

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".)

Member of the public

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 commissioned a custom house build recently and after just a little research it was clear that using the Passivhaus standard was the best way to design-in very high levels of comfort and energy efficiency while also protecting against the 'performance gap'. I am convinced that wider adoption of the Passivhaus standard is highly desirable.

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).

David Brooke

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.

It is unforgivable that we are still constructing new homes that will need large-scale energy efficiency retrofits in order to deliver against the Net Zero obligations. Retrofitting the existing housing stock is a big enough challenge; we should at least stop making the problem worse.

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.

I was lucky enough to be able to specify the design for my custom build project, and I chose to specify a Passivhaus. Most people purchasing a new home do not get that opportunity so the people making the decisions about what specification to build (i.e. property developers) need to be encouraged to take Total Cost of Ownership into account - rather than just maximising their profit. I cannot see any alternative to legislation that would achieve this.

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 is hard to imagine anyone living in a Passivhaus as being subject to fuel poverty, although domestic hot water usage still needs to be paid for.

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.

Energy is still needed for the small amount of heating (or cooling) a Passivhaus requires - and also for Domestic Hot Water. Delivering this energy from the electrical grid means it will be decarbonised as the grid decarbonises (and the Scottish electrical grid is already very low-carbon) - and reducing the magnitude of the energy demand via Passivhaus levels of building performance makes this possible without significant investments in grid upgrades.

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.

My own experience of the pre- and post-construction verification processes for Passivhaus is that they are much more robust than more conventional Building Control. There is a wider evidence base that the Performance Gap is effectively eliminated. For a one-off custom build these processes did add to the cost but if Passivhaus becomes more mainstream (through being made mandatory) that cost differential will decrease.

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

The construction industry will seek to recover the costs of training and new / modified components and construction practices by increasing the prices they charge for completed homes. This will presumably raise the prices of new-build homes in relation to existing homes - but that cost differential will be directly reflected in the reduction in running costs.

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.

There are clearly factors that tend to slightly increase costs: triple- rather than double-glazed windows; better insulation; air tightness measures; the addition of MVHR systems; the extra checking of the as-designed and as-built performance. These will need to be added to the purchase price - but they will be offset by much lower running costs. Mortgage lenders who understand the benefits of high levels of energy efficiency tend to be willing to grant purchasers slightly larger mortgages because they know they will be spending less on their energy costs.

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.

Under the current legislation, the only people who are realistically able to purchase a Passivhaus home are the tiny minority able to commission a custom build. Making Passivhaus mandatory will enable a much wider range of individuals to benefit from the improved levels of comfort and energy efficiency.

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?

No Response

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)?

Many people rightly focus on the energy efficiency aspects of Passivhaus construction but there are other benefits too - e.g. the inclusion of MVHR provides much better levels of ventilation, typically improving air quality and eliminating the risk of condensation and mould. (Better for reducing the risk of COVID-19 transmission too.)