

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 a semi-retired self employed interim senior manager/ consultant in the Scottish housing association sector. I am also a Board member of a housing association and a subsidiary of a further housing association, both operating in Scotland. I have spent my career working in the sector, and have a basic working knowledge of many of the issues relating to low energy housing.

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).

Lawrie West

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.

I'm generally very supportive of the principle of future proofing all new housebuilding by achieving Passivhaus Standards. Notwithstanding the additional capital costs of building to these Standards, these are necessary to achieve net zero targets. I also believe that it will be difficult for future Governments to fund retrofit programmes if some form of 'halfway house' standard is agreed now in an attempt to defray current capital costs.

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 think legislation or the threat of legislation may ultimately be required but if at all possible it is arguably desirable either to develop systems on a voluntary basis with housebuilders that achieve Passivhaus standards for new build, or carry the prospect of retrospective action against housebuilders who consistently underachieve in meeting the performance gap objectives that feature so prominently in the Consultation document. For example, could a licensing arrangement be introduced for housebuilders as a pre-requisite for building consent, with licences reviewed regularly annually or once every two years, and withdrawn for evident under-performance. Regulation of these licences would lie with designated verifiers.

As the Consultation Paper states, funding mechanisms could be used for social housing which rely in part on Scottish Government subsidy for construction, to ensure compliance with Standards devised to address the performance gap.

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.

Although in their relative infancy in Scotland, I think there is already enough evidence that Passivhaus specifications greatly reduce fuel running costs for residents and thus will contribute to mitigating the effects of fuel poverty.

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.

The studies quoted in the Consultation Paper bear out the reduction in emissions associated with Passivhaus specifications, in comparison to conventional new build housing. It also seems self evident that the reduction in heating inputs to Passivhaus houses must be consistent with a reduction in emissions. There was one disturbing reference in the Consultation Paper however to current monitoring arrangements not having generated sufficient information to make judgements on progress towards emissions targets. If this is the case it is a fundamental flaw that needs to be quickly addressed as good quality information will be required quickly to allow checks to be made on progress towards targets. This remark would follow not just for housing designed to Passivhaus Standards but also for and future new build housing built to lower carbon standards. In the case of the latter it might be critical in making judgements about the necessity to revise subsequent Standards to achieve Passivhaus standards, if as seems likely we are not achieving national carbon reduction targets.

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.

I am generally fully supportive of a range of measures that might need to be considered to address

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)

performance gap and verification issues.

The Consultation Paper quotes John Gilbert Architects as stating that quality in the construction industry is an issue. In my working experience there are some good construction companies who hopefully would make a satisfactory transition to a more stringent performance and verification environment. However others might find this a bit of a cultural shift in working practices. We would want to work collaboratively between statutory agencies and the construction industry on the training verification and certification issues listed on page 30 of the Consultation Paper.

However, we might look at contract devices such as retention periods and percentage contract sums retained until certification has been satisfactorily completed prior to releasing the balance of contract sums.

I would like to see some of the industry exemplars playing a key role in promoting better construction practices towards Passivhaus design. There is obviously a potential for the housebuilding industry to 'kickback' at new Passivhaus requirements. Exemplars encouraged and indeed offered financial incentives to stand alongside Government and statutory agencies might be one way of securing buy-in to desired design standards and construction methods. The exemplars could be part of the training and awareness raising response, helping to draft new regulations and Technical Handbook revisions, and working alongside designers, architects, project managers, clerks of works and procurement professionals to encourage change and good practice. It would be a good reward for those current exemplars who have shown vision and have been prepared to invest time money and resources in taking net zero design and construction to its current position.

I believe that the Scottish Federation of Housing Associations is currently working on a database of low energy designed housing in the HA sector - and doubtless Homes for Scotland will also be able to assist in creating a database of exemplar organisations who might help to create an improved Passivhaus culture in the housebuilding industry.

I also wonder if Scotland Excel might have a role to play in encouraging better procurement practices in all public or publicly-funded bodies to ensure better outcomes in providing new houses and indeed other new buildings designed to Passivhaus standards.

On the verification processes, it might be better to remove self verification/ compliance from builders and vest this in a combination of local authorities and designated verifiers - who in turn would be licensed by LA's. There are some exemplars amongst architectural and professional practices which have been at the forefront to date of promoting lower carbon housing. We may wish to encourage them to form the first 'tranche' of non-LA verifiers licensed by LA's for this purpose, to assist in verification of future new build housing to Passivhaus standards. In terms of onsite activity, a particular training emphasis needs to be placed on the importance of quality control activities, clerk of works activities and other project management activities influencing the quality of the finished product.

The costs of such verification activities would inevitably have to be borne by housebuilders and set at levels required to cover the costs of verifiers.

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

Perhaps the real issue here would be to engage with volume housebuilders and Homes for Scotland to determine what steps might be taken to counter the prospect of Scotland becoming less attractive an environment for investment in new housebuilding, as a result of the increased capital costs of Passivhaus construction.

It might be argued that the Scottish Government should try to work as closely as possible in tandem with England and Wales, given the degree of integration of our economies. If it were possible to agree key strategic steps and actions with the UK Government and other devolved administrations, this might avoid disadvantaging Scotland if we develop Paasivhaus construction requirements out of step with the rest of the UK.

Perhaps again enlisting the support of our exemplars here in Scotland might assist in addressing some of the fears of the volume housebuilders - as well as enlisting assistance from exemplars from other

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

countries such as Ireland and Belgium as stated in the Consultation Paper, to help to make the case and mitigate adverse market reactions to the introduction of Passivhaus standards

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?

a significant 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.

It seems likely that a move to Passivhaus specifications would result initially in a significant increase in capital costs. It might be hoped that these would reduce in time as the industry adjusted. However the construction methods will remain more intensive even through time. This is presumably the source of the 4-8% premium quoted in the Consultation Paper.

This is a critical issue. Notwithstanding whatever methodology was used in arriving at the 4-8% figure, this needs to be subject to ongoing monitoring and review. Continuous review might help to identify the hot spots i.e. those aspects of costs which are particularly high and may point to areas requiring ongoing efficiency improvements e.g. design, verification, manufacture and supply chains.

On the latter, one principal feature might be size of companies involved in the process and our gut instincts to want to have everything here in Scotland. Arguably, this might be tempered by a recognition that it may be more efficient to have facilities sited elsewhere in the UK - particularly if these create business units of size that generate efficiencies, and are located in some of the target 'levelling up' areas that badly need economic stimulation and the benefit of the jobs.

The potential for increased capital costs create a considerable tension here in competing priorities for funding for new affordable housing. Our mounting difficulties in recent years in achieving acceptable numerical levels of output to address our growing housing need. It can only be compounded if design to Passivhaus standards makes unit costs more expensive, and by implication increase unit subsidy implications for affordable housing. There has been considerable work in recent years progressed amongst developing housing associations, the Scottish Futures Trust and civil servants to look to new sources of finance or more competitive sources of loan finance for non-subsidised portions of housing development costs and this might warrant further exploration.

There is of course a strategic political economic that has an overarching effect on public funding available for housebuilding; and that is the priorities that drive the allocation of funding from the Scottish block grant. There is clearly a need for even further scrutiny of such issues as renewing and creating Scotland's physical infrastructure to meet net zero targets progresses.

One further factor making impacts harder again is inflation in the general economy and in the building industry. This is clearly running at levels equivalent to or higher than the 4-8% quoted as a premium in the Consultation Paper for Passivhaus specification premiums.

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.

I would generally comment that research and studies point to the relative disadvantage of protected groups in the workings of the economy. Any reduction in fuel poverty and mitigation of pressures on household budgets resulting from the adoption of Passivhaus standards must impact advantageously on these protected groups.

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?

A particular compelling reason to build to Passivhaus rather than other but less stringent low energy standards, is how realistic might be the prospect of retrofitting at a later date. Building to less stringent low energy standards might seem attractive in offsetting the current fairly daunting capital cost implications of insisting on Passivhaus standards hereafter for new housebuilding.

However, the history of retrofit in housing has been patchy. Take for example the issue of private sector improvement grants which were a feature of public subsidies in the 1970s and 1980s and which were used with some success in targetting areas of particular disrepair in older town centres and adjacent areas at that time. Increasingly, these activities have featured less prominently as time has gone and demand on public subsidy has been channeled to other forms of housing need and investment. Houses designed and constructed to reduced low energy standards today may never be retrofitted at a later date, as demands for public housing subsidy are always likely to outstrip available funding.

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)?

None