

Energy Performance Certificate (EPC)

Scotland

Dwellings

CLOUSTON, STENNESS VILLAGE, STROMNESS, KW16 3JY

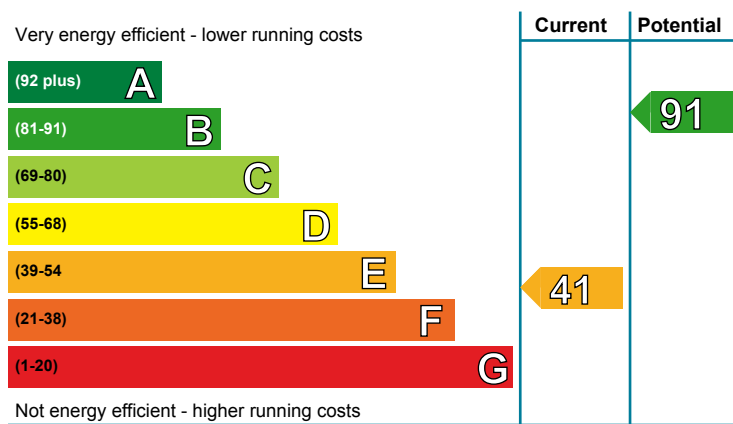
Dwelling type:	Semi-detached bungalow	Reference number:	0130-2592-4170-2807-6565
Date of assessment:	02 March 2023	Type of assessment:	RdSAP, existing dwelling
Date of certificate:	10 March 2023	Approved Organisation:	Elmhurst
Total floor area:	94 m ²	Main heating and fuel:	Boiler and radiators, oil
Primary Energy Indicator:	349 kWh/m ² /year		

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*	£8,298	See your recommendations report for more information
Over 3 years you could save*	£2,676	

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

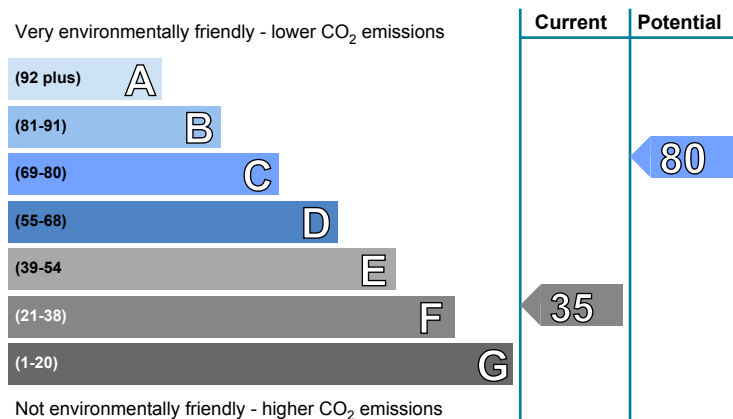


Energy Efficiency Rating

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 E (41)**. 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 (CO₂) emissions. The higher the rating, the less impact it has on the environment.

Your current rating is **band F (35)**. 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
1 Flat roof or sloping ceiling insulation	£850 - £1,500	£1101.00
2 Internal or external wall insulation	£4,000 - £14,000	£273.00
3 Floor insulation (suspended floor)	£800 - £1,200	£549.00

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.

To find out more about the recommended measures and other actions you could take today to stop wasting energy and money, visit greenerscotland.org or contact Home Energy Scotland on 0808 808 2282.

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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	Sandstone or limestone, as built, no insulation (assumed)	★★☆☆☆	★★☆☆☆
	Timber frame, as built, partial insulation (assumed)	★★★★☆	★★★★☆
Roof	Pitched, no insulation (assumed)	★☆☆☆☆	★☆☆☆☆
	Flat, limited insulation (assumed)	★☆☆☆☆	★☆☆☆☆
Floor	Suspended, no insulation (assumed)	—	—
Windows	Fully double glazed	★★★★☆	★★★★☆
Main heating	Boiler and radiators, oil	★★★★☆	★★★★☆
Main heating controls	Programmer, TRVs and bypass	★★★★☆	★★★★☆
Secondary heating	Room heaters, oil	—	—
Hot water	From main system	★★★★☆	★★★★☆
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, 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 calculated emissions for your home are 92 kg CO₂/m²/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 8.7 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 5.7 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	£6,828 over 3 years	£4,353 over 3 years	
Hot water	£1,038 over 3 years	£837 over 3 years	
Lighting	£432 over 3 years	£432 over 3 years	
Totals	£8,298	£5,622	

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	Indicative cost	Typical saving per year	Rating after improvement	
			Energy	Environment
1 Flat roof or sloping ceiling insulation	£850 - £1,500	£367	E 50	E 42
2 Internal or external wall insulation	£4,000 - £14,000	£91	E 52	E 44
3 Floor insulation (suspended floor)	£800 - £1,200	£183	D 56	E 48
4 Upgrade heating controls	£350 - £450	£96	D 58	E 49
5 Solar water heating	£4,000 - £6,000	£68	D 60	E 52
6 Replacement glazing units	£1,000 - £1,400	£87	D 62	E 54
7 Solar photovoltaic panels, 2.5 kWp	£3,500 - £5,500	£600	C 72	D 62
8 Wind turbine	£15,000 - £25,000	£1318	B 91	C 80

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 Flat roof or sloping ceiling insulation

Insulating a flat roof or sloping ceiling will significantly reduce heat loss through the roof; this will improve levels of comfort, reduce energy use and lower fuel bills. Insulation can be placed on top of the roof under the waterproof membrane and should particularly be considered when the waterproofing needs to be replaced. Further information about roof insulation and details of local contractors can be obtained from the National Insulation Association (www.nationalinsulationassociation.org.uk). Building regulations generally apply to this work so it is best to check with your local authority building standards department.

2 Internal or external wall insulation

Internal or external wall insulation involves adding a layer of insulation to either the inside or the outside surface of the external walls, which reduces heat loss and lowers fuel bills. As it is more expensive than cavity wall insulation it is only recommended for walls without a cavity, or where for technical reasons a cavity cannot be filled. Internal insulation, known as dry-lining, is where a layer of insulation is fixed to the inside surface of external walls; this type of insulation is best applied when rooms require redecorating. External solid wall insulation is the application of an insulant and a weather-protective finish to the outside of the wall. This may improve the look of the home, particularly where existing brickwork or rendering is poor, and will provide long-lasting weather protection. Further information can be obtained from the National Insulation Association (www.nationalinsulationassociation.org.uk). It should be noted that a building warrant is required for the installation of external wall insulation. Planning permission may also be required and that building regulations apply to external insulation so it is best to check with your local authority on both issues.

3 Floor insulation (suspended floor)

Insulation of a floor will significantly reduce heat loss; this will improve levels of comfort, reduce energy use and lower fuel bills. Suspended floors can often be insulated from below but must have adequate ventilation to prevent dampness; seek advice about this if unsure. Further information about floor insulation is available from many sources including www.energysavingtrust.org.uk/scotland/Insulation/Floor-insulation. Building regulations generally apply to this work so it is best to check with your local authority building standards department.

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

5 Solar water heating

A solar water heating panel, usually fixed to the roof, uses the sun to pre-heat the hot water supply. This can significantly reduce the demand on the heating system to provide hot water and hence save fuel and money. Planning permission might be required, building regulations generally apply to this work and a building warrant may be required, so it is best to check these with your local authority. You could be eligible for Renewable Heat Incentive payments which could appreciably increase the savings beyond those shown on your EPC, provided that both the product and the installer are certified by the Microgeneration Certification Scheme (or equivalent). Details of local MCS installers are available at www.microgenerationcertification.org.

6 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.

7 Solar photovoltaic (PV) panels

A solar PV system is one which converts light directly into electricity via panels placed on the roof with no waste and no emissions. This electricity is used throughout the home in the same way as the electricity purchased from an energy supplier. Planning permission might be required, building regulations generally apply to this work and a building warrant may be required, so it is best to check with your local authority. The assessment does not include the effect of any Feed-in Tariff which could appreciably increase the savings that are shown on this EPC for solar photovoltaic panels, provided that both the product and the installer are certified by the Microgeneration Certification Scheme (or equivalent). Details of local MCS installers are available at www.microgenerationcertification.org.

8 Wind turbine

A wind turbine provides electricity from wind energy. This electricity is used throughout the home in the same way as the electricity purchased from an energy supplier. Wind turbines are not suitable for all properties. The system's effectiveness depends on local wind speeds and the presence of nearby obstructions, and a site survey should be undertaken by an accredited installer. Planning permission might be required and building regulations generally apply to this work and a building warrant may be required, so it is best to check these with your local authority. The assessment does not include the effect of any Feed-in Tariff which could appreciably increase the savings that are shown on this EPC for a wind turbine, provided that both the product and the installer are certified by the Microgeneration Certification Scheme (or equivalent). Details of local MCS installers are available at www.microgenerationcertification.org.

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

In this section, you can see how much energy you might need to heat your home and provide hot water. These are estimates showing how an average household uses energy. These estimates may not reflect your actual energy use, which could be higher or lower. You might spend more money on heating and hot water if your house is less energy efficient. The table below shows the potential benefit of having your loft and walls insulated. Visit <https://energysavingtrust.org.uk/energy-at-home> for more information.

Heat demand	Existing dwelling	Impact of loft insulation	Impact of cavity wall insulation	Impact of solid wall insulation
Space heating (kWh per year)	19,675	(3,236)	N/A	(825)
Water heating (kWh per year)	3,381			

Addendum

This dwelling has stone walls and so requires further investigation to establish whether these walls are of cavity construction and to determine which type of wall insulation is best suited.

About this document

This Recommendations Report and the accompanying Energy Performance Certificate are valid for a maximum of ten years. These documents cease to be valid where superseded by a more recent assessment of the same building carried out by a member of an Approved Organisation.

The Energy Performance Certificate and this Recommendations Report for this building were produced following an energy assessment undertaken by an assessor accredited by Elmhurst (www.elmhurstenergy.co.uk), 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. You can verify the validity of this document by visiting www.scottishepcregister.org.uk and entering the report reference number (RRN) printed at the top of this page.

Assessor's name:	Mrs. Jill Rendall
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Related party disclosure:	No related party

If you have any concerns regarding the content of this report or the service provided by your assessor you should in the first instance raise these matters with your assessor and with the Approved Organisation to which they belong. All Approved Organisations are required to publish their complaints and disciplinary procedures and details can be found online at the web address given above.

Use of this energy performance information

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Advice and support to improve this property

There is support available, which could help you carry out some of the improvements recommended for this property on page 3 and stop wasting energy and money. For more information, visit [greener-scotland.org](https://www.greener-scotland.org) or contact Home Energy Scotland on 0808 808 2282.

Home Energy Scotland's independent and expert advisors can offer free and impartial advice on all aspects of energy efficiency, renewable energy and more.

HOMEENERGYSCOTLAND.ORG
0808 808 2282
FUNDED BY THE SCOTTISH GOVERNMENT



Energy Performance Certificate

Scotland

Non-Domestic buildings and buildings other than dwellings

SUTHERLAND GARAGE, STENNESS VILLAGE, STROMNESS KW16 3JY

Date of assessment: 02 March 2023
Date of certificate: 10 March 2023
Total conditioned area: 255.595m²
Primary energy indicator: 480 kWh/m²/yr

Reference Number: 0078-1249-8337-8250-8020
Building type: Retail/Financial
Assessment Software: EPCgen, v5.6.b.0
Approved Organisation: Elmhurst Energy Systems

Building Energy Performance Rating

Excellent



Net Zero Carbon or better

(0-15)

A

(16-30)

B

(31-45)

C

(46-60)

D

(61-80)

E

(81-100)

F

(100+)

G

Current

104

Potential

95

Very Poor

Approximate Energy Use:

266 kWh per m² per year

Approximate Carbon Dioxide Emissions:

103.91 kgCO₂ per m² per year

The building energy performance rating is a measure of the effect of a building on the environment in terms of carbon dioxide (CO₂) emissions. The better the rating, the less impact on the environment. The current rating is based upon an assessor's survey of the building. The potential rating shows the effect of undertaking all of the recommended measures listed below. The Recommendations Report which accompanies this certificate explains how this rating is calculated and gives further information on the performance of this building and how to improve it.

Benchmark

A building of this type built to current building regulations at the date of issue of this certificate would have a building energy performance rating of:



Recommendations for the cost-effective improvement of energy performance

1. Consider replacing T8 lamps with retrofit T5 conversion kit.
2. Add time control to heating system.
3. Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.
4. Add optimum start/stop to the heating system.

There are additional improvement measures applicable to this building. Refer to the Recommendations Report.

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Background

This section provides additional information regarding the building and your energy assessment.

Building type:	Retail/Financial and Professional services
Total useful floor area:	256m ²
Main heating fuel:	Oil
Building Environment:	Heating and Natural Ventilation
Renewable energy source:	None
Electricity:	Grid supplied

The Recommendations Report provides additional information in support of your Energy Performance Certificate. It was produced in line with the Government's approved calculation methodology and is based upon output from CLG, iSBEM, v5.6.b, SBEM, v5.6.b.0.

This calculates energy used in the heating, hot water provision, lighting and ventilation of your building. Different fuels produce different amounts of carbon dioxide for every kilowatt hour (kWh) of energy used. The calculation methodology therefore applies fuel emission factors to energy use for each fuel used to give an overall rating for your building. This assessment covers all fixed building services but excludes energy used in portable appliances, office equipment and for industrial processes.

As buildings can be used in different ways, energy use is calculated using standard occupancy assumptions which may be different from the way you use your building. The rating also uses national weather information to allow comparison between the performance of similar buildings in different parts of Scotland.

Further information on the assessment process and approved software tools can be found online at: www.scotland.gov.uk/epc.

Recommendations for improvement

This section lists the improvement measures recommended on your Energy Performance Certificate and further action you can take to improve the performance of your building. These measures have been checked by your assessor as being appropriate for your building and are listed under four headings: short payback period, medium payback period, long payback period and other improvement measures.

The calculation tool has automatically produced a set of recommendations which are reviewed by your assessor to ensure that they are relevant to the building and its use. The assessor may add or remove recommendations and may also have commented on the recommendations based upon their professional knowledge and expertise. This may include inserting additional recommendations or measures under 'other recommendations' (see below).

Note that these recommendations do not include advice on matters relating to the operation and maintenance of your building as such cannot be identified or represented within the calculation process.

Implementing improvements - legal disclaimer.

The advice provided in this Recommendations Report is intended to be for information only. Recipients of this report are advised to seek further professional advice before making any decision on how to improve the energy performance of the building.

Recommended measures with a short payback period (less than 3 years)

Recommendations (short payback)	Potential Impact
Consider replacing T8 lamps with retrofit T5 conversion kit.	HIGH
Add time control to heating system.	MEDIUM
Introduce HF (high frequency) ballasts for fluorescent tubes: Reduced number of fittings required.	LOW
Add optimum start/stop to the heating system.	MEDIUM
The default heat generator efficiency is chosen. It is recommended that the heat generator system be investigated to gain an understanding of its efficiency and possible improvements.	HIGH
Some windows have high U-values - consider installing secondary glazing.	MEDIUM

Recommended measures with a medium payback period (3 to 7 years)

Recommendations (medium payback)	Potential Impact
Add local temperature control to the heating system.	MEDIUM
Add weather compensation controls to heating system.	MEDIUM
Some loft spaces are poorly insulated - install/improve insulation.	MEDIUM
Add local time control to heating system.	MEDIUM
Some solid walls are poorly insulated - introduce or improve internal wall insulation.	MEDIUM
Consider replacing heating boiler plant with a condensing type.	HIGH
Carry out a pressure test, identify and treat identified air leakage. Enter result in EPC calculation.	MEDIUM
Some glazing is poorly insulated. Replace/improve glazing and/or frames.	MEDIUM
Consider installing an air source heat pump.	HIGH

Recommended measures with a long payback period (more than 7 years)

Recommendations (long payback)	Potential Impact
Consider installing a ground source heat pump.	HIGH
Some floors are poorly insulated - introduce and/or improve insulation. Add insulation to the exposed surfaces of floors adjacent to underground, unheated spaces or exterior.	MEDIUM
Consider installing building mounted wind turbine(s).	LOW
Consider installing solar water heating.	LOW

Recommendations (long payback)	Potential Impact
Consider installing PV.	LOW

Other measures

This section lists other measures selected by your assessor based upon an understanding of the building and/or a valid existing Recommendations Report.

Your assessor has not identified other measures for this building.

Payback period:

Payback periods are based upon data provided by Good Practice Guides and Carbon Trust energy survey reports and are average figures calculated using a simple payback method. It is assumed that the source data is correct and accurate, using up to date information.

They should be considered indicative. The figures have been calculated as an average across a range of buildings and may therefore differ from the actual payback period for the building being assessed. It is recommended that the cost effectiveness and payback of each suggested measure be further investigated before making any decision on how to improve the energy efficiency of your building.

Carbon Impact:

Each measure is assigned a low, medium or high potential impact on the energy efficiency of your building. This relates to their potential to reduce carbon dioxide emissions arising from energy used in your building. For automatically generated recommendations, the carbon impact is determined by the approved software but may be adjusted by your assessor based upon their knowledge of the building. The impact of 'other recommendations' is determined by the assessor.

Comparative assessment - Feed-in Tariff

Eligibility for standard tariff for solar PV under the DECC Feed-in Tariff initiative is contingent on a minimum energy efficiency requirement being met. This requires a building to have an EPC band of D or better. Further information can be found at: www.decc.gov.uk/fits This requirement is based upon the means of determining EPC band which is used in England & Wales.

If calculated using this process, but using Scottish climate data, your building would currently have an EPC band of F (and a rating of 145).

Requirements under section 63 of the Climate Change (Scotland) Act

From 1 September 2016, regulations require the assessment and improvement of existing non-domestic buildings with an area of more than 1,000 m². See www.gov.scot/section63 for information.

As this building does not exceed 1,000 m² in area, it is not currently subject to these regulations.

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Assessor's name: Jill Rendall
Assessor membership number: EES/018022
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