

Energy Efficient Scotland Consultation Energy Efficient Scotland Programme Management Office Scottish Government 1H South Victoria Quay Edinburgh EH6 6QQ

27<sup>th</sup> July 2018

**Response: Energy Efficient Scotland Consultation** 

Dear Sir/Madam,

Scottish Renewables is the representative body for the renewable energy industry in Scotland, working to deliver secure supplies of low-carbon, clean energy for heat, power and transport at the lowest possible cost. We represent around 260 organisations ranging from large suppliers, operators and manufacturers to small developers, installers and community groups, and companies right across the supply chain. We have around 60 members active in heat, predominantly in the district heat, biomass and electric heat pump sectors, ranging from manufacturers to developers and installers.

We set out our answers to the call for evidence questions below.

Yours Sincerely,

Fabrice Leveque
Senior Policy Manager, Large-Scale Renewables

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#### **IMPROVING HOMES**

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?

We support the proposal to set a long-term standard for homes, as improving the fabric efficiency of homes will help reduce fuel poverty and carbon emissions. It will also help prepare some existing buildings for the installation of low-carbon heating systems, for example by making poorly insulated homes more suited to electric heat pumps.

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

Yes, where the costs of reaching the standard are prohibitively expensive.

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3. Do you think we should allow for situations where a longer period for improvement is allowed? Please explain your answer, giving examples.

Yes, although care must be taken to avoid creating loopholes that can be exploited to avoid compliance.

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?

We do not support this definition, as it risks ruling out higher cost interventions that may provide wider social benefits. Reductions in energy bills are only one of the objectives behind insulating buildings; others include reducing fuel poverty and carbon emissions reduction. Energy demand reductions will also reduce the scale and cost of energy networks in future, providing a further cost reduction that does not accrue directly to the consumer but provides a wider social benefit.

Clarity on how this would impact requirements around low-carbon heating would be welcome. Heating systems are not installed to reduce costs via demand reductions, but will in some cases improve an EPC score by virtue of improving system efficiency.

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

Not answered.

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?

Not answered.

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

We support this proposal, recognising that in many cases the benefits of insulation improvements will not accrue to tenants and that it is therefore appropriate for landlords to cover these costs.

However, we are concerned that there is no discussion of how standards (or other approaches) could be used to drive the uptake of low-carbon heating in rented homes off the gas grid, given that the proposed standards will drive interventions in rented homes during the 2020s. To meet Scotland's climate change targets it is likely that high-carbon (coal, oil and LPG) heating systems in homes off the gas grid will need to be replaced with low-carbon alternatives, and therefore any interventions in rented off-gas grid homes driven by the proposed regulations should also consider heating system replacements.

Delivering the emissions reductions set out for buildings in the Climate Change Plan implies the replacement of all high-carbon heating systems in homes off the gas grid by 2030. For example,



modelling by the Committee on Climate Change recommends the installation of low-carbon heating systems in 280,000 existing homes by 2030<sup>1</sup>; there are approximately 170,000 homes heated by oil and LPG off the gas grid in Scotland, and 316,000 heated with traditional electric heaters<sup>2</sup>. Moreover, the consultation and Route Map state that in the 2020s, Scottish Government intends to 'continue to support the deployment of low regrets, low carbon heat options (such as individual renewable heat technologies for those buildings not connected to the gas grid..)'.

We therefore urge the Scottish Government to consider how best to drive heating system replacements change alongside these proposed regulations. We believe that the best way to achieve this would be to phase out high-carbon heating systems in existing buildings from 2025; after this date no new installations of coal, oil and LPG boilers should be permitted. This could be implemented through building regulations (section six in Scotland covering heating system upgrades) and would drive replacements in existing buildings.

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

Although we welcome the phased introduction of regulation, there is significant risk that regulations set too far into the future will create insufficient drive for consumers to act. Past experience has shown that significant barriers put consumers off from making retrofit energy improvements and that therefore encouragements such as incentives and better information may achieve little without a regulatory underpinning.

# 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?

As well as information on the potential upgrades that could be made to a property, it will be important that information provided to householders outlines the options for low-carbon heating, for example by communicating low-carbon heating technologies identified in an LHEES 'zoning' process.

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

We support the intention to drive change through mandatory action, as in practise it is a combination of information, incentives and regulation that can best drive a change in behaviour.

# 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?

2030 should be considered the latest point at which mandatory action is required – setting regulations too far in the future will reduce their effectiveness and risk continuing the low levels of retrofit activity currently undertake in able to pay homes. Regulations should be designed to increase market size over the time, which will help develop supply chains and ensure that costs reduce and quality improves. This in turn will open the potential to tighten standards over time.

CCC, 2016, Scottish Emissions Targets 2028 - 2032

<sup>&</sup>lt;sup>2</sup> Ofgem, 2015, Insights paper on households with electric and other non-gas heating



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

We support the use of penalties for non-compliance, as regulations must have some consequence if they are to be followed.

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.

Not answered.

#### 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?

We support earlier targets for fuel poor households given the negative social impacts of fuel poverty and the fact that funding is in place to support their renovation.

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?

We support setting higher targets for fuel poor households, as energy bills savings will make a greater impact to the quality of life of low-income households.

## 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.

We believe that the working group should also look at the role of low-carbon heat. How regulations and interventions will impact on low-carbon heating choices should be integrated from the start, rather than at a later date. Technologies like district heat networks, heat pumps, biomass boilers and solar thermal systems are already being deployed, and the last natural gas boilers will need to be installed in 2035 if we are to decarbonise building heat by mid-century. Therefore is it is important that advice be given to consumers now regarding heating system choices as well as



retrofit upgrades. We would welcome the opportunity to contribute to the working of the group on this subject.

#### COMPLIANCE AND ENFORCEMENT OF THE LONGTERM 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.

Not answered.

#### NON-DOMESTIC SECTOR OVERVIEW

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

Not answered.

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.

We support the introduction of regulations to encourage energy efficiency improvements in commercial buildings. However, it would be good to understand in more detail why the Scottish Government proposes to use a benchmarking approach. The Minimum Energy Efficiency Standards (MEES) in England and Wales use a single EPC rating approach<sup>3</sup>. Since April 2018 it has been illegal to grant new lets of properties rated below an F or G rating. The UK Government has since proposed to increase this standard to EPC B by 2035<sup>4</sup>. Early indications are that these standards are driving efficiency improvements.

The use of benchmarking is not without difficulties. Energy performance indicators give a measure of activity based energy use, which can be compared with equivalent benchmarks. Benchmarking in buildings is not an exact science as energy consumption generally depends on a number of influencing factors such as geographical location across the UK, whether in a city centre environment or on an out of town development, the nature of the activities undertaken inside (for example a call centre is often more densely populated and other on-site facilities with high energy use such as catering and restaurants. Typical Energy Consumption Guide benchmark figures require refreshing as they are from a research programme that was conducted 15 years ago. Modern offices have changed and the level of information technology equipment has increased as has the size and complexity of server rooms. The only accurate way to appraise a non-domestic building or process capability and scope for energy efficiency is to carry out a building or process specific energy audit typically along the lines of BS EN 16247 which will meet all the requirements of ESOS and an energy review as featured in 50001.

<sup>&</sup>lt;sup>3</sup> <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/656541/Non-Dom\_Private\_Rented\_Property\_Minimum\_Standard\_- Landlord\_Guidance.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/656541/Non-Dom\_Private\_Rented\_Property\_Minimum\_Standard\_- Landlord\_Guidance.pdf</a>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/726711/Call\_for\_Evidence\_helping\_businesses\_to\_improve\_the\_way\_they\_use\_energy\_.pdf



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

We support the intention to review the evidence base for improvement targets in non-domestic buildings, as this should lead to better quality targets being proposed.

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

A long-term standard would be useful but interim targets will also be needed to drive near-term activity, to help grow the market and lower installation costs.

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

Not answered.

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

Not answered.

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

There are significant opportunities to decarbonise public sector buildings which are not currently being taken advantage of. New public buildings are still being constructed with fossil fuel heating systems where lower-carbon alternatives are available (for example the Queen Elizabeth University Hospital in Glasgow). The RHI has helped drive the retrofit of lower-carbon heating systems in offgas grid areas, but more could be done to increase current levels of activity. We propose the following:

Phase out high-carbon heating systems in 2025: to ensure that high-carbon (coal, oil and LPG) heating systems are no longer installed in public sector buildings we recommend that Scottish Government prevents the replacement of such systems after 2025. This could be implemented through building regulations and applied to non-domestic as well as domestic buildings. High-carbon heating systems are only found in off-gas grid areas (natural gas, where available, is lower cost and therefore takes precedence) and this measure would help drive demand for low-carbon heating systems in the near-term. It would also ensure consistency amongst local authorities. Highland Council has an ambition to replace all oil heating systems across its building stock by 2020, but our members report varying degrees of ambition and delivery between local authorities. Biomass boilers, heat pumps and solar thermal systems are mature technologies that have been installed in Scotland for well over a decade by an experienced and reliable supply chain. However, these technologies are sometimes treated as high risk and therefore limited to pilots and trials (rather than being rolled out as standard), reflecting varying levels of familiarity with such



technologies. A regulatory backstop would help ensure a consistent approach between different local authorities.

Mandate connection to district heat networks: making it mandatory for public sector buildings to connect to existing or planned district heat networks when replacing the heating system of existing buildings would help drive the development and expansion of such heat networks. Although Scottish Government policies (primarily the LCITP and the District Heat Loan Fund) have driven deployment in recent years, our members continue to report instances where economically viable projects are unable to connect public sector buildings due to reluctance on the part of managing bodies and authorities (either due to perceived risk or lack of knowledge). This could be addressed by introducing a last-resort compulsion to connect as was previously included in the Scottish Government's proposed package of district heat network regulation<sup>5</sup>. The requirement could be limited to large public-sector buildings, which are the most crucial to developing new heat networks (by providing a large enough 'anchor' load). Alternatively, public procurement could be amended to align with socioeconomic assessments in a LHEES, to overcome differences in public sector evaluation methods that have historically prevented collaboration. For example, public authorities could be asked to consider the opportunity cost (for the LHEES decarbonisation ambitions) of not connecting and anchoring a proposed district heat network. More detail can be found in Scottish Renewables' response to the second consultation on these regulations in February 2018<sup>6</sup>.

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

As well as information on the potential upgrades that could be made to a property, it will be important that information provided to householders outlines the options for low-carbon heating, for example by communicating low-carbon heating technologies identified in an LHEES.

#### THE PROGRAMME AND USE OF EPC DATA (DOMESTIC AND NON-DOMESTIC)

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

Not answered.

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?

It would be beneficial to make heating technology zones identified within an LHEES (such as district heat zones and off-gas grid zones) easily available online, for both businesses and consumers to consult. This would help communicate the required changes in heating systems proposed in LHEES to consumers as well and provide useful information to the supply chain.

<sup>&</sup>lt;sup>5</sup> Scottish Government, 2017, Consultation On Local Heat & Energy Efficiency Strategies & Regulation Of District Heating

<sup>6</sup> https://www.scottishrenewables.com/publications/download/334/



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.

Not answered.

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

Not answered.

#### POTENTIAL LEGISLATIVE PROVISION TO SUPPORT THE 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 Energy Efficient Scotland Programme?

To ensure that decisions regarding energy efficiency and low-carbon heating within LHEES are given due consideration within development planning and decision making, it will likely be necessary to ensure that these are referenced in national planning guidelines such as the forthcoming NPF.

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

Not answered.

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

Given the scale and duration of the programme, giving an arms-length delivery body responsibility for delivery of the programme would help ensure a consistent and well-resourced approach. This should be traded off against the likely time and expense of setting such a body up.