

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

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).

Ian van Duivenbode

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.

Passivhaus provides value on many fronts: low energy, low fuel cost, life cycle value, comfort, quality, fresh air, moisture control, etc. But we should exhaust retrofit options before building new.

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 the only way the industry minimum standards are raised.

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?

Fully supportive

Please explain the reasons for your response.

It's the only standard that requires an in use performance and has sufficient QA to achieve the aspirations of the design.

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?

Fully supportive

Please explain the reasons for your response.

A low carbon building is first and foremost a low energy building. Passivhaus delivers the lowest energy solutions.

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)

Partially 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.

To minimise risk the certifier should be involved in the project from commencement to support the designers and contractors. Evidence of quality construction must be collected during the construction phase - if the first involvement of the certifier is post construction they cannot see any errors that could be covered up e.g. missing thermal insulation, holes in air tight layer, etc. So long as the certifier is PH approved by the PHI they can sit inside or outside the Department. I imagine there will be challenges with the availability of certifiers as there are only currently a handful in the UK.

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

Less house building - CAPEX will increase so fewer houses will be built and smaller pool of qualified designers and house builders available until the market adjusts to the higher standards. This is positive from an environmental perspective; lower Scotland-wide carbon footprint as less building materials required. Of the houses that are built, there will be more site locations available to consider where they are built to minimise environmental impact if competition is less and due to their lower energy they are much easier to achieve net zero carbon fully from onsite renewables, minimising demand on the national electricity grid and providing energy security for occupants. If the new build houses are much more expensive as a result this may encourage more retrofit / conversions which again is positive from an environmental perspective - retrofit first.

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.

CAPEX increases but life cycle savings for all - Passivhaus buildings are optimised to achieve maximum lifecycle savings.

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?

This will undoubtedly have greatest benefits in the long term - higher quality construction means longer life buildings ultimately reducing impact on climate change. Passivhaus is also a comfort standard which provides health and wellbeing benefits from year round comfortable temperatures and fresh air reducing the burden on the NHS. Lower energy bills provides social value and reducing fuel poverty.

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)?

Is the proposal to get PHI in Germany to sign off all new builds in Scotland or will there be some sort of certification body in Scotland able to sign off on behalf of the PHI? Either way it will require a big investment to get get started. Fantastic to see the ambition and I will be immensely proud of the nation if we can lead the way in the UK and pass this Bill.