

# Proposed Domestic Building Environmental Standards (Scotland) Bill

## Introduction

A proposal for a Bill to introduce new minimum environmental design standards for all new-build housing to meet the Passivhaus standard or a Scottish equivalent in order to improve energy efficiency and thermal performance.

The consultation runs from 4 May 2022 to 27 July 2022

All those wishing to respond to the consultation are strongly encouraged to enter their responses electronically through this survey. This makes collation of responses much simpler and quicker. However, the option also exists of sending in a separate response (in hard copy or by other electronic means such as e-mail), and details of how to do so are included in the member's consultation document.

Questions marked with an asterisk (\*) require an answer.

All responses must include a name and contact details. Names will only be published if you give us permission, and contact details are never published – but we may use them to contact you if there is a query about your response. If you do not include a name and/or contact details, we may have to disregard your response.

Please note that you must complete the survey in order for your response to be accepted. If you don't wish to complete the survey in a single session, you can choose "Save and Continue later" at any point. Whilst you have the option to skip particular questions, you must continue to the end of the survey and press "Submit" to have your response fully recorded.

Please ensure you have read the consultation document before responding to any of the questions that follow. In particular, you should read the information contained in the document about how your response will be handled. The consultation document is available here:

[Consultation Document](#)

[Privacy Notice](#)

I confirm that I have read and understood the Privacy Notice which explains how my personal data will be used.

## About you

Please choose whether you are responding as an individual or on behalf of an organisation.

Note: If you choose "individual" and consent to have the response published, it will appear under your own name. If you choose "on behalf of an organisation" and consent to have the response published, it will be published under the organisation's name.

an individual

Which of the following best describes you? (If you are a professional or academic, but not in a subject relevant to the consultation, please choose "Member of the public".)

Professional with experience in a relevant subject

Which of the following best describes you? (If you are a professional or academic, but not in a subject relevant to the consultation, please choose "Member of the public".)

**Optional: You may wish to explain briefly what expertise or experience you have that is relevant to the subject-matter of the consultation**

I am an architect and certified passivhaus designer

Please select the category which best describes your organisation

*No Response*

Please choose one of the following:

I am content for this response to be published and attributed to me or my organisation

Please provide your Full Name or the name of your organisation. (Only give the name of your organisation if you are submitting a response on its behalf).

(Note: the name will not be published if you have asked for the response to be anonymous or "not for publication". Otherwise this is the name that will be published with your response).

Euan Lochhead

Please provide details of a way in which we can contact you if there are queries regarding your response. Email is preferred but you can also provide a postal address or phone number.

We will not publish these details.

**Aim and approach - Note: All answers to the questions in this section may be published (unless your response is "not for publication").**

Q1. Which of the following best expresses your view of the proposed Bill? Please note that this question is compulsory.

Fully supportive

**Please explain the reasons for your response.**

To meet net zero, it is essential that new buildings are compatible with net zero and electric heating systems without being unaffordable to run. I work in retrofit and can see that recent standards do not achieve this, partly because Section 6 is too lenient and partly because of a lack of quality assurance in the building standards process. Mandating that all new buildings meet the passivhaus standard would ensure a consistent and quality assured method towards delivering new homes which are already compatible with 2050 targets. If we continue with current standards, achieving fuel poverty and net zero targets will require retrofit of buildings completed in the 2020s at much greater expense than building to higher standards now.

Q2. Do you think legislation is required, or are there other ways in which the proposed Bill's aims could be achieved more effectively? Please explain the reasons for your response.

Legislation is a stick to improve standards but there are not enough carrots. The Scottish Government could provide incentive for the uptake of passivhaus by providing funding for new build and retrofit projects targeting higher levels of efficiency. This should be based on metered energy performance to ensure that targets are achieved in practice.

Q3. Which of the following best expresses your view on setting the Passivhaus standard or a Scottish equivalent as the most appropriate new build housing standards to contribute to eradicating fuel poverty?

Neutral (neither support nor oppose)

**Please explain the reasons for your response.**

While constructing buildings to the passivhaus standard will result in lower energy consumption, it does not necessarily mean lower fuel bills due to the difference between gas and electricity unit costs. Separate legislation/funding would be needed to ensure that those who install electric heating and air source heat pumps do not end up paying more for heating. The current situation is ridiculous though as gas, a fossil fuel, is still the cheapest form of heat generation despite Scotland's prolific renewable energy generation. Scotland rural areas need to be better compensated for hosting the infrastructure that will make net zero possible through lower per unit electricity costs. This would incentivise the uptake of electric and air source heating systems

Q4. Which of the following best expresses your view on setting the Passivhaus standard or a Scottish equivalent as the most appropriate new build housing standards to contribute to a reduction in emissions?

Neutral (neither support nor oppose)

**Please explain the reasons for your response.**

The passivhaus standard is a great tool for reducing operational carbon emissions consistently. Using the standard as a minimum standard would ensure that new build housing is compatible for a net zero future. However, the passivhaus standard does not deal with embodied emissions which can represent up to 60 years worth of operational emissions. These emissions are released now as a 'carbon burp'. Therefore, to reduce carbon emissions from new build we need to legislate for permitted levels of embodied carbon in new build construction. Ideally we should heavily tax new construction to fund domestic retrofit, which, if completed to passivhaus standards, will result in significantly lower carbon emissions

Q5. Which of the following best expresses your view of the process set out to ensure that the new standards are met in all new build housing? (see pages 14 to 16 in the consultation document)

Fully supportive

**Please explain the reasons for your response, including your views on how effective the process would be in removing the 'performance gap' and on how the proposed verification process might work in practice.**

Essential

Q6. What could be the market effects of the introduction of this proposal?

Extremely positive as new skilled jobs will be created. This will be a great step towards upskilling the construction industry for the challenge of achieving net zero

## Financial Implications

Q7. Any new law can have a financial impact which would affect individuals, businesses, the public sector, or others. What financial impact do you think this proposal could have if it became law?

some increase in costs

**Please explain the reasons for your answer, including whom you would expect to feel the financial impact of the proposal, and if there are any ways you think the proposal could be delivered more cost-effectively.**

Better quality costs more and it is so with passivhaus construction. However in the long-term costs will be reduced as passivhaus buildings will not require retrofit measures to achieve net zero. Tenants will also have lower fuel bills in direct comparison to a section 6 compliant home

## Equalities

Q8. Any new law can have an impact on different individuals in society, for example as a result of their age, disability, gender re-assignment, marriage and civil partnership status, pregnancy and maternity, race, religion or belief, sex or sexual orientation.

What impact could this proposal have on particular people if it became law? If you do not have a view skip to next question.

Please explain the reasons for your answer and if there are any ways you think the proposal could avoid negative impacts on particular people.

*No Response*

## Sustainability

Q9. Any new law can impact on work to protect and enhance the environment, achieve a sustainable economy, and create a strong, healthy, and just society for future generations.

Do you think the proposal could impact in any of these areas? If you do not have a view then skip to next question

Please explain the reasons for your answer, including what you think the impact of the proposal could be, and if there are any ways you think the proposal could avoid negative impacts?

Yes it will contribute to these aims

## General

Q10. Do you have any other additional comments or suggestions on the proposed Bill (which have not already been covered in any of your responses to earlier questions)?

*No Response*