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# Energy Efficient Scotland

## Improving energy efficiency in owner occupied homes



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## Ministerial Foreword



This government wants all our homes to be warmer, greener and more efficient, and for housing to play a full part in Scotland's efforts to tackle climate change.

Last year we published the Energy Efficient Scotland Route Map, with the dual aims of removing poor energy efficiency as a driver of fuel poverty and reducing greenhouse gas emissions. Since then, we have taken concrete steps towards these goals.

In the social housing sector, progress towards energy efficient homes is already well advanced. The Scottish Housing Regulator (SHR) reports that 85% of social rented homes are already meeting the first 2020 energy efficiency milestone. Under the Energy Efficiency Standard for Social Housing post-2020 (ESSH2) a challenging and ambitious target is set for social rented homes to achieve an

Energy Performance Certificate (EPC) band B by December 2032, or to be as energy efficient as practically possible within the limits of cost, technology and necessary consent.

In June this year, we consulted on energy efficiency regulations in the private rented sector (PRS). From 1 April 2020, PRS landlords will need to meet minimum energy efficiency standards (EPC Band E) for new tenancies, and for all tenancies by 31 March 2022. After that, all new tenancies must meet minimum energy efficiency standards of EPC Band D for new tenancies after 1 April 2022, and for all tenancies by 31 March 2025.

But there is much still to be done. Most homes in Scotland (62%) are owned by their occupants, so regulations for social or privately rented homes will not apply to them. Only 38% of owner-occupied homes are at EPC band C or better, which means around 930,000 homes are still below that level.

Two vital pieces of legislation have also passed through Parliament this year. The Fuel Poverty (Targets, Definition and Strategy) (Scotland) Act 2019 and the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 each set ambitious targets - to eliminate poor

energy efficiency as a driver of fuel poverty, and to end Scotland's contribution to climate change by reaching net zero emissions by 2045.

All of this means that we need to go faster and further where we can do so in a way that is fair and just. In the context of a global climate emergency we must look to all parts of society to take action to cut emissions. We consulted in March this year on the impacts of accelerating Energy Efficient Scotland. Our analysis of the responses has been published<sup>1</sup> and the proposals in this consultation are an important part of how we can make faster progress.

Last year In the Route Map we outlined our plan to encourage homeowners to improve their energy efficiency until 2030, after which we would consider a legally-binding

standard. This consultation outlines our proposals to set a standard for energy efficiency and make it legally binding on homeowners from 2024 onwards.

This document sets out what that standard may look like and how we can help homeowners meet it. We also provide updates on areas which are being developed to support Energy Efficient Scotland, including proposals from the Short Life Working Group on Assessment and the research underway to define cost effectiveness.

We look forward to continuing this conversation as we work together to deliver our bold vision of making every home in Scotland warmer, greener and more energy efficient. We encourage you to respond and look forward to hearing your views.



**KEVIN STEWART MSP**  
Minister for Local Government,  
Housing and Planning



**PAUL WHEELHOUSE MSP**  
Minister for Energy, Connectivity  
and the Islands

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<sup>1</sup> <http://www.gov.scot/ISBN/9781839603952>

## Introduction



### Background

In April this year, the First Minister declared a global climate emergency – calling for action from Scotland and the world – and committed Scotland to net-zero greenhouse gas emissions by 2045, in line with the UK committee on Climate Change (CCC) recommendations<sup>2</sup>.

And a new Climate Change (Emissions Reduction Targets) (Scotland) Act 2019<sup>3</sup> has just been passed by the Scottish Parliament. Parliament has set in law very ambitious targets to reduce greenhouse gas emissions, requiring Scotland to reach net-zero emissions by 2045, with 75% reductions by 2030 and 90% reductions by 2040.

The Scottish Parliament also passed the Fuel Poverty (Targets, Definition and Strategy)(Scotland) Act 2019<sup>4</sup> which set a target, in law, of no more

than 5% of Scottish households being in fuel poverty by 2040 and includes challenging interim targets.

Meeting these ambitious targets will demand an increased focus and a faster pace of action right across society.

But we are not starting from scratch.

Improving the energy efficiency of Scotland's buildings has been a national infrastructure priority since 2015. In May 2018, Scottish Ministers published a Route Map to an Energy Efficient Scotland, setting out a pathway to 2040 to make our buildings warmer, greener and more energy efficient. The aims of the Energy Efficient Scotland programme are to make sure that poor energy efficiency in homes is no longer a driver of fuel poverty, and to reduce greenhouse gas emissions through more energy

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<sup>2</sup> <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>

<sup>3</sup> <http://www.legislation.gov.uk/asp/2019/15/enacted>

<sup>4</sup> <http://www.legislation.gov.uk/asp/2019/10/enacted>

efficient buildings and decarbonising our heat supply.

In *Protecting Scotland's Future: the Government's Programme for Scotland 2019-2020*<sup>5</sup> we reaffirmed our commitment to energy efficiency and heat decarbonisation, setting out plans to ensure that from 2024, newly-built homes use only renewable or low carbon heating systems, rather than fossil fuel boilers.

The Scottish Government's substantial investment to date in energy efficiency has seen significant improvements in buildings in Scotland, in homes, businesses and public sector buildings. As well as directly funding energy efficiency programmes (described in Part 2 of this consultation), we have made progress towards setting standards and regulating for improvement across domestic and non-domestic buildings. For homes, legally binding standards are already in progress in both social rented (council and housing association homes) and privately rented homes.

### **This consultation**

In this consultation, we focus on action in the owner-occupied housing sector. In our consultation earlier this year on

the potential to accelerate Energy Efficient Scotland, and again in our 2019 Programme for Government we committed to publishing a more detailed consultation on proposals for encouraging and requiring action in owner-occupied housing. This document is the owner-occupied housing consultation.

Overall, emissions from the Scottish residential sector totalled 6 MTCO<sub>2</sub> in 2017, equivalent to 15% of all greenhouse gas emissions in Scotland (greenhouse gas inventory). Currently, 62% of homes in Scotland are owner-occupied. Improving energy efficiency in owner occupier dwellings will therefore play a significant role in reducing emissions in the residential sector, as well as in the energy sector through reduced use of electricity<sup>6</sup>.

Of those 62% of homes in Scotland that are owner-occupied, only 38% have an Energy Performance Certificate rating of C or above. However, the situation has improved in recent years. Figure 1 shows that owner-occupied homes at EPC C and above has risen steadily since 2014. In 2017, there were 560,000 properties at EPC C and above, compared to 420,000 at EPC C and above in 2014.

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<sup>5</sup> <https://www.gov.scot/publications/protecting-scotlands-future-governments-programme-scotland-2019-20/>

<sup>6</sup> Greenhouse gas emissions are reported by source, i.e. emissions are attributed to the sector that emits directly. Therefore electricity used in residential dwellings is counted against the Energy Supply sector.



Figure 1: Bar chart showing the number of homes with an Energy Performance Certificate rating of below C (blue) and above C (orange) from 2014 – 2017 (Scottish House Condition Survey).

There is still progress to be made and improving energy efficiency and reducing the demand for heat in owner occupied homes will continue to play an important role in helping to achieve our climate change targets. Beyond EPC band C, with only 2% of Scottish owner occupied housing at EPC bands B, there is significant potential for improvements right across the owner-occupied housing sector.

Also, fuel poverty remains an issue. In 2017, 18% (150,000) of homes owned outright and 8% (56,000) of mortgaged homes were in fuel poverty.

This consultation outlines proposals to tackle these issues. We set out our proposals for an energy efficiency standard for owner-occupied homes to reach, and suggest that it should be legally binding. We also set out how homeowners can be helped and supported to bring their homes up to the standard.

In doing so, we believe there are many benefits for homeowners themselves and for society as a whole. Taking action to reduce our energy demand and use greener energy sources can

help to make bills more affordable and our homes more comfortable, improve health and wellbeing for our children and for more vulnerable Scots, make a positive contribution to the Scottish economy, and crucially, help Scotland end its contribution to climate change.

In this consultation, we ask for your views and guidance on our proposals to introduce a binding standard on homeowners, and to support them to meet it.

- **In part 1** you will be asked about the mandatory standard we are proposing and how it will be applied.
- **In part 2** we will seek your views on the support mechanisms that are available to help home owners achieve that standard.
- In the **Annexes**, we give further detail on some of the key points discussed in this consultation document.

### Next Steps

Following the consultation, we will analyse the responses received. Your feedback will inform further development of the Energy Efficient Scotland programme, and especially inform the next steps for action in owner-occupied housing.

We aim to publish an update to the Energy Efficient Scotland Route Map in the first half of 2020, following and reflecting the ambitions and pathway set out in Scotland's updated Climate Change Plan which is due to be published by the end of April 2020.



## Part 1 - Setting the energy efficiency standard for owner-occupied housing

We are proposing that energy efficiency standards should be introduced for owner-occupied housing, and that they should be legally binding. In this section we describe proposals and options for:

- What those legally binding standards should be.
- When they should start operating across Scotland.
- When they should apply to an individual property or homeowner.
- How compliance should be checked and enforced.
- What valid reasons there might be for not complying or only partially complying with the standard.

In Part 2 we describe what steps a homeowner would need to take and proposals for how they can be supported and enabled to meet the standards.

### 1.1 What the standard should be

In the Energy Efficient Scotland Route Map<sup>7</sup>, published in May 2018, we proposed that the standard for domestic properties should be based on the Energy Efficiency Rating (EER) of the Energy Performance Certificate

(EPC). We said that all homes should reach at least an EER of Band C, where it is technically feasible and cost effective to do.

Using the Energy Efficiency Rating as the standard would bring owner-occupied housing into line with the standards applying in private rented and social rented housing, which would help make it more easily understood across the general public and industry.

From previous consultation responses<sup>8</sup> we know that there is some support for using EER, as an appropriate level and measure for the standard. Energy Performance Certificates are an established mechanism to benchmark a property's energy efficiency, and they have been required at the point of sale since 2008 as a standard part of the Home Report. You have previously told us that, while not always fully understood, EPCs are widely recognised and should be built upon.

An EPC provides information on how energy efficient a building is and how it could be improved. An EPC report contains a number of different energy

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<sup>7</sup> <https://www.gov.scot/publications/energy-efficient-scotland-route-map/>

<sup>8</sup> <https://www.gov.scot/publications/consultation-analysis-energy-efficient-scotland-making-homes-buildings-warmer-greener-more-efficient/>

and environmental related information values in addition to the Energy Efficiency Rating (EER). Examples include the Environmental Impact Rating (EIR) and a Primary Energy Indicator. In Annex A, we describe in a little more detail how EPCs work and what the different values relate to.

There are pros and cons to each of these EPC-related options for the long term standard. For example, one of the downsides of using the Energy Efficiency Rating alone as the standard is that - because of the current higher cost of many renewable fuel sources - it is possible in some cases to make the Energy Efficiency Rating worse even though the carbon emissions from the home have reduced.

Conversely, it is also possible in some situations to improve the Energy Efficiency Rating of a property while making the Environmental Impact Rating of the property worse – by changing the heating system to a high carbon heating system.

It is not the aim of these proposals to encourage such changes. Clearly, we don't want the legally-binding standard to discourage people from making greener choices and using renewable energy for their heating, where that is the right choice for their home.

But we do want to encourage a “fabric first” approach. No matter how you heat your home, improving your insulation and reducing draughts will make your home easier to heat, will

mean less energy is wasted and could save you on your fuel bills.

So one option is to base the standard on the Energy Efficiency Rating of C as planned, but give an exemption to those properties which do not meet EPC C, despite having all appropriate fabric energy efficiency measures and a renewable or low carbon heating source (eg air source heat pump or district heating system) installed. Exemptions and abeyances are discussed more in section 1.5.3 below.

Another option is to require that the Environmental Impact Rating is not made worse by any works that are undertaken.

#### **Questions:**

1. Do you agree or disagree that there should be a legally-binding energy efficiency standard for owner-occupied housing?
2. Do you agree or disagree that EPC Energy Efficiency Rating band C is the appropriate standard to use? Please explain.
3. What are your views on the “fabric first” approach as described above?

#### **1.1.1 Potential for misuse of EPCs**

A concern around EPCs and their use in determining whether a regulatory standard has been met is the risk of potential misuse. There have been cases in the past involving the misuse of EPCs linked to funding of energy efficiency measures.

Currently, there are bodies who provide accreditation schemes for energy assessors producing EPCs. These bodies carry out a desk-based audit of a small percentage of lodged<sup>9</sup> EPCs from their members. The audit ensures all energy assessors who are members of the accreditation scheme and who lodge an EPC, are subject to a minimum of one audit per year.

In addition to this, we need to ensure the EES programme can robustly monitor the quality of EPCs and ensure necessary safeguards are in place.

The quality assurance process outlined in section 2.2 should help homeowners to access reliable and accredited assessors but we are keen to hear views on how potential instances of EPC misuse can be mitigated.

**Question:**

4. In your view, how can we ensure that when EPCs are used to determine compliance with the standard, they are robust and not easily open to misuse?

### 1.1.2 Should the standard change over time?

Over the longer term, as a society we need to move away from fossil fuels as

a source of energy. For housing, this will mean moving towards heating systems which use renewable or low carbon fuel sources rather than fossil fuels such as gas or oil. To help inform this, the Scottish Government will publish a Heat Decarbonisation Policy Statement in summer 2020, setting out the steps we will take to reduce greenhouse gas emissions from heating our buildings.

In addition, we have committed to ending Scotland's contribution to climate change by 2045 by reducing our greenhouse gas emissions to net-zero, with interim targets of 75% emissions reductions by 2030, and 90% by 2040<sup>10</sup>.

In the 2018 Route Map and previous consultations, we proposed that the standard for homes should remain the same at EPC C over the long term to 2040 (subject to normal changes over time in the underlying EPC methodology and data values). Many consultation respondents welcomed this approach because it is clear and helps with longer term planning.

But at the moment there are still many unknowns about how low carbon heating can be put in place across Scotland's homes and buildings, including awaited UK Government announcements on hydrogen and re-provisioning the gas network.

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<sup>9</sup> <https://www.scottishepcregister.org.uk/>

<sup>10</sup> These economy wide targets were set by Scottish Parliament in the Climate Change (Emissions Reduction Targets) (Scotland) Act, 2019.

Action to improve energy efficiency – such as we are proposing in this consultation – can only help. Many renewable heating systems only work effectively in buildings which have a good level of energy efficiency. And reducing the amount of energy needed within a home, from whatever energy source, reduces bills and makes the future task of finding a cost-effective renewable heating system easier.

So we are seeking your views on whether the standard should be fixed at EPC Energy Efficiency Rating band C, or whether periodic review points should be built in, so that the standard can increase over time if necessary to respond to the global climate emergency, or change focus to further encourage uptake of renewable heating as technology and policy develops. As one example, the standard could be updated in the future to build in the EPC Environmental Impact Rating (EIR) as well or instead of the Energy Efficiency Rating (EER). Review points could also be used to assess progress.

If there is an update to the standard in future, a specific property would be subject to the standard in force at the time that property reached a trigger point.

**Question:**

5. Do you think the standard should be fixed, or should it be subject to periodic review and change over time? Please explain your view.

**1.2 When the mandatory standard should come into force across Scotland**

In the 2018 Route Map, we proposed introducing mandatory standards for owner occupiers from 2030. However, because of the global climate emergency and Scotland’s new and even more ambitious climate change targets, we need to make faster progress. So we now propose that we should considering bringing in mandatory standards for owner occupied properties sooner than 2030.

We are proposing a start date of 2024. From that date onwards the standard would need to be met when defined trigger points are reached. These trigger points – point of sale, and potentially point of major renovation - are discussed below in section 1.3. At this point, we are not proposing a backstop date to cover properties which have not been caught by the trigger points by a certain date. But that may be considered in the future.

Projections<sup>11</sup> suggest that around 190,000 homes which are currently below EPC C will experience at least

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<sup>11</sup> Projections are based on 2014-16 [Scottish House Condition Survey \(SHCS\)](#) data of average length of tenure by EPC Band.

one change in ownership in a five-year period, and 330,000 homes over a ten-year period. This is around 20 percent and 36 percent respectively of all the homes which are currently below EPC C.

If regulations are tied to point of turnover, these figures give an indication of the number of homes which will be subject to the regulatory requirement to meet an EPC C or improve the homes as much as is technically feasible and cost effective (discussed in section 1.5 and annex D).

We would aim to lay the necessary regulations far enough in advance to provide a significant lead-in time so that homeowners and industry would have time to prepare.

**Question:**

6. Do you agree or disagree that 2024 is the right start date for the mandatory standard to start operating? Please give your reasons, whether you agree or disagree.

**1.3 When the standard should apply to an individual property**

We propose that the main point at which a home would have to meet the standard would be when it changes ownership – at “point of sale”.

We also intend to explore the idea of the standard applying if major refurbishment work is undertaken – at “point of major renovation”.

How these two potential trigger points could work is described more below, and we are seeking your opinions on them.

**1.3.1 Point of Sale**

When a home is sold or transferred to a new owner, we propose that there would be a legal obligation on the owner to make sure the property meets the standard, as demonstrated by an Energy Performance Certificate (EPC). This would apply even if no money is exchanged for the home, such as between family members. There is already a legal obligation on a person selling a home to provide a home report which contains an energy report. The energy report will contain the EPC.

If the home being sold was not already at the standard, and the seller could not, or did not want to, upgrade it before selling, we propose that the legal obligation to meet the standard would fall on the buyer. This would have to be reflected in the conveyancing process. The buyer would then have a set time limit (say 12 months) in which to bring the home up to meet the standard, and demonstrate this by submitting a new Energy Performance Certificate. We expect that market forces would mean that the sale price and/or the property valuation would reflect the extra effort and cost for the buyer, who would have to bring the property up to the standard.

**Questions:**

7. Do you agree or disagree with point of sale as an appropriate trigger point for a property to meet the legally-binding standard?

8. Do you agree or disagree that responsibility for meeting the standard should pass to the buyer if the standard is not already met at point of sale, as described above? Please explain your views and give any evidence you have, whether you agree or disagree.

9. What, if any, unintended consequences do you think could happen as a result of these proposals? For example, any positive or negative effects on the house sales market.

**1.3.2 Point of Major Renovation**

In previous consultations, you have told us that the time when a homeowner is about to undertake a major refurbishment would be an appropriate time to apply an energy efficiency requirement. So we are exploring the possibility of making “point of major renovation” another trigger point which would apply in addition to the point of sale trigger.

A major renovation may be a sensible moment to take action on energy efficiency because disruption will be happening anyway within the property. It may also help to encourage mainstream construction trades to bring energy efficiency measures and awareness more fully into their

standard skill set and range of services offered.

Clearly, what is meant by a “major renovation” would have to be carefully defined. Some of the possibilities and issues around this are set out at Annex B. We will need to explore more fully how compliance would be checked and enforced, and by whom. We are seeking your views on both these points.

We propose to consider point of major renovation further over the coming months, and are keen to hear any views that would help inform this work.

**Questions:**

10. Do you agree or disagree with point of major renovation as an appropriate trigger point for a property to meet the legally-binding standard?

11. What is your view on how “major renovation” should be defined? Should the Energy Performance of Buildings Directive definition, as described in Annex B, be used? Please explain.

12. How could a requirement to meet the energy efficiency standard at point of major renovation be checked and enforced? Who should be responsible for this?

## 1.4 How compliance with the standard should be checked and enforced

If legally-binding standards are brought in for owner occupied housing, there will need to be a way of checking compliance and making sure they are met.

We are now seeking views on how this could be done in a fair, appropriate and proportionate way.

Ideas that are under consideration include the creation of civil fines, or the use of fiscal measures, such as tax penalties or additional charges.

Responses to our previous consultations have suggested that these options should be explored.

Issues to consider include:

- Should the penalty for failing to comply with the standard be one-off or recurring? A fine or penalty could be charged once, or could be charged annually (at a flat rate or increasing) until either a new EPC is lodged for the property showing it has met the standard or a valid exemption (“abeyance” – see section 1.5.3) is in place.
- At what level, approximately, should any penalty be set? If it is set too low, there is a risk that it will not motivate people to comply with the standard – they would rather just pay the penalty than pay to carry out the necessary work on their property. If it is set too high, it may push people into poverty, and could

also reduce their ability to take action to comply with the standard.

- Are there any particular groups of people who could be adversely affected by enforcement processes and charges? Or, on the other hand, are there any groups on whom a financial penalty would have little effect?
- Which body or bodies should check if the standard has been complied with at the trigger point, and should be responsible for levying any penalty? What might be the roles of central government, local government, conveyancing solicitors etc in this process? It is important that monitoring and enforcement is robust, and also that the costs of the system and process are proportionate.

Your feedback on these points will help to inform further work to determine the right enforcement process.

### Questions:

13. What do you think would be a fair and appropriate method to ensure compliance, if the legally-binding standard is not met? What type of penalty system would be appropriate? Please explain.

14. Should a penalty for failing to comply with the standard be one-off or recurring?

15. At what level, approximately, should any penalty be set?

16. Are there any particular groups of people who could be adversely affected, more than others, by enforcement processes and charges?

17. Which body or bodies should check if the standard has been complied with at the trigger point, and should be responsible for levying any penalty?

### 1.5 What if a home cannot fully meet the standard?

We are proposing that all homes should reach at least Band C on the EPC Energy Efficiency Rating where that is technically feasible and cost effective to do.

In some cases, it will not be possible for a home to reach EPC C. This could be because there are not enough improvement measures which are technically suitable for that type of property, or the measures exist but are disproportionately expensive.

In principle, we believe that even if a home cannot meet the standard in full, it should be required to get as close as reasonably possible when one of the trigger points is reached. We are seeking your views on this principle. It mirrors the approach taken in the social housing sector, where homes must reach the standard or become “as energy efficient as practically

possible within the limits of cost, technology and necessary consent”.

#### 1.5.1 Technical Feasibility

Work has been ongoing to create an assessment process which will give bespoke information to a homeowner about what can be done to their specific property. This assessment will help to determine what is technically feasible, and what measures would bring the property up to the standard (and beyond, if the homeowner chooses to improve their home to an even higher standard). This assessment will serve two functions – it will inform the homeowner about what can be done and it will be the basis for any decisions about whether any exemption can be granted.

A Short Life Working Group (SLWG) has been developing proposals for the assessment process, and has created a set of interim proposals. Part 2 of this document sets out more information about the assessment work, and Annex C lists the interim proposals.

#### 1.5.2 Cost Effectiveness

We are also working on how to define “cost effectiveness”. This is important because we have said that owners will only have to meet the standard to the extent that it is cost effective to do so.

The Scottish Government has provided, and continues to provide, substantial funding for energy efficiency works in the form of both



loans and grants. Part 2 of this consultation describes the financial support that is currently available. Grant support is targeted on vulnerable people and those in fuel poverty.

Government will not be able to fund all the work needed to bring private homes up to the energy efficiency standard, and we have been clear that homeowners who are able to fund measures themselves will be expected to do so. Homeowners will often make ongoing savings on their fuel bills by carrying out energy efficiency measures but even so, it is important to think carefully about what financial upper limits should be placed on what homeowners are required to do, so that action taken is cost effective and proportionate.

Research has shown<sup>12</sup> that there is not one specific single approach that is normally used to define the cost effectiveness of energy efficiency upgrades in buildings.

Some of the cost effectiveness options include a cost cap focusing on the overall cost of upgrading a dwelling. This is the approach that is being taken for the first phase of regulations in private rented housing, which come into force from April 2020. Landlords will be expected to pay up to a

maximum of £5,000 to upgrade each property they let out, for each of the stages to EPC E and EPC D.

Another option is a simple payback test, which research has shown to be most widely used cost effectiveness option for dwellings. The payback test is based on estimating the fuel bill savings and calculating whether the cost of the upgrade will be paid back within its lifetime or within a maximum period.

A more complex option is a net present value approach, where future costs and benefits are discounted. This approach could potentially allow factors such future fuel prices, maintenance and replacement costs, etc. to be factored into the calculation.

Further information on cost effectiveness options and the research behind determining cost effectiveness options is contained within Annex D.

We welcome your views on the factors affecting an appropriate cost effectiveness test.

In particular, we welcome views on the trade-offs between ease of calculation and communication, the sophistication of the test, and the impact of the cost effectiveness definition on attainment rates.

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<sup>12</sup><https://www.climateexchange.org.uk/media/3611/defining-cost-effectiveness-for-energy-efficiency-improvements-in-buildings.pdf>

**Question:**

18. Considering the information above and in Annex D, what are your views on the best way to approach cost effectiveness, taking into account the trade-offs between how easy to understand and how sophisticated different definitions are, and how the different definitions might affect the number of homes that actually achieve the EPC C standard?

### 1.5.3 Time-limited abeyances

When the trigger point is reached and the standard cannot be met because it is either not technically feasible or not cost effective, we propose that the homeowner should be able to apply for a full or partial exemption from the legal requirement to meet the standard. As well as technical feasibility and cost effectiveness, there may be a limited number of other reasons why an exemption should apply, for example because the owner cannot get permission from their co-owners to do work on the common parts of blocks of flats.

We propose that any exemption should be for a limited time only, because the technologies available are developing continuously, and the real cost of many measures may also fall over time. This means that what is not

feasible or cost effective at one time, may become achievable two or three or five years later.

For the moment, we are using the term “abeyance” rather than “exemption” to emphasise its temporary nature.

We are seeking your views on both the reasons for an abeyance, and the practicalities of how they should be administered and by whom.

**Questions:**

19. Other than technical feasibility and cost effectiveness, are there any other reasons why a homeowner may not be able to bring their property up to EPC C at point of sale or renovation, and would need to be given an exemption or abeyance? (For example, difficulties of getting permission from other owners for common parts of buildings.) Please explain.

20. Do you agree or disagree that, even if a property can't fully meet the standard, it should be required to get as close as possible to it?

21. Do you agree or disagree that any exemptions or abeyances from the standard should be time-limited?

22. Which body or bodies should take decisions about granting abeyances? Should this be done at a local level or centrally at a national level?

## Part 2 - Helping homeowners to meet the energy efficiency standard

If homeowners are to be legally obliged to improve the energy efficiency of their properties, we need to consider and put in place help and support for them to do this. There is already a range of help available, described below, and we propose to build on this. We are now seeking your views on how to do that, and what additional help homeowners will need.

### 2.1 Knowing what measures are suitable for a particular home

In the Route Map and in previous consultations, we discussed the need for a robust assessment process that would give information to a homeowner about the measures and actions they could take for their individual property. And, if meeting the standard is to be compulsory, there needs to be a way of showing what is and isn't possible for a property, for cases where an exemption or partial exemption is to be considered.

We propose that, at point of sale (and potentially point of major renovation) – if the property does not already have a valid EPC certificate which shows that the standard is already met – then a homeowner would be required to have a property assessment carried out, as described below.

### 2.1.1 Overview of assessment proposals

In October 2018, the Scottish Government established a Short Life Working Group (SLWG) on Assessment. Composed of industry experts, it has produced a number of interim proposals around the assessment process.

These propose two levels of assessment – a Standard Assessment or a Full Assessment. Under section 64 of the Climate Change (Scotland) Act 2009<sup>13</sup>, a Standard Assessment will be mandatory at the trigger points outlined within this consultation.

Subject to legal scrutiny, the Standard Assessment will build upon the current EPC assessment process to help the homeowner to reach the regulatory standard. It will provide more functionality to allow EPC assessors to tailor recommendations for a specific property. The Standard Assessment will allow the assessor to select or insert more appropriate technical values (such as u-values or insulation thicknesses) and select the most appropriate recommendations for the property.

A proposed voluntary level of assessment, called the Full

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<sup>13</sup> <http://www.legislation.gov.uk/asp/2009/12/contents>

Assessment, will also be available, and will include and build upon the Standard Assessment by capturing additional data relating to occupancy and local climate. This aims to provide the property owner with a more relevant illustration of how the recommendations from the Standard Assessment will affect their specific circumstances.

Further information on the assessment process and the Interim Proposals of the Assessment Short Life Working Group can be found in Annex C. The SLWG will be continuing their work, building on their interim proposals to create a set of final proposals. The SLWG is seeking your views on their interim proposals, and will use your feedback from questions 23 to 27 below to inform this work.

**Questions on the Assessment SLWG interim proposals:**

23. The SLWG on Assessment propose that any new assessment regime should exist on two levels, comprising both a mandatory asset-based assessment and an optional occupancy-based assessment. What are your views on this approach? Do you agree that an occupancy assessment should be optional? Are there specific inputs that should be included in both? Please explain your answer.

24. The SLWG on Assessment propose that the output of the assessment should be a report with

tailored recommendations that set a clear pathway to both regulatory compliance (i.e. EPC band C) and zero carbon. There are conflicts between meeting the EPC rating and zero carbon. What are your views on how this can be handled/mitigated? Please explain your answer.

25. The new assessment proposals from the SLWG on Assessment include more of an advisory role for the assessor. What are your views on the additional skills and training required to deliver this role? Are existing Domestic Energy Assessors best placed to provide the tailored recommendations? What risks and conflicts do you foresee and how would you propose to mitigate them? Please explain your answer.

26. The SLWG on Assessment propose that the tailored recommendations to improve energy efficiency and achieve zero carbon should consider the legal designation of buildings, obvious defects or condition issues, and local costings. Do you foresee any liability issues in this approach and if so, what suggestions do you have to mitigate them? Do you believe the inclusion of local costings to be practical and what are your thoughts on what level should be considered 'local'? Should the local cost of energy also be considered? Please explain your answer.

27. The SLWG on Assessment propose that the assessment should provide a theoretical indication of whether recommendations are technically feasible. Please provide your views on who should determine actual technical feasibility? Should this be a qualified installer or someone else? Please explain your answer.

### 2.1.2 Advice is available from Home Energy Scotland

At the core of our offer to homeowners (and all other households) is Home Energy Scotland (HES), which provides free and impartial advice on energy efficiency, energy saving and home renewables measures.

HES also provides advice to households on funding and support available for energy efficiency and home renewables and makes onward referrals to Scottish Government fuel poverty programmes, Local Authority Area Based Schemes, income maximisation support and, for vulnerable customers, referrals for tariff switching advice. HES Energy Carers visit the most vulnerable people in the community in their own homes to ensure they get the support they need.

We propose to continue providing an advice service, available to all.

### 2.2 Finding Suppliers and Ensuring Quality

In order for householders to act on the recommendations of the assessment it is important that they will have access to suppliers and installers who can provide a high quality service.

Previous consultations on Energy Efficient Scotland<sup>14</sup> have identified a consensus that the availability and expertise of trusted suppliers and installers is essential for the programme to succeed. Consumer protection, quality assurance and skilled trades throughout the supply chain will be critical.

As a result, we set up an independent, industry-led Short Life Working Group (SLWG) focusing on the quality, skills and consumer protection requirements of the Programme.

In March 2019, the SLWG published recommendations<sup>15</sup> on five key elements of the Energy Efficient Scotland programme;

- Quality assurance
- Building a workforce
- Consumer Protection
- Procurement
- Non-domestic sector

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<sup>14</sup> <https://consult.gov.scot/energy-and-climate-change-directorate/scotlands-energy-efficiency-programme/> & <https://consult.gov.scot/energy-and-climate-change-directorate/lhees-and-dhr2/>

<sup>15</sup> <https://www.gov.scot/publications/quality-assurance-short-life-working-group-report/>

Overall, the SLWG felt that there was a need for robust quality assurance criteria under Energy Efficient Scotland, which would require close inspection and the imposition of sanctions on suppliers who failed to meet the criteria. They also felt that the Programme should be based around the skills and competencies of the operatives undertaking the work and that protection of consumers should underpin every element of the Programme. In addition, the SLWG suggested a new designer role should be considered to ensure that a whole building approach is taken and that only the most appropriate improvements are applied.

We also consulted on the SLWG recommendations through the Energy Efficient Scotland: consultation on further development of the programme<sup>16</sup>. Respondents were asked if they agreed with the recommendations, with around two thirds of correspondents stating they did and many expressing the view that they were thorough and comprehensive.

The consultation also asked questions on ensuring participation of suppliers across all parts of Scotland, as well as on the role of the Scottish Government in ensuring quality criteria are met.

Further analysis of the consultation responses can be seen in the “EES:

consultation on further development of the programme: Analysis of responses to the public consultation exercise”<sup>17</sup>.

Since we last consulted, we have made significant progress in relation to skills for the EES Programme, with the minimum skill requirements of suppliers now identified in conjunction with industry. A more comprehensive update on the quality assurance work will be produced next year. We will use your feedback from this consultation and the previous one to inform this work.

**Questions:**

28. In your view, what are the most important considerations for homeowners who are required to meet the legally-binding standard, in relation to skills, supply chain, consumer protection and quality assurance?

29. What are your views on how the Quality, Skills and Consumer Protection SLWG recommendations specifically have an impact on the owner occupied sector? Please explain.

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<sup>16</sup> <https://www.gov.scot/publications/energy-efficient-scotland-consultation>

<sup>17</sup> <http://www.gov.scot/ISBN/9781839603952>

## 2.3 Financing the Work

We understand that how to fund the work needed to meet the legally-binding standard will be a key question for homeowners. The overall investment needed to bring all owner occupied homes up to EPC band C is estimated to be in the region of £6 billion. Given that these are private assets, funding this will require a mix of grants, low-cost loans and private investment by the homeowner.

The Scottish Government has been providing financial support to households for a number of years, supporting those living in fuel poverty with grant funding, and providing loan finance to others to make energy efficiency improvements to their properties that reduce their greenhouse gas emissions and save money on their fuel bills.

We propose to continue to focus our grant funding support on those who are most vulnerable and are in fuel poverty. We are committed to meeting the new fuel poverty targets and eliminating fuel poverty as a driver of energy efficiency.

We also plan to continue to make loans available to those who may not be eligible for grants, to help with the upfront cost of works and allow homeowners to unlock the potential energy savings that can come from making energy efficiency improvements, as well as supporting them to meet the legally-binding standard.



We also wish to encourage the private finance sector to expand its range of products for homeowners. A small number of financial institutions already offer financial products that support homeowners to improve the energy efficiency of their homes. This is a relatively new and developing market. We are exploring ways in which we can encourage and support more financial institutions to develop products that will give customers a range of finance options that support them to improve the energy efficiency of their homes.

As an example, the Scottish Government is a member of the Energy Efficient Mortgage Initiative, a pan-European project focussed on bringing together public administrations, banks and finance institutions to support the design and delivery of an energy efficient mortgage that will help householders to meet the cost of energy efficiency measures.

Our current Scottish Government funding programmes which are available to homeowners are described below.

### **2.3.1 Home Energy Scotland Loan**

As well as providing free, impartial advice through HES, the Scottish Government provides interest-free loans helping to spread the cost of making energy efficiency improvements and installing home renewables.

Loan funding of up to £38,500 per home is available to homeowners in Scotland. This covers a range of energy efficiency improvements, including up to £17,500 for home renewables systems or connections to an approved district heating scheme powered by a renewable energy source. The repayment period varies based on the amount borrowed. Those taking out higher value loans will be able to pay them back over 10 years. Since 2017, the HES loan has supported householders to install more than 2,400 energy efficiency improvement measures.

### **2.3.2 Equity Loans**

In 2017, we launched a pilot project offering homeowners in eight local authority areas across Scotland the facility to take out an equity loan to help pay for energy efficiency improvements and specified maintenance activities. The equity loan enables householders to borrow money against the value of their property with the loan being paid back when the property is sold or the last applicant for the loan is deceased. The pilot project will run until March 2020 and we will review the outcomes as part of considering how our loan offers can best support the delivery of Energy Efficient Scotland.



### 2.3.3 Fuel Poverty support - Warmer Homes Scotland

The Scottish Government provides support to homeowners and private sector tenants living in or at risk of fuel poverty – who have lived in the property for at least 12 months and receive qualifying benefits – to make their home warmer and more affordable to heat by installing a range of energy efficiency measures. This support can be accessed through Home Energy Scotland. To date Warmer Homes Scotland has helped over 17,000 households since it began in September 2015.

### 2.3.4 Fuel Poverty support - Area Based Schemes

The Scottish Government provides funding for local Councils to deliver energy efficiency schemes to help homeowners and private tenants in areas with high levels of fuel poverty. This includes a wide range of projects, but the main focus is to provide solid wall and cavity wall insulation for 'hard to treat' properties (e.g. tenements, 'non-traditional build houses etc.). Typically there is little or no cost for these measures to the householder. Households are only eligible for ABS funding if they are affected by fuel

poverty – for example if they are on certain benefits - or on a low income and at risk of cold. Households can also benefit if providing a measure to their property would help other fuel poor households in their block or row ('infill' properties). Since 2013, our Area Based Schemes have helped over 87,000 households.

#### Questions:

30. In your opinion, is this the right range of Scottish Government financial support schemes? Are there any gaps, regarding either types of financial product or groups of people who may be excluded from being able to access products? Please explain your views.

31. Do you agree or disagree that grant funding from the public purse should be focused on households who are vulnerable or in fuel poverty? Please explain if you disagree.

32. In your opinion, what sources of non-government, private sector support are people most likely to want to access? (eg from banks, building societies, credit unions, mortgage providers)

## Annex A - Energy Performance Certificates

### What are Energy Performance Certificates?

Energy Performance Certificates (EPCs) provide information on how energy efficient your building is, and how it could be improved. Buildings are rated on a scale from A-G, with A being the most efficient. Information is also provided on measures which could be made to improve the energy efficiency and an indication of the cost for each improvement.

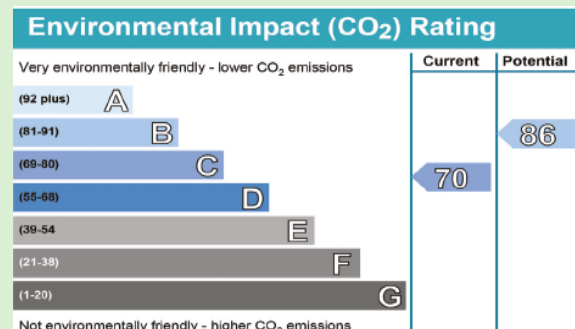
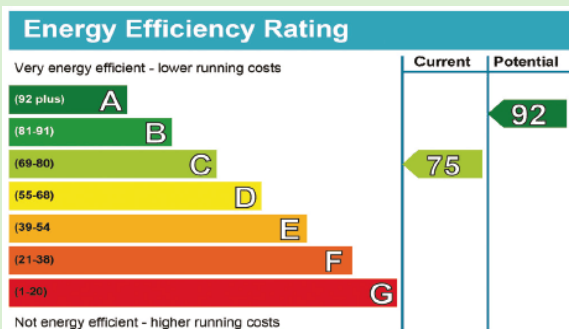
An EPC must be produced when a new building has been constructed; and when a building is to be sold or rented to a new tenant. An EPC must also be obtained and displayed in a building over 250 m<sup>2</sup> in area, which is occupied by a public authority and frequently visited by the public.

EPCs are valid for 10 years. They are based on information such as the size and layout of a building, how it has been constructed and the way it is insulated, heated, ventilated, and lighted. Since people use buildings in different ways, the calculation is based on standardised assumptions of occupancy and use.

### What do domestic EPCs show?

Domestic EPCs display an Energy Efficiency Rating (EER) and an Environmental Impact Rating (EIR). The EER is rated in terms of energy costs, while the EIR is rated in terms of carbon emissions. Domestic EPCs also have numerical ratings, with a higher number suggesting greater energy efficiency.

On an EPC the numbered arrows show the current rating based on the existing energy performance of the property and the potential rating if the suggested improvements are implemented. An EPC also shows the Primary Energy Indicator which is based on the kWh of energy use per square metre.



The EER is the most widely recognised rating on an EPC. The EER is based on costs, so varies by energy supply rather than just fabric performance. The EIR rates the environmental impact of a property by measuring a property's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions.

Both EER and EIR are relevant given the dual objective of Energy Efficient Scotland in eliminating poor energy efficiency as a driver of fuel poverty and reducing greenhouse gas emissions.

The Primary Energy Indicator is based on the annual kWh energy use per square metre. This indicator varies by energy supply as it takes into account energy lost in generation, transmission and distribution. However the current layout of the EPC does not offer a way of indicating and interpreting that figure into energy efficiency and environmental impact values that would be understandable for most homeowners.

A potential issue with basing EES targets on the EER, is the higher fuel costs in Standard Assessment Procedure<sup>18</sup> (SAP) for some renewable and low carbon heating sources. In some scenarios using SAP methodology, moving from a higher

efficiency gas boiler to a heat pump powered by electricity would result in a worsening of the EER.

This would mean in those particular scenarios, replacing gas boilers with heat pumps might reduce the EER, with a consequence that a property might not meet the standard. Using SAP methodology in those scenarios would also reduce the EIR rating due to the current higher SAP emissions values for electricity.

The current SAP emissions values do not yet not reflect the decreased emissions associated with electricity. This is problematic as installing heat pumps will make an important contribution in meeting our climate change targets. However, SAP values may change in the near future.

Future versions of SAP may improve the emissions factor of electricity as well the primary energy factor. This is due to environmental improvements and decreased emissions associated with the continuing decarbonisation of the electricity supply to the National Grid. This will help technologies such as heat pumps contribute to achieving climate change targets in the future.

As a result of any changes to SAP, there may be a need for the long term EES standard to be flexible and

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<sup>18</sup> <https://www.gov.uk/guidance/standard-assessment-procedure>

reviewed at specific points in the future.

Any review of the standard could also take into account other issues that may affect whether properties meet the standard, such as the development of the energy supply in the short to medium term including any possible UK Government announcements on hydrogen and the re-provisioning of the gas network.

We intend to use this consultation to consider whether the long term EES standard should be flexible and reviewed at specific points in the future or whether the standards should be fixed in the regulations from the outset (see Question 6).

In the medium to long term, with uncertainties around the timescales for changes to fuel costs and emissions for electricity in SAP and the future technology mix for heat decarbonisation, there may be merit to initially focusing the owner occupier regulations on improving the building fabric as much as possible. This would help both those living in fuel poverty and in reducing emissions.

Alongside the fabric first approach, in order to incentivise low carbon and renewable heat sources such as district heating and heat pumps, or facilitate those who wish to decarbonise their heating supply, we are proposing an abeyance for those properties which install heat pumps or connect to district heating but do not meet the EPC band C target based on the EER.

There may be an opportunity to develop guidance to accompany the regulations which could outline any heating technologies and/or district heating that would be eligible for abeyances. We would expect in those scenarios that the majority of building fabric improvements will have already been made to a property where technically feasible and cost effective.

Finally, where a property does not meet the EPC band C standard by the installation of any measures to improve EER, there may be potential to introduce a requirement that the EIR is not made worse following the installation of those measures.

## Annex B – Defining Major Renovation

When householders make improvements to their homes, these need to comply with Scottish Building Standards<sup>19</sup>. If a builder is doing the work for you, it's the responsibility of the builder to meet Scottish Building Standards. But it's your responsibility as a homeowner to ensure that the builder does so.

In some cases, building work and renovations may need a building warrant. All works must meet building regulations, even if no building warrant is required. Householders should always check with their local building standards department if they need a building warrant, before carrying out any renovations.

Currently, with some limited exceptions, building regulations in Scotland don't require a homeowner to make any "consequential improvements"<sup>20</sup>. We are proposing that a consequential improvement requirement could be brought in, to require homeowners to improve the energy efficiency of their home when undertaking a major renovation.

A likely definition of 'major renovation' could be based on the Energy

Performance of Buildings Directive (EPBD)<sup>21</sup>. The Directive has been revised to build a forward-looking climate change policy. The Energy Performance of Buildings Directive is, together with the Energy Efficiency Directive, the main legislative instrument to promote the energy performance of buildings and to boost renovation within the EU.

Major renovation is cited in the EPBD definition(s) – Article 2: 'major renovation' means the renovation of a building where:

(a) the total cost of the renovation relating to the building envelope or the technical building systems is higher than 25 % of the value of the building, excluding the value of the land upon which the building is situated; or

(b) more than 25% of the surface of the building envelope undergoes renovation;

In 2012, we consulted<sup>22</sup> on options for the appropriate definition of major renovation, and 'cost', outlined in

<sup>19</sup> <https://www.gov.scot/policies/building-standards/monitoring-improving-building-regulations/>

<sup>20</sup> A requirement to improve building energy performance triggered by change or improvement to another aspect of the building.

<sup>21</sup> <https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-performance-of-buildings/energy-performance-buildings-directive>

<sup>22</sup> <https://www.webarchive.org.uk/wayback/archive/20160105083456/http://www.gov.scot/Topics/Built->

Article 2(a) of the EPBD was the preferred options from stakeholders.

The definition of major renovation will help outline when the trigger point is activated. It is highly likely a building warrant will be required in those circumstances, though a homeowner should always check.

We are keen to hear views on the EPBD definition of major renovation to be used as the definition of the trigger point. We also want to hear of any other potential views on appropriate definitions of major renovation.

## Annex C - Assessment

### Background

In our 2018 Route Map, we committed to using and building upon the current Energy Performance Certificate (EPC) assessment process in order to support the introduction of a long term standard for energy efficiency. We recognised that homeowners need an appropriate and proportionate assessment process to inform them as to how energy efficient their home is, what action they need to take to meet the standard and, once done, how to demonstrate they have met it.

In October 2018, the Scottish Government established a Short Life Working Group (SLWG) on Assessment, bringing together industry experts from Building Research Establishment (Chair), Built Environment Forum Scotland, Changeworks, Citizens Advice Scotland, COSLA, Elmhurst Energy, Energy Saving Trust, Heriot-Watt University, Historic Environment Scotland, Institution of Civil Engineers, Royal Institution of Chartered Surveyors, The Wise Group and Zero Waste Scotland.

The aim of the Group is to review and advise on what additional assessment requirements are needed to support homeowners in meeting the standard. This included, but was not limited to, consideration of the tools needed to

deliver such assessments, technical feasibility and cost effectiveness, the skills required to deliver, the scoping of costs and wider consideration of building condition. It is worth noting that whilst this consultation focusses on the owner-occupier sector, assessment has been developed to also consider the private rented sector.

Since forming, the Group have met seven times and have produced a set of Interim Proposals, included in this Annex for consideration. These proposals outline the discussions and agreement of the Group to date and, at this stage, offer a broad view of how a new assessment regime might work. After this consultation, the Group will reconvene to consider any feedback received and develop a set of final recommendations for Scottish Ministers in 2020.

It is important to highlight at this stage that whilst the Group were asked to consider how such an assessment might be streamlined with the current EPC process, the methodology used for EPCs was out of scope. More information on what we are doing to improve the EPC methodology is provided below at 'Update on EPC work'.

## **Topics still to be considered by the SLWG**

The proposals outlined below are, at this stage, intended to offer broad-level principles. There are a number of areas that are yet to be fully explored by the Group. These include:

- A definition for cost effective. This is explored in more detail in Annex D. The working group will need to consider this in the context of assessment to ensure there are no conflicts;
- Arrangements and processes associated with compliance and enforcement;
- How a potential 'Designer' role (as recommended by the Quality Assurance SLWG) or the introduction of PAS 2035 might integrate with the assessment process; and
- How buildings of multi-tenure, multi-use and multi-dwelling might be approached. Whilst this represents a broader issue, the working group will need to consider this in the context of assessment to ensure there are no conflicts.

### **Update on EPC work**

In our 2018 Route Map, we have committed to using EPCs as the 'standard' for measuring the energy performance of domestic properties.

This system is well understood and well embedded, though its application and underlying methodology does attract some criticism. Feedback received through previous consultations has highlighted a number of concerns around the underlying methodology of EPCs and, in January 2019, we published A Review of Domestic and Non-Domestic Energy Performance Certificates in Scotland<sup>23</sup> to explore these issues and identify how EPCs can be improved. This report noted 80 possible actions for our consideration. These will be fully explored as part of our work on Energy Efficient Scotland, with a view to publishing an Action Plan on EPCs in 2020.

### **Assessment - Draft SLWG Recommendations Proposals Report**

A brief overview of the Interim Proposals of the Assessment Short Life Working Group is provided here.

We propose that a new assessment regime should form two levels; a Standard Assessment and a Full Assessment.

A Standard Assessment will be mandatory under section 64 of the Climate Change (Scotland) Act 2009, at the trigger points outlined within this consultation.

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<sup>23</sup> <https://www.gov.scot/publications/review-domestic-non-domestic-energy-performance-certificates-scotland/>



Subject to detailed legal investigations, the Standard Assessment will include and build on the current EPC assessment process. It will use RdSAP methodology to ensure recommendations align with the regulatory standard, but provide the assessor with more functionality to allow them to tailor the recommendations to the specific building.

As well as the standardised data collected via the EPC assessment, the assessor will collate information on building designations, obvious defects or condition issues, local measure costings, the scenario preferences of the building owner (e.g. lowest cost, biggest cost savings or carbon savings) and tie in with the Local Authority's Local Heat & Energy Efficiency Strategy. By including this extra data, it is intended that assessors will have more ability to provide relevant and tailored advice and recommendations to building owners. However, it is important to highlight that it is a purely asset-based assessment and takes no account of how a building is used.

A Full Assessment will include and build upon the Standard Assessment by capturing additional data relating to occupancy and local climate. This aims to provide the building owner with a more relevant illustration of how the recommendations from the Standard Assessment will affect their specific circumstances. It may also provide limited ability to optimise the

recommendations made through the Standard Assessment. It is proposed that this level of assessment be voluntary.

On completion of an assessment, building owners will be provided with a report of recommendations. These should be listed in a fabric-first hierarchy and provide a clear pathway to both regulatory compliance and zero carbon. The report should be adapted to the owner's scenario preferences and should signpost to available support services.

It is proposed that current EPC assessors are best placed to deliver a new assessment regime, given their current knowledge and skills. However, as these proposals will move assessors into more of an advisory role, upskilling will be required. This will include more detailed training on construction types, energy efficiency measures, renewable energy systems and softer skills, such as identifying and working with more vulnerable groups.

If the assessment is delivered by the private market, there is a need to ensure adequate protections are in place for consumers. Accreditation and quality assurance measures are already in place for EPC assessors, but a revision to the assessment regime provides a useful opportunity to review these and ensure they are robust.

Early estimates on costs indicate that the Standard Assessment should cost

only a little more than the current EPC rate of £50-£120, and a Full Assessment will cost up to double. It is therefore proposed that those who can pay should, and adequate financial support be offered to those who can't. Costs should be factored into existing and future support schemes (e.g. loans).

# Assessment Short Life Working Group

## Draft Interim Proposals – December 2019

### General Overview

**An assessment should exist on two levels and should comprise both a mandatory and an optional element**

Two levels of assessment are proposed, a Standard Assessment and a Full Assessment. The Standard Assessment will be mandatory, and homeowners will be required to undertake this to meet regulatory obligations (i.e. EPC band C by 2040). It will include and build upon the current Energy Performance Certificate (EPC) process, by offering more functionality to tailor recommendations to a specific building.

The Full Assessment will include and build upon the Standard Assessment by introducing an occupancy element. This aims to provide owners with an understanding of how recommendations made through the Standard Assessment might impact on their specific circumstances. In most situations this element will be optional.

Both levels of the assessment are outlined in more detail below.

### Standard Assessment

**A Standard Assessment should be mandatory under regulation**

This will require all homeowners to undertake a Standard Assessment at one of the specified trigger points outlined within the main body of this consultation i.e. point of sale or point of renovation. Only by making the Standard Assessment mandatory can we meet the requirements set out within Section 64 of the Climate Change (Scotland) Act 2009<sup>24</sup> and help homeowners to work towards the challenging targets outlined in the Energy Efficient Scotland: Route Map.

**A Standard Assessment should use RdSAP methodology to ensure it meets regulatory needs**

Through the 2018 Energy Efficient Scotland: Route Map, the Scottish Government has committed to setting a long term standard for domestic properties using the Energy Efficiency Rating of EPCs. To ensure that the output recommendations of the

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<sup>24</sup> <http://www.legislation.gov.uk/asp/2009/12/contents>

Standard Assessment meet these requirements, the process should be built on existing RdSAP conventions.

### **A Standard Assessment should include and build upon the current EPC process**

The Standard Assessment process should include and build upon the current EPC process by offering more functionality to tailor recommendations to a specific building. This will allow the assessor to select or insert more appropriate technical values (such as u-values or insulation thicknesses) and select the most appropriate recommendations for the building. It is important to note that, given the use of RdSAP, the Standard Assessment will be an asset-based measure of energy performance (as is currently the case with EPCs) and will take no account building use.

Subject to more detailed legal investigations, this should be a single assessment process that smooths delivery for homeowners and allows us to meet the requirements of both the Energy Performance in Buildings Directive<sup>25</sup> and Section 64 of the Climate Change (Scotland) Act 2009.

### **Full Assessment**

#### **A Full Assessment should be offered to homeowners**

The RdSAP conventions used within the Standard Assessment are based on generic assumptions about energy and building use. A more detailed, Full Assessment should be offered to homeowners as an optional and additional service. This will build upon the Standard Assessment by introducing an occupancy element, allowing assessors to optimise recommendations and illustrate to homeowners how these might impact on their specific circumstances. This will require additional data that represents how the household use their building e.g. heating patterns.

To be clear, a Full Assessment will still be reliant on the RdSAP conventions used during the Standard Assessment and should not be confused with a full SAP calculation.

There are circumstances where a Full Assessment may be the most appropriate option e.g. for vulnerable customers or those considered to be in fuel poverty. Where an assessment is delivered via a Scottish Government or local authority programme, the Full Assessment should be delivered as the default option.

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<sup>25</sup> <https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-performance-of-buildings/energy-performance-buildings-directive>

## Recommendations

### **Recommendations should be tested for technical feasibility and cost effectiveness**

As far as possible, recommendations made through an assessment should be actionable. It is therefore important to only recommend measures that are technically feasible and cost effective from the outset. The process for testing these elements should be as straightforward for the assessor as possible.

Where recommendations are not considered technically feasible and/or cost effective, homeowners will be offered an opportunity to apply for an exemption. The exemption process should be fair and robust to remove opportunities for 'easy opt-out'. Additionally, an exemption now should not necessarily mean an exemption in the future. Measures may become technically feasible or cost effective in the future, as technology develops or installation costs reduce.

### **A homeowner should be provided with a tailored report of recommendations, setting a clear pathway to a warmer home, regulatory compliance and zero carbon**

This will provide homeowners with a clear plan of how to improve the efficiency of their property, to make their home warmer and meet regulatory requirements and beyond. Where possible, it will also provide a clear pathway for making their building zero carbon through, for example, the decarbonisation of their heat supply. Recommendations should be presented according to the homeowner's preferred scenario (e.g. lowest capital cost, highest carbon reduction). However, alternative scenarios should be offered to give the homeowner more choice, particularly where different low carbon heat options may be suitable.

For some buildings it may not be possible to present a series of recommendations that reach regulatory compliance and/or zero carbon, for example, where recommendations are deemed not to be technically feasible or cost effective. In such instances, homeowners would be expected to undertake any recommendations that are actionable, bringing the building as close to compliance as possible.

Whilst a significant amount of data collection will be required, the final report should be clear and concise, providing the homeowner with only the information they need to make informed decisions. Should the homeowner wish, all data should be made available to them on request.

## Delivery

### Assessors

#### **An assessment should be conducted by an existing EPC assessor**

The current EPC market provides a convenient foundation on which to build a new assessment regime, and existing assessors already carry the core knowledge and skills required to deliver this.

#### **Existing EPC assessors will require further training and/or qualifications to deliver an assessment**

Whilst existing EPC assessors have the core knowledge and skills required to deliver an assessment, whether Standard or Full, they will require additional training. It is envisaged that assessors will take on a more advisory role. They will be required to identify and communicate how different measures will impact the property and homeowner, the pros and cons of each intervention, any potential disruption required for installation, and any change in household/system functionality post installation. This will require more specialised training on building construction types (including specific training on traditional buildings), listed buildings and conservation areas, and insulation measures and renewable energy systems. There may also be a need to develop softer skills, such as customer service, identifying and engaging with vulnerable customers, consumer protection, working with cultural differences and available funding and support schemes. Though this appears extensive, it should be highlighted that not all assessors would necessarily be required to be trained in all areas. For example, some assessors may specialise in traditional buildings, whilst others specialise in more modern construction types.

There are a number of formal qualifications already available (e.g. City & Guilds Energy Awareness) that may meet the requirements of these proposals. There are also opportunities to build upon existing training programmes and develop new formal qualifications.

To ensure the correct skills are identified, a full skills review will be necessary.

### Consumers

#### **Assessors should be fully accredited, which could be supported by a Scottish Quality Mark.**

It is vital to implement adequate consumer protections to ensure the service delivered by assessors is consistent, of high quality, fair and cost effective. Through

the Scottish Government's Operating Framework for Approved Organisations<sup>26</sup>, there are currently measures built into the existing EPC process to protect consumer interests, specifically relating to quality assurance and recourse. Some of these measures are as follows:

- Each Approved Organisation must publish and enforce a code of conduct for members, together with a complaints, appeals and disciplinary processes;
- Minimum requirements for audit of EPC output are set within the Operating Framework;
- Action in response to complaints (if upheld) and on audit failures can extend from enhanced future auditing, through additional training right up to suspension and termination of registration; and
- Where an assessor is in default, the Approved Organisation must act to rectify issues with the customer.

Current accreditation frameworks may not be sufficiently robust to fully protect consumers, particularly if the assessment market expands rapidly. It is likely that quality assurance will need to be expanded and sufficiently resourced to ensure that the process works properly for consumers as the basis for improvement. The introduction of a new assessment regime provides an opportunity to review and build upon these to ensure a robust and fair system.

The use of accreditation and associated quality assurance will help provide assurance of an assessor's competence, whilst use of a quality mark over and above that will reassure consumers that the service they provide is of an adequate standard. Furthermore, a quality mark endorsed by the Scottish Government will lend the Standard and Full Assessment extra credibility from a consumer perspective.

It should be noted that the Scottish quality mark and the accreditation scheme are still under development.

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<sup>26</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2012/12/energy-performance-certificate-approved-organisations-operational-framework/documents/operational-framework-epc-approved-organisations-pdf/operational-framework-epc-approved-organisations-pdf/govscot%3Adocument/operational%2Bframework%2Bfor%2Bepec%2Bapproved%2Borganisations.pdf>

## Costs

### **Early estimates suggest a Standard Assessment may cost only marginally more than a current EPC assessment**

Against the current EPC base rate of £50-£120 per assessment, early estimates suggest that a Standard Assessment may cost an additional £10-£30. This factors in the additional time that would be required to define specific data and adjust the recommendations accordingly.

Estimating the costs of the Standard Assessment is difficult at this stage as there is no current model on which to base this, beyond the current EPC assessment. It is important to note that costs will be driven significantly by market conditions. Furthermore, this estimate does not yet factor in costs of additional training for assessors, applying tests for technical feasibility and cost effectiveness, or the extra time required to log obvious building defects. The costs presented here are therefore subject to change.

### **A Full Assessment may cost up to double that of the current EPC assessment**

Again, against the current EPC base rate of £50-£120, initial estimates suggest that the Full Assessment may cost an additional £50-£120 i.e. up to double the current EPC price. These costs include all those associated with the Standard Assessment, plus the additional training, and time required to undertake the occupancy element of the assessment.

We are more confident with these figures, as there are existing models on which to base them. Again, this estimate does not include costs associated with applying tests for technical feasibility and cost effectiveness or the extra time required to log obvious building defects. The costs presented here are therefore subject to change.

### **The cost of an assessment should be met by the homeowner, with appropriate financial support provided to those who need it**

Generally speaking it is proposed that homeowners who are able to pay, should do so. It is also proposed that those that are unable to pay should be provided with adequate financial support to carry out an assessment. The working group acknowledge that 'unable to pay' needs to be more clearly defined. However, this lies out with their remit.

There may be situations where those usually considered 'able to pay' do not have the funds available. With the offer of two assessment levels (Standard and Full), there may also be situations where homeowners can pay for the Standard Assessment, but are unable to stretch to a Full Assessment. This may result in those who would potentially benefit most from a Full Assessment missing out. The



inclusion of assessment costs should therefore be considered in all current and future support programmes, such as local and national grant funding and loan schemes.

Furthermore, the Full Assessment may offer a useful means by which to assess fuel poverty according to the new definition, and therefore support the delivery of the Fuel Poverty Strategy. Accordingly, it would be logical to fund the assessment for those in fuel poverty given that two of the four drivers of fuel poverty are determined by the occupant (behavioural use of energy and income level).

## Assessment tool

### Inputs

**A Standard Assessment, as a minimum, should draw on the following inputs:**

**(a) Data and recommendations from an EPC assessment**

As the Standard Assessment is rooted in the existing RdSAP methodology, any tool developed must be able to draw on EPC measurement data, whether taken at the time of the Standard Assessment or taken from a previous (in date and still relevant) EPC assessment. There is potential to automate some of this process by pulling data through from the existing EPC Register.

It is noted, however, that whilst it will be acceptable to draw on a previous EPC assessment, in practice assessors are likely to opt for conducting a new assessment, particularly where a previous assessment has been done by another assessor. There are a number of reasons why this situation may occur, including liability issues or the time required to check another assessors work being closely matched to collating new data. This creates a need to ensure clear messaging to building owners as to why a new assessment is being undertaken.

**(b) Legal designations of the building in question e.g. listed building status, conservation zone, etc.**

The legal designation of a building should be noted and there is potential to draw some of this information from existing data sources, such as Historic Environment Scotland's Canmore. This will allow certain recommendations to be flagged and the assessor to make an informed decision about their appropriateness. For any such assessments, appropriate disclaimers should be made against the assessor's recommendations and the homeowner should be directed towards their local planning authority for further guidance on the acceptability of recommendations, according to planning regulations.

**(c) Obvious defects or condition issues that may impact on the installation and/or effectiveness of any improvement measures**

Often, building defects will impact on whether or not a measure can be installed or its effectiveness when installed. It is therefore important to log any obvious building defects and bring these to attention of the homeowner. In practice, this may be straightforward at point of sale, where an assessment is being undertaken by a surveyor as part of a Home Report survey. In other instances, there may be opportunity to draw on and adapt some aspects of the House Condition Survey to suit.

It is important to note that the assessment does not include a detailed condition survey and will not account for any hidden defects. The homeowner may be required seek additional technical advice from a suitably qualified professional. This element should therefore include relevant disclaimers.

Defects or condition issues should not lead to an exemption. Any measures recommended by an assessor that would otherwise be considered technically feasible and cost effective should be installed, but should be accompanied by any necessary repair work.

**(d) Local costings for the installation of measures**

The inclusion of local costings will be vital to fully informing the homeowner of the potential costs of any work needing to be completed. It will also be necessary to determine whether or not recommendations are cost effective.

Local costings do present significant challenges, however, that need to be fully explored. The level of 'local' is a key issue, as is its interaction with cost effectiveness, particularly in geographical areas that might attract a rural premium. Care must be taken to avoid rural exclusion i.e. where rural properties have the potential to be more efficient but are limited because of their location. Management of such data is another key issue, e.g. who collects and manages the data, how is it stored and accessed and how is validity and quality maintained.

**(e) Scenario preferences of the homeowner**

Homeowners may have different motivations when improving the energy efficiency of their properties. For example, some may be motivated by lowest installation cost, whilst others by savings (energy, cost or carbon) or available incentives. It is important therefore to capture this information so that the associated recommendations might be tailored to suit.

## **(f) Local Heat & Energy Efficiency Strategies**

It is important to ensure any recommendations being made via an assessment are consistent with plans laid down by the local authority, through their Local Heat & Energy Efficiency Strategy. This will be particularly important when recommending low carbon heat options. It is vital to ensure that any recommendations made do not undermine any zoning undertaken by the local authority, whilst also ensuring homeowners are given adequate choice. Assessors will therefore have to be aware of specific local strategies.

### **A Full Assessment, as a minimum, should draw on the following inputs:**

As previously stated, a Full Assessment includes and builds upon the Standard Assessment. Therefore, all data collected via the Standard Assessment should be pulled through into the Full Assessment.

#### **(a) Occupancy patterns**

In order to demonstrate how recommendations will impact directly on the household, it is important to include occupancy patterns and how energy (and how much energy) is used within the building. The level of detail required to assess occupancy is yet to be fully explored. However, this could be fairly standardised, providing discrete categories of occupancy that can be tweaked based on the household's circumstances. Or it could be more free-form, drawing data from household interviews, thermostat settings, billing information, smart meter data (with the necessary permissions) or a mix of all of these.

There is also potential that this information could be recorded directly by the homeowner via, for example, an online tool. This may help to maintain data integrity, mitigate any instances of data manipulation and reduce the cost of the Full Assessment.

#### **(b) Local climate data**

As with the occupancy information, the inclusion of more specific local climate data will help to provide a more tailored illustration of how selected recommendations will impact on the household directly.

## **Outputs**

### **An assessment should, as a minimum, provide the following outputs:**

- (a) A tailored set of recommendations that sets a clear pathway for the property achieving regulatory compliance and zero carbon**

This will provide a clear plan of action for the homeowner, demonstrating the most suitable route to a warmer home, regulatory compliance and beyond (via all relevant EPC bands), and zero carbon, in an appropriately staged approach. This will help to future-proof the assessment process against any potential regulatory changes and in so doing, will help Scotland meet its challenging climate change targets. Homeowners should be actively encouraged to go beyond regulatory compliance wherever possible.

Recommendations should always be displayed in a fabric first hierarchy.

As far as can be determined at the assessment stage, recommendations should be technically feasible and cost effective. A clear description for both should be provided to the homeowner to ensure they understand how this has been determined. Technical feasibility will likely require a suitably qualified technical expert and recommendations should therefore be caveated to reflect this. Cost effectiveness may present some conflict as it may still be beneficial to display some measures that are deemed not to be cost effective in order to provide a clear pathway to regulatory compliance or zero carbon.

**(b) A description of how the recommendations impact on the building's ability to meet regulatory requirements (i.e. Standard Assessment) and, where chosen, how they will impact the household directly (i.e. Full Assessment)**

In the case of a Standard Assessment, this will demonstrate the extent to which the building meets regulatory requirements. This could also include an estimate of cost, energy and carbon savings, with the caveat that these are based on standard assumptions relating to occupancy.

A Full Assessment will take this a step further by illustrating how the recommendations will impact on the household directly. Again, this could include estimates of cost, energy and carbon savings, noting these have been more tailored to the household's use of the building and therefore should be more representative. Disclaimers will be required, however, to note that savings outlined here are estimates, calculated based on data provided by the homeowner and are intended for illustrative purposes only.

**(c) Different scenarios based on the homeowner's preferences**

Recommendations should be presented according to the homeowner's preferences and needs recorded during the assessment e.g. cost savings, carbon reduction or preference for certain measures. The report should outline various different scenarios dependent on these preferences as well as highlight any current or future

incentive schemes available in Scotland e.g. Renewable Heat Incentive or Smart Export Guarantee (SEG).

In some cases, a homeowner may wish to see all scenarios, or may be indifferent to the presentation of information. In which case, all scenarios should be presented on the report.

It is worth noting that there may be some difference between the presentation of scenarios dependent on whether the homeowner is receiving a Standard or Full Assessment. Disclaimers should therefore be included to highlight that the scenarios are determined based on either standardised data that is not as tailored to the homeowner's personal circumstances (Standard Assessment), or additional data provided by the homeowner (Full Assessment).

**(d) Advice on how to be more energy efficient and a list of available support services**

Homeowners should be provided with advice on how to use their home in a more energy efficient manner. With the homeowner's permission, this could also include a referral to Home Energy Scotland for more free and impartial advice or support. They should be provided with a list of the various support services available to them, as well as any relevant incentive schemes. For example, energy-saving advice, or assistance that may be available to help with installation costs.

## Exemptions

### Technical feasibility

Exemptions should be available where recommended measures are deemed not technically feasible. The level to which this can be determined during an assessment is outlined below.

As previously noted, exemptions should not apply to any recommended measures that are deemed unfeasible solely due to a building defect or condition issue.

### Assessment should be non-destructive

Assessment should be non-destructive, meaning there should be no physically invasive or destructive processes carried out at the assessment stage e.g. drilling bore-holes in walls to check wall cavities.

### Assessment should provide a theoretical indication of whether recommendations are technically feasible

Given the non-destructive nature of the assessment and the wide range of measures available, it is unlikely that a single assessor will have the full range of skills

necessary to determine technical feasibility for all possible measures. Assessors, therefore, should only provide a *theoretical* indication of technical feasibility. *Actual* feasibility should be determined by a suitable technical expert. For example, an assessor could recommend that, in theory, cavity wall insulation can be installed on the basis that a cavity exists. However, only a suitably qualified technical expert will be able to confirm actual feasibility on conclusion of more invasive investigations.

Broadly speaking, where a measure is subsequently determined to be unfeasible, homeowners should move on to the next appropriate measure. The determination of whether a suitable alternative may be available could be assessed at compliance stage i.e. when the building owner is seeking exemption for the unsuitable measure. However, in practical terms, this may cause significant issues as careful consideration must be given to whether earlier recommendations within the 'fabric first' hierarchy that are deemed unfeasible have an impact on the feasibility of later recommendations. For example, where cavity wall insulation (early measure) and a heat pump (later measure) are recommended: if the cavity wall insulation is deemed to be unfeasible, this will likely have an impact on the feasibility of the heat pump. It is therefore important to build the resolution of such issues into the logic of any assessment tool/software developed.

As it stands, this proposal generates a potential need for homeowners to call on the services of additional technical experts. In turn, this may create a situation where, after the initial assessment, recommendations need to be revised. How this process is managed therefore needs careful consideration to ensure it does not place any undue cost burdens on homeowners.

### **Cost effectiveness**

Exemptions should be available where recommended measures are deemed not cost effective. Possible definitions for cost effective are discussed in section 1.5.3 and Annex D of this consultation document. As cost effectiveness is yet to be fully defined, the working groups have not considered this fully in the context of assessment.

### **Compassionate grounds**

In exceptional cases, exemptions should be available where it is inappropriate to enforce regulation for compassionate social reasons. For example, for more vulnerable groups, where the process of upgrading the property would have an unfair and disproportionate impact on the homeowner's life.

## Annex D – Defining Cost Effectiveness

In the EES Route Map in 2018, we proposed that an EPC C should be reached where cost effective and technically feasible. Following this, we commissioned a literature review through ClimateXChange<sup>27</sup> to survey definitions of cost effectiveness used for energy efficiency upgrades in buildings.

The research found that there is no single approach that is universally applied. In addition to a straightforward cap on the costs of upgrading a property (which will be used in the Energy Efficient Scotland private rented housing regulations in the initial stages), the review identified at least nine methods of evaluating cost effectiveness which have been used in different contexts.

These definitions are best understood as a continuum, becoming more complex as various costs and benefits, and more sophisticated methods of calculation, are added. Three broad categories of defining cost effectiveness are set out in the box below.

**Cost Cap:** The simplest is a cost cap approach, which focuses entirely on the cost of upgrading the dwelling, and is also the easiest definition to calculate and communicate.

**Simple Payback Test:** A simple payback test, which the review found was the most widely used method for domestic properties, takes into the account the benefit of the upgrade in terms of fuel bill savings as well as its cost, and tests whether the savings are expected to exceed the cost of the upgrade over the life of the measure, or within a set maximum period. This definition requires calculation of the fuel bill savings, most likely through an application of the SAP methodology to calculate the expected savings for the particular dwelling in question. It may also require a decision to be made on the expected lifetimes of different types of upgrades.

**Net present value:** Further refinements can be made to the simple payback test. For example, future energy prices can be assumed to grow at a particular rate rather than remaining constant, maintenance costs can be included, and discounting can be applied to future costs and benefits, so that the definition increasingly resembles a full net present value calculation. In turn, this requires a decision about the appropriate discount rate. Business as usual costs could potentially also be taken into account.

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<sup>27</sup><https://www.climateexchange.org.uk/media/3611/defining-cost-effectiveness-for-energy-efficiency-improvements-in-buildings.pdf>

Deciding which parameters to use in the cost effectiveness definition will require trade-offs between the ease of calculation and communication, the sophistication of the test and the level of energy efficiency and low carbon attainment in the housing stock.

For example, setting a maximum upgrade cost is relatively easy to communicate. However, it may mean that more expensive measures, such as external wall insulation and renewables, will be less likely to fall within the cap, even if they are expected to pay back over their lifetimes. This limitation also applies to a simple payback test if it sets a maximum payback period which is significantly shorter than the lifetime of longer-lasting measures.

Definitions which focus on the payback to the individual household from fuel bill savings can also fail to recognise wider benefits to society from reducing carbon emissions, since these are not factored into the market price of fuels, particularly fossil fuels (such as gas and oil) which have a high carbon content contributing to pollution and climate change.

The cost effectiveness calculation could attempt to include the wider social benefits from reduced greenhouse gas emissions, although this would require quantification. An

alternative approach is to factor in public sector incentive schemes, e.g. payments for the energy generated from renewables, or a contribution towards the capital cost of installing renewables or insulation, since the rationale for this public funding is to close the gap between what is individually optimal and what is socially optimal. This could add complexity to the calculation, particularly as the level of support can fluctuate between years, and budgets may run out during a year.

A further decision that is required is whether the cost effectiveness test applies to a package of measures, or to each measure on its own. A test based on a package of measures is likely to result in more dwellings meeting the target than a measure-by-measure test.

For example, the final measure of a package of measures which is required to meet the target may not pay back when considered on its own<sup>28</sup>, even though the package of measures as a whole pays back because the negative payback on the final measure is more than offset by the positive payback on the other measures.

If the cost effectiveness calculation applies to a package of measures, this would require setting a time period to

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<sup>28</sup> Particularly as each time a measure is installed, building energy efficiency will increase, and this is likely to reduce the level of savings from subsequent measures.



determine whether previous work undertaken by the owner should be considered as part of the package; in contrast, with a measure-by-measure approach, there is no need to consider previous work.

It will also be important that the cost effectiveness test works effectively alongside the assessment methodology<sup>29</sup>. For example, the assessment methodology may allow for tailoring of the recommendations to the needs of the particular household in question to give them the best advice for their own needs. However, to decide whether the regulatory standard has been met, standard assumptions will need to be applied, because the regulations need to cover the situation where the occupants of the dwelling change.

The assessment process may allow greater flexibility to choose a more sophisticated cost effectiveness

definition, since the complexities can be offset to some extent by ensuring that the assessment tool automatically calculates whether the cost effectiveness test has been met, although the drawback would be the household may have less understanding of what the calculation means.

To help inform these considerations, we have commissioned modelling work to explore the impacts of different cost effectiveness definitions on attainment rates. This work is focussing on the three main approaches set out above;

- a cost cap,
- a simple payback test,
- and a net present value calculation.

It is also undertaking sensitivity testing of the impact of factoring public sector incentives for upgrades. We expect the results to be published in early 2020.

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<sup>29</sup> Assessment is outlined in further detail in Annex C.

## Summary of consultation questions

1. Do you agree or disagree that there should be a legally-binding energy efficiency standard for owner-occupied housing?
2. Do you agree or disagree that EPC Energy Efficiency Rating band C is the appropriate standard to use? Please explain.
3. What are your views on the “fabric first” approach as described section 1.1?
4. In your view, how can we ensure that when EPCs are used to determine compliance with the standard they are robust and not easily open to misuse?
5. Do you think the standard should be fixed, or should it be subject to periodic review and change over time? Please explain your view.
6. Do you agree or disagree that 2024 is the right start date for the mandatory standard to start operating? Please give your reasons, whether you agree or disagree.
7. Do you agree or disagree with point of sale as an appropriate trigger point for a property to meet the legally-binding standard?
8. Do you agree or disagree that responsibility for meeting the standard should pass to the buyer if the standard is not already met at point of sale, as described above? Please explain your views and give any evidence you have, whether you agree or disagree.
9. What, if any, unintended consequences do you think could happen as a result of these proposals? For example, any positive or negative effects on the house sales market.
10. Do you agree or disagree with point of major renovation as an appropriate trigger point for a property to meet the legally-binding standard?
11. What is your view on how “major renovation” should be defined? Should the Energy Performance of Buildings Directive definition, as described in Annex B, be used? Please explain.
12. How could a requirement to meet the energy efficiency standard at point of major renovation be checked and enforced? Who should be responsible for this?
13. What do you think would be a fair and appropriate method to ensure compliance, if the legally-binding standard is not met? What type of penalty system would be appropriate? Please explain.

14. Should a penalty for failing to comply with the standard be one-off or recurring?
15. At what level, approximately, should any penalty be set?
16. Are there any particular groups of people who could be adversely affected, more than others, by enforcement processes and charges?
17. Which body or bodies should check if the standard has been complied with at the trigger point, and should be responsible for levying any penalty?
18. Considering the information above and in Annex D, what are your views on the best way to approach cost effectiveness, taking into account the trade-offs between how easy to understand and how sophisticated different definitions are, and how the different definitions might affect the number of homes that actually achieve the EPC C standard?
19. Other than technical feasibility and cost effectiveness, are there any other reasons why a homeowner may not be able to bring their property up to EPC C at point of sale or renovation, and would need to be given an exemption or abeyance? (For example, difficulties of getting permission from other owners for common parts of buildings.) Please explain.
20. Do you agree or disagree that, even if a property can't fully meet the standard, it should be required to get as close as possible to it?
21. Do you agree or disagree that any exemptions or abeyances from the standard should be time-limited?
22. Which body or bodies should take decisions about granting abeyances? Should this be done at a local level or centrally at a national level?
23. The SLWG on Assessment propose that any new assessment regime should exist on two levels, comprising both a mandatory asset-based assessment and an optional occupancy-based assessment. What are your views on this approach? Do you agree that an occupancy assessment should be optional? Are there specific inputs that should be included in both? Please explain your answer.
24. The SLWG on Assessment propose that the output of the assessment should be a report with tailored recommendations that set a clear pathway to both regulatory compliance (i.e. EPC band C) and zero carbon. There are conflicts between meeting the EPC rating and zero carbon. What are your views on how this can be handled/mitigated? Please explain your answer.

25. The new assessment proposals from the SLWG on Assessment include more of an advisory role for the assessor. What are your views on the additional skills and training required to deliver this role? Are existing Domestic Energy Assessors best placed to provide the tailored recommendations? What risks and conflicts do you foresee and how would you propose to mitigate them? Please explain your answer.
26. The SLWG on Assessment propose that the tailored recommendations to improve energy efficiency and achieve zero carbon should consider the legal designation of buildings, obvious defects or condition issues, and local costings. Do you foresee any liability issues in this approach and if so, what suggestions do you have to mitigate them? Do you believe the inclusion of local costings to be practical and what are your thoughts on what level should be considered 'local'? Should the local cost of energy also be considered? Please explain your answer.
27. The SLWG on Assessment propose that the assessment should provide a theoretical indication of whether recommendations are technically feasible. Please provide your views on who should determine actual technical feasibility? Should this be a qualified installer or someone else? Please explain your answer.
28. In your view, what are the most important considerations for homeowners who are required to meet the legally-binding standard, in relation to skills, supply chain, consumer protection and quality assurance?
29. What are your views on how the Quality, Skills and Consumer Protection SLWG recommendations specifically have an impact on the owner occupied sector? Please explain.
30. In your opinion, is this the right range of Scottish Government financial support schemes? Are there any gaps, regarding either types of financial product or groups of people who may be excluded from being able to access products? Please explain your views.
31. Do you agree or disagree that grant funding from the public purse should be focused on households who are vulnerable or in fuel poverty? Please explain if you disagree.
32. In your opinion, what sources of non-government, private sector support are people most likely to want to access? (eg from banks, building societies, credit unions, mortgage providers)

## List of abbreviations used

ABS	Area Based Schemes
CCC	UK Committee on Climate Change
COSLA	Convention of Scottish Local Authorities
EER	Energy Efficiency Rating
EES	Energy Efficient Scotland
EESSH2	Energy Efficient Standard for Social Housing post-2020
EIR	Environmental Impact Rating
EPBD	Energy Performance of Buildings Directive
EPC	Energy Performance Certificate
HES	Home Energy Scotland
MTCO <sub>2</sub>	Metric Tons of Carbon dioxide
PAS	Publicly Available Specification
PRS	Private Rented Sector
RdSAP	Reduced Standard Assessment Procedure
SAP	Standard Assessment Procedure
SHCS	Scottish House Condition Survey
SHR	Scottish Housing Regulator
SLWG	Short Life Working Group

## Responding to this consultation

We are inviting responses to this consultation by **26 March 2020**.

Please respond to this consultation using the Scottish Government's consultation hub, Citizen Space (<http://consult.gov.scot>). Access and respond to this consultation online at (<https://consult.gov.scot/housing-and-social-justice/energy-efficient-scotland-owner-occupier-proposals/>). You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of **26 March 2020**.

If you are unable to respond using our consultation hub, please complete and send the Respondent Information Form to:

Energy Efficient Scotland Unit  
Scottish Government  
2H North  
Victoria Quay  
EDINBURGH, EH6 6QQ

### Handling your response

If you respond using the consultation hub, you will be directed to the About You page before submitting your response. Please indicate how you wish your response to be handled and, in particular, whether you are content for your response to be published. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document.

To find out how we handle your personal data, please see our privacy policy: <https://beta.gov.scot/privacy/>

### **Next steps in the process**

Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material, responses will be made available to the public at (<http://consult.gov.scot>). If you use the consultation hub to respond, you will receive a copy of your response via email.

Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so. An analysis report will also be made available.

### **Comments and complaints**

If you have any comments about how this consultation exercise has been conducted, please send them to the contact address above or to [EnergyEfficientScotland@gov.scot](mailto:EnergyEfficientScotland@gov.scot)

### **Scottish Government consultation process**

Consultation is an essential part of the policymaking process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: (<http://consult.gov.scot>). Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

Responses will be analysed and used as part of the decision making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review
- inform the development of a particular policy
- help decisions to be made between alternative policy proposals
- be used to finalise legislation before it is implemented

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.



## Improving energy efficiency in owner occupied homes

### RESPONDENT INFORMATION FORM

**Please Note** this form **must** be completed and returned with your response.

To find out how we handle your personal data, please see our privacy policy:

<https://beta.gov.scot/privacy/>

Are you responding as an individual or an organisation?

Individual       Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

- Publish response with name  
 Publish response only (without name)  
 Do not publish response

#### Information for organisations:

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Yes       No





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