impact of cavity wall insulation	Impact of solid wall insulation
Space heating (kWh per year)	4,574	(316)	(1,332)	N/A
Water heating (kWh per year)	2,408			***************************************