

## Response ID ANON-7R6N-GSQD-V

Submitted to **Energy Efficient Scotland Consultation: Making our homes and buildings warmer, greener and more efficient**  
Submitted on **2018-07-24 11:20:15**

### 1. The Domestic Sector

#### 1 What are your views on our proposal for owner occupied and private rented properties to achieve the Long-Term Domestic Standard EPC Energy Efficiency Rating Band C by 2040 at the latest?

##### Question 1: What are your views on the proposed target to maximise the proportion of social housing meeting EPC Band B by 2032?:

The aspiration is excellent. BEFS would however reiterate the response from HES that there are many buildings currently assessed as not able to achieve a band C. These homes should not be condemned to obsolescence and future potential demolition. A building may be able to achieve EPC band D and have 200 years of use left, not to speak of the embodied energy its many years of service may already have demonstrated. To potentially demolish this stock due to EPC rating/rating potential and replace it with buildings with a far shorter design life (of 30/40 years) is a strategy flawed from both a financial and carbon perspective. Any aspiration to achieve band C will need appropriate exemptions, therefore, to be workable. BEFS would also suggest that parallel to this there should be a clear revisiting of how current building stock is assessed in relation to EPC standards, and the application of EPC in relation to pre-existing homes, particularly traditionally built dwellings.

#### Exceptions to the proposed Programme Long-Term Domestic Standard (private rented and owner occupied homes)

#### 2 Do you think we should allow for situations where a lower standard is acceptable?

Yes

##### Please explain your answer, giving examples. :

Yes, a lower standard should be acceptable in some situations. Consider pre-1919 housing stock in Scotland - which is some 483,000 homes - would this stock, which when considered under the current assessment standards as not able to meet band C, suddenly be unacceptable as domestic housing? There are also many pre-1919 dwellings where some measures suggested for 'upgrading' may fundamentally damage the fabric of the property and could have negative impacts on the health of the inhabitants.

#### 3 Do you think we should allow for situations where a longer period for improvement is allowed?

Yes

##### Please explain your answer, giving examples.:

Yes there should be situations where a longer period of implementation is allowed. Current assessment techniques and technologies for existing homes, particularly those pre-1919 need more time to be embedded into an affordable supply chain.

In addition, particular care should be taken in relation to following appropriate approaches where advised through Listed Building Consent and Planning Consent in Conservation Areas. The time necessary for these processes may necessitate more time. The advice given in these cases may also be appropriate for non-listed buildings of traditional construction methods. The correct assessment and installation of any measures will be key to these buildings remaining as homes - and these aspects may take more time.

#### Technically feasible and cost-effective

#### 4 We are proposing that the definition of a cost-effective measure is that it should payback over its lifetime. What are your views on this definition?

##### 4. We are proposing that the definition of a cost effective measure is that it should pay back over its lifetime. What are your views on this definition? :

BEFS would reiterate HES' response:

A definition of cost effective as one which pays for itself in the lifetime of the measure makes sense. However, this requires accurate data on the expected lifetime of a measure which is produced independently of material manufacturers. If this is to be the measure of whether an energy efficiency measure is to be considered cost effective fresh independent analysis of the payback times will be required. It is worth noting that if this is the definition of a cost effective measure double glazing is unlikely to be included in applicable measures.

There is no question in the consultation regarding the technical feasibility of measures. The proposal states that "a new assessment, building on the EPC process, should be developed to identify what is technically feasible". Whilst this is certainly to be welcomed, the question here is who will develop this assessment and who will undertake it? Current EPC assessors are not on the whole qualified to carry out such a detailed technical feasibility assessment. Considerable training will be required if this commitment is to be met, with input from specialists in a wide range of measures and building types.

As mentioned previously the current EPC assessments and ratings do not appreciate the variation and fabric types of pre-1919 buildings of numerous kinds. BEFS would reiterate the HES view that: there are currently various groups discussing possible changes to EPC's and [these changes] should be considered as part of the EES development.

#### Air Quality and the Long-Term Domestic Standard

#### 5 What are your views on the issue of air quality in relation to the Long-Term Domestic Standard?

##### 5. What are your views on the issue of air quality in relation to the Long-Term Domestic Standard?:

BEFS would reiterate the response from HES - The issue of air quality is critical to the long-term success of efforts to improve energy efficiency. Ensuring that

energy efficiency improvements are balanced with the needs of ventilation and the removal of moisture from buildings should be at the heart of the Energy Efficient Scotland legislation. The effects of moisture concentrations can be damaging to building fabric and human health causing dampness and mould growth. The dangers associated with this are likely to be greater where the most significant interventions are made to a building as will be required if EPC band C is the aim. Monitoring of buildings to ensure air quality is of a sufficient standard and the introduction of measures such as humidity controlled ventilation should be considered. It is important however that this does not only consider moisture within a room but also in areas that are hidden from view, for example behind IWI and above loft insulation.

## **Using EPCs for the Long-Term Domestic Standard**

### **6 The EPC Rating of a property can be affected by changes to the underlying methodology and to fuel price data. How do you suggest that the Programme takes account of this in setting the Long-Term Domestic Standard?**

#### **5. The EPC Rating of a property can be affected by changes to the underlying methodology and to fuel price data. How do you suggest that the programme takes account of this in setting the Long Term Residential standard? :**

To expand on several points made by HES:

The methodology for undertaking EPC assessments requires amendment in a number of areas to ensure it is fit for purpose, especially when looking at buildings of traditional construction.

Namely:

- Accurate assessment and rating for wall type, including assessment relating to wall thickness
- Assessment and rating of rural properties based on what is feasible (heating type for example)
- Consideration of the significant affect thorough maintenance should have on the rating of a building. Without wind/watertight assessment and what could be improved through those actions, the suggestion to upgrade some elements to improve EPC rating becomes meaningless
- An acknowledgement that EPC ratings assume certain human behaviours which may/may not be met by those within dwellings. (Ie additional suggestions in relation to human actions to improve a building's rating may be a necessary part of the EPC.)

HES note: it would be difficult, however, to apply revised methodology to existing EPC's therefore reliance on periodic updating of a buildings EPC is likely to be required. The chart on page 10 raises some important issues which are not specifically referred to in questions 1-32. Under the Advice heading the requirement for "good quality, independent advice" is rightly highlighted. The question here is who will provide this advice? Currently EST provide a lot of advice in this area, however their advisors are unlikely to have the requisite technical knowledge of buildings to provide advice on measures which can achieve an EPC band C without detrimental effects on buildings. The independence of this advice is paramount and must be separate from industry / trade bodies such NIA and INCA as these are not independent. Who delivers this advice and who considers technical exemptions is critical to the success of this process. This is also relevant to the section discussing Service, again who will provide the independent advice referred to and what training / qualifications will they have?

## **Support for the Long-Term Domestic Standard**

### **7 What are your views on the proposal that all PRS properties meet EPC Energy Efficiency Rating Band C by 2030?**

#### **6. What are your views on the proposal that all PRS properties meet EPC energy efficiency band C by 2030? :**

We would refer you to previous answers, particularly Q1, Q2, Q3 and Q4 – Scotland needs more warm homes, homes which add to the character and value of our places. With a significant number of buildings these steps would potentially increase void numbers, and reduce the number of high-quality homes Scotland has to offer across all residence types. Suggested changes to alter some buildings purely for EPC related reasons would not be cost effective, or carbon effective. This could well result in a deterioration of our built environment and a further reduction in home numbers for communities.

## **Owner occupied**

### **Owner Occupiers: Encouraging Action**

#### **8 What are your views on our proposal for an initial period of encouraging action?**

##### **8. What are your views on our proposal for an initial period of encouraging action?:**

Whilst being mindful of the potential for exemptions, and for measures to both protect the long-term fabric of the building, inhabitant health, and be genuinely cost-effective. If measures which fulfilled those criteria were introduced as part of a package working towards:

- well maintained homes, with the best possible EPC rating, inhabited by those taking actions to mitigate their impact on climate change
- BEFS could support this suggestion.

#### **9 What information would be useful for householders to be able to access on how to achieve EPC Energy Efficiency Rating Band C before 2030?**

##### **9. What information would be useful for householders to be able to access on how to achieve EPC energy efficiency band C before 2030?:**

HES state: Information regarding how buildings perform in terms of moisture, air movement / ventilation and heat would be useful for householders as would the way different materials perform. In addition to this an understanding of condensation and mould would be beneficial. It is critical though that decisions are not left to householders but that they are provided with independent advice from those with an in depth understanding of the issues surrounding insulating buildings, air movement and moisture related issues.

BEFS would add that to this specialist information, accurate for specific building types, information regarding the importance of maintenance to reducing fuel spend, as well as the human actions involved in the process would be of great benefit.

### **Owner Occupiers: Mandatory Action**

#### **10 What are your views on our proposal to follow this initial period with mandating action?**

**10. What are your views on our proposal to follow this initial period with mandating action?:**

HES state: If action then becomes mandatory the question of liability for failure becomes important. If the government are mandating action and that action leads to failures of building fabric who is liable for those failures? This is an issue which will require to be considered and resolved.

BEFS would add – how will this be enforced, and who is responsible for enforcement?

**11 What are your views on our proposal that 2030 is the right point to start mandating action to achieve EPC Energy Efficiency Rating Band C?**

**11. What are your views on our proposal that 2030 is the right point to start mandating action to achieve EPC energy efficiency band C? :**

No comment further to the issues previously noted.

**12 What are you views on our proposal for owner occupied properties to be subject to penalties for non-compliance?**

**12. What are you views on our proposal for owner occupied properties to be subject to penalties for non-compliance?:**

HES : If penalties are to be in place, technical exemptions working correctly are of even greater importance. If an owner-occupier takes action to avoid a penalty and that action leads to failures of building fabric - for example rot in sarking boards following loft insulation who is responsible for this?

BEFS would add – how will this be enforced, and who is responsible for enforcement?

**Homes outside of the existing mandatory EPC process**

**13 What are your views on requiring all types of accommodation to meet the Long-Term Domestic Standard over time?**

**Please explain your answer, giving examples of accommodation you think should/should not be required to meet the Long-Term Domestic Standard if relevant.:**

All homes, where possible and mindful of the exemption arguments previously made, should be required to meet their best possible standard over time.

**Higher targets for Fuel Poor Homes**

**14 Please provide your views on our proposal that all homes with fuel poor households are to reach EPC Energy Efficiency Rating Band C by 2030, where technically feasible and cost-effective?**

**14. Please provide your views on our proposal that all homes with fuel poor households are to reach EPC Energy Efficiency Rating Band C by 2030, where technically feasible and cost-effective? :**

HES state: Again there is no problem with the aspiration of lifting fuel poor households to a band C by 2030, however this must take into account situations where this is not technically feasible. Care also needs to be taken that sufficient education is provided on how energy efficiency measures will affect homes especially in relation to indoor air quality, ventilation and condensation.

BEFS – there is more to fuel poverty than an EPC rating, and whilst the aim is indeed positive, the outcomes of costly interventions, which may/may not provide appropriately scaled benefits would need to be carefully modelled. Making targets which are not feasible undermines the standards being set, and the outcomes being sought.

Additionally, changing the focus to assess the householder, rather than the property, could also cause unintended consequences. Householders may move – but the changes related to the property are far more permanent.

**15 Please provide your views on our proposal that all homes with fuel poor households are to reach EPC Energy Efficiency Rating Band B by 2040, where technically feasible, cost-effective and possible within limits affordable to the public purse?**

**15. Please provide your views on our proposal that all homes with fuel poor households are to reach EPC Energy Efficiency Rating Band B by 2040, where technically feasible, cost-effective and possible within limits affordable to the public purse?:**

HES - There are likely to be a sizeable number of buildings which cannot achieve a band B and there are therefore questions about how effective this aspiration will be. The higher the EPC band aimed at the higher the costs and technical risks. There are many factors which affect fuel poverty in addition to building fabric and a rounded approach will be required to eradicate fuel poverty.

**The role of Assessment to support the Domestic Energy Efficiency Standards**

**16 In addition to what we have set out in paras 46 - 50, what should the Energy Efficient Scotland Assessment Short Life Working Group also consider?**

**Please explain your answer.:**

HES - The short life working group should consider the [assessment] needs of buildings with different building fabric types and the [ratings they receive], this should include traditional buildings, system built structures and timber frame buildings. Moisture issues in buildings of all types should be considered by the SLWG, this should include condensation (surface and interstitial), mould growth, decay of building fabric and indoor air quality; related to the last point ventilation should be considered; the need to address wider building defects before any insulation work takes place should also be discussed. Work has been carried out in England and Wales that could help inform this.

BEFS would add that the SLWG should also take into account:

Maintenance – what could be improved to change the efficiency level of the building/ related building types?

Appropriate EPC measurements for traditionally built buildings and their associated fabric (ie potential presence and use of shutters, chimney balloons etc)

Human action to improve fuel consumption associated with any particular building type. (Appropriate curtains may be far more cost and carbon effective than new windows.)

## **Compliance and enforcement of the Long-Term Domestic Standard**

### **17 What are your views on whether the Long-Term Domestic Standard should be enforced at a local or national level?**

**Please explain your answer.:**

Relying on over-stretched Local Authorities for enforcement may prove problematic. BEFS has recently examined Listed Building Enforcement notices and found that enforcement rarely occurs. Adding in additional regulatory powers, without increasing LA capacity may prove to make this aims of the EPC rating levels toothless.

## **2. The Non-Domestic Sector**

### **18 Are there specific building characteristics you consider should be included in research to ensure that future improvement targets reflect the diverse nature of our non-domestic building stock?**

Yes

**If so, please set out what these are and why they should be considered.:**

HES - Specific building characteristics would include construction materials, methods of construction, how materials handle moisture, vulnerability to decay, occupancy rate and tenure.

BEFS – our Local Authority, NHS, and Military estates can include a wide range of buildings, many of which utilise traditional construction methods – attention to, and assessment of these buildings appropriately would be of great carbon and financial benefit to the nation.

### **19 What are your views on the way calculated energy use from building assessments are presented and/or benchmarked?**

**We are particularly interested in what arrangements you favour and how you think they would be useful.:**

Benchmarking taking place needs to be mindful of the assessment of traditional buildings appropriately and effectively as mentioned previously.

### **20 What are your views on the proposed planned work to review improvement targets?**

**20. What are your views on the proposed planned work to review improvement targets?:**

No comment

### **21 What are your views on our proposals for phasing the regulations from 2020?**

**21. What are your views on our proposals for phasing the regulations from 2020?:**

Important to set-standards for exemptions, and assessments prior to the start of phasing, and as such 2020 may not be practicable.

## **The Programme for industrial users of energy**

### **22 Should advice and support to invest in the energy efficiency of industrial or manufacturing buildings align with wider advice and support on how to reduce energy consumed for productive processes?**

Don't know

**If so, please suggest how improving efficiency in building and 'process' energy could work together, and what opportunities and challenges might this present?:**

## **Public Sector Buildings**

### **23 What more could the Scottish Government do to encourage the public sector to accelerate energy efficiency across their building stock?**

**23. What more could the Scottish Government do to encourage the public sector to accelerate energy efficiency across their building stock?:**

Realistic setting of EPC and energy use goals. Achievable savings will provide greater encouragement.

Appropriately trained assessors able to deal with complex building type/use – ensuring accuracy of ratings and therefore more feasible suggestions for change.

Enable procurement across the public sector to ensure greater affordability of appropriate measures.

### **24 What more could the Scottish Government do to encourage the public sector to accelerate heat decarbonisation across their building stock?**

**23. What more could the Scottish Government do to encourage the public sector to accelerate heat decarbonisation across their building stock?:**

No comment

## **3. The Programme and use of EPC data (Domestic and Non-Domestic**

**25 What additional data would help building owners in the delivery of the Energy Efficient Scotland Programme? How would this be used?**

**25. What additional data would help building owners in the delivery of The Programme? How would this be used?:**

HES - Data surrounding building types which struggled to achieve a given EPC rating would be helpful and should be fairly easy to extract. Out-with EPC data, a thorough analysis of failures in buildings following energy efficiency work would be useful in gauging which measures cause problems in the short, medium and long term.

BEFS would add that data on savings made in traditional building types after implementation of works to achieve better EPC ratings would be useful to making the case for changes.

**26 What additional data would be helpful to others in the delivery of the Energy Efficient Scotland Programme? How would this be used?**

**26. What additional data would be helpful to others in the delivery of The Programme? How would this be used?:**

No comment

**27 We will investigate the benefit in providing new online resources or tools to support building owners to access and use data to help them improve their properties. What particular types of resources or tools would you find useful and why?**

**27. We will investigate the benefit in providing new online resources or tools to support building owners to access and use data to help them improve their properties. What particular types of resources or tools would you find useful and why? :**

Any online resource or tool will need to be tailored to reflect the needs of a diverse range of building types, a one size fits all approach may do more harm than good. Guidance and how to interpret the outcomes for different housing types is key to good retrofit work taking place.

It is also essential that there are well-trained assessors and fitters, as well as suitable materials available within the supply chain for all building types. Recommendations appropriate for each building type, with accurate data on performance would be beneficial to home-owners faced with making costly long-term choices.

**28 In addition to the above, we welcome any specific comments or observations you may have on the future use of the data that is gathered from energy assessments.**

**28. In addition to the above, we welcome any specific comments or observations you may have on the future use of the data that is gathered from energy assessments:**

Real-world examples of the benefits of building-type appropriate work which has benefited the homeowner, the home itself, and the related energy use would be beneficial.

It would also be useful to see the negative effects of where intervention has not been of benefit in relation to the above characteristics.

**4. Potential legislative provision to support the Programme**

**29 What are your views on the implementation and enforcement of existing legislation relating to energy efficiency and heating of buildings in Scotland?**

**29. What are your views on the implementation and enforcement of existing legislation relating to energy efficiency and heating of buildings in Scotland?:**

Owners face challenges to tenement maintenance and any energy efficiency measures suggested are currently classed as 'improvements' and subject to similar difficulties requiring the agreement of all owners. Addressing these challenges through underlying legislation would be key.

It should also be noted that for tenements to get the greatest potential benefits the whole building, rather than individual units, needs to be considered.

Enabling appropriate capacity for skilled implementation and accurate and appropriate enforcement would be required, for all/any legislative matters.

**30 What changes may be needed (if any) to this existing legislation to ensure that the Scottish Government, local authorities, and any other relevant bodies or persons, have the powers and duties necessary to support the Energy Efficient Scotland Programme?**

**30. What changes may be needed (if any) to this existing legislation to ensure that the Scottish Government, local authorities, and any other relevant bodies or persons, have the powers and duties necessary to support The Programme? :**

Changes to legislation would be required to ascertain where responsibility lies if the government are mandating people to carry out work, in particular should the changes made prove to be detrimental to the building fabric in the long-term, or fail to deliver energy savings (within stated parameters).

**31 What other elements of the programme may require new or amended legislation to enable the Energy Efficient Scotland Programme to operate?**

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No comment

**32 Which organisation(s) should be responsible for delivering any new legal requirements?**

**32 Which organisation(s) should be responsible for delivering any new legal requirements?:**

Local authorities and Building Standards Division would be the obvious organisations responsible for delivering new legal requirements. Mindful of the related agencies legislation which is to be taken into account in relation to building change/adaptation. (HES - Managing Change, HESPS etc)

## About you

**What is your name?**

**Name:**

Ailsa Macfarlane

**What is your email address?**

**Email:**

amacfarlane@befsf.org.uk

**Are you responding as an individual or an organisation?**

Organisation

**What is your organisation?**

**Organisation:**

Built Environment Forum Scotland (BEFS)

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

Publish response with name

**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

## Evaluation

**Please help us improve our consultations by answering the questions below. (Responses to the evaluation will not be published.)**

**Matrix 1 - How satisfied were you with this consultation?:**

Slightly satisfied

**Please enter comments here.:**

**Matrix 1 - How would you rate your satisfaction with using this platform (Citizen Space) to respond to this consultation?:**

Very satisfied

**Please enter comments here.:**