

[Redacted]

From: [Redacted] on behalf of Minister for Public Finance, Planning & Community Wealth
Sent: 09 December 2021 16:39
To: Public Engagement Unit
Cc: Minister for Public Finance, Planning & Community Wealth
Subject: FW: Homes for Scotland response to Building Standards Section 6 consultation re e energy
Attachments: PDF HFS consultation response questions.pdf; HFS Consultation response position paper.pdf; Tom Arthur section 6 letter 091221.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: David, MICASE

[Redacted]

PEU,

Could you add this as an MR and allocate to planning colleagues in first instance.

Thank you.

From: Jennifer Kennedy [Redacted] @homesforscotland.com>
Sent: 09 December 2021 14:40
To: Minister for Public Finance, Planning & Community Wealth <MinisterPFPCW@gov.scot>
Subject: Homes for Scotland response to Building Standards Section 6 consultation re e energy

Please see attached copy of Homes for Scotland's recent submission to the Scottish Government's consultation on Building Standards Section 6 (which pertains to the energy efficiency of new homes) for your information.

It is vital that there is a co-ordination of efforts between both Building Standards and Planning to assist us all with a smooth transition to net zero. Whilst we are engaging directly with the Minister for Zero Carbon Buildings, we would be delighted to brief you personally on our submission should this be of interest.

Kind regards
Jennifer

Jennifer Kennedy
Head of Public Affairs
Homes for Scotland

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(Please note my working pattern is Mon/Tues 9am – 3pm, Wed 9am – 4pm and Thurs/Fri 9am – 4.30pm)

Delivering the range of new homes that Scotland needs involves the coming together of many different elements. Our manifesto sets out what is required if we are to meet Scotland's varied housing needs. Read more [here](#).



Tom Arthur MSP
Minister for Public Finance, Planning & Community Wealth
Scottish Government

9 December 2021

By email only

Dear Tom

With last month's COP26 still very fresh in our minds and having put the climate emergency into even sharper focus, I enclose a copy of Homes for Scotland's recent submission to the Scottish Government's consultation on Building Standards Section 6 (which pertains to the energy efficiency of new homes) for your information.

Recognising that we all have our part to play in Scotland's transition to a net zero nation, we confirm our commitment to achieving the 32% "improved standard" for operational energy reduction as proposed by the Scottish Government at the earliest practicable opportunity.

This will not be from a standing start as the new homes sector in Scotland is already well ahead of the rest of the UK in respect of such standards. We will therefore continue to move forward with increasing momentum, building on the solid knowledge and experience that has been developed.

As the consultation called for "robust assessment" of proposals, it was imperative that our response highlighted some of the very practical hurdles that need to be overcome as our sector, wider stakeholders and the Scottish Government move forward together.

In addition to the very significant and obvious challenge arising from the extremely short 2022 lead-in time and the extent of technological and fabric changes required within such a period, we have identified the following areas that require to be addressed:

- Grid capacity constraints
- Lack of supply chain readiness
- Skills and labour availability
- Wider societal impacts
- Impact on affordability for customers

Overcoming these issues will require clear guidance, planning, piloting, testing and investment, combined with a clear and realistic timescale for implementation.

We therefore propose that the Scottish Government sets up a steering group with industry, the supply chain and Delivery Network Operators to provide a clear route map to implementation of both the 2022 standards and the wider changes coming in 2024. This will mitigate any risk that could result in a reduction in the number of homes built in Scotland (including the affordable housing supply programme).

Furthermore, to encourage and support customers in the transition to net zero homes, we ask the Scottish Government for a fiscal support package to include:

- Enhanced grant regime for the delivery of new affordable homes
- Introduction of net zero carbon grant support for new home buyers
- Discounted LBTT rates to incentivise the purchase of low carbon homes

It is vital that there is a co-ordination of efforts between both Building Standards and Planning to assist us all with a smooth transition to net zero. Whilst we are engaging directly with the Minister for Zero Carbon Buildings, I would be delighted to brief you personally on our submission should this be of interest.

Yours sincerely

Fionna Kell

Fionna Kell
Director of Policy

Enc

DELIVERING MORE

**HOMES FOR
SCOTLAND**

SECTION 6 BUILDING STANDARDS CONSULTATION RESPONSE

November 2021

Executive Summary

Homes for Scotland (HFS) members understand, respect and support the commitment that the Scottish Government has made to make Scotland a net zero society by 2045. We recognise that we all have our part to play in this and we confirm our commitment to achieving what is practicable at the earliest opportunity.

It is important to highlight that the New Homes sector in Scotland is currently ahead of the rest of the UK with respect to standards and has demonstrated substantial progress since 1990 in delivering carbon reductions across the new build housing stock.

We will continue to move forward with increasing momentum accepting our role is essential in helping to drive Scotland towards a Zero Carbon future. In other words, we are not tackling this crisis from a standing start, rather, we are building on solid knowledge and experience in delivering sustainable homes and this response reflects our collective level of expertise.

In this context we can confirm that we are committed to achieving the ‘Improved standard’ 32% operational energy reduction targets as proposed in the consultation. Understanding that this change in Building Standards will be both ambitious and potentially disruptive, it is considered deliverable with the necessary Scottish Government support with fiscal, financial and grant incentivisation measures which will help reinforce a consumer shift towards low carbon housing.

With respect to the proposed “Advanced Standard” 57% operational energy reduction target, we firmly believe it all but impossible to deliver this in the short to medium term whilst using a gas fired heating system.

Given that the consultation calls for such proposals to *“be subject to robust assessment of both benefits and costs and the implications to the construction industry in Scotland”*¹, it is imperative that our response highlights some of the very practical hurdles facing our sector and Scottish Government as we jointly move towards meeting net zero ambitions. These practical hurdles have been identified following extensive engagement with sector representatives.

We support the overall intent of the changes and welcome the need to improve the energy efficiency of new homes for the benefit of owners, occupiers, and the planet. The very significant challenge comes from the extremely short lead-in time proposed before implementation, coupled with the extent of technological and fabric changes required within such a short period.

The major areas of concern that need to be addressed jointly between industry, Scottish Government and wider stakeholders are:

- Grid capacity constraints
- Lack of supply chain readiness
- Skills and labour availability
- Wider societal impacts
- Impact on affordability for customers

We believe that it is possible to overcome the concerns that we have highlighted, but they do require clear guidance, planning, piloting, testing and investment, combined with a clear and realistic timescale for implementation. On the back of this consultation exercise, we propose that Scottish Government sets up a steering group with industry, the supply chain and DNOs

¹ Scottish Building Regulations, Proposed Changes to Energy Standards and Associated Topics, July 2021, Para 1.2.1

to provide a clear route map to implementation of both the 2022 standards and the wider changes coming in 2024. This proposed partnership working will mitigate any risk that could result in a reduction in the number of homes built in Scotland including the government's own affordable housing supply programme.

Furthermore, to encourage and support customers in the transition to net zero homes we ask Scottish Government for a fiscal support package to include:

- Enhanced grant regime for delivery of new affordable homes to meet these targets;
- Introduction of net zero carbon grant support for new home buyers;
- Discounted LBTT rates to incentivise consumer behaviour to encourage purchase of low carbon homes.

Introduction

This submission is made following COP26 in Glasgow, where nations, people and businesses around the globe increased their commitments to delivering the changes that the world demands.

Homes for Scotland (HFS) and our members understand, respect and support the commitment that the Scottish Government has made to make Scotland a net zero society by 2045. We recognise that all have our part to play in this and we confirm our commitment to doing so.

HFS represents home builders of all tenures and sizes and includes both RSLs and private homebuilders. Together our members deliver circa 95% of all homes built to rent or own across Scotland. We look to change, challenge and collaborate on behalf of the housing sector to ensure the housing needs and aspirations of all those living in Scotland are met. HFS recognises the challenges faced by both those seeking to rent or buy a home that is affordable to them, and we also recognise the challenges faced by those companies whose business it is to supply those homes.

We aim to bridge the gap in affordability by addressing the challenges that prevent the delivery of sufficient numbers of new homes and we work in partnership with stakeholders at all levels to ensure the best outcomes for the people of Scotland. Our approach to this consultation response balances the need to ensure carbon reduction targets are achieved; affordability is maintained or improved; and sufficient homes are delivered.

Throughout the consultation process, we closely engaged with members (including large private home builders, RSLs and SMEs) building across all areas of Scotland and who deliver a wide variety of home types. This collective knowledge and intel has ensured that the response provided is an accurate position of the practical realities of delivering homes of all tenures.

Progress to date

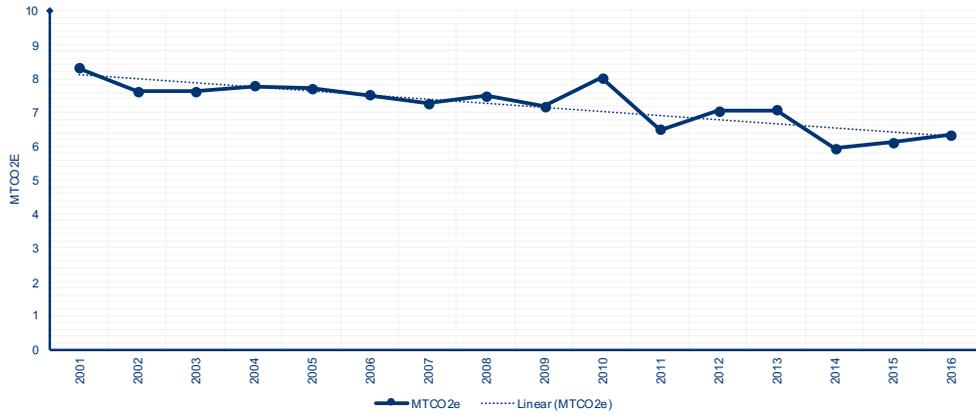
Over the last decade and since the publication of the Sullivan Report² in particular, continued investment in the efficiency of new build homes in Scotland has supported a direct reduction in operational carbon emissions by in excess of 75% on 1990 baseline levels through progressive step-changes in fabric efficiency standards and encouragement of the use of low and zero carbon energy generating technologies (LZCEGT).

To put this into context of residential sector carbon emissions, a simple analysis of notional emissions rates for new and existing dwellings in Scotland suggests that while the number of new homes completed between 2010 and 2016 equated to around 4.4% of Scotland's housing stock, the associated emissions only represented 2.6% of the recorded total for the residential sector.

The following charts provide an overview of the estimated carbon emissions rates for new and existing homes across the years 2007 to 2016, encompassing changes to Section 6 Energy of the Building Standards in 2007, 2010 and 2015. These highlight the assumed deviation in carbon emissions generated from the operation of new and existing homes based upon Scottish Government data sources.

² A Low Carbon Building Standards Strategy for Scotland, 2007

Residential Sector Emissions



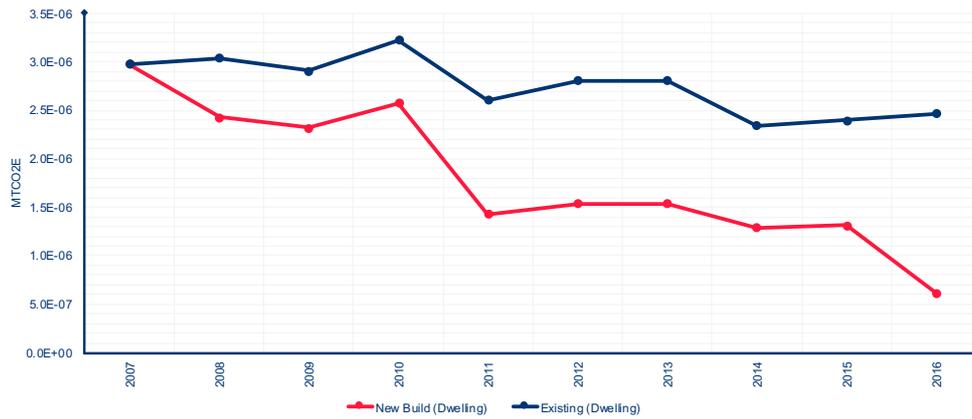
Greenhouse Gas Emissions by Source Sector – Scottish Government (May 2019)

1

Homes for Scotland | SPEN: Homes of the Future Conference 2019

04/03/2021

Notional Emissions Rate per Dwelling



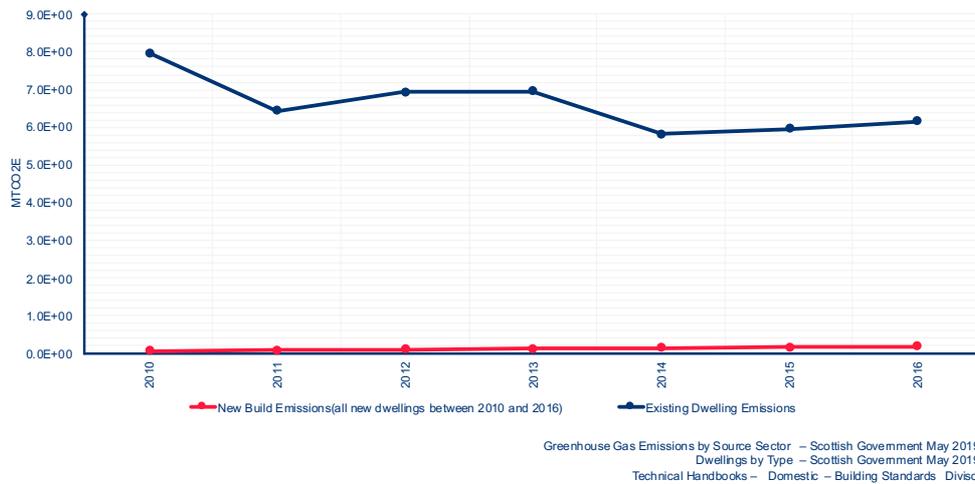
Greenhouse Gas Emissions by Source Sector – Scottish Government May 2019
 Dwellings by Type – Scottish Government May 2019
 Technical Handbooks – Domestic – Building Standards Division

2

Homes for Scotland | SPEN: Homes of the Future Conference 2019

04/03/2021

Residential Sector Emissions 2010- 2016



It is clear that the new build sector's contribution to overall residential sector emissions reduction has been radically improving and the changes proposed in the consultation will continue this trend. Given this trajectory, the new build sector will continue to contribute an ever-decreasing proportion of the overall emissions from the residential property stock, whilst we all recognise that addressing emissions from existing homes is undoubtedly where the biggest challenges will lie.

Appendix A provides just a few examples of where the industry is already progressing towards net zero.

These examples show a tiny fraction of what is already happening across the Scottish home building industry, and we know from discussions with SMEs, that they follow where the larger developers lead. They rely on those with the resources to research and develop next generation technologies and solutions. It is also important to note that the larger developers all work across the UK, and while they are dealing with these challenges holistically, they are having to consider the differing timescales for implementation across the devolved nations. This causes a number of challenges, especially within the supply chain, who are gearing up to serve the English market (approx. 90% of the UK market), and who are not fully aware of the earlier timescales being driven forward in Scotland.

Section 6 Consultation Response

Notwithstanding this initial context and the very substantial progress made to date in addressing operational carbon emissions, the home building sector in Scotland recognises that it still has a major role to play in assisting the transition to net zero. Our consultation response is therefore made in the context of our firm commitment to working towards a 2045 net zero Scotland.

In this context we can confirm that we are committed to achieving the 32% operational energy reduction targets as proposed in the consultation.

With respect to the proposed “Advanced Standard” 57% operational energy reduction target, we firmly believe it all but impossible to deliver this in the short to medium term whilst using a gas fired heating system. The power grid and wider industry supply chain is not yet ready to accommodate the electrification demands that an Advanced Standard would require.

Given that the consultation calls for such proposals to *“be subject to robust assessment of both benefits and costs and the implications to the construction industry in Scotland”*³, it is imperative that our response highlights some of the very practical issues facing both our sector and Scottish Government alike if we are to jointly move towards meeting net zero ambitions.

These issues have been identified following extensive engagement with sector representatives and, in preparing this response, HFS home builder members have worked alongside the team at Building Standards Division to undertake extensive modelling and testing of house types using the ISAP software provided by the Scottish Government.

Through this modelling exercise, it is essential to state that while we support the overall intent of the changes, the very short lead-in time proposed, and the extent of the changes required within such a short period are of significant concern to the industry in terms of deliverability.

These levels of uncertainty around delivery timescales as well as financial implications of the changes and lack of capacity in the infrastructure network and supply chain mean that investment decisions regarding site acquisitions and site starts will likely be put on hold until these issues have been resolved.

In addition to this, we understand that SAP software providers are not updating their products in line with Scottish Government timescales. Rather they are concentrating on the English changes, which means that the software needed to support building warrant applications will not be in place next year.

There is a very real possibility that an unintended consequence of the proposed 2022 changes will be a reduction in the number of new homes built in Scotland. This will impact all tenures, including the Scottish Government’s own affordable housing programme commitment.

We do believe that in the medium term, the concerns we have highlighted are possible to overcome, but they require jointly developed clear guidance, planning, piloting, testing and investment, combined with a clear and realistic timescale for implementation.

Clear and well planned route to delivery

We would propose that the most practical way of jointly achieving the national carbon reduction targets required would be to limit the scale and impact of the change to take place in 2022 and instead focus collectively on the introduction of the New Build (Zero Direct Emissions) Heat Standard and the proposed effective ban on gas boilers in 2024.

³ Scottish Building Regulations, Proposed Changes to Energy Standards and Associated Topics, July 2021, Para 1.2.1

Such an approach, with a clear planned out transition over the next 24 months, would provide the sector and wider supply chain with the confidence and clarity as to what is expected and when. It allows appropriate investment to be made with more certainty and ensures that low carbon homes of all tenures will continue to be built at the scale that Scotland needs.

Now in the last quarter of 2021, the industry is still unclear as to what changes will be introduced during 2022. Allowing for analysis of the consultation responses, we expect that the finalised guidance will not be published until early 2022, providing no lead in time before it comes into effect. Until such time as the new guidance is published and the appropriate software is available to support it, the home building industry and wider supply chain have no clarity as to what those changes will be or what impact it will have on their customers and businesses.

For this reason, we recommend that effort is best focused on the provision of a jointly prepared Scottish Government / sector route map which should be well- evidenced and communicated with a commitment to deliver the changes required by 2024.

A working group focusing on low carbon home delivery should be established from January 2022 with cross-sector stakeholder representation including Scottish Government, HFS, SFHA, home builders of all tenures, utilities and the wider supply chain. This specialist working group can address the challenges early, find solutions ahead of time and ensure that these solutions are achievable and deliverable. This will ensure the successful delivery of the Scottish Government's zero carbon heating target for 2024 as we will take the journey together as one, intent on achieving a common goal.

Readiness of the energy networks to cope with increased demand

The ability of home builders to comply with the proposed new regulations will, to a very large extent, be determined by the existing and future capacity of the electricity grid to accommodate the additional demands placed on it. This is the case at both local and national levels.

Currently, in some parts of Scotland, home builders are already restricted in terms of the volume of new homes, associated technology and energy demands that can be connected to the electricity network. Estimates suggest that the switch to predominantly electric-based heating systems, increased use of Photo Voltaic panels and the introduction of Electric Vehicle charging points will increase the energy requirements per home from circa 5kWhs to 8kWhs.

The proposed changes will significantly increase the electrification of our homes and HFS home builder members are being advised by Distribution Network Operators (DNOs) that they will be unable to accommodate significant additional loads on the network in advance of the proposed full electrification of heat in new build from 2024.

The Draft Heat in Buildings strategy advises that the Scottish Government is conducting analysis to understand generation and network requirements, in terms of the scale and location of the demand that heat electrification could bring. Until this analysis is completed, the sector has no clear visibility of the plans that the Scottish Government and network operators have to ensure that additional loads can be accommodated. Without capacity and clarity over future investment upgrades, sites will not be able to commence, nor can additional phases be progressed.

Whilst HFS understand that work has been underway with the Scottish Government and DNOs to progress these issues (including the recent establishment of a Heat Electrification Strategic Partnership⁴), we do not yet have any visibility over this work or confidence that the investment

⁴ Scottish Government, Heat in Building Strategy, October 2021

required will be made in the timeframes that the proposed building regulations changes will be expected of home builders.

We encourage the Scottish Government to facilitate joint discussions with home builders and energy providers over the course of the next two years to allow a realistic and deliverable approach to fully decarbonising home heating in new builds from 2024 and not place additional burdens on the power networks in advance of that.

Readiness of the supply chain to cope with increased demand

The proposals will have implications for the material, fabric and technologies used in the construction of new homes and some of these changes are significant.

2022 will see the introduction of changes to the Building Standards in England, the result of which is to bring homes in England to approximately the standards currently delivered in Scotland. The changes proposed in this current consultation will continue to see Scotland exceeding the standards required of the rest of the UK in 2022.

However, as the significant majority of homes built in the UK are in England (173k completions in England in 2019 compared to 22k in Scotland), most manufacturers and suppliers operate outwith Scotland. Significant investment to change processes or technologies will not be undertaken by the supply chain until the volume of demand is prevalent in England. The demand driven by acceleration of changes in Scotland will unlikely be significant enough to trigger genuine wholesale changes in advance of further requirements to change in England. Whilst we appreciate that some Scottish-based parts of the supply chain may be ready, overall capacity as a whole will remain significantly constrained.

HFS has explored other unintended consequences. The increased insulation required may, in some circumstances, require changes to wall components / systems. These new systems are likely to require new fire certification which can take up to 12-18 months to be received which will introduce even more delays in delivering the homes Scotland needs.

We therefore welcome the commitment in the Heat in Building Strategy to expand the Scottish Government's work with the supply chain including the co-production of Supply Chain Delivery Plan.

We suggest that the proposed changes to the Building Regulations should be minimised in 2022 until, in line with the rest of the UK, the supply chain is substantially expanded. A realistic timeframe for this is 2024/2025. Acceleration in advance of supply chain readiness will have a significant impact on the volume of new homes delivered across all tenures.

Customer impact and readiness

The way we heat and use our homes will change significantly as a result of the transition. These changes will have attitudinal and behavioural implications as well as financial.

Recent research undertaken for Scottish Housing Day⁵ indicates that whilst 40% of respondents (from across all housing tenures) would like to move to a more energy-efficient home, only 14% agreed that this was a key factor in choosing their current home. Furthermore, 82% think the Scottish Government should financially support homeowners/landlords to meet energy-efficiency standards, with 34% believing this should cover all costs. Whilst consumers in Scotland are aware of the need for change, what is less clear is their current appetite to meet the cost of the change that is required.

⁵ CIH, Housing and Climate Change Survey, August 2021

The Scottish Government's own Heat in Buildings strategy recognises that the heat technologies identified as near-term priorities (heat pumps and heat networks), whilst widely used in other European countries remain unfamiliar to many in Scotland.

Evidence from a recent Scottish Government report⁶ indicates that there is a lack of real-world running cost data for low and zero emission heating systems with comparison to SAP estimates and fossil fuel counterfactuals. We fully support the SFHA and RSLs in their concern that there is a major risk of tenants being faced with high energy costs following the shift towards decarbonised forms of heat. We are also in agreement with SFHA's concern that many of their members who have already installed some new low carbon technologies such as heat pumps have experienced significant operational issues including cases where both the running costs and maintenance costs were more expensive than anticipated or appliance lifespans were much shorter than expected.

HFS welcomes the proposed establishment of a National Public Energy Agency as part of an initiative to increase public engagement and raise awareness and understanding of the new technologies. We also understand that work is to be undertaken by the Scottish Government to explore the potential network investment costs of the heat transition for Scotland, to provide greater clarity on the range of costs and impacts on consumers. With these engagement initiatives being launched from 2022, we believe it is premature to introduce significant changes to the building regulations, requiring the adoption of many of these technologies in advance of the public awareness being raised and technologies being more fully tested and customer ready.

Significant, clear, and consistent messaging about what will be required of householders in terms of behaviours and cost is an essential part of the route map that should be delivered over the next 24 months. This will increase public awareness of the benefits and cost of the transition to net zero homes.

Financial and grant incentivisation measures which will help reinforce a consumer shift towards low carbon housing are essential. Experience from the car industry demonstrates that a policy of structured fiscal intervention and incentivisation has accelerated the population towards the mainstream of electric powered rather than carbon fuelled vehicles. A similar impact could be achieved for the transition of our new homes.

Diversity of product

On any new housing site to ensure quality of place, design, customer choice etc, a home builder might offer 3 or 4+ different house models detached / semi / terraced / bungalow / townhouse / integral garage etc. To maximise the affordability of homes, home builders need to benefit from economies of scale in procurement, so requiring standardisation of components.

The modelling undertaken by members to inform our response to this consultation indicates that across any one development each of the above house models requires a different technical solution. Therefore, whilst a 'technical' solution might be possible on any one property, the requirement to have a different approach (technology and installation methods) to each house type, and therefore 3 to 4+ solutions on any one site, is commercially unviable. The modelling undertaken by home builders suggests that, in some instances, for example

⁶ [Renewable and zero emissions heating systems in affordable housing projects: evaluation - gov.scot \(www.gov.scot\)](https://www.gov.scot/reforms/energy/heat-in-buildings/evaluation-renewable-and-zero-emissions-heating-systems-in-affordable-housing-projects)

bungalows and apartments, it may not be possible to achieve a 32% reduction. As a result, the proposed changes may preclude some of these types of buildings being delivered, thus reducing diversity of product and customer choice.

This issue is of particular concern from the perspective of affordable housing providers. As they retain ownership for the properties and responsibility for ongoing management and maintenance, it is unfeasible for affordable housing providers to introduce a range of solutions on any one site. This would be expected as a result of the proposed changes.

The proposed changes create a significant risk that the diversity and overall supply of homes of all tenures will reduce as commercial viability is significantly eroded.

Cost assumptions

The consultation is clear that Scottish Government wants to understand the “*technical, commercial and wider policy implications of improvements to energy standards*”⁷.

The papers accompanying the consultation⁸ indicate an expectation that the changes will add circa 3-6% to build costs. However, in preparation of this consultation response, the reality from modelling undertaken by those delivering the new homes is that costs are closer to 15%, in addition to the already rising cost base from recent months.

As highlighted in the SFHA response to this consultation, research amongst housing associations has indicated they are already facing very significant cost pressures. A recent evaluation of affordable housing projects in Scotland found that low and zero carbon technologies were between £2,000 to £5,000 more expensive per unit than the default option of a gas boiler with solar PV⁹. The introduction of ambitious local design standards, such as the Glasgow Standard, is increasing costs by between 5–10% and 13–15%, whilst building to the Passivhaus standard can add 17.3% to the cost of a typical two-bedroom property.

Additional costs in the region of 15% will put additional pressure on the viability of many housing projects of all tenures and could ultimately result in a reduction of the overall number of homes delivered in Scotland, especially in more rural and remote areas where values are marginal already.

Future societal impact

The pressure placed on the industry through the intended changes could reduce the ability to meet demand as outlined above. The slow down or reduction in homes built will directly impact the ability of the sector to provide opportunities for new jobs and upskilling which, in turn, will have repercussions on the Scottish Government’s own pledge to deliver affordable homes, the Young Person’s Guarantee and meet the 2024 standard.

The ability to own a home provides people with security and stability. Since COVID-19 there has been a strong desire for people to have a safe space where they can work and connect with family. Reducing the number of new homes available will add to the existing housing

⁷ Para 1.1

⁸ Improvement to Energy Standards for New Buildings within Scottish Building Regulations 2021: Modelling Report – Domestic Buildings. AECOM for Scottish Government

⁹ [SFHA publishes findings of research into the rising costs of development - The Scottish Federation of Housing Associations Limited](#)

shortfall and will have a direct impact on the well-being of Scotland's population and increase pressure on the social housing sector.

Instead, minimising change in 2022 and focusing on a clear route map to 2024 will limit any potential short-term and socio-economic impacts on Scotland's people.

Current and future skills availability

It is estimated that between 2020 and 2025 Scotland will require an additional 26,250 construction workers. The Scottish Government has committed to investing an additional £500 million to support new jobs and reskill people for jobs of the future. As our sector provides almost a third of all apprenticeships in Scotland, it is essential that these opportunities continue to be available to our young people, particularly to meet demand for the provision for green skills. With a joint effort between the Scottish Government and our sector, these opportunities can continue to be provided, contributing towards helping people to secure work in the low carbon economy. The workforce is not currently ready in either skill or numbers to undertake what will be required of it to deliver homes to the new standards from 2022.

The new standards will place significant additional responsibilities on Building Control services across local authorities, requiring officers to be upskilled in key areas to interpret the additional information required with building warrant applications. Services are already under significant pressure and the introduction of new standards in 2022, without significant additional investment in authorities, will only add to an overall slowdown in the delivery of new homes.

Conclusion

Homes for Scotland (HFS) and our members understand and respect the commitment that the Scottish Government has made to make Scotland a net zero society by 2045. We recognise that all have our part to play in this and we confirm our commitment to doing so.

In this context we can confirm that we are committed to achieving Option 1 the "Improved Standard" 32% operational energy reduction targets as proposed in the consultation.

We believe that it is possible to overcome the concerns that we have highlighted, but they do require focussed direction, guidance, planning, piloting, testing and investment, combined with a clear and realistic timescale for implementation. On the back of this consultation exercise, we propose that Scottish Government sets up a steering group with industry, the supply chain and DNOs to provide a clear route map to implementation of both the 2022 standards and the wider changes coming in 2024. This proposed partnership working will mitigate any risk that could result in a reduction in the number of homes built in Scotland including the government's own affordable housing supply programme.

Furthermore, to encourage and support customers in the transition to net zero homes we ask Scottish Government for a fiscal support package to include:

- Enhanced grant regime for delivery of new affordable homes to meet these targets;
- Introduction of net zero carbon grant support for new home buyers.
- Discounted LBTT rates to incentivise consumer behaviour to encourage purchase of low carbon homes.

Appendix A:

Industry Best Practice Examples

It is helpful for anyone involved in this work to acknowledge the steps already being taken at a strategic level by the majority of home builders of all scales operating in Scotland, as well as across the UK. The examples at Appendix A are just a few examples to illustrate that the sector is progressing and building momentum on what has already been achieved in enhancing the energy efficiency of buildings and reducing overall carbon output. These issues are not being tackled from a standing start.

CCG Scotland – The Net Zero Home

In response to the Scottish Government target to become a net zero economy by 2045, which will require the rapid alignment of policy with construction resources, methods and technology, CCG has created the 'Net Zero Home'.

The CCG Net Zero Home introduces a new building standard that reduces the Greenhouse Gas Emissions (GHG) associated with regulated operational energy arising from heating, cooling, lighting, pumps and fans. Whilst this does not tackle issues surrounding embodied carbon, the high energy efficiency standards created in the home designs makes achieving net zero more viable by increasing sustainability and carbon offsetting practices.

Utilising a range of innovative construction and building services such as:

- Fabric First approaches to construction using their bespoke CCG 'iQ' Timber Systems
- Low Carbon heating and renewable technologies
- Low carbon, low maintenance ventilation systems

They have achieved on these home types:

- Average Dwelling Emissions Rate of -0.83kg.CO2/m2/Year, this represents a reduction of 98%.
- Average Space Heating Demand IS 26 KWH/m2/YEAR, representing a reduction of 39%.
- Average energy costs from £117 per annum, representing a reduction of 394%.

The following examples illustrate carbon reduction figures already achieved, as well as future tangible targets to reduce their overall carbon output over the coming years, from some of the largest volume builders, operating not just in Scotland but across the UK. As they supply the vast majority of new homes in Scotland, it is important to recognise the contribution already being made here.

CALA Homes

Launched in 2021, CALA's Zero Carbon Project Team is currently in the process of delivering a roadmap to achieve zero net carbon operating homes by 2030. This Team will ensure that appropriate strategies are implemented to reduce carbon emissions produced as a result of their operations and home building activity.

Again, it is important to remember that CALA has already made significant strides in both reducing overall carbon emissions and introducing enhanced sustainability measures. Key figures from the company's Annual Report show that during the 18 month period to 31 December 2019, it constructed a total of 1,822 homes for sale and a further 390 affordable units. From this:

- The average SAP rating was 84.
- 259 homes had PV installed.
- 1,419 homes had renewable energy sources.
- 40% of their sites were using low-embodied carbon materials.

Taylor Wimpey

Recognising the impact their development and construction activity has on carbon emissions and environmental wellbeing, Taylor Wimpey, within its 2020 Sustainability Report, clearly outlined its commitment and the measures it will be taking to reduce its overall carbon output. These objectives and targets include:

- Reducing operational carbon emissions intensity by 26% by 2025 from a 2019 baseline level.
- Reduce carbon emissions intensity from their supply chain and customer homes by 24% by 2030, from a 2019 baseline level.
- Reduce embodied carbon per home by 21% by 2030.
- Reduce emissions from customer homes in use by 75% by 2030.

Again, it had already made strong progress on reducing its emissions before the publication of its new sustainability strategy, having achieved an absolute reduction in emissions of 39% since 2013 and a reduction of 30% in its carbon emissions intensity since 2013.

Barratt Homes

In January 2020, the Group Level Board of Barratt Homes formally approved its own science-based carbon reduction targets to reduce its overall carbon emissions by 29% by 2025. Its greenhouse gas emissions in absolute terms have reduced by 23% (location based) and 28% (market based).

Further, as outlined in its 2020 Annual Report, Barratt has a wide range of measures of objectives, with clear timescales to reduce carbon emissions whilst delivering additional environmental benefits. These include:

- Development of an updated waste reduction strategy, as well as researching the benefits of MMC and how to enhance them.
- Commitment to reducing the lifetime emissions of homes: it has set a target to ensure new standard house type designs will be net zero carbon in use by 2030.
- To create a low carbon supply chain (covering Scope 3 emissions), it has set a science-based target to reduce these emissions by 11% by 2030.

Response ID ANON-N96P-VR8H-N

Submitted to Scottish Building Regulations: Proposed changes to Energy Standards and associated topics, including Ventilation, Overheating and Electric Vehicle Charging Infrastructure

Submitted on 2021-11-25 14:01:25

Section 1 - Energy - New Buildings - Questions 1 - 11

1 Do you support the extension of standard 6.1 to introduce an energy target in addition to the current emissions target? If yes, do you have a view on the metric applied - primary or delivered energy?

Yes, a delivered energy target

Please provide a summary of the reason for your view below::

There are serious concerns from Homes for Scotland (HFS) members surrounding the lack of adequate SAP software. The absence of this makes it very challenging to understand the impact of the proposals and also for our members to develop their own proposals. Some members are currently undertaking independent analysis with the risk of inaccuracy and assumptions made on potential impacts. This has potential to significantly change upon full release of SAP10 software in Scotland.

Evidence suggests limitations on setting primary energy targets, particularly if these are standardised and do not take full consideration of individual home types. Greater detail is required to understand how the metric will work.

2 What level of uplift to the 2015 standard for new dwellings do you consider should be introduced as an outcome of this review?

Option 1: 'Improved' standard (32% emissions reduction)

Please provide a summary of the reason for your view below::

The new homes sector in Scotland already leads the rest of the UK however accepts its essential role in helping to drive Scotland toward a zero carbon future.

While some HFS members have indicated that Option 1 'Improved' standard (32% emissions reduction) is technically deliverable, the route to this will be both immensely ambitious and disruptive. Based on the technical analysis shared with the Scottish Government, compliance with a 32% reduction in operating carbon emission performance standards will be challenging and potentially unviable for a range of house types which currently account for a major proportion of new homes delivered annually in Scotland.

Whilst still maintaining the use of gas fired boilers for heating it will be all but impossible to achieve Option 2 'Advanced' standard (57% emission reduction), as full electrification of heating and hot water will be required and this should only be considered from after 2024 at the earliest.

While HFS members fully understand and support the commitment that the Scottish Government has made to make Scotland a net zero society by 2045, there are several areas of concern we would like to highlight and provide solutions to.

Route to delivery

We suggest limiting the scale and nature of the proposed changes due to take place in 2022 and instead focus on the New Build Heat Standard (encompassing the ban on gas boilers) in 2024. Collaborative working between the Scottish Government and industry would ensure that the sector and supply chain are confident and clear in what is expected. This will ensure that by working collaboratively and detailing a clear timeline, Scotland can produce homes of all tenures for the people of Scotland which meet the highest of emission and energy targets.

Increased demand on energy networks

HFS members have been advised that the proposed changes and move to electrification of heat in new build homes will mean the Distribution Network Operators (DNO) will be unable to accommodate the significant additional loads on the network. Whilst HFS members understand that the Scottish Government and DNO's have been investigating this, there has been no clarity or confidence that an appropriate solution has been found. We encourage the Scottish Government to engage with home builders and energy providers over the next two year period to focus on a realistic approach to fully decarbonising heating in new builds from 2024.

Increased demand on supply chain

2022 will see the introduction of changes to the Building Regulations in England, the result of which is to bring homes in England to approximately the standards currently delivered in Scotland. The changes proposed in this current consultation will continue to see Scotland exceeding the standards required of the rest of the UK in 2022.

However, as the significant majority of homes built in the UK are in England (173k completions in England in 2019 compared to 22k in Scotland), most manufacturers and suppliers operate outwith Scotland. Significant investment to change processes or technologies will not be undertaken by the supply chain until the volume of demand is prevalent in England. The demand driven by acceleration of changes in Scotland will unlikely be significant enough to trigger genuine wholesale changes in advance of further requirements to change in England. Whilst we appreciate that some Scottish-based parts of the supply chain may be ready, overall capacity as a whole will remain significantly constrained.

With the proposed new and emerging systems and technologies, there will be a clear impact on the reliability, availability of skilled workers and willingness of customers to engage with these new technologies. It is essential that a clear route map is established to ensure that these new systems and

technologies are not adopted prematurely, causing significant challenges for the industry, Scottish Government and home owners.

We suggest that the proposed changes to the Building Standards should be minimised in 2022 until, in line with the rest of the UK, the supply chain is substantially expanded. A realistic timeframe for this is 2024/2025. Acceleration in advance of supply chain readiness will have a significant impact on the volume of new homes delivered across all tenures.

Impact on the customer

The way we heat and use our homes will change significantly as a result of the transition. These changes will have attitudinal and behavioural implications as well as financial.

The Scottish Government's own Heat in Buildings strategy recognises that the heat technologies identified as near-term priorities (heat pumps and heat networks), whilst widely used in other European countries remain unfamiliar to many in Scotland.

HFS members are aware that the Scottish Government plan to establish a National Public Energy Agency by September 2025. Although there is value in this, it is required immediately. If the intention of the Scottish Government is to create transformational change, then this must be launched well in advance of the 2024 changes. Instigating this now will ensure that the people of Scotland understand that there are going to be huge changes in the way we heat and use energy in our homes and aid understanding and awareness. Significant, clear, and consistent messaging about what will be required of householders in terms of behaviours and cost impact is an essential part of the route map that should be delivered over the next 24 months. This will increase public awareness of the benefits and cost of the transition to net zero homes.

Diversity of product

On any new housing site to ensure quality of place, design, customer choice etc, a home builder might offer 3 or 4+ different house models detached / semi / terraced / bungalow / townhouse / integral garage etc. To maximise the affordability of homes, home builders need to benefit from economies of scale in procurement, so requiring standardisation of components.

The modelling undertaken by members to inform our response to this consultation indicates that across any one development each of the above house types may require a different technical solution. Therefore, whilst a 'technical' solution might be possible on any one property, the requirement to have a different approach (technology and installation methods) to each house type, and therefore 3 to 4+ solutions on any one site, is commercially unviable. The modelling undertaken by home builders suggests that, in some instances, for example bungalows and apartments, it may not be possible to achieve a 32% reduction. As a result, the proposed changes may preclude some of these types of buildings being delivered, thus reducing diversity of product and customer choice.

This issue is of particular concern from the perspective of affordable housing providers. As they retain ownership for the properties and responsibility for ongoing management and maintenance, it is unfeasible for affordable housing providers to introduce a range of solutions on any one site. This would be expected as a result of the proposed changes.

The proposed changes create a significant risk that the diversity and overall supply of homes of all tenures will reduce as commercial viability is significantly eroded.

Cost assumptions

The consultation is clear that Scottish Government wants to understand the "technical, commercial and wider policy implications of improvements to energy standards"⁶.

The papers accompanying the consultation indicate an expectation that the changes will add circa 3-6% to build costs. However, in preparation of this consultation response, the reality from modelling undertaken by those delivering the new homes is that costs are closer to 15%, in addition to the already rising cost base from recent months. Additional costs in the region of 15% will put additional pressure on the viability of many housing projects of all tenures and could ultimately result in a reduction of the overall number of homes delivered in Scotland, especially in more rural and remote areas where values are marginal already.

Future societal impact

The pressure placed on the industry through the intended changes could reduce the ability to meet demand as outlined above. The slow down or reduction in homes built will directly impact the ability of the sector to provide opportunities for new jobs and upskilling which, in turn, will have repercussions on the Scottish Government's own pledge to deliver affordable homes, the Young Person's Guarantee and meet the 2024 standard.

The ability to own a home provides people with security and stability. Since COVID-19 there has been a strong desire for people to have a safe space where they can work and connect with family. Reducing the number of new homes available will add to the existing housing shortfall and will have a direct impact on the well-being of Scotland's population and increase pressure on the social housing sector.

Instead, minimising change in 2022 and focusing on a clear route map to 2024 will limit any potential short-term and socio-economic impacts on Scotland's people.

Current and future skills availability

It is estimated that between 2020 and 2025 Scotland will require an additional 26,250 construction workers. The Scottish Government has committed to investing an additional £500 million to support new jobs and reskill people for jobs of the future. As our sector provides almost a third of all apprenticeships in Scotland, it is essential that these opportunities continue to be available to our young people, particularly to meet demand for the provision for green skills. With a joint effort between the Scottish Government and our sector, these opportunities can continue to be provided, contributing towards helping people to secure work in the low carbon economy. The workforce is not currently ready in either skill or numbers to undertake what will be required of it to deliver homes to the new standards from 2022.

The new standards will place significant additional responsibilities on Building Control services across local authorities, requiring officers to be upskilled in key areas, specifically in the installation and maintenance of heat pumps, to interpret the additional information required with building warrant applications. Services are already under significant pressure and the introduction of new standards in 2022, without significant additional investment in authorities, will only add to an overall slowdown in the delivery of new homes.

3 What level of uplift to the 2015 standard for new non-domestic buildings do you consider should be introduced as an outcome of this review?

Not Answered

Please provide a summary of the reason for your view below::

N/A

4 Do you have any comments or concerns on the values identified for the elements which make up the domestic notional building specification for either option, e.g. in terms of their viability/level of challenge?

Yes

If yes, please provide your comments below::

There will likely be an increase in new building materials being required to support the new systems and technologies proposed resulting in the unintended consequence of increasing the embodied carbon as a result of manufacturing the new building materials, undermining the Scottish Government's aspirations for a net zero transition.

Extensive modelling of the domestic notional buildings specification with fully functioning SAP software is required to be undertaken by HFS members in order to fully assess the impact of the proposal. Currently, the results from modelling with the iSAP software provided with this consultation, are showing that large arrays of PVs are required in order to meet the expected compliance. Additionally, physically finding roof space to install the PVs is proving to be extremely challenging, and in some house types (such as room in the roof with dormer windows and hipped roofs) impossible.

HFS members have other concerns around the supplier sector and the lack of qualified and trained installers and testers, who are needed to cope with the installation and maintenance of the new technologies.

Following discussions with SELECT Scotland's largest trade association, it is apparent that the industry has not yet identified which sector (Gas fitting, Electrical) will be assigned responsibility for the installation of the new technology. It is of concern to our members that upskilling and training of experienced engineers and those new to the industry, will take considerable time in order to meet the demand of not only Scotland but the UK as a whole.

5 Do you have any comments or concerns on the values identified for the elements which make up the non-domestic notional building specification for either option, e.g. in terms of their viability/level of challenge?

Not Answered

If yes, please provide your comments below::

N/A

6 Do you have any comments on the simplified two-specification approach to defining the domestic notional building from 2022?

No

If yes, please provide your comments below::

The response to this question must be taken in anticipation that a fully functioning, glitch free SAP software tool is available for industry use, as this is currently not the case.

7 Do you have any comments on the simplified two-specification approach to defining the non-domestic notional building from 2022?

No

If yes, please provide your comments below::

8 Do you have any comments on the proposal to separate and provide a more demand-based approach to assignment of domestic hot water heating within the non-domestic notional building specification from 2022?

No

If yes, please provide your comments below::

9 Do you support the change in application of targets for supplied heat connections to new buildings, focussed on delivering a consistent high level of energy performance at a building level?

Yes

Please provide a summary of the reason for your view below::

However HFS members have real concerns that this change may create real complexity within the building warrant and compliance reporting process.

10 Do you agree with the principle set out, that the benefit from on-site generation within the compliance calculation should be limited by a practical assessment of the extent that generated energy can be used on-site?

Yes

Please provide a summary of the reason for your view below::

HFS members are in general agreement with this provision as it is a reasonable approach to promoting improvement in the fabric performance of buildings and/or encourage adoption of technologies that better utilise/store onsite energy generated. However, this may make the process of fabric improvement more challenging. It also potentially creates difficulties in smaller dwelling types which utilise combi boilers for heat and water, where there is insufficient space to locate a DWH hot water cylinder.

11 Are there any particular concerns you have over this approach, e.g. with regards particular technologies or solutions?

No

If yes, please provide your comments below::

Section 1 - Energy - New Buildings - Questions 12 - 23

12 Do you agree with the proposal that new buildings where heat demand is met only by 'zero direct emissions' sources should be exempt from the need for a calculation to demonstrate compliance with the Target Emissions Rate?

Yes

Please provide a summary of the reason for your view below::

HFS members believe this could simplify the design and assessment process in determining when a building meets the mandatory standards. It is reasonable to presume that if there is no direct emission from the provision of energy to a home then the intent of "de-carbonising" heat and hot water has been achieved.

13 Do you support the need for new buildings to be designed to enable simple future adaptation to use of a zero direct emissions heat source where one is not installed on construction. And for information setting out the work necessary for such change to be provided to the building owner?

Yes

Please provide a summary of the reason for your view below::

HFS members commented that if at construction stage, this has not been adequately designed and planned, the infrastructure will not be at a scale where it can cope with new, additional technology. Further discussions should be held with energy providers to ensure that the appropriate energy loads can service the development.

There are potential implications where the provisions have an impact on the house type, design, layouts and accommodation of service runs. This requires future proof design and questions how it will be assessed by verifiers. A consistent approach is key to ensure these challenges are minimised.

Future adaptations even for internal heat sources may also impact on the fabric and fire performance as these are retro fitted. If the design and future adaptations are not planned carefully then the clients may require to alter these plans following the initial planning stage.

14 Do you have any comments on the level of information needed to support such action in practice and on the extent to which alterations other than at, or very close to, the heat generator can be justified?

No

If yes, please provide your comments below::

15 Do you support the retention of the current elemental approach to setting minimum standards for fabric performance in new dwellings, supported by the option to take an alternate approach via calculation of the total space heating demand for the dwelling (as described)?

Yes

Please provide a summary of the reason for your view below::

Our members commented that backstop U values are generally used in design across the industry, and that these are currently challenging enough to achieve satisfactory results under SAP. When considering tightening the notional specification, there are concerns surrounding the need to change

construction methodology along with fabric improvements. The consequence of driving towards more onerous U values will lead to a change in construction methods, which will require additional modelling, research and investment. This will also produce delays in terms of obtaining fire rating approvals for new fabric detailing which will likely utilise PIR insulation board as opposed to mineral wool.

16 In the context of the proposed approach, do you have any comments on the maximum U-values proposed for elements of fabric, in relation to their level of challenge and achievability at a national level?

No

If yes, please provide your comments below::

17 Do you support the move to airtightness testing of all new dwellings, by registered members of an appropriate testing organisation?

Yes

Please provide a summary of the reason for your view below::

HFS members generally support this change across all new build homes as it would deliver consistency across all developments and provide accurate data.

Some of the larger volume developer members have indicated that there is a level of consistency across their construction which ensures a consistent airtightness level and negates the need to test all new dwellings.

However, all members have concerns around the additional time and resources that will be required at the final stages of completion to support this change. There will also be a lack of equipment and approved skilled people carry the testing in order to meet demand. There are questions around who will ensure the assessors are trained and available to check every property.

18 Do you support the move to increased airtightness testing of all new non-domestic buildings, by registered members of an appropriate testing organisation?

Not Answered

Please provide a summary of the reason for your view below::

N/A

19 Do you support the adoption of CIBSE TM23 as the basis for airtightness testing in Scotland?

Yes

Please provide a summary of the reason for your view below::

The current standard across many parts of the UK for the testing of buildings for air leakage is CIBSE TM23. It would be practical for Scotland to adopt the same principles and standards to align with the rest of the UK.

20 Do you support the introduction of the pulse test method of airtightness testing as a further means to testing and reporting on the performance of new buildings?

Yes

Please provide a summary of the reason for your view below::

Since the revision of CIBSE TM23 in January 2021, low pressure pulse testing has become an approved methodology. It has been proven to give improved, consistent results, is less reliant on external factors such as weather and is quicker to conduct. The result being that it will facilitate the proposed increase to testing of 100% in all new homes.

However, HFS members have raised a concern around whether the apparatus will work on a timber kit, and if the vapour barrier would give incorrect readings.

21 Are there any particular benefits, risks or limitations you would seek to identify?

No

If yes, please provide your comments below::

22 Do you consider the amended provision provides an appropriate balance between: the requirement to improve building energy performance in new buildings; enabling the reuse of better performing modular elements; and enabling use of small units for short term use at short notice?

Yes

Please provide a summary of the reason for your view below::

Unsure.

23 We welcome any other comments you may wish to make on the proposed changes to the setting of performance targets for new buildings or the application of other amended provisions within Section 6 (energy) of the Technical Handbooks which apply to the delivery of new buildings.

Please provide your comments below::

No further comments.

If you wish to provide additional information to support your comments regarding the proposals for new buildings please upload relevant file below::
HFS Consultation response position paper.pdf was uploaded

Section 2 - Energy - All Buildings - Questions 1 - 9

1 The term 'major renovation' means the renovation of a building where more than 25% of the surface of the building envelope undergoes renovation. Do you agree with the proposed introduction of this term as an additional means of identifying when aspects of building regulations shall be applied to an existing building?

Not Answered

Please provide a summary of the reason for your view below::

N/A

2 Do you support the proposed improvement in maximum U-values for elements of building fabric for domestic buildings?

No

Please provide a summary of the reason for your view below::

There are concerns from HFS members around whether there are calculations showing the make up considered for the back stop u-values, as there has been previous discussions about standardised details. The current back stop U values present a challenge. This means any changes being considered to improve current backstop U values, will have an impact on design and construction methods. This will include changes to the timber frame make up, including a move away from the use of mineral wool insulation and on the wholesale use of PIR insulation boards. Additionally, there will be a requirement to carry out new fire testing for certification, which will result in delays to implementation.

HFS members also questioned whether there is an awareness that floor u-value is currently viable from plot to plot, making a standard specification hard to achieve and will also cause risk confusion on site.

3 We would also welcome your views on the proposed simplification achieved by the setting of a single set of values for all building work to new and existing domestic buildings.

Please provide your comments below::

No additional comments.

4 Do you support the proposed improvement in maximum U-values for elements of building fabric for non-domestic buildings?

Not Answered

Please provide a summary of the reason for your view below::

N/A

5 We would also welcome your views on the proposed simplification achieved by setting a single set of values for all building work to new and existing non-domestic buildings.

Please provide your comments below::

N/A

6 Do you support the proposed standardisation of values and approach for conversions, extensions and shell buildings?

Not Answered

Please provide a summary of the reason for your view below::

N/A

7 If you have a view on the preferred format for presentation of information on compliance of building services, what would be your preference?

Re-integrate into guidance to the relevant standard

Please provide a summary of the reason for your view below::

It is key that there is a consistency of approach to ensuring all relevant information regarding Standards, is in one accessible document.

8 Do you support the continued alignment of minimum provisions for fixed building services at a UK level within the Domestic Building Services Compliance Guide?

Yes

Please provide a summary of the reason for your view below::

HFS members reported that many developers across Scotland also conduct business in England. Therefore, it would be logical to align Scotland's minimum provision for fixed building services and standards in general to the UK level. This will mitigate any potential confusion, provide consistency of approach and improve compliance.

9 Are there any issues you wish to raise in relation to the amended specifications set out in the draft Guide?

No

If yes, please provide your comments below::

Section 2 - Energy - All Buildings - Questions 10 - 17

10 Do you support the continued alignment of minimum provisions for fixed building services at a UK level within the Non-domestic Building Services Compliance Guide?

Not Answered

Please provide a summary of the reason for your view below::

N/A

11 Are there any issues you wish to raise in relation to the amended specifications set out within the draft Guide?

Not Answered

If yes, please provide your comments below::

N/A

12 Do you agree with the proposal that the option of installing a less efficient heat generator and compensating for this using heating efficiency credits in existing buildings should be withdrawn from the Non-domestic Buildings Services Compliance Guidance?

Not Answered

Please provide a summary of the reason for your view below::

N/A

13 Do you agree with the proposal to limit distribution temperatures in wet central heating systems to support effective implementation of low and zero carbon heat solutions and optimise the efficiency of heat generation and use?

Yes

Please provide a summary of the reason for your view below::

14 Do you agree with the proposed extension to the provision of self-regulating devices to include when replacing a heat generator?

Yes

Please provide a summary of the reason for your view below::

15 Do you have any comment on issues of technical feasibility or determining when installation should be at a room/zone level?

No

If yes, please provide your comments below::

16 Do you agree with the proposed introduction of a requirement for building automation control systems, of the type specified, in larger non-domestic buildings with systems with an effective rated output over 290kW?

Not Answered

Please provide a summary of the reason for your view below::

N/A

17 We welcome any other comments you may wish to make on these topics and broader changes to the setting of minimum standards for all buildings.

Please provide your comments below::

No additional comments.

If you wish to provide additional information to support your comments regarding the proposals for all buildings please upload relevant file below::

No file uploaded

Section 3 - Ventilation - Questions 1 - 12

1 Do you support the proposed revisions to the presentation of guidance on ventilation and the incorporation of the 'domestic ventilation guide' into the Technical Handbooks?

Yes

Please provide a summary of the reason for your view below::

This would be consistent with normal practice.

2 Do you agree with the revision of guidance to clarify the function of purge ventilation and increase provision to align with that applied elsewhere in the UK?

Yes

Please provide a summary of the reason for your view below::

3 Do you support reference to a single option for continuous mechanical extract ventilation which can have centralised or decentralised fans, with the same design parameters being applied to the system in each case?

No

Please provide a summary of the reason for your view below::

HFS members have raised concerns surrounding the use of centralised MVHR and more generally flagging the operation of MVHR as a bigger issue, as ongoing maintenance will be required to ensure that they work efficiently and safely.

Concerns were raised regarding the effectiveness of mechanical ventilation systems where reference was made to the NHBC Foundation report on issues with MVHR.

MVHR systems are normally located in loft spaces and will require regular checks and maintenance regimes such as the replacement of filters etc., an important factor in the operation of this technology.

This produces the potential for a significant increase in annual costs for homeowners. Additionally, it is possible that this proposal could result in air tight unventilated homes, producing a breeding ground for damp and associated health conditions to those living in the homes.

4 If you have any further views on the use of continuous mechanical extract to deliver effective ventilation in both low infiltration (3-5 m³) or higher infiltration (>5 m³) buildings, we would also welcome your comments.

Please provide your comments below::

No further comments.

5 Do you support introduction of proposed guidance on default minimum size of background ventilator for continuous mechanical extract systems?

Yes

Please provide a summary of the reason for your view below, including any specific concerns you consider may arise from the proposed level of background ventilation or its application in the design of systems::

HFS members wish to highlight the need to consider the size of ventilators to improve air quality. Current practice may result in levels of air pollution and CO in new buildings, which although will remain within limitations will be closer to the upper threshold.

6 Should continuous mechanical extract systems be considered a viable solution in very low infiltration dwellings and, if so, under what circumstances?

No

Please provide a summary of the reason for your view below::

HFS members have raised a particular concern with the use of centralised mechanical extract systems where the system is run on a single fan. Should there be a failure or the system is not maintained correctly then serious issues may arise.

7 We would also like to hear your views on whether heat recovery should be mandated for packaged supply/extract systems.

Please provide your comments below::

No additional comments.

8 Do you support the proposed incorporation of a revised version of the current 'domestic ventilation guide' as an annex to section 3 (environment) of the Domestic Technical Handbook?

Yes

9 We would be grateful for your comments on the content of the proposed Annex and whether there are elements absent from the current guide or which would be better presented within the guidance to standard 3.14 itself.

Please provide your comments below::

No additional comments.

10 Are there other elements of the commissioning of ventilation systems that you consider are both practical to implement and useful in providing additional assurance of performance in practice?

No

If yes, please provide a summary of the elements which should also be considered below::

11 We welcome your thoughts on these or broader topics which would merit consideration as part of the planned review.

Please provide your comments below, including citation of relevant supporting evidence, where relevant::

No additional comments.

12 We welcome any other comments you may wish to make on proposed changes to ventilation standards for domestic buildings.

Please provide your comments below::

No additional comments.

If you wish to provide additional information to support your comments regarding the proposals for ventilation please upload relevant file below::

No file uploaded

Section 4 - Overheating Risk in New Dwellings and other New Residential Buildings - Questions 1 - 8

1 Do you agree with the proposed introduction of a requirement to assess and mitigate summertime overheating risk in new homes and new non-domestic residential buildings offering similar accommodation?

No

Please provide a summary of the reason for your view below::

HFS members are aware of TM59 modelling but would seek further views from colleagues operating in England to ensure that they fully understand the requirements.

HFS members also reported that overheating is not a common issue in Scotland. In the event where this type of complication is found, it would normally present in ground floor and flatted developments.

2 If you consider that proposals should be extended to non-domestic buildings which provide other forms of residential accommodation (which are not 'self-contained residential units'), we welcome your views on such provisions, including if the same or alternate approach to assessment is recommended?

Please provide your comments below::

N/A

3 Do you agree with the proposal that an initial assessment of dwelling characteristics should be undertaken to help inform design choices and the delivery of new homes which provide better thermal comfort in the summer months?

Yes

Please provide a summary of the reason for your view below::

4 We would also welcome your knowledge and views on other sources of good practice guidance which have been implemented by developers and the outcome (e.g. no reports of significant summertime overheating) evidenced through feedback from residents.

Please provide your comments below::

No additional comments.

5 Are there circumstances where you consider the specific characteristics of a dwelling should trigger a need for CIBSE TM59 assessment rather than application of a simple elemental approach?

Yes

Please provide a summary of the reason for your view below::

Not generally necessary in new build homes.

6 Recognising the level of risk identified in the 'Addressing Overheating Risk in New Dwellings' published research paper, do you agree with the assessment proposals as a suitable means of mitigating summertime overheating in new homes through prescriptive actions?

Yes

Please provide a summary of the reason for your view below::

7 Do you consider that the approach set out in the proposed standard and guidance will provide adequate assurance that ventilation measures provided to mitigate summer overheating can be used safely and conveniently in practice?

Yes

Please provide a summary of the reason for your view below::

8 We welcome any other comments you may wish to make on the proposed introduction of provisions to mitigate the risk of summer overheating in new homes and residential buildings.

Please provide your comments below::

No further comments.

If you wish to provide additional information to support your comments regarding the proposals for overheating mitigation please upload relevant file below::

No file uploaded

Section 5 - Improving and Demonstrating Compliance - Questions 1 - 4

1 Do you have any experience of successful design or construction quality assurance regimes which you consider may be useful to consider in the context of the development of a Compliance Plan manual to support the effective delivery of compliance with section 6 (energy)?

Yes

If yes, please share any relevant information below::

Previous discussions with HFS Technical Forum members noted that some activities were being undertaken, particularly surrounding NHBC and other warranty provider reporting, which shares compliance issues on a monthly basis with developers. This allows the learning to then be utilised to develop regional training.

2 Do you have any comments on the compliance themes identified (i.e. informed design, risk assessment, calculation, communication, competence, commissioning, quality assurance, performance testing and use of data) and any other actions you consider would be useful in supporting improved compliance with requirements for energy and emission performance?

No

If yes, please provide your comments below::

3 Are there particular aspects to building design and construction which you consider should be prioritised as part of the development of a detailed compliance plan manual for section 6 (energy)?

No view

If yes, please provide further details, including any evidence you are aware of that supports such emphasis, below::

4 We welcome any other comments you may wish to make on the topic of improving compliance of building work with the provisions within section 6 (energy) of the Technical Handbooks to better align designed and as-built performance.

Please provide your comments below::

No additional comments.

If you wish to provide additional information to support your comments regarding the proposals for ventilation please upload relevant file below::

No file uploaded

Section 6 - Electric Vehicle Charging Infrastructure - Questions 1 - 6

1 What are your views on our policy goal to enable the installation of electric vehicle (EV) charge points and ducting infrastructure (to facilitate the future installation of EV charge points) for parking spaces in new residential and non-residential buildings parking?

Please provide a summary of your views below::

Passive provision is achievable however, active charging will be delayed by network constraints.

HFS members have voiced concerns around the capacity of the infrastructure and power supply in the grid.

2 What are your views on the following preferred options?

Please provide a summary of your views below::

With respect to new residential buildings, HFS and our members support the Scottish Governments preferred option. The following points should be considered/addressed.

- Capacity within the network to supply the required power.
- Consider the provision of passive connection until network constraints addressed.
- The Scottish Government to provide clarity on the following; Exemption to requirement to install EV charge point if additional cost of electricity grid connection exceeds £2,000.

3 Do you agree with the Scottish Government's preferred options for the exemptions as set out below?

Yes

If no, please explain why you disagree below::

4 What are your views on how our preferred option relating to existing non-residential buildings with car parks with more than 20 spaces could be properly monitored and enforced, given that the Building (Scotland) Regulations will not apply?

Please provide a summary of your views below::

N/A

5 What are your views on the proposed provision for charge points for accessible parking spaces? Do you have examples of current best practice for the provision of charge points for accessible parking spaces?

Please provide a summary of your views and any relevant information below::

No views.

6 We welcome any other comments you may wish to make on EV charging provision (e.g. the minimum standard of EV charge point or safety within the built environment).

Please provide your comments below::

HFS members believe it would be beneficial for every home to have the facility for EV charging. Not everyone will want or need an EV, but each home should have the future provision (via ducting) to allow for future installation if required. There are concerns that there is a disproportionate impact on smaller properties. Remote charging stations cost around four times that of a standard property within curtilage parking. Further concerns from HFS members around wires in public areas creating a trip hazard.

In addition, an element of EV points which are set within adoptable carriageways (maintained by the Local Authority) would support the EV infrastructure.

If you wish to provide additional information to support your comments regarding EV charging provision please upload relevant file below::

No file uploaded

About you

What is your name?

Name:

[Redacted]

What is your email address?

Email:

[Redac] @homesforscotland.com

Are you responding as an individual or on behalf of an organisation?

Organisation

What is your organisation?

Organisation name:

Homes for Scotland

If responding on behalf of an organisation please select the most relevant type of organisation from the list below:

Other (please specify below)

if other organisation, please specify type here:

Trade Body

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

Publish response only (without name)

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Yes

I confirm that I have read the privacy policy and consent to the data I provide being used as set out in the policy.

I consent

Evaluation

Please help us improve our consultations by answering the questions below. (Responses to the evaluation will not be published.)

Matrix 1 - How satisfied were you with this consultation?:

Slightly dissatisfied

Please enter comments here.:

Matrix 1 - How would you rate your satisfaction with using Citizen Space to respond to consultations?:

Slightly dissatisfied

Please enter comments here.:

Minister for Public Finance, Planning & Community
Wealth
Ministear airson Ionmhas Poblach, Dealbhachadh agus
Beartas Còimhearsnachd
Tom Arthur BPA/MSP



Scottish Government
Riaghaltas na h-Alba
gov.scot

T : 0300 244 4000
E : scottish.ministers@gov.scot

Fionna Kell
[Redacted] @homesforscotland.com

Our Reference: 202100262983

10 January 2022

Dear Fionna Kell,

Thank you for your letter and attachments to Tom Arthur MSP, Minister for Public Finance, Planning and Community Wealth about the Homes for Scotland response to the consultation on Building Standards Section 6. You kindly offered to meet with the Minister to brief him on it, given the links with the planning system on net zero.

I understand that you will also be writing to Patrick Harvie MSP, Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights about your response, and he will respond in due course.

The recently published draft National Planning Framework 4 (NPF4) sets out a vision for more sustainable locations and types of development in Scotland to achieve net-zero, including support for energy efficient developments. I understand Planning officials have been liaising with your Director of Planning regarding engagement during the consultation period for draft NPF4.

Whilst unfortunately on this occasion Mr Arthur will not be able to accept your invitation, he offers his thanks for your input into the Section 6 consultation, and looks forward to any responses you may have on the consultation on the draft National Planning Framework 4.

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See www.lobbying.scot

Tha Ministearanna h-Alba, an luchd-comhairleachaidh sònraichte agus Rùnaire Maireannach fo chumhachan Achd Coiteachaidh (Alba) 2016. Faicibh www.lobbying.scot

St Andrew's House, Regent Road, Edinburgh EH1 3DG
www.gov.scot



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Yours sincerely

[Redacted]

Private Secretary

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See www.lobbying.scot

Tha Ministearanna h-Alba, an luchd-comhairleachaidh sònraichte agus Rùnaire Maireannach fo chumhachan Achd Coiteachaidh (Alba) 2016. Faicibh www.lobbying.scot

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From: [Steve Fawcett](#)
To: [Garvin S \(Stephen\) \(Dr\)](#); [Scott S \(Steven\)](#)
Cc: [Nicola Barclay](#); [Fionna Kell](#)
Subject: Section 6 - Consultation response
Date: 25 November 2021 14:32:57
Attachments: [image001.jpg](#)
[image002.jpg](#)
[image003.jpg](#)
[HFS Consultation response position paper.pdf](#)
[HFS consultation response questions.pdf](#)

Good afternoon Stephen and Steven

Please find attached PDF copies of our cover document and response to the consultation questionnaire which were both submitted through the online portal provided.

We sincerely hope that Scottish Government will look to engage with HFS, on behalf of the home building industry, along with the wider stakeholder groups in order that we can all look towards ensuring a seamless transition to realising the improved standards envisaged and the managing of the challenging journey towards Zero Carbon Homes in Scotland.

On a personal note, I would like to express my gratitude for the way the Building Standards Division has embraced the engagement and open discussions with HFS during the past couple of months as I have found this collaborative way of working very refreshing indeed. Going forward one would anticipate this will set the scene for delivering significant transformation for the benefit of all in the coming years.

Kind regards

Steve

Stephen Fawcett

MCIQB : MCABE : C.BuildE

Head of Technical Services

Homes for Scotland

5 New Mart Place, Edinburgh, EH14 1RW

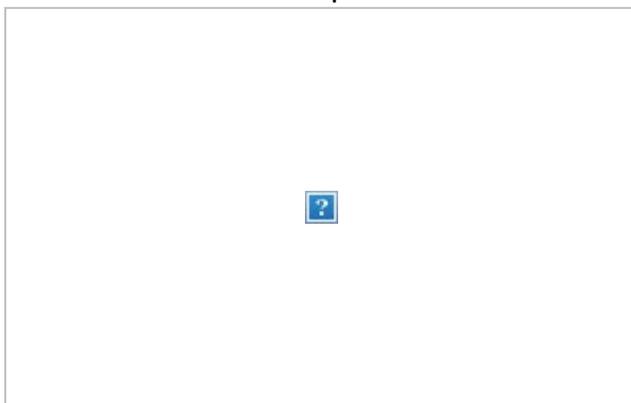
Tel: 0131 455 8350

[Redacted]

Email: [Redacted] [@homesforscotland.com](mailto:info@homesforscotland.com)

Website: www.homesforscotland.com

Delivering the range of new homes that Scotland needs involves the coming together of many different elements. Our manifesto sets out what is required if we are to meet Scotland's varied housing needs. Read more [here](#).



DELIVERING MORE

**HOMES FOR
SCOTLAND**

SECTION 6 BUILDING STANDARDS CONSULTATION RESPONSE

November 2021

Executive Summary

Homes for Scotland (HFS) members understand, respect and support the commitment that the Scottish Government has made to make Scotland a net zero society by 2045. We recognise that we all have our part to play in this and we confirm our commitment to achieving what is practicable at the earliest opportunity.

It is important to highlight that the New Homes sector in Scotland is currently ahead of the rest of the UK with respect to standards and has demonstrated substantial progress since 1990 in delivering carbon reductions across the new build housing stock.

We will continue to move forward with increasing momentum accepting our role is essential in helping to drive Scotland towards a Zero Carbon future. In other words, we are not tackling this crisis from a standing start, rather, we are building on solid knowledge and experience in delivering sustainable homes and this response reflects our collective level of expertise.

In this context we can confirm that we are committed to achieving the ‘Improved standard’ 32% operational energy reduction targets as proposed in the consultation. Understanding that this change in Building Standards will be both ambitious and potentially disruptive, it is considered deliverable with the necessary Scottish Government support with fiscal, financial and grant incentivisation measures which will help reinforce a consumer shift towards low carbon housing.

With respect to the proposed “Advanced Standard” 57% operational energy reduction target, we firmly believe it all but impossible to deliver this in the short to medium term whilst using a gas fired heating system.

Given that the consultation calls for such proposals to *“be subject to robust assessment of both benefits and costs and the implications to the construction industry in Scotland”*¹, it is imperative that our response highlights some of the very practical hurdles facing our sector and Scottish Government as we jointly move towards meeting net zero ambitions. These practical hurdles have been identified following extensive engagement with sector representatives.

We support the overall intent of the changes and welcome the need to improve the energy efficiency of new homes for the benefit of owners, occupiers, and the planet. The very significant challenge comes from the extremely short lead-in time proposed before implementation, coupled with the extent of technological and fabric changes required within such a short period.

The major areas of concern that need to be addressed jointly between industry, Scottish Government and wider stakeholders are:

- Grid capacity constraints
- Lack of supply chain readiness
- Skills and labour availability
- Wider societal impacts
- Impact on affordability for customers

We believe that it is possible to overcome the concerns that we have highlighted, but they do require clear guidance, planning, piloting, testing and investment, combined with a clear and realistic timescale for implementation. On the back of this consultation exercise, we propose that Scottish Government sets up a steering group with industry, the supply chain and DNOs

¹ Scottish Building Regulations, Proposed Changes to Energy Standards and Associated Topics, July 2021, Para 1.2.1

to provide a clear route map to implementation of both the 2022 standards and the wider changes coming in 2024. This proposed partnership working will mitigate any risk that could result in a reduction in the number of homes built in Scotland including the government's own affordable housing supply programme.

Furthermore, to encourage and support customers in the transition to net zero homes we ask Scottish Government for a fiscal support package to include:

- Enhanced grant regime for delivery of new affordable homes to meet these targets;
- Introduction of net zero carbon grant support for new home buyers;
- Discounted LBTT rates to incentivise consumer behaviour to encourage purchase of low carbon homes.

Introduction

This submission is made following COP26 in Glasgow, where nations, people and businesses around the globe increased their commitments to delivering the changes that the world demands.

Homes for Scotland (HFS) and our members understand, respect and support the commitment that the Scottish Government has made to make Scotland a net zero society by 2045. We recognise that all have our part to play in this and we confirm our commitment to doing so.

HFS represents home builders of all tenures and sizes and includes both RSLs and private homebuilders. Together our members deliver circa 95% of all homes built to rent or own across Scotland. We look to change, challenge and collaborate on behalf of the housing sector to ensure the housing needs and aspirations of all those living in Scotland are met. HFS recognises the challenges faced by both those seeking to rent or buy a home that is affordable to them, and we also recognise the challenges faced by those companies whose business it is to supply those homes.

We aim to bridge the gap in affordability by addressing the challenges that prevent the delivery of sufficient numbers of new homes and we work in partnership with stakeholders at all levels to ensure the best outcomes for the people of Scotland. Our approach to this consultation response balances the need to ensure carbon reduction targets are achieved; affordability is maintained or improved; and sufficient homes are delivered.

Throughout the consultation process, we closely engaged with members (including large private home builders, RSLs and SMEs) building across all areas of Scotland and who deliver a wide variety of home types. This collective knowledge and intel has ensured that the response provided is an accurate position of the practical realities of delivering homes of all tenures.

Progress to date

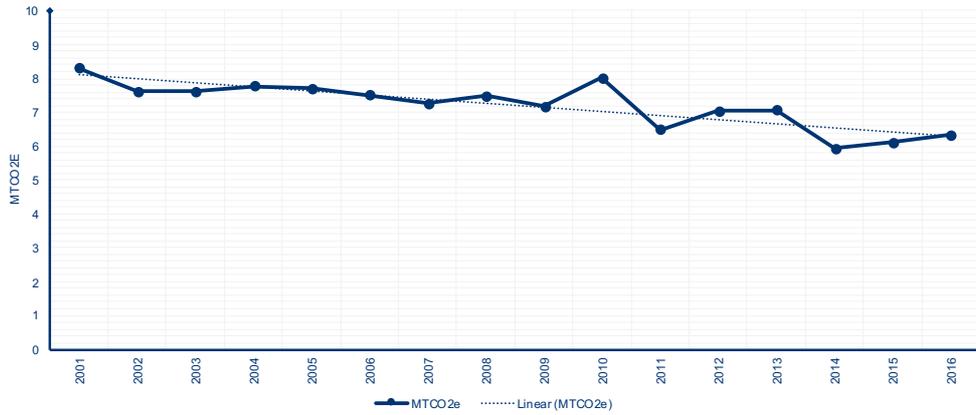
Over the last decade and since the publication of the Sullivan Report² in particular, continued investment in the efficiency of new build homes in Scotland has supported a direct reduction in operational carbon emissions by in excess of 75% on 1990 baseline levels through progressive step-changes in fabric efficiency standards and encouragement of the use of low and zero carbon energy generating technologies (LZCEGT).

To put this into context of residential sector carbon emissions, a simple analysis of notional emissions rates for new and existing dwellings in Scotland suggests that while the number of new homes completed between 2010 and 2016 equated to around 4.4% of Scotland's housing stock, the associated emissions only represented 2.6% of the recorded total for the residential sector.

The following charts provide an overview of the estimated carbon emissions rates for new and existing homes across the years 2007 to 2016, encompassing changes to Section 6 Energy of the Building Standards in 2007, 2010 and 2015. These highlight the assumed deviation in carbon emissions generated from the operation of new and existing homes based upon Scottish Government data sources.

² A Low Carbon Building Standards Strategy for Scotland, 2007

Residential Sector Emissions



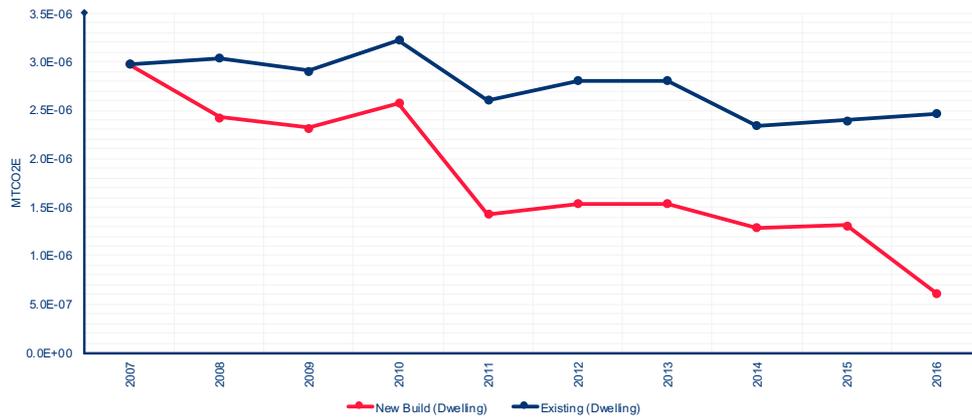
Greenhouse Gas Emissions by Source Sector – Scottish Government (May 2019)

1

Homes for Scotland | SPEN: Homes of the Future Conference 2019

04/03/2021

Notional Emissions Rate per Dwelling



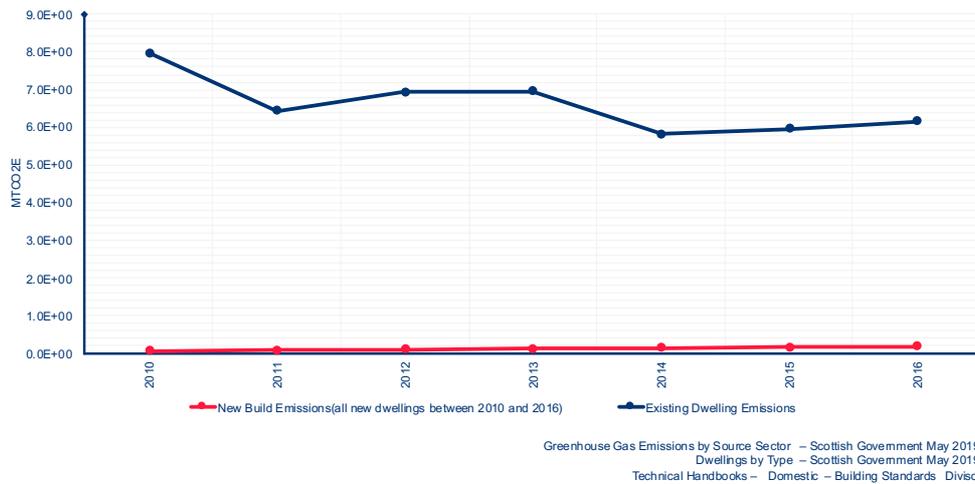
Greenhouse Gas Emissions by Source Sector – Scottish Government May 2019
 Dwellings by Type – Scottish Government May 2019
 Technical Handbooks – Domestic – Building Standards Division

2

Homes for Scotland | SPEN: Homes of the Future Conference 2019

04/03/2021

Residential Sector Emissions 2010- 2016



It is clear that the new build sector's contribution to overall residential sector emissions reduction has been radically improving and the changes proposed in the consultation will continue this trend. Given this trajectory, the new build sector will continue to contribute an ever-decreasing proportion of the overall emissions from the residential property stock, whilst we all recognise that addressing emissions from existing homes is undoubtedly where the biggest challenges will lie.

Appendix A provides just a few examples of where the industry is already progressing towards net zero.

These examples show a tiny fraction of what is already happening across the Scottish home building industry, and we know from discussions with SMEs, that they follow where the larger developers lead. They rely on those with the resources to research and develop next generation technologies and solutions. It is also important to note that the larger developers all work across the UK, and while they are dealing with these challenges holistically, they are having to consider the differing timescales for implementation across the devolved nations. This causes a number of challenges, especially within the supply chain, who are gearing up to serve the English market (approx. 90% of the UK market), and who are not fully aware of the earlier timescales being driven forward in Scotland.

Section 6 Consultation Response

Notwithstanding this initial context and the very substantial progress made to date in addressing operational carbon emissions, the home building sector in Scotland recognises that it still has a major role to play in assisting the transition to net zero. Our consultation response is therefore made in the context of our firm commitment to working towards a 2045 net zero Scotland.

In this context we can confirm that we are committed to achieving the 32% operational energy reduction targets as proposed in the consultation.

With respect to the proposed “Advanced Standard” 57% operational energy reduction target, we firmly believe it all but impossible to deliver this in the short to medium term whilst using a gas fired heating system. The power grid and wider industry supply chain is not yet ready to accommodate the electrification demands that an Advanced Standard would require.

Given that the consultation calls for such proposals to *“be subject to robust assessment of both benefits and costs and the implications to the construction industry in Scotland”*³, it is imperative that our response highlights some of the very practical issues facing both our sector and Scottish Government alike if we are to jointly move towards meeting net zero ambitions.

These issues have been identified following extensive engagement with sector representatives and, in preparing this response, HFS home builder members have worked alongside the team at Building Standards Division to undertake extensive modelling and testing of house types using the ISAP software provided by the Scottish Government.

Through this modelling exercise, it is essential to state that while we support the overall intent of the changes, the very short lead-in time proposed, and the extent of the changes required within such a short period are of significant concern to the industry in terms of deliverability.

These levels of uncertainty around delivery timescales as well as financial implications of the changes and lack of capacity in the infrastructure network and supply chain mean that investment decisions regarding site acquisitions and site starts will likely be put on hold until these issues have been resolved.

In addition to this, we understand that SAP software providers are not updating their products in line with Scottish Government timescales. Rather they are concentrating on the English changes, which means that the software needed to support building warrant applications will not be in place next year.

There is a very real possibility that an unintended consequence of the proposed 2022 changes will be a reduction in the number of new homes built in Scotland. This will impact all tenures, including the Scottish Government’s own affordable housing programme commitment.

We do believe that in the medium term, the concerns we have highlighted are possible to overcome, but they require jointly developed clear guidance, planning, piloting, testing and investment, combined with a clear and realistic timescale for implementation.

Clear and well planned route to delivery

We would propose that the most practical way of jointly achieving the national carbon reduction targets required would be to limit the scale and impact of the change to take place in 2022 and instead focus collectively on the introduction of the New Build (Zero Direct Emissions) Heat Standard and the proposed effective ban on gas boilers in 2024.

³ Scottish Building Regulations, Proposed Changes to Energy Standards and Associated Topics, July 2021, Para 1.2.1

Such an approach, with a clear planned out transition over the next 24 months, would provide the sector and wider supply chain with the confidence and clarity as to what is expected and when. It allows appropriate investment to be made with more certainty and ensures that low carbon homes of all tenures will continue to be built at the scale that Scotland needs.

Now in the last quarter of 2021, the industry is still unclear as to what changes will be introduced during 2022. Allowing for analysis of the consultation responses, we expect that the finalised guidance will not be published until early 2022, providing no lead in time before it comes into effect. Until such time as the new guidance is published and the appropriate software is available to support it, the home building industry and wider supply chain have no clarity as to what those changes will be or what impact it will have on their customers and businesses.

For this reason, we recommend that effort is best focused on the provision of a jointly prepared Scottish Government / sector route map which should be well- evidenced and communicated with a commitment to deliver the changes required by 2024.

A working group focusing on low carbon home delivery should be established from January 2022 with cross-sector stakeholder representation including Scottish Government, HFS, SFHA, home builders of all tenures, utilities and the wider supply chain. This specialist working group can address the challenges early, find solutions ahead of time and ensure that these solutions are achievable and deliverable. This will ensure the successful delivery of the Scottish Government's zero carbon heating target for 2024 as we will take the journey together as one, intent on achieving a common goal.

Readiness of the energy networks to cope with increased demand

The ability of home builders to comply with the proposed new regulations will, to a very large extent, be determined by the existing and future capacity of the electricity grid to accommodate the additional demands placed on it. This is the case at both local and national levels.

Currently, in some parts of Scotland, home builders are already restricted in terms of the volume of new homes, associated technology and energy demands that can be connected to the electricity network. Estimates suggest that the switch to predominantly electric-based heating systems, increased use of Photo Voltaic panels and the introduction of Electric Vehicle charging points will increase the energy requirements per home from circa 5kWhs to 8kWhs.

The proposed changes will significantly increase the electrification of our homes and HFS home builder members are being advised by Distribution Network Operators (DNOs) that they will be unable to accommodate significant additional loads on the network in advance of the proposed full electrification of heat in new build from 2024.

The Draft Heat in Buildings strategy advises that the Scottish Government is conducting analysis to understand generation and network requirements, in terms of the scale and location of the demand that heat electrification could bring. Until this analysis is completed, the sector has no clear visibility of the plans that the Scottish Government and network operators have to ensure that additional loads can be accommodated. Without capacity and clarity over future investment upgrades, sites will not be able to commence, nor can additional phases be progressed.

Whilst HFS understand that work has been underway with the Scottish Government and DNOs to progress these issues (including the recent establishment of a Heat Electrification Strategic Partnership⁴), we do not yet have any visibility over this work or confidence that the investment

⁴ Scottish Government, Heat in Building Strategy, October 2021

required will be made in the timeframes that the proposed building regulations changes will be expected of home builders.

We encourage the Scottish Government to facilitate joint discussions with home builders and energy providers over the course of the next two years to allow a realistic and deliverable approach to fully decarbonising home heating in new builds from 2024 and not place additional burdens on the power networks in advance of that.

Readiness of the supply chain to cope with increased demand

The proposals will have implications for the material, fabric and technologies used in the construction of new homes and some of these changes are significant.

2022 will see the introduction of changes to the Building Standards in England, the result of which is to bring homes in England to approximately the standards currently delivered in Scotland. The changes proposed in this current consultation will continue to see Scotland exceeding the standards required of the rest of the UK in 2022.

However, as the significant majority of homes built in the UK are in England (173k completions in England in 2019 compared to 22k in Scotland), most manufacturers and suppliers operate outwith Scotland. Significant investment to change processes or technologies will not be undertaken by the supply chain until the volume of demand is prevalent in England. The demand driven by acceleration of changes in Scotland will unlikely be significant enough to trigger genuine wholesale changes in advance of further requirements to change in England. Whilst we appreciate that some Scottish-based parts of the supply chain may be ready, overall capacity as a whole will remain significantly constrained.

HFS has explored other unintended consequences. The increased insulation required may, in some circumstances, require changes to wall components / systems. These new systems are likely to require new fire certification which can take up to 12-18 months to be received which will introduce even more delays in delivering the homes Scotland needs.

We therefore welcome the commitment in the Heat in Building Strategy to expand the Scottish Government's work with the supply chain including the co-production of Supply Chain Delivery Plan.

We suggest that the proposed changes to the Building Regulations should be minimised in 2022 until, in line with the rest of the UK, the supply chain is substantially expanded. A realistic timeframe for this is 2024/2025. Acceleration in advance of supply chain readiness will have a significant impact on the volume of new homes delivered across all tenures.

Customer impact and readiness

The way we heat and use our homes will change significantly as a result of the transition. These changes will have attitudinal and behavioural implications as well as financial.

Recent research undertaken for Scottish Housing Day⁵ indicates that whilst 40% of respondents (from across all housing tenures) would like to move to a more energy-efficient home, only 14% agreed that this was a key factor in choosing their current home. Furthermore, 82% think the Scottish Government should financially support homeowners/landlords to meet energy-efficiency standards, with 34% believing this should cover all costs. Whilst consumers in Scotland are aware of the need for change, what is less clear is their current appetite to meet the cost of the change that is required.

⁵ CIH, Housing and Climate Change Survey, August 2021

The Scottish Government's own Heat in Buildings strategy recognises that the heat technologies identified as near-term priorities (heat pumps and heat networks), whilst widely used in other European countries remain unfamiliar to many in Scotland.

Evidence from a recent Scottish Government report⁶ indicates that there is a lack of real-world running cost data for low and zero emission heating systems with comparison to SAP estimates and fossil fuel counterfactuals. We fully support the SFHA and RSLs in their concern that there is a major risk of tenants being faced with high energy costs following the shift towards decarbonised forms of heat. We are also in agreement with SFHA's concern that many of their members who have already installed some new low carbon technologies such as heat pumps have experienced significant operational issues including cases where both the running costs and maintenance costs were more expensive than anticipated or appliance lifespans were much shorter than expected.

HFS welcomes the proposed establishment of a National Public Energy Agency as part of an initiative to increase public engagement and raise awareness and understanding of the new technologies. We also understand that work is to be undertaken by the Scottish Government to explore the potential network investment costs of the heat transition for Scotland, to provide greater clarity on the range of costs and impacts on consumers. With these engagement initiatives being launched from 2022, we believe it is premature to introduce significant changes to the building regulations, requiring the adoption of many of these technologies in advance of the public awareness being raised and technologies being more fully tested and customer ready.

Significant, clear, and consistent messaging about what will be required of householders in terms of behaviours and cost is an essential part of the route map that should be delivered over the next 24 months. This will increase public awareness of the benefits and cost of the transition to net zero homes.

Financial and grant incentivisation measures which will help reinforce a consumer shift towards low carbon housing are essential. Experience from the car industry demonstrates that a policy of structured fiscal intervention and incentivisation has accelerated the population towards the mainstream of electric powered rather than carbon fuelled vehicles. A similar impact could be achieved for the transition of our new homes.

Diversity of product

On any new housing site to ensure quality of place, design, customer choice etc, a home builder might offer 3 or 4+ different house models detached / semi / terraced / bungalow / townhouse / integral garage etc. To maximise the affordability of homes, home builders need to benefit from economies of scale in procurement, so requiring standardisation of components.

The modelling undertaken by members to inform our response to this consultation indicates that across any one development each of the above house models requires a different technical solution. Therefore, whilst a 'technical' solution might be possible on any one property, the requirement to have a different approach (technology and installation methods) to each house type, and therefore 3 to 4+ solutions on any one site, is commercially unviable. The modelling undertaken by home builders suggests that, in some instances, for example

⁶ [Renewable and zero emissions heating systems in affordable housing projects: evaluation - gov.scot \(www.gov.scot\)](https://www.gov.scot/research/publications/renewable-energy/2021/01/renewable-and-zero-emissions-heating-systems-in-affordable-housing-projects-evaluation)

bungalows and apartments, it may not be possible to achieve a 32% reduction. As a result, the proposed changes may preclude some of these types of buildings being delivered, thus reducing diversity of product and customer choice.

This issue is of particular concern from the perspective of affordable housing providers. As they retain ownership for the properties and responsibility for ongoing management and maintenance, it is unfeasible for affordable housing providers to introduce a range of solutions on any one site. This would be expected as a result of the proposed changes.

The proposed changes create a significant risk that the diversity and overall supply of homes of all tenures will reduce as commercial viability is significantly eroded.

Cost assumptions

The consultation is clear that Scottish Government wants to understand the “*technical, commercial and wider policy implications of improvements to energy standards*”⁷.

The papers accompanying the consultation⁸ indicate an expectation that the changes will add circa 3-6% to build costs. However, in preparation of this consultation response, the reality from modelling undertaken by those delivering the new homes is that costs are closer to 15%, in addition to the already rising cost base from recent months.

As highlighted in the SFHA response to this consultation, research amongst housing associations has indicated they are already facing very significant cost pressures. A recent evaluation of affordable housing projects in Scotland found that low and zero carbon technologies were between £2,000 to £5,000 more expensive per unit than the default option of a gas boiler with solar PV⁹. The introduction of ambitious local design standards, such as the Glasgow Standard, is increasing costs by between 5–10% and 13–15%, whilst building to the Passivhaus standard can add 17.3% to the cost of a typical two-bedroom property.

Additional costs in the region of 15% will put additional pressure on the viability of many housing projects of all tenures and could ultimately result in a reduction of the overall number of homes delivered in Scotland, especially in more rural and remote areas where values are marginal already.

Future societal impact

The pressure placed on the industry through the intended changes could reduce the ability to meet demand as outlined above. The slow down or reduction in homes built will directly impact the ability of the sector to provide opportunities for new jobs and upskilling which, in turn, will have repercussions on the Scottish Government’s own pledge to deliver affordable homes, the Young Person’s Guarantee and meet the 2024 standard.

The ability to own a home provides people with security and stability. Since COVID-19 there has been a strong desire for people to have a safe space where they can work and connect with family. Reducing the number of new homes available will add to the existing housing

⁷ Para 1.1

⁸ Improvement to Energy Standards for New Buildings within Scottish Building Regulations 2021: Modelling Report – Domestic Buildings. AECOM for Scottish Government

⁹ [SFHA publishes findings of research into the rising costs of development - The Scottish Federation of Housing Associations Limited](#)

shortfall and will have a direct impact on the well-being of Scotland's population and increase pressure on the social housing sector.

Instead, minimising change in 2022 and focusing on a clear route map to 2024 will limit any potential short-term and socio-economic impacts on Scotland's people.

Current and future skills availability

It is estimated that between 2020 and 2025 Scotland will require an additional 26,250 construction workers. The Scottish Government has committed to investing an additional £500 million to support new jobs and reskill people for jobs of the future. As our sector provides almost a third of all apprenticeships in Scotland, it is essential that these opportunities continue to be available to our young people, particularly to meet demand for the provision for green skills. With a joint effort between the Scottish Government and our sector, these opportunities can continue to be provided, contributing towards helping people to secure work in the low carbon economy. The workforce is not currently ready in either skill or numbers to undertake what will be required of it to deliver homes to the new standards from 2022.

The new standards will place significant additional responsibilities on Building Control services across local authorities, requiring officers to be upskilled in key areas to interpret the additional information required with building warrant applications. Services are already under significant pressure and the introduction of new standards in 2022, without significant additional investment in authorities, will only add to an overall slowdown in the delivery of new homes.

Conclusion

Homes for Scotland (HFS) and our members understand and respect the commitment that the Scottish Government has made to make Scotland a net zero society by 2045. We recognise that all have our part to play in this and we confirm our commitment to doing so.

In this context we can confirm that we are committed to achieving Option 1 the "Improved Standard" 32% operational energy reduction targets as proposed in the consultation.

We believe that it is possible to overcome the concerns that we have highlighted, but they do require focussed direction, guidance, planning, piloting, testing and investment, combined with a clear and realistic timescale for implementation. On the back of this consultation exercise, we propose that Scottish Government sets up a steering group with industry, the supply chain and DNOs to provide a clear route map to implementation of both the 2022 standards and the wider changes coming in 2024. This proposed partnership working will mitigate any risk that could result in a reduction in the number of homes built in Scotland including the government's own affordable housing supply programme.

Furthermore, to encourage and support customers in the transition to net zero homes we ask Scottish Government for a fiscal support package to include:

- Enhanced grant regime for delivery of new affordable homes to meet these targets;
- Introduction of net zero carbon grant support for new home buyers.
- Discounted LBTT rates to incentivise consumer behaviour to encourage purchase of low carbon homes.

Appendix A:

Industry Best Practice Examples

It is helpful for anyone involved in this work to acknowledge the steps already being taken at a strategic level by the majority of home builders of all scales operating in Scotland, as well as across the UK. The examples at Appendix A are just a few examples to illustrate that the sector is progressing and building momentum on what has already been achieved in enhancing the energy efficiency of buildings and reducing overall carbon output. These issues are not being tackled from a standing start.

CCG Scotland – The Net Zero Home

In response to the Scottish Government target to become a net zero economy by 2045, which will require the rapid alignment of policy with construction resources, methods and technology, CCG has created the 'Net Zero Home'.

The CCG Net Zero Home introduces a new building standard that reduces the Greenhouse Gas Emissions (GHG) associated with regulated operational energy arising from heating, cooling, lighting, pumps and fans. Whilst this does not tackle issues surrounding embodied carbon, the high energy efficiency standards created in the home designs makes achieving net zero more viable by increasing sustainability and carbon offsetting practices.

Utilising a range of innovative construction and building services such as:

- Fabric First approaches to construction using their bespoke CCG 'iQ' Timber Systems
- Low Carbon heating and renewable technologies
- Low carbon, low maintenance ventilation systems

They have achieved on these home types:

- Average Dwelling Emissions Rate of $-0.83\text{kg.CO}_2/\text{m}^2/\text{Year}$, this represents a reduction of 98%.
- Average Space Heating Demand IS $26\text{KWH}/\text{m}^2/\text{YEAR}$, representing a reduction of 39%.
- Average energy costs from £117 per annum, representing a reduction of 394%.

The following examples illustrate carbon reduction figures already achieved, as well as future tangible targets to reduce their overall carbon output over the coming years, from some of the largest volume builders, operating not just in Scotland but across the UK. As they supply the vast majority of new homes in Scotland, it is important to recognise the contribution already being made here.

CALA Homes

Launched in 2021, CALA's Zero Carbon Project Team is currently in the process of delivering a roadmap to achieve zero net carbon operating homes by 2030. This Team will ensure that appropriate strategies are implemented to reduce carbon emissions produced as a result of their operations and home building activity.

Again, it is important to remember that CALA has already made significant strides in both reducing overall carbon emissions and introducing enhanced sustainability measures. Key figures from the company's Annual Report show that during the 18 month period to 31 December 2019, it constructed a total of 1,822 homes for sale and a further 390 affordable units. From this:

- The average SAP rating was 84.
- 259 homes had PV installed.
- 1,419 homes had renewable energy sources.
- 40% of their sites were using low-embodied carbon materials.

Taylor Wimpey

Recognising the impact their development and construction activity has on carbon emissions and environmental wellbeing, Taylor Wimpey, within its 2020 Sustainability Report, clearly outlined its commitment and the measures it will be taking to reduce its overall carbon output. These objectives and targets include:

- Reducing operational carbon emissions intensity by 26% by 2025 from a 2019 baseline level.
- Reduce carbon emissions intensity from their supply chain and customer homes by 24% by 2030, from a 2019 baseline level.
- Reduce embodied carbon per home by 21% by 2030.
- Reduce emissions from customer homes in use by 75% by 2030.

Again, it had already made strong progress on reducing its emissions before the publication of its new sustainability strategy, having achieved an absolute reduction in emissions of 39% since 2013 and a reduction of 30% in its carbon emissions intensity since 2013.

Barratt Homes

In January 2020, the Group Level Board of Barratt Homes formally approved its own science-based carbon reduction targets to reduce its overall carbon emissions by 29% by 2025. Its greenhouse gas emissions in absolute terms have reduced by 23% (location based) and 28% (market based).

Further, as outlined in its 2020 Annual Report, Barratt has a wide range of measures of objectives, with clear timescales to reduce carbon emissions whilst delivering additional environmental benefits. These include:

- Development of an updated waste reduction strategy, as well as researching the benefits of MMC and how to enhance them.
- Commitment to reducing the lifetime emissions of homes: it has set a target to ensure new standard house type designs will be net zero carbon in use by 2030.
- To create a low carbon supply chain (covering Scope 3 emissions), it has set a science-based target to reduce these emissions by 11% by 2030.

Response ID ANON-N96P-VR8H-N

Submitted to Scottish Building Regulations: Proposed changes to Energy Standards and associated topics, including Ventilation, Overheating and Electric Vehicle Charging Infrastructure
Submitted on 2021-11-25 14:01:25

Section 1 - Energy - New Buildings - Questions 1 - 11

1 Do you support the extension of standard 6.1 to introduce an energy target in addition to the current emissions target? If yes, do you have a view on the metric applied - primary or delivered energy?

Yes, a delivered energy target

Please provide a summary of the reason for your view below::

There are serious concerns from Homes for Scotland (HFS) members surrounding the lack of adequate SAP software. The absence of this makes it very challenging to understand the impact of the proposals and also for our members to develop their own proposals. Some members are currently undertaking independent analysis with the risk of inaccuracy and assumptions made on potential impacts. This has potential to significantly change upon full release of SAP10 software in Scotland.

Evidence suggests limitations on setting primary energy targets, particularly if these are standardised and do not take full consideration of individual home types. Greater detail is required to understand how the metric will work.

2 What level of uplift to the 2015 standard for new dwellings do you consider should be introduced as an outcome of this review?

Option 1: 'Improved' standard (32% emissions reduction)

Please provide a summary of the reason for your view below::

The new homes sector in Scotland already leads the rest of the UK however accepts its essential role in helping to drive Scotland toward a zero carbon future.

While some HFS members have indicated that Option 1 'Improved' standard (32% emissions reduction) is technically deliverable, the route to this will be both immensely ambitious and disruptive. Based on the technical analysis shared with the Scottish Government, compliance with a 32% reduction in operating carbon emission performance standards will be challenging and potentially unviable for a range of house types which currently account for a major proportion of new homes delivered annually in Scotland.

Whilst still maintaining the use of gas fired boilers for heating it will be all but impossible to achieve Option 2 'Advanced' standard (57% emission reduction), as full electrification of heating and hot water will be required and this should only be considered from after 2024 at the earliest.

While HFS members fully understand and support the commitment that the Scottish Government has made to make Scotland a net zero society by 2045, there are several areas of concern we would like to highlight and provide solutions to.

Route to delivery

We suggest limiting the scale and nature of the proposed changes due to take place in 2022 and instead focus on the New Build Heat Standard (encompassing the ban on gas boilers) in 2024. Collaborative working between the Scottish Government and industry would ensure that the sector and supply chain are confident and clear in what is expected. This will ensure that by working collaboratively and detailing a clear timeline, Scotland can produce homes of all tenures for the people of Scotland which meet the highest of emission and energy targets.

Increased demand on energy networks

HFS members have been advised that the proposed changes and move to electrification of heat in new build homes will mean the Distribution Network Operators (DNO) will be unable to accommodate the significant additional loads on the network. Whilst HFS members understand that the Scottish Government and DNO's have been investigating this, there has been no clarity or confidence that an appropriate solution has been found. We encourage the Scottish Government to engage with home builders and energy providers over the next two year period to focus on a realistic approach to fully decarbonising heating in new builds from 2024.

Increased demand on supply chain

2022 will see the introduction of changes to the Building Regulations in England, the result of which is to bring homes in England to approximately the standards currently delivered in Scotland. The changes proposed in this current consultation will continue to see Scotland exceeding the standards required of the rest of the UK in 2022.

However, as the significant majority of homes built in the UK are in England (173k completions in England in 2019 compared to 22k in Scotland), most manufacturers and suppliers operate outwith Scotland. Significant investment to change processes or technologies will not be undertaken by the supply chain until the volume of demand is prevalent in England. The demand driven by acceleration of changes in Scotland will unlikely be significant enough to trigger genuine wholesale changes in advance of further requirements to change in England. Whilst we appreciate that some Scottish-based parts of the supply chain may be ready, overall capacity as a whole will remain significantly constrained.

With the proposed new and emerging systems and technologies, there will be a clear impact on the reliability, availability of skilled workers and willingness of customers to engage with these new technologies. It is essential that a clear route map is established to ensure that these new systems and

technologies are not adopted prematurely, causing significant challenges for the industry, Scottish Government and home owners.

We suggest that the proposed changes to the Building Standards should be minimised in 2022 until, in line with the rest of the UK, the supply chain is substantially expanded. A realistic timeframe for this is 2024/2025. Acceleration in advance of supply chain readiness will have a significant impact on the volume of new homes delivered across all tenures.

Impact on the customer

The way we heat and use our homes will change significantly as a result of the transition. These changes will have attitudinal and behavioural implications as well as financial.

The Scottish Government's own Heat in Buildings strategy recognises that the heat technologies identified as near-term priorities (heat pumps and heat networks), whilst widely used in other European countries remain unfamiliar to many in Scotland.

HFS members are aware that the Scottish Government plan to establish a National Public Energy Agency by September 2025. Although there is value in this, it is required immediately. If the intention of the Scottish Government is to create transformational change, then this must be launched well in advance of the 2024 changes. Instigating this now will ensure that the people of Scotland understand that there are going to be huge changes in the way we heat and use energy in our homes and aid understanding and awareness. Significant, clear, and consistent messaging about what will be required of householders in terms of behaviours and cost impact is an essential part of the route map that should be delivered over the next 24 months. This will increase public awareness of the benefits and cost of the transition to net zero homes.

Diversity of product

On any new housing site to ensure quality of place, design, customer choice etc, a home builder might offer 3 or 4+ different house models detached / semi / terraced / bungalow / townhouse / integral garage etc. To maximise the affordability of homes, home builders need to benefit from economies of scale in procurement, so requiring standardisation of components.

The modelling undertaken by members to inform our response to this consultation indicates that across any one development each of the above house types may require a different technical solution. Therefore, whilst a 'technical' solution might be possible on any one property, the requirement to have a different approach (technology and installation methods) to each house type, and therefore 3 to 4+ solutions on any one site, is commercially unviable. The modelling undertaken by home builders suggests that, in some instances, for example bungalows and apartments, it may not be possible to achieve a 32% reduction. As a result, the proposed changes may preclude some of these types of buildings being delivered, thus reducing diversity of product and customer choice.

This issue is of particular concern from the perspective of affordable housing providers. As they retain ownership for the properties and responsibility for ongoing management and maintenance, it is unfeasible for affordable housing providers to introduce a range of solutions on any one site. This would be expected as a result of the proposed changes.

The proposed changes create a significant risk that the diversity and overall supply of homes of all tenures will reduce as commercial viability is significantly eroded.

Cost assumptions

The consultation is clear that Scottish Government wants to understand the "technical, commercial and wider policy implications of improvements to energy standards"⁶.

The papers accompanying the consultation indicate an expectation that the changes will add circa 3-6% to build costs. However, in preparation of this consultation response, the reality from modelling undertaken by those delivering the new homes is that costs are closer to 15%, in addition to the already rising cost base from recent months. Additional costs in the region of 15% will put additional pressure on the viability of many housing projects of all tenures and could ultimately result in a reduction of the overall number of homes delivered in Scotland, especially in more rural and remote areas where values are marginal already.

Future societal impact

The pressure placed on the industry through the intended changes could reduce the ability to meet demand as outlined above. The slow down or reduction in homes built will directly impact the ability of the sector to provide opportunities for new jobs and upskilling which, in turn, will have repercussions on the Scottish Government's own pledge to deliver affordable homes, the Young Person's Guarantee and meet the 2024 standard.

The ability to own a home provides people with security and stability. Since COVID-19 there has been a strong desire for people to have a safe space where they can work and connect with family. Reducing the number of new homes available will add to the existing housing shortfall and will have a direct impact on the well-being of Scotland's population and increase pressure on the social housing sector.

Instead, minimising change in 2022 and focusing on a clear route map to 2024 will limit any potential short-term and socio-economic impacts on Scotland's people.

Current and future skills availability

It is estimated that between 2020 and 2025 Scotland will require an additional 26,250 construction workers. The Scottish Government has committed to investing an additional £500 million to support new jobs and reskill people for jobs of the future. As our sector provides almost a third of all apprenticeships in Scotland, it is essential that these opportunities continue to be available to our young people, particularly to meet demand for the provision for green skills. With a joint effort between the Scottish Government and our sector, these opportunities can continue to be provided, contributing towards helping people to secure work in the low carbon economy. The workforce is not currently ready in either skill or numbers to undertake what will be required of it to deliver homes to the new standards from 2022.

The new standards will place significant additional responsibilities on Building Control services across local authorities, requiring officers to be upskilled in key areas, specifically in the installation and maintenance of heat pumps, to interpret the additional information required with building warrant applications. Services are already under significant pressure and the introduction of new standards in 2022, without significant additional investment in authorities, will only add to an overall slowdown in the delivery of new homes.

3 What level of uplift to the 2015 standard for new non-domestic buildings do you consider should be introduced as an outcome of this review?

Not Answered

Please provide a summary of the reason for your view below::

N/A

4 Do you have any comments or concerns on the values identified for the elements which make up the domestic notional building specification for either option, e.g. in terms of their viability/level of challenge?

Yes

If yes, please provide your comments below::

There will likely be an increase in new building materials being required to support the new systems and technologies proposed resulting in the unintended consequence of increasing the embodied carbon as a result of manufacturing the new building materials, undermining the Scottish Government's aspirations for a net zero transition.

Extensive modelling of the domestic notional buildings specification with fully functioning SAP software is required to be undertaken by HFS members in order to fully assess the impact of the proposal. Currently, the results from modelling with the iSAP software provided with this consultation, are showing that large arrays of PVs are required in order to meet the expected compliance. Additionally, physically finding roof space to install the PVs is proving to be extremely challenging, and in some house types (such as room in the roof with dormer windows and hipped roofs) impossible.

HFS members have other concerns around the supplier sector and the lack of qualified and trained installers and testers, who are needed to cope with the installation and maintenance of the new technologies.

Following discussions with SELECT Scotland's largest trade association, it is apparent that the industry has not yet identified which sector (Gas fitting, Electrical) will be assigned responsibility for the installation of the new technology. It is of concern to our members that upskilling and training of experienced engineers and those new to the industry, will take considerable time in order to meet the demand of not only Scotland but the UK as a whole.

5 Do you have any comments or concerns on the values identified for the elements which make up the non-domestic notional building specification for either option, e.g. in terms of their viability/level of challenge?

Not Answered

If yes, please provide your comments below::

N/A

6 Do you have any comments on the simplified two-specification approach to defining the domestic notional building from 2022?

No

If yes, please provide your comments below::

The response to this question must be taken in anticipation that a fully functioning, glitch free SAP software tool is available for industry use, as this is currently not the case.

7 Do you have any comments on the simplified two-specification approach to defining the non-domestic notional building from 2022?

No

If yes, please provide your comments below::

8 Do you have any comments on the proposal to separate and provide a more demand-based approach to assignment of domestic hot water heating within the non-domestic notional building specification from 2022?

No

If yes, please provide your comments below::

9 Do you support the change in application of targets for supplied heat connections to new buildings, focussed on delivering a consistent high level of energy performance at a building level?

Yes

Please provide a summary of the reason for your view below::

However HFS members have real concerns that this change may create real complexity within the building warrant and compliance reporting process.

10 Do you agree with the principle set out, that the benefit from on-site generation within the compliance calculation should be limited by a practical assessment of the extent that generated energy can be used on-site?

Yes

Please provide a summary of the reason for your view below::

HFS members are in general agreement with this provision as it is a reasonable approach to promoting improvement in the fabric performance of buildings and/or encourage adoption of technologies that better utilise/store onsite energy generated. However, this may make the process of fabric improvement more challenging. It also potentially creates difficulties in smaller dwelling types which utilise combi boilers for heat and water, where there is insufficient space to locate a DWH hot water cylinder.

11 Are there any particular concerns you have over this approach, e.g. with regards particular technologies or solutions?

No

If yes, please provide your comments below::

Section 1 - Energy - New Buildings - Questions 12 - 23

12 Do you agree with the proposal that new buildings where heat demand is met only by 'zero direct emissions' sources should be exempt from the need for a calculation to demonstrate compliance with the Target Emissions Rate?

Yes

Please provide a summary of the reason for your view below::

HFS members believe this could simplify the design and assessment process in determining when a building meets the mandatory standards. It is reasonable to presume that if there is no direct emission from the provision of energy to a home then the intent of "de-carbonising" heat and hot water has been achieved.

13 Do you support the need for new buildings to be designed to enable simple future adaptation to use of a zero direct emissions heat source where one is not installed on construction. And for information setting out the work necessary for such change to be provided to the building owner?

Yes

Please provide a summary of the reason for your view below::

HFS members commented that if at construction stage, this has not been adequately designed and planned, the infrastructure will not be at a scale where it can cope with new, additional technology. Further discussions should be held with energy providers to ensure that the appropriate energy loads can service the development.

There are potential implications where the provisions have an impact on the house type, design, layouts and accommodation of service runs. This requires future proof design and questions how it will be assessed by verifiers. A consistent approach is key to ensure these challenges are minimised.

Future adaptations even for internal heat sources may also impact on the fabric and fire performance as these are retro fitted. If the design and future adaptations are not planned carefully then the clients may require to alter these plans following the initial planning stage.

14 Do you have any comments on the level of information needed to support such action in practice and on the extent to which alterations other than at, or very close to, the heat generator can be justified?

No

If yes, please provide your comments below::

15 Do you support the retention of the current elemental approach to setting minimum standards for fabric performance in new dwellings, supported by the option to take an alternate approach via calculation of the total space heating demand for the dwelling (as described)?

Yes

Please provide a summary of the reason for your view below::

Our members commented that backstop U values are generally used in design across the industry, and that these are currently challenging enough to achieve satisfactory results under SAP. When considering tightening the notional specification, there are concerns surrounding the need to change

construction methodology along with fabric improvements. The consequence of driving towards more onerous U values will lead to a change in construction methods, which will require additional modelling, research and investment. This will also produce delays in terms of obtaining fire rating approvals for new fabric detailing which will likely utilise PIR insulation board as opposed to mineral wool.

16 In the context of the proposed approach, do you have any comments on the maximum U-values proposed for elements of fabric, in relation to their level of challenge and achievability at a national level?

No

If yes, please provide your comments below::

17 Do you support the move to airtightness testing of all new dwellings, by registered members of an appropriate testing organisation?

Yes

Please provide a summary of the reason for your view below::

HFS members generally support this change across all new build homes as it would deliver consistency across all developments and provide accurate data.

Some of the larger volume developer members have indicated that there is a level of consistency across their construction which ensures a consistent airtightness level and negates the need to test all new dwellings.

However, all members have concerns around the additional time and resources that will be required at the final stages of completion to support this change. There will also be a lack of equipment and approved skilled people carry the testing in order to meet demand. There are questions around who will ensure the assessors are trained and available to check every property.

18 Do you support the move to increased airtightness testing of all new non-domestic buildings, by registered members of an appropriate testing organisation?

Not Answered

Please provide a summary of the reason for your view below::

N/A

19 Do you support the adoption of CIBSE TM23 as the basis for airtightness testing in Scotland?

Yes

Please provide a summary of the reason for your view below::

The current standard across many parts of the UK for the testing of buildings for air leakage is CIBSE TM23. It would be practical for Scotland to adopt the same principles and standards to align with the rest of the UK.

20 Do you support the introduction of the pulse test method of airtightness testing as a further means to testing and reporting on the performance of new buildings?

Yes

Please provide a summary of the reason for your view below::

Since the revision of CIBSE TM23 in January 2021, low pressure pulse testing has become an approved methodology. It has been proven to give improved, consistent results, is less reliant on external factors such as weather and is quicker to conduct. The result being that it will facilitate the proposed increase to testing of 100% in all new homes.

However, HFS members have raised a concern around whether the apparatus will work on a timber kit, and if the vapour barrier would give incorrect readings.

21 Are there any particular benefits, risks or limitations you would seek to identify?

No

If yes, please provide your comments below::

22 Do you consider the amended provision provides an appropriate balance between: the requirement to improve building energy performance in new buildings; enabling the reuse of better performing modular elements; and enabling use of small units for short term use at short notice?

Yes

Please provide a summary of the reason for your view below::

Unsure.

23 We welcome any other comments you may wish to make on the proposed changes to the setting of performance targets for new buildings or the application of other amended provisions within Section 6 (energy) of the Technical Handbooks which apply to the delivery of new buildings.

Please provide your comments below::

No further comments.

If you wish to provide additional information to support your comments regarding the proposals for new buildings please upload relevant file below::
HFS Consultation response position paper.pdf was uploaded

Section 2 - Energy - All Buildings - Questions 1 - 9

1 The term 'major renovation' means the renovation of a building where more than 25% of the surface of the building envelope undergoes renovation. Do you agree with the proposed introduction of this term as an additional means of identifying when aspects of building regulations shall be applied to an existing building?

Not Answered

Please provide a summary of the reason for your view below::

N/A

2 Do you support the proposed improvement in maximum U-values for elements of building fabric for domestic buildings?

No

Please provide a summary of the reason for your view below::

There are concerns from HFS members around whether there are calculations showing the make up considered for the back stop u-values, as there has been previous discussions about standardised details. The current back stop U values present a challenge. This means any changes being considered to improve current backstop U values, will have an impact on design and construction methods. This will include changes to the timber frame make up, including a move away from the use of mineral wool insulation and on the wholesale use of PIR insulation boards. Additionally, there will be a requirement to carry out new fire testing for certification, which will result in delays to implementation.

HFS members also questioned whether there is an awareness that floor u-value is currently viable from plot to plot, making a standard specification hard to achieve and will also cause risk confusion on site.

3 We would also welcome your views on the proposed simplification achieved by the setting of a single set of values for all building work to new and existing domestic buildings.

Please provide your comments below::

No additional comments.

4 Do you support the proposed improvement in maximum U-values for elements of building fabric for non-domestic buildings?

Not Answered

Please provide a summary of the reason for your view below::

N/A

5 We would also welcome your views on the proposed simplification achieved by setting a single set of values for all building work to new and existing non-domestic buildings.

Please provide your comments below::

N/A

6 Do you support the proposed standardisation of values and approach for conversions, extensions and shell buildings?

Not Answered

Please provide a summary of the reason for your view below::

N/A

7 If you have a view on the preferred format for presentation of information on compliance of building services, what would be your preference?

Re-integrate into guidance to the relevant standard

Please provide a summary of the reason for your view below::

It is key that there is a consistency of approach to ensuring all relevant information regarding Standards, is in one accessible document.

8 Do you support the continued alignment of minimum provisions for fixed building services at a UK level within the Domestic Building Services Compliance Guide?

Yes

Please provide a summary of the reason for your view below::

HFS members reported that many developers across Scotland also conduct business in England. Therefore, it would be logical to align Scotland's minimum provision for fixed building services and standards in general to the UK level. This will mitigate any potential confusion, provide consistency of approach and improve compliance.

9 Are there any issues you wish to raise in relation to the amended specifications set out in the draft Guide?

No

If yes, please provide your comments below::

Section 2 - Energy - All Buildings - Questions 10 - 17

10 Do you support the continued alignment of minimum provisions for fixed building services at a UK level within the Non-domestic Building Services Compliance Guide?

Not Answered

Please provide a summary of the reason for your view below::

N/A

11 Are there any issues you wish to raise in relation to the amended specifications set out within the draft Guide?

Not Answered

If yes, please provide your comments below::

N/A

12 Do you agree with the proposal that the option of installing a less efficient heat generator and compensating for this using heating efficiency credits in existing buildings should be withdrawn from the Non-domestic Buildings Services Compliance Guidance?

Not Answered

Please provide a summary of the reason for your view below::

N/A

13 Do you agree with the proposal to limit distribution temperatures in wet central heating systems to support effective implementation of low and zero carbon heat solutions and optimise the efficiency of heat generation and use?

Yes

Please provide a summary of the reason for your view below::

14 Do you agree with the proposed extension to the provision of self-regulating devices to include when replacing a heat generator?

Yes

Please provide a summary of the reason for your view below::

15 Do you have any comment on issues of technical feasibility or determining when installation should be at a room/zone level?

No

If yes, please provide your comments below::

16 Do you agree with the proposed introduction of a requirement for building automation control systems, of the type specified, in larger non-domestic buildings with systems with an effective rated output over 290kW?

Not Answered

Please provide a summary of the reason for your view below::

N/A

17 We welcome any other comments you may wish to make on these topics and broader changes to the setting of minimum standards for all buildings.

Please provide your comments below::

No additional comments.

If you wish to provide additional information to support your comments regarding the proposals for all buildings please upload relevant file below::

No file uploaded

Section 3 - Ventilation - Questions 1 - 12

1 Do you support the proposed revisions to the presentation of guidance on ventilation and the incorporation of the 'domestic ventilation guide' into the Technical Handbooks?

Yes

Please provide a summary of the reason for your view below::

This would be consistent with normal practice.

2 Do you agree with the revision of guidance to clarify the function of purge ventilation and increase provision to align with that applied elsewhere in the UK?

Yes

Please provide a summary of the reason for your view below::

3 Do you support reference to a single option for continuous mechanical extract ventilation which can have centralised or decentralised fans, with the same design parameters being applied to the system in each case?

No

Please provide a summary of the reason for your view below::

HFS members have raised concerns surrounding the use of centralised MVHR and more generally flagging the operation of MVHR as a bigger issue, as ongoing maintenance will be required to ensure that they work efficiently and safely.

Concerns were raised regarding the effectiveness of mechanical ventilation systems where reference was made to the NHBC Foundation report on issues with MVHR.

MVHR systems are normally located in loft spaces and will require regular checks and maintenance regimes such as the replacement of filters etc., an important factor in the operation of this technology.

This produces the potential for a significant increase in annual costs for homeowners. Additionally, it is possible that this proposal could result in air tight unventilated homes, producing a breeding ground for damp and associated health conditions to those living in the homes.

4 If you have any further views on the use of continuous mechanical extract to deliver effective ventilation in both low infiltration (3-5 m³) or higher infiltration (>5 m³) buildings, we would also welcome your comments.

Please provide your comments below::

No further comments.

5 Do you support introduction of proposed guidance on default minimum size of background ventilator for continuous mechanical extract systems?

Yes

Please provide a summary of the reason for your view below, including any specific concerns you consider may arise from the proposed level of background ventilation or its application in the design of systems::

HFS members wish to highlight the need to consider the size of ventilators to improve air quality. Current practice may result in levels of air pollution and CO in new buildings, which although will remain within limitations will be closer to the upper threshold.

6 Should continuous mechanical extract systems be considered a viable solution in very low infiltration dwellings and, if so, under what circumstances?

No

Please provide a summary of the reason for your view below::

HFS members have raised a particular concern with the use of centralised mechanical extract systems where the system is run on a single fan. Should there be a failure or the system is not maintained correctly then serious issues may arise.

7 We would also like to hear your views on whether heat recovery should be mandated for packaged supply/extract systems.

Please provide your comments below::

No additional comments.

8 Do you support the proposed incorporation of a revised version of the current 'domestic ventilation guide' as an annex to section 3 (environment) of the Domestic Technical Handbook?

Yes

9 We would be grateful for your comments on the content of the proposed Annex and whether there are elements absent from the current guide or which would be better presented within the guidance to standard 3.14 itself.

Please provide your comments below::

No additional comments.

10 Are there other elements of the commissioning of ventilation systems that you consider are both practical to implement and useful in providing additional assurance of performance in practice?

No

If yes, please provide a summary of the elements which should also be considered below::

11 We welcome your thoughts on these or broader topics which would merit consideration as part of the planned review.

Please provide your comments below, including citation of relevant supporting evidence, where relevant::

No additional comments.

12 We welcome any other comments you may wish to make on proposed changes to ventilation standards for domestic buildings.

Please provide your comments below::

No additional comments.

If you wish to provide additional information to support your comments regarding the proposals for ventilation please upload relevant file below::

No file uploaded

Section 4 - Overheating Risk in New Dwellings and other New Residential Buildings - Questions 1 - 8

1 Do you agree with the proposed introduction of a requirement to assess and mitigate summertime overheating risk in new homes and new non-domestic residential buildings offering similar accommodation?

No

Please provide a summary of the reason for your view below::

HFS members are aware of TM59 modelling but would seek further views from colleagues operating in England to ensure that they fully understand the requirements.

HFS members also reported that overheating is not a common issue in Scotland. In the event where this type of complication is found, it would normally present in ground floor and flatted developments.

2 If you consider that proposals should be extended to non-domestic buildings which provide other forms of residential accommodation (which are not 'self-contained residential units'), we welcome your views on such provisions, including if the same or alternate approach to assessment is recommended?

Please provide your comments below::

N/A

3 Do you agree with the proposal that an initial assessment of dwelling characteristics should be undertaken to help inform design choices and the delivery of new homes which provide better thermal comfort in the summer months?

Yes

Please provide a summary of the reason for your view below::

4 We would also welcome your knowledge and views on other sources of good practice guidance which have been implemented by developers and the outcome (e.g. no reports of significant summertime overheating) evidenced through feedback from residents.

Please provide your comments below::

No additional comments.

5 Are there circumstances where you consider the specific characteristics of a dwelling should trigger a need for CIBSE TM59 assessment rather than application of a simple elemental approach?

Yes

Please provide a summary of the reason for your view below::

Not generally necessary in new build homes.

6 Recognising the level of risk identified in the 'Addressing Overheating Risk in New Dwellings' published research paper, do you agree with the assessment proposals as a suitable means of mitigating summertime overheating in new homes through prescriptive actions?

Yes

Please provide a summary of the reason for your view below::

7 Do you consider that the approach set out in the proposed standard and guidance will provide adequate assurance that ventilation measures provided to mitigate summer overheating can be used safely and conveniently in practice?

Yes

Please provide a summary of the reason for your view below::

8 We welcome any other comments you may wish to make on the proposed introduction of provisions to mitigate the risk of summer overheating in new homes and residential buildings.

Please provide your comments below::

No further comments.

If you wish to provide additional information to support your comments regarding the proposals for overheating mitigation please upload relevant file below::

No file uploaded

Section 5 - Improving and Demonstrating Compliance - Questions 1 - 4

1 Do you have any experience of successful design or construction quality assurance regimes which you consider may be useful to consider in the context of the development of a Compliance Plan manual to support the effective delivery of compliance with section 6 (energy)?

Yes

If yes, please share any relevant information below::

Previous discussions with HFS Technical Forum members noted that some activities were being undertaken, particularly surrounding NHBC and other warranty provider reporting, which shares compliance issues on a monthly basis with developers. This allows the learning to then be utilised to develop regional training.

2 Do you have any comments on the compliance themes identified (i.e. informed design, risk assessment, calculation, communication, competence, commissioning, quality assurance, performance testing and use of data) and any other actions you consider would be useful in supporting improved compliance with requirements for energy and emission performance?

No

If yes, please provide your comments below::

3 Are there particular aspects to building design and construction which you consider should be prioritised as part of the development of a detailed compliance plan manual for section 6 (energy)?

No view

If yes, please provide further details, including any evidence you are aware of that supports such emphasis, below::

4 We welcome any other comments you may wish to make on the topic of improving compliance of building work with the provisions within section 6 (energy) of the Technical Handbooks to better align designed and as-built performance.

Please provide your comments below::

No additional comments.

If you wish to provide additional information to support your comments regarding the proposals for ventilation please upload relevant file below::

No file uploaded

Section 6 - Electric Vehicle Charging Infrastructure - Questions 1 - 6

1 What are your views on our policy goal to enable the installation of electric vehicle (EV) charge points and ducting infrastructure (to facilitate the future installation of EV charge points) for parking spaces in new residential and non-residential buildings parking?

Please provide a summary of your views below::

Passive provision is achievable however, active charging will be delayed by network constraints.

HFS members have voiced concerns around the capacity of the infrastructure and power supply in the grid.

2 What are your views on the following preferred options?

Please provide a summary of your views below::

With respect to new residential buildings, HFS and our members support the Scottish Governments preferred option. The following points should be considered/addressed.

- Capacity within the network to supply the required power.
- Consider the provision of passive connection until network constraints addressed.
- The Scottish Government to provide clarity on the following; Exemption to requirement to install EV charge point if additional cost of electricity grid connection exceeds £2,000.

3 Do you agree with the Scottish Government's preferred options for the exemptions as set out below?

Yes

If no, please explain why you disagree below::

4 What are your views on how our preferred option relating to existing non-residential buildings with car parks with more than 20 spaces could be properly monitored and enforced, given that the Building (Scotland) Regulations will not apply?

Please provide a summary of your views below::

N/A

5 What are your views on the proposed provision for charge points for accessible parking spaces? Do you have examples of current best practice for the provision of charge points for accessible parking spaces?

Please provide a summary of your views and any relevant information below::

No views.

6 We welcome any other comments you may wish to make on EV charging provision (e.g. the minimum standard of EV charge point or safety within the built environment).

Please provide your comments below::

HFS members believe it would be beneficial for every home to have the facility for EV charging. Not everyone will want or need an EV, but each home should have the future provision (via ducting) to allow for future installation if required. There are concerns that there is a disproportionate impact on smaller properties. Remote charging stations cost around four times that of a standard property within curtilage parking. Further concerns from HFS members around wires in public areas creating a trip hazard.

In addition, an element of EV points which are set within adoptable carriageways (maintained by the Local Authority) would support the EV infrastructure.

If you wish to provide additional information to support your comments regarding EV charging provision please upload relevant file below::

No file uploaded

About you

What is your name?

Name:

[Redacted]

What is your email address?

Email:

[Redac] @homesforscotland.com

Are you responding as an individual or on behalf of an organisation?

Organisation

What is your organisation?

Organisation name:

Homes for Scotland

If responding on behalf of an organisation please select the most relevant type of organisation from the list below:

Other (please specify below)

if other organisation, please specify type here:

Trade Body

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

Publish response only (without name)

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Yes

I confirm that I have read the privacy policy and consent to the data I provide being used as set out in the policy.

I consent

Evaluation

Please help us improve our consultations by answering the questions below. (Responses to the evaluation will not be published.)

Matrix 1 - How satisfied were you with this consultation?:

Slightly dissatisfied

Please enter comments here.:

Matrix 1 - How would you rate your satisfaction with using Citizen Space to respond to consultations?:

Slightly dissatisfied

Please enter comments here.:

Note of Call with Homes For Scotland (HfS)

10:45 – 11:30, 18 November 2021

Attendees: Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights, Nicola Barclay, Fionna Kell, John Stephen, Gavin Corbett, [Redacted]
Steven Scott, Stephen Garvin, [Redacted] [Redacted]

Agenda Items:

- Introduction to HfS, membership and remit
- SNP/Greens co-operation agreement: what it means for housing delivery across all tenures
- Building Standards Section 6 / New Build Heat Standard
- Social and economic impacts of the sector

Introductions:

The Minister introduced the meeting and topic list and noted the challenges of addressing housing and climate change issues. Mr Harvie was keen to understand HfS perspective on issues such as the S6 energy review and the New Build Heat Standard (NBHS) and wider issues around Housing delivery. The Minister invited HfS to offer general reflections and to illustrate the challenges ahead and members' experiences in delivering housing development.

Key Points from HfS:

- HfS reiterated their support for the NBHS and the ability of housing developers to meet it from 2024.
- However, HfS raised noted that the sector was dependent on factors outwith their control (i.e. supply chain capacity, capacity of electricity network, comparatively high costs of zero emissions heating systems (ZEH)) to meet the standard, and that if these issues were not overcome ahead of the introduction of the NBHS then it could ultimately lead to a reduction in the supply of new homes in Scotland.
- As such, HfS informed that they would raise these issues with the Cabinet Secretary for Social Justice, Housing and Local Government and making the case for additional grant funding from the Scottish Government.
- HfS welcomed the engagement that they have had with the Scottish Government's Building Standards Division (BSD) regarding the consultation on proposed changes to energy standards from 2022, but were seeking greater engagement on the NBHS ahead of 2024 (and beyond public consultation).
- HfS appealed for the NBHS to be implemented via Building Standards, given that: it would then apply consistently across Scotland; developers are familiar with building standards processes; and as it would not add a further permit that developers have to attain prior to getting on site. Request made to repeal s.72 provisions set through planning, as no longer needed.

- HfS also advocated for significant detail on the NBHS to be published alongside the proposed changes to energy standards from 2022 being laid in Parliament, to give the sector sight of further forthcoming changes (and in the spirit of the recommendations of the Sullivan Report).
- HfS raised the question of whether it may be preferable to introduce the proposed changes to energy standards from 2024 (alongside the NBHS) in ZEH supply chains to develop (given HfS's view that the proposed changes to energy standards from 2022 will result in a substantial increase in air source heat pump installations in new homes).

Meeting closed:

Mr Harvie offered his thanks for the input offered today. Homes for Scotland made an open invitation to come and talk to any house builder at any time to find out more about challenges and opportunities.

[Redacted]

From: Fiona Kell <F.Kell@homesforscotland.com>
Sent: 06 October 2021 14:03
To: Scott S (Steven); Steve Fawcett
Cc: [Redacted] Garvin S (Stephen) (Dr)
Subject: RE: Building Standards, Section 6 consultation timetable

Thanks for this, very much appreciated. We will advise members accordingly.

Regards,

Fionna

Fionna Kell
Director of Policy
Homes for Scotland

5 New Mart Place, Edinburgh, EH14 1RW
Tel: 0131 455 8350
[Redacted]
Email [Redacted] @homesforscotland.com
Twitter: @HFSFionna
Website: www.homesforscotland.com

Please note my hours of work are Tuesday to Friday 8.30 – 5.00

From: Steven.Scott@gov.scot <Steven.Scott@gov.scot>
Sent: 06 October 2021 14:00
To: Fiona Kell [Redacted] <@homesforscotland.com>; Steve Fawcett [Redacted] <@homesforscotland.com>
Cc: [Redacted] <@gov.scot>; [Redacted] <@gov.scot>; Stephen.Garvin@gov.scot
Subject: RE: Building Standards, Section 6 consultation timetable

Fionna –

Good afternoon.

We've received consent from our Minister to the requested extension so I will now amend the closing date of the consultation to 26 November.

An update note will also be issued to our various groups and main stakeholder list.

If you have any further meetings or events planned to support responses by your members, please let us know if it would be useful for us to attend. Particularly interested in any sessions planned to review iSAP modelling outcomes once users have had a little time to model scenarios use the current updated version, with complete PCDF, etc.

Regards

Steven

From: Garvin S (Stephen) (Dr) <Stephen.Garvin@gov.scot>
Sent: 05 October 2021 18:12
To: Fiona Kell [Redacted] <@homesforscotland.com>
Cc: Steve Fawcett [Redacted] <@homesforscotland.com>; Scott S (Steven) <Steven.Scott@gov.scot>
Subject: RE: Building Standards, Section 6 consultation timetable

Fionna

Sorry I had not seen your email till now. We are hopeful of a decision from the Minister in the next couple of days. We will let you know as soon as possible.

Regards

Stephen

From: Fiona Kell [Redacted] <@homesforscotland.com>
Sent: 05 October 2021 11:50
To: Garvin S (Stephen) (Dr) <Stephen.Garvin@gov.scot>
Cc: Steve Fawcett [Redacted] <@homesforscotland.com>
Subject: RE: Building Standards, Section 6 consultation timetable

Stephen

I have an update call with members today, are you able to advise on when we might hear about any amendments to the timetable?

Thanks

Fionna

Fionna Kell
Director of Policy
Homes for Scotland

5 New Mart Place, Edinburgh, EH14 1RW
Tel: 0131 455 8350
[Redacted]
Email: [Re @homesforscotland.com]
Twitter: @HFSFionna
Website: www.homesforscotland.com

Please note my hours of work are Tuesday to Friday 8.30 – 5.00

From: Stephen.Garvin@gov.scot <Stephen.Garvin@gov.scot>
Sent: 30 September 2021 15:46
To: Fiona Kell [Redacted] <@homesforscotland.com>
Cc: @cala.co.uk; [Redacted] <@taylorwimpey.com>; Nicola Barclay <N.Barclay@homesforscotland.com>
Subject: RE: Building Standards, Section 6 consultation timetable

Fionna

Thanks for your email, we are currently looking at options. As discussed at the meeting we would need to agree any extension with the Minister. In any case we will get back to you soon.

Kind regards

Stephen

From: Fiona Kell [Redacted] <@homesforscotland.com>
Sent: 29 September 2021 11:56
To: Garvin S (Stephen) (Dr) <Stephen.Garvin@gov.scot>
Cc: [Redacted] <@cala.co.uk>; [Redacted] <@taylorwimpey.com>; Nicola Barclay <N.Barclay@homesforscotland.com>
Subject: Building Standards, Section 6 consultation timetable

Stephen,

Further to recent conversations, I am writing on behalf of Homes for Scotland members to request an extension to the current consultation by a period of 4 weeks.

As you will appreciate the proposals represent a major change for the industry and whilst we acknowledge the reasons behind the proposed changes, there are significant technical and commercial challenges to navigate.

In particular the recent release of the ISAP software has thrown up a number of areas which members are still trying to explore. Now that some of the nuances of the software are becoming apparent as it is tested on live cases, it is apparent that members will need to run some more test models to inform the consultation response. Until we have the confidence that the software provides accurate outputs for members to base technical and commercial decisions on, we are unable to provide a well evidenced and valid response to the consultation.

I look forward to hearing from you.

Regards
Fionna

Fionna Kell
Director of Policy
Homes for Scotland

5 New Mart Place, Edinburgh, EH14 1RW
Tel: 0131 455 8350
[Redacted]
Email: [Redacted] <@homesforscotland.com>
Twitter: @HFSFionna
Website: www.homesforscotland.com

Please note my hours of work are Tuesday to Friday 8.30 – 5.00

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Patrick Harvie MSP
Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights
Scottish Government

2 September 2021

By email only

Dear Patrick

On behalf of the Homes for Scotland Board, I write to congratulate on your appointment as Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights.

Whilst Scotland's home builders are already well on the path to net zero, with a 75% reduction in carbon emissions from new homes built today compared to 1990 baselines, we recognise there is, of course, more to do.

Although this will be challenging, not only for builders in terms of skills, grid capacity and supply chain readiness but also for consumers in terms of demand and behaviour change as new technologies are introduced, we look forward to working with you in support of transition ambitions and would welcome an early meeting to discuss this in more detail.

Yours sincerely



Nicola Barclay
Chief Executive



T : 0300 244 4000
E : scottish.ministers@gov.scot

Nicola Barclay
[Redacted] @homesforscotland.com

Our Reference: 202100237230

17 September 2021

Dear Ms Barclay,

Thank you for your letter of 2 September 2021 inviting Patrick Harvie, Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights to meet you and discuss the challenges around our transition to Net Zero.

The Minister would be delighted to accept. Mr Harvie asks that you contact his Assistant Private Secretary, [Redacted] , at MinisterZCBATTR@gov.scot to make the necessary arrangements.

Yours sincerely,

[Redacted]

Private Secretary

