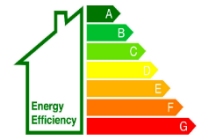




Scottish Government
Riaghaltas na h-Alba
gov.scot

Energy Performance Certificate Reform

Patrick Mason



Scottish Government
Riaghaltas na h-Alba
gov.scot



Overview

- 1. What are EPCs and what are the issues?**
- 2. What is SG doing to address these issues?**
- 3. Making the change happen**
- 4. Timetable for reform**



What are EPCs and what are the issues?



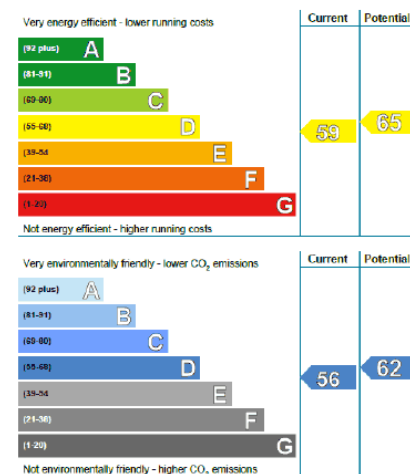
EPCs in Scotland

What EPCs are:

- ✓ Vital, established part of the Scottish property market since 2009
- ✓ Required when building is advertised for sale or rent, or constructed.
- ✓ Central part of Home Report.
- ✓ Principal tool to provide basic, standardised consumer information around the heating and fabric elements of a building.
- ✓ The basis for government funding schemes (ECO, WHS, HES, ABS, RHI, etc.).
- ✓ Widely used by LAs, RSLs (EESHS, Fuel Poverty Strategy and – increasingly – mortgage providers to understand the performance of their stock).
- ✓ Important legacy from EU membership, retained across UK.
- ✓ Currently around **1.5 million** valid EPCs in Scotland.
- ✓ Roughly **60%** of the housing stock has an EPC.
- ✓ Approx. **200k domestic, 5k non-domestic p.a.**
- ✓ **3,350 assessors**; accredited by 6 'Approved Organisations'

What EPCs are not:

- ✗ An accurate predictor of future energy costs.
- ✗ A substitute for a detailed, bespoke technical assessment of the most appropriate heating and fabric measures for a building.



Scottish Government
Riaghaltas na h-Alba
gov.scot



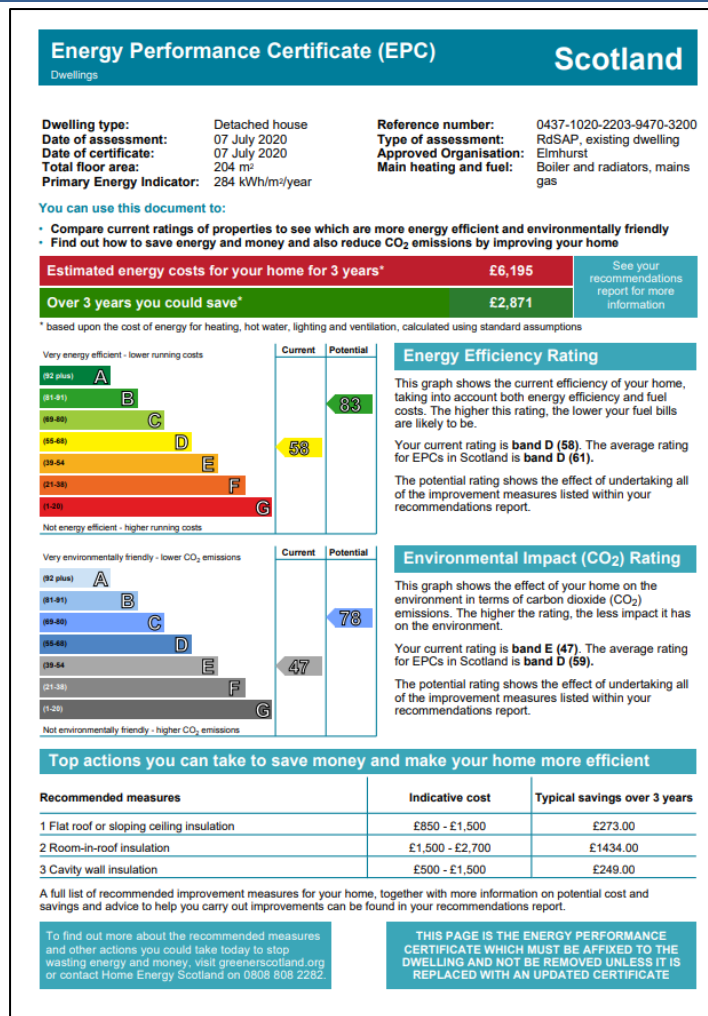
How are EPCs currently calculated and what needs to change?

Current calculation approach

- EPCs are a standardised assessment – they make modelled assumptions about a building
- Based on the *Standard Assessment Procedure* – used since 2008 across UK (updated)
- Assessors must visit the building in-person to record information on:
 - Building construction and age
 - Presence of energy efficiency features (in walls, windows, roof, floors)
 - Type of heating system (and cooling system) and controls
 - Lighting
- Two main domestic ratings: 'Energy Efficiency Rating' and 'Environmental Impact Rating'

What needs to change? – consultation respondents and experts in bodies like CCC and Which? have told us

- EPCs do not currently measure and incentivise the most useful thing
- EPCs aren't easy to understand
- EPCs aren't always of good enough quality



Existing EPC Design



Scottish Government
Riaghaltas na h-Alba
gov.scot



What is SG doing to address these issues?



EPC Reform – one page summary

What SG has committed to doing:

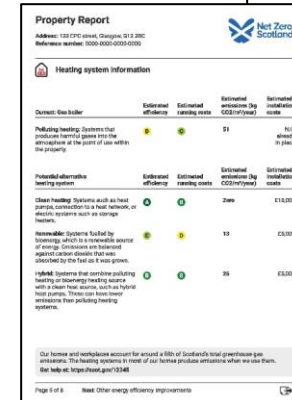
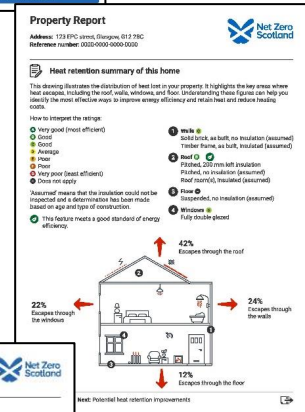
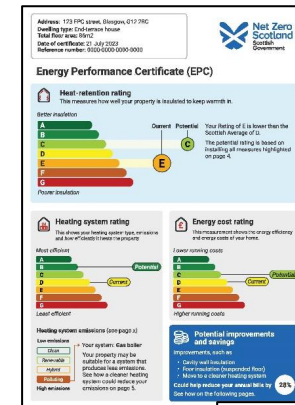
- Government Response sets out final decisions on reform
- We will introduce new EPC regulations in the Scottish Parliament during 2025 and bring them into force in 2026.
- adopt a new EPC rating system for domestic buildings:
 - Heat Retention Rating (fabric energy efficiency);
 - Heating System Rating (type, emissions, efficiency, running costs)
 - Energy Cost Rating (retaining the existing SAP-based EE Rating)
- adopt a new EPC rating system for non-domestic buildings;
- adopt a redesigned EPC certificate;
- reduction of the validity period of EPCs from 10 to five years
- development of a new dynamic EPC user interface to sit alongside the published EPC;
- introduce strengthened operational governance arrangements for EPC assessors and Approved Organisations to enhance quality assurance for consumers;
- establishing a new technical infrastructure: replacing Standard Assessment Procedure (SAP) with the new UK Home Energy Model (HEM) calculation methodology; a new EPC Register;
- continuing to work with the UK Government and devolved administrations where we share elements of the EPC regulatory system across the UK internal market

What SG has consulted upon:

- Public consultation on overall reforms – summer 2023
- Technical consultation on EPC lodgement fees – early 2025 (to fund the technical infrastructure of HEM and Register and to fund new onsite audit and inspection of EPCs; and on penalty charges)

Timeline:

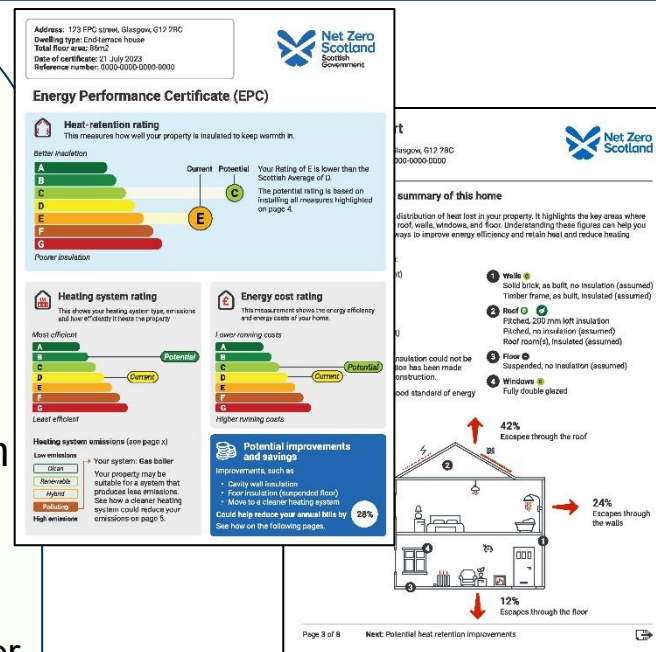
- We will **lay regulations Sept 2025 to bring these changes into force autumn 2026**.
- We intend to align with the timeline for the UKG bringing in HEM to support new regulations in E&W, given we will share technical infrastructure across the UK



The reforms we will make – new Rating system DOMESTIC

We Will Do (domestic EPC):

1. Introduce a **reformed set of three domestic EPC ratings**:
 - Heat Retention Rating, based on how well the building retains heat – i.e. its heat demand / fabric efficiency
 - Heating System Type Rating, comprising ratings for the emissions category, thermal efficiency and running cost
 - Energy Cost Rating, based on the total cost to run the property (in line with the current Energy Efficiency Rating / EPC Rating)
2. Introduce a set of **secondary metrics** to provide information for those interested in particular aspects of the building's performance.
3. Reform the approach to **'recommendations'** by:
 - Renaming them to 'potential improvement options' (to be clearer about their purpose and nature)
 - Changing the logic used to display potential improvement measures to focus on improving the building's Heat Retention Rating (i.e. its fabric)
 - Adopting a technology neutral approach to highlighting and providing basic information about potential non-polluting heating systems.
4. **Redesign the EPC** so that the information it displays is accessible, clearer, and more engaging.



EPC Bands	Heat Retention Rating kWh/m ² /year	Level of EE
A	30 or less	Higher
B	31 to 70	Higher
C	71 to 120	Good
D	121 to 215	Lower
E	215 to 301	
F	302 to 350	
G	351 or more	



Scottish Government
Riaghaltas na h-Alba
gov.scot

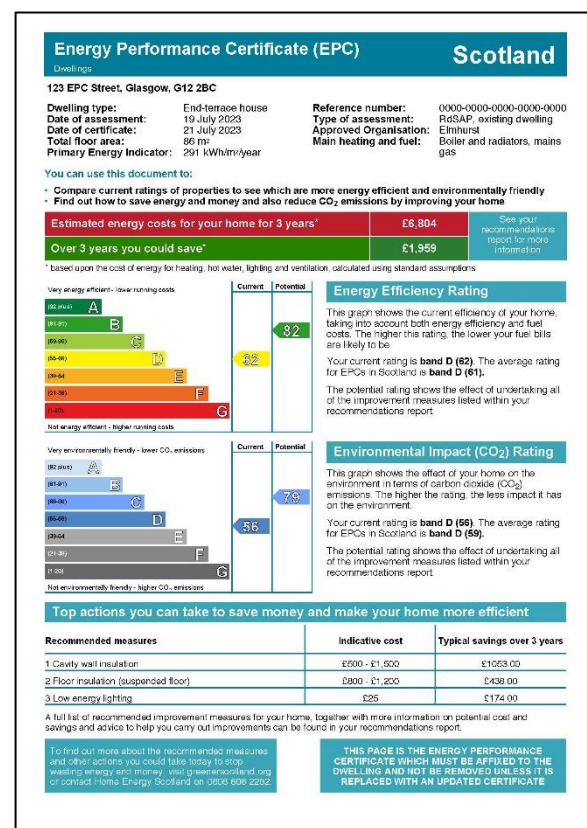


The reforms we will make – redesigned certificates and user interface

New Design Proposals vs Existing EPC

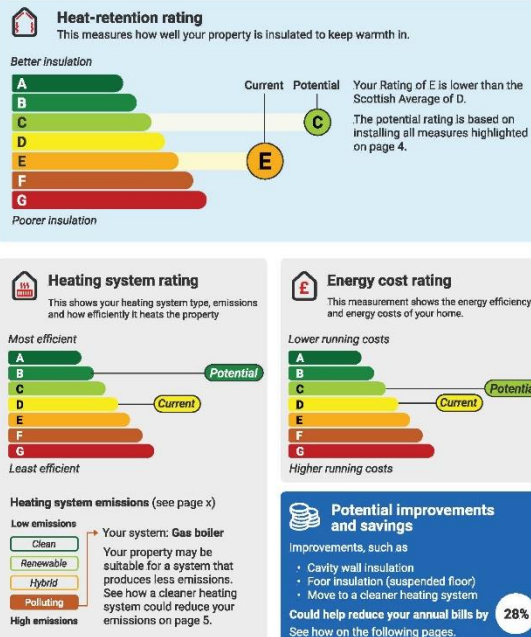
Phase 1

- Informed by user research and testing
- Existing described as text-heavy, dated, crowded and unengaging
- New design feedback:
 - “It's more modern looking”
 - “It's easy to digest”
 - “It tells you what you need to know pretty quickly”
- Testing to date involved over 60 individuals:
 - Recent home buyers/sellers
 - Mortgage advisors
 - Landlords
 - Private tenants
 - Business owners
 - Local authority housing staff
- New ratings incorporated
- Existing A to G scales well-understood
- “Fabric” Rating not understood, so changed to “Heat Retention Rating”



Existing EPC Design

Energy Performance Certificate (EPC)



New Design Proposal

Phase 2 of user testing will review moving to digital certificate, the new EPC Register and potential interactive tools to help inform users and drive retrofit.

Officials will engage with consumer groups, the UK Government and the CCC among others.



Scottish Government
 Riaghaltas na h-Alba
 gov.scot



Making the Change Happen



Making the change happen – Technical Infrastructure & Operational Governance

Technical consultation on lodgement fees and penalty charges

Technical Infrastructure design and build – maximum sharing with UKG

- new **EPC Register** – using UKG cloud calculation service
- new **Calculation Methodology** using UK Home Energy Model – adapted to Scotland

Operational Governance

- new **Operational Framework** – strengthen oversight of market:
 - **Accreditation** – (re)-appointment of Approved Organisations and new market entrants
 - **Skills:**
 - review National Occupational Standards with UKG
 - ensuring assessors trained in new HEM methodology and new ratings
 - **Enforcement** – support LAs through toolkit working with COSLA
 - **Quality assurance:**
 - enhance desk-based audit with new onsite Audit & Inspection of certificates – to ensure reliability and accuracy of assessors' work; drive up the quality of assessments for consumers; align with EU (work with Ireland and Denmark)
 - **Consumer protection:**
 - Work with UKG to consider Ombudsman
 - **Comms and engagement with market**
 - engage estate and lettings agents and conveyancing solicitors; input to Home Report Review
 - engage general public on changes to rating system
 - engage government delivery programmes



New Register - Opportunities

Current Register

- Run by Energy Saving Trust on behalf of Scottish Ministers
- Needs significant development to work with new Home Energy Model, and calculation infrastructure
- SG will bring the register in-house at the same time as moving to the Home Energy Model
- Currently has ~60% coverage of domestic buildings and ~30% of non-domestic buildings
- Data is not perfect; e.g. some missing UPRNS (common for new builds) not retrospectively added

New Register

- Developed from scratch on SG infrastructure (supported by 'database as a service')
- Opportunity to consider whether other policies would benefit from a Unique Property Reference Number-indexed database of buildings (using One Scotland Gazetteer UPRNs)
- Other data could be appended to each UPRN record
- At project inception so keen to understand whether other policies could benefit from this database – e.g. in future it could potentially support other building data, such as that for a building passport or information gathered through a Home Report



Longer term reforms – technical suitability assessment (HEETSA)

Heat & Energy Efficiency Technical Suitability Assessment (HEETSA)

We think that an additional form of bespoke, technical assessment, which goes *beyond the EPC*, is needed, and are scoping how to address a range of situations surrounding:

- a. how to ensure that the correct energy efficiency measures and heating systems are installed in buildings which are complex (like tenements) or more challenging to retrofit (such as traditional and protected buildings)
- b. how to ensure owners are aware of communal energy efficiency and clean heating options which would not be included on an individual EPC

Development of the retrofit assessment market

Growth in recent years in industry-led initiatives to develop more detailed retrofit assessments:

- PAS 2035 and PAS 2038; RICS Retrofit Standard; BS40104; Enerphit/PassivHaus; Historic Scotland Guide to Energy Retrofit of Traditional Buildings

Role of HEETSA?

- identify any gaps within the market (e.g. around ‘whole building’ assessment of communal vs individual heating in tenements)
- set out in regulations and guidance, clear standards for the methodology and tools used to assess technical suitability of measures
- set out in regulations and / or guidance, clear standards of skills, qualification and quality assurance which assessors offering advice on technical suitability of measures need to meet, in order to be allowed to operate within the market
 - initial independent scoping research completed – move to scoping consultation



Scottish Government
Riaghaltas na h-Alba
gov.scot



Timetable for reform



Timetable for reform

Legislative

- Feb-Mar 2025 – technical consultation; BRIA interviews
- Apr-May 2025 – consultation analysis
- Jun-Aug 2025 – regulations drafting, finalisation of BRIA
- Sep-Nov 2025 – regulations laid and scrutinised in Parliament
- Dec-Jun 2026 – comms and engagement with public and market actors
- Autumn 2026 – regulations in force

Technical infrastructure

- Feb 25-Jun 2026 – design, build, test new EPC Register
- Feb 25-Jun 2026 – design, build, test new EPC Calculation Methodology and software
- Autumn 2026 – new infrastructure goes live

Operational governance

- Feb-Mar 2025 – finalise Operational Framework review and Approved Org engagement
- Summer 2025 – agree key objectives and performance indicators for new Framework
- Winter 25-2026 – notify market and (re-)appoint AOs and new entrants
- Spring 2027 – establishment of onsite audit and inspection function



Annexes – for information



Scottish Government
Riaghaltas na h-Alba
gov.scot

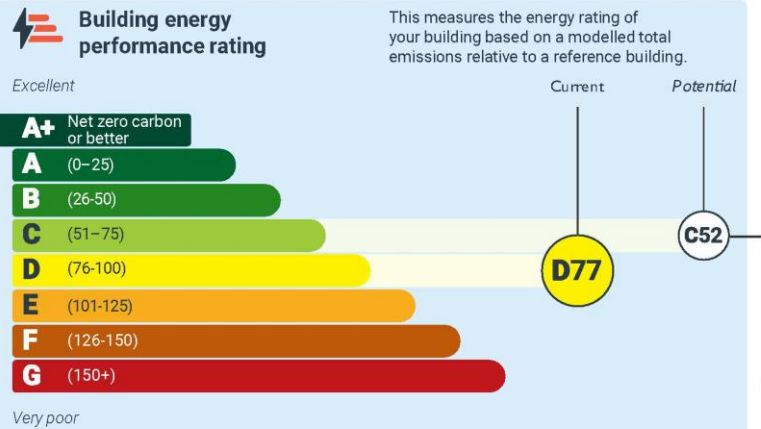


The reforms we will make – new Rating system NON-DOMESTIC

Address: 321 EPC Example, G12 2BC
Building type: Office/Workshop
Total conditioned area: 6065.27m²
Date of certificate: 08 October 2021
Reference number: 1111-1111-1111-1111



Energy Performance Certificate (EPC)



Heating system

This shows your heating system and how efficiently it heats the property.

Heating system emissions (see page x)

Your system: **Gas boiler**

Clean

Renewable

Hybrid

Polluting

Your building may be suitable for a system that produces less emissions.

See how a cleaner heating system could save you money on page X.

Energy use

Approximate energy use per year: **103 kWh per m²**

Direct emissions

Approximate carbon dioxide emissions per year: **48.65 kgCO₂ per m²**

Potential savings

Improvements, such as

- cavity wall insulation
- floor insulation (suspended floor)
- low energy lighting for all fixed outlets

Could pay for themselves within **3 years**

This page is the energy performance certificate which must be affixed to the building and not be removed unless replaced with an updated certificate.

We Will Do (non-domestic EPC):

- Introduce a reformed set of three non-domestic EPC ratings:
 - Energy Efficiency Rating, based on modelled emissions from regulated energy use relative to a reference building to align with the rating system used across the UK;
 - Direct Emissions Rating, based on the building's modelled direct emissions from regulated energy use to allow a focus on the decarbonisation of individual buildings. For buildings which only use grid electricity this will be zero;
 - Energy Demand - the building's modelled regulated energy use under standardised conditions to allow comparisons between buildings.
- Clearly show the **main heating system** of the building and whether it is a polluting system or not.
- **Redesign the EPC** so that the information it displays is accessible, clearer, and more engaging.
- Consider additional reforms as any **proposals for non-domestic standards** are developed.



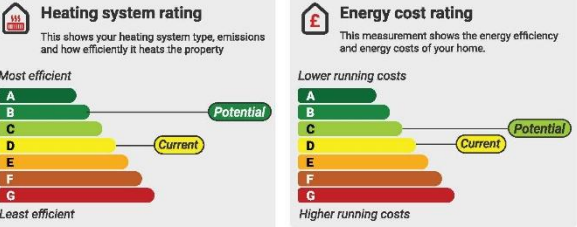
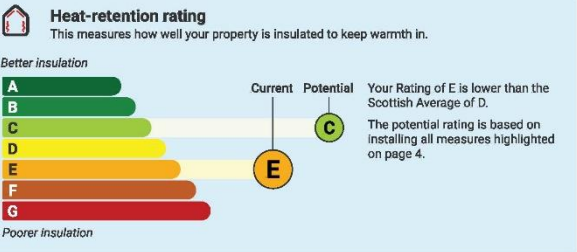
Scottish Government
Riaghaltas na h-Alba
gov.scot

Annex – The reforms we will make – redesigned certificates and user interface

Address: 123 EPC street, Glasgow, G12 2BC
Dwelling type: End-terrace house
Total floor area: 86m²
Date of certificate: 21 July 2023
Reference number: 0000-0000-0000-0000



Energy Performance Certificate (EPC)



Heating system emissions (see page x)

Low emissions

Your system: Gas boiler

Your property may be suitable for a system that produces less emissions. See how a cleaner heating system could reduce your emissions on page 5.

High emissions

Potential Improvements and savings

Improvements, such as

- Cavity wall insulation
- Floor insulation (suspended floor)
- Move to a cleaner heating system

Could help reduce your annual bills by **28%**

See how on the following pages.

Property Report

Address: 123 EPC street, Glasgow, G12 2BC
Reference number: 0000-0000-0000-0000



Heat retention summary of this home

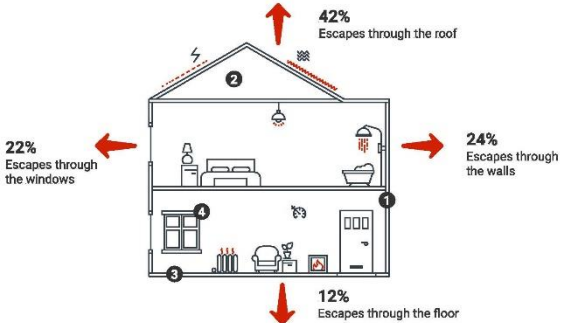
This drawing illustrates the distribution of heat lost in your property. It highlights the key areas where heat escapes, including the roof, walls, windows, and floor. Understanding these figures can help you identify the most effective ways to improve energy efficiency and retain heat and reduce heating costs.

How to interpret the ratings:

- 1 Walls: Solid brick, as built, no insulation (assumed)
- 2 Roof: Pitched, 200 mm loft insulation (assumed)
- 3 Floor: Suspended, no insulation (assumed)
- 4 Windows: Fully double glazed

'Assumed' means that the insulation could not be inspected and a determination has been made based on age and type of construction.

This feature meets a good standard of energy efficiency.



Page 3 of 8 Next: Potential heat retention improvements

Property Report

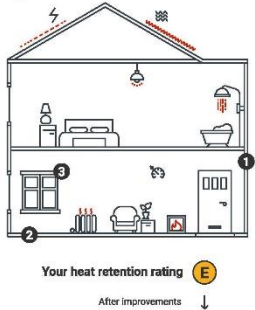
Address: 123 EPC street, Glasgow, G12 2BC
Reference number: 0000-0000-0000-0000



Potential heat retention improvements

How to read this page:

- The measures below aim to improve the heat retention and reduce the emissions of this property.
- The 'Potential improvement options' are suggested first steps, starting with low-cost options that provide good value, followed by higher-cost improvements with long-term benefits.
- Performance ratings are cumulative, assuming the measures are implemented in the order listed.



Potential Improvements	Estimated installation cost	Estimated annual saving	Potential ratings after improvements
1 Cavity wall insulation	£500 – £1,500	£1,053	D
2 Floor insulation (suspended floor)	£800 – £1,200	£438	C

This feature meets a good standard of energy efficiency. Funding available. See next page for details.

You should consider seeking professional advice before installing energy efficiency measures. Further advice and information can be found online at <https://scot.gov/12345>

Page 4 of 8 Next: Heating system information



Annex – The reforms we will make – redesigned certificates and user interface

Property Report

Address: 123 EPC street, Glasgow, G12 2BC

Reference number: 0000-0000-0000-0000



Heating system information

Current: Gas boiler	Estimated efficiency	Estimated running costs	Estimated emissions (kg CO2/m ² /year)	Estimated installation costs
Polluting heating: Systems that produces harmful gases into the atmosphere at the point of use within the property.	D	C	51	N/A already in place
Potential alternative heating system	Estimated efficiency	Estimated running costs	Estimated emissions (kg CO2/m ² /year)	Estimated installation costs
Clean heating: Systems such as heat pumps, connection to a heat network, or electric systems such as storage heaters.	A	B	Zero	£10,000
Renewable: Systems fuelled by bioenergy, which is a renewable source of energy. Emissions are balanced against carbon dioxide that was absorbed by the fuel as it was grown.	C	D	13	£5,000
Hybrid: Systems that combine polluting heating or bioenergy heating source with a clean heat source, such as hybrid heat pumps. These can have lower emissions than polluting heating systems.	B	B	26	£5,000

Our homes and workplaces account for around a fifth of Scotland's total greenhouse gas emissions. The heating systems in most of our homes produce emissions when we use them.

Get help at: <https://scot.gov/12345>

Page 5 of 8

Next: Other energy efficiency improvements



Property Report

Address: 123 EPC street, Glasgow, G12 2BC

Reference number: 0000-0000-0000-0000



Information about potential improvements

This section offers additional information and advice on the recommended improvement measures to improve your home's performance rating.



1 Cavity wall insulation*

Cavity wall insulation is insulation material that fills the gap between the inner and outer layers of external walls to reduce heat loss through the walls; this will improve levels of comfort, reduce energy use and lower energy 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.



2 Floor insulation (suspended floor)

Insulating a floor will significantly reduce heat loss; this will improve levels of comfort, reduce energy use and lower energy bills. Suspended floors can often be insulated from below but must have adequate ventilation to prevent dampness; seek advice about this if you're unsure.



3 Low energy lighting

Replacing traditional light bulbs with energy saving bulbs will reduce lighting costs over the lifetime of the bulb, and they last many times longer than ordinary light bulbs. Low energy lamps and fittings are commonplace and readily available. Find out more from Energy Saving Trust (energysavingtrust.org.uk/home-energy-efficiency/lighting).

Before carrying out work, make sure that the appropriate permissions are obtained, such as permission from a landlord (if you are a tenant).

* Building regulations may apply to home energy efficiency and heating improvements and sometimes require a building warrant. It is best to check with your local authority building standards department or contact a qualified professional.

Funding, advice and support



Home Energy Scotland may be able to provide funding for these recommended measures and can also offer free advice and support to help you make your home warmer, reduce energy bills, and contribute to a greener, more sustainable future. Please visit www.homeenergyscotland.org or call 0808 808 2282.

Page 7 of 8

Next: About this document



Scottish Government
Riaghaltas na h-Alba
gov.scot



Annex – Summary of regulatory functions

Under the new EPC Regulations, **the Scottish Government** will be responsible for:

- Making and reviewing the Regulations;
- Specifying the EPC rating system and the content of certificates;
- Specifying and maintaining the EPC Calculation Methodology;
- Keeping and maintaining the EPC Register;
- Appointment and review of AOs and the Operational Framework; and
- Onsite audit and inspection to verify the accuracy of certificates.

EPC assessors will continue to be responsible for:

- Assessing the energy performance of properties; and
- Issuing of certificates.

Approved Organisations will continue to be responsible for:

- Accreditation and oversight of EPC assessors, including their training;
- Desk-based audit to verify the accuracy of certificates; and
- Lodging certificates on the EPC Register.

Local authorities will continue to be responsible for:

- Enforcing the Regulations.

Property owners will continue to be responsible for:

- Ensuring that a valid EPC is made available when a property is advertised for sale or for let; and
- Ensuring any advert in commercial media states the energy performance indicator for any property advertised for sale or let.



Scottish Government
Riaghaltas na h-Alba
gov.scot

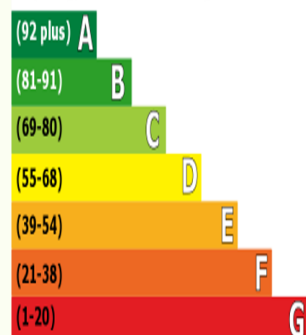


Annex – How is our stock performing?

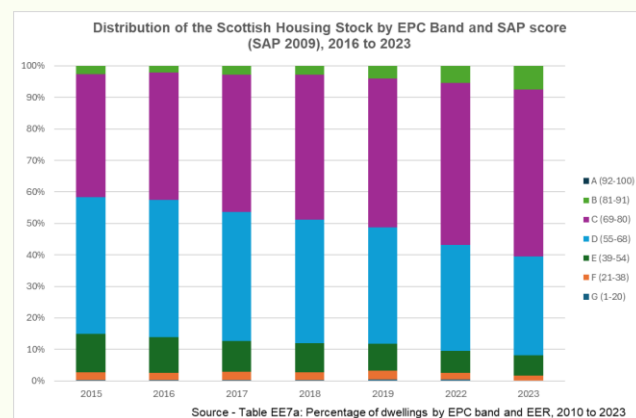
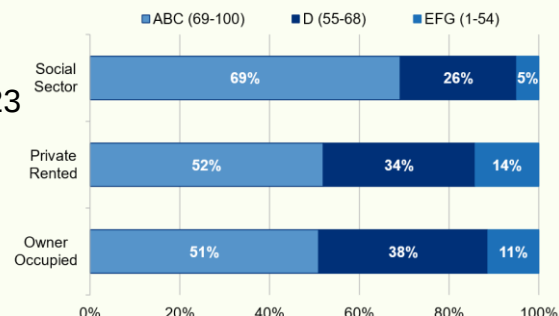
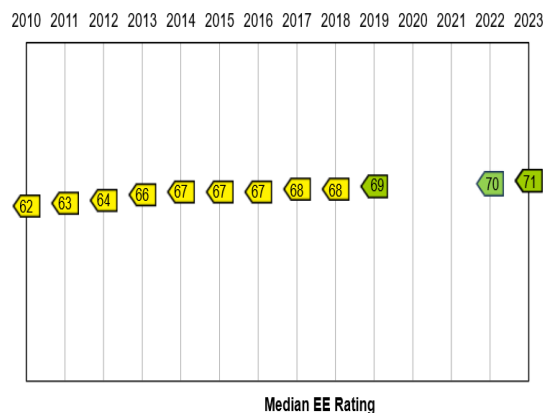
Domestic; Non-domestic SHCS and Register data

Median EER 2010-23 relative to EPC bands (SAP 2009), SHCS 2023

Very energy efficient - lower running costs



Not energy efficient - higher running costs



How many homes meet EPC Bands A-G? SHCS 2023 found:

- 61% of the housing stock in 2023 had an EPC rating Band C or better, up 37% since 2010.
- 31% were Band D.
- 8% of properties were Band E or worse.



Scottish Government
Riaghaltas na h-Alba
gov.scot

