

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

Building Services Engineer, Passivhaus experience

Please select the category which best describes your organisation

No Response

Please choose one of the following:

I would like this response to be published anonymously

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).

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 building standards encourage both lower carbon & energy use in day-to-day living. The benefits to both environmental & cost of living are very good. The improved comfort & quality of the living environment is proven, through better temperature, air quality & humidity within homes & buildings.

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.

Passivhaus is currently more expensive as a capital cost than traditional building methods, so legislation would be required to overcome developer desires to build cheaper upfront buildings. Current incentives have proven insufficient, as there has been little wider uptake in Passivhaus residential building outwith solo or small scale developments. Building of Passivhaus school buildings has been led by funding opportunities that would not be applicable to commercial housing developers.

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.

Reducing energy demand will inherently reduce the energy cost to the inhabitant. Just providing support to those in fuel poverty will only move funds from government to energy supplier, without providing any benefit to those living in the homes, who will likely still face higher bills as energy costs rise more quickly than supporting funding.

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.

Reducing energy use should be the first factor in reducing related carbon emissions. Changing energy production methods will still require extensive emissions relating to construction, transportation & operation of new energy generation, which would not be required at such scale if less overall energy (electric) was required.

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.

Verification of design & construction should remain part of the local council Building Control Department. Departments require to be properly resourced to inspect & verify construction in person, not just through checking design documentation. Third party verification becomes a 'box-ticking' exercise where everything works on paper and may not be properly produced in reality on site. This is applicable to all elements of construction, from verifying Passivhaus design through fire safety construction. Elements of operational review should be undertaken to ensure dwellings, especially those built in large scale, actually perform as intended through the first few years of occupation. Proper detailed handover of buildings to their owners/inhabitants is also required to ensure buildings are correctly operated in the most efficient methods, especially with Passivhaus buildings that operate differently to a traditional dwelling.

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

Capital cost of house development would increase, through more intense construction practices required for the higher quality of construction. Increased design fees would also be likely from Architects & Services Engineers, as well as Passivhaus design specialists who would be required to advise on compliance with the Passivhaus design verification requirements. This would all likely increase the upfront cost of new housing. The payback to dwelling buyers would be provided in reduced energy costs & likely improved dwelling values with reduced depreciation, but would require increased upfront support in initial purchase of dwellings.

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.

As per previous response. Larger scale developments would allow this cost increase to be reduced as many of the associated increased costs can be shared if multiple identical dwellings are constructed using the same design, the economy of scale principle.

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.

Negligible impact to inhabitants. Impact to those that would see an increased struggle to purchase a home made worse if house prices were to increase further.

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?

Very positive impact across all areas of environment, sustainable economy & future generation impact. Improved housing stock for future generations with reduced longterm environmental impact is a major positive.

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)?

The Passivhaus design standard is a proven method for building energy efficient, high quality & longterm environmentally beneficial buildings across Europe, and wider. It builds on the basic principles of using less energy through high quality building fabric & materials and high standards of construction that are also driving recent updates to the Scottish Building Regulations Section 6.