# Response ID ANON-EDAR-YMBD-8

Submitted to **New Build Heat Standard: scoping consultation**
Submitted on **2021-03-03 18:38:53**

## Chapter 1

### 1 Do you agree with the above key outcomes?

**Please explain your view.:**

Notwithstanding the significant concerns we highlight below on the ability to achieve the proposed new Standard without improvements to energy networks, the SPF welcomes and agrees with the general outcomes detailed in the consultation.

As an industry, reducing our impact on the environment and contribution to climate change is paramount. This is evidenced by the significant reduction achieved in emissions from the built environment since 1990 and the increased uptake of zero emissions heat solutions in new developments.

### 2 Are there any additional outcomes which should be embedded here?

**Are there any additional outcomes which should be embedded here?:**

An important outcome for the new Standard should be that Scotland maintains a successful and diverse property industry that is able to build and deliver the homes and workspaces of the future.

Adding this outcome would help to ensure that there is a focus on how the potential Standard will interact with existing regulations and wider commercial and economic factors. This is important because without the requisite funding and investment into our built environment, Scotland's ability to meet the future demand from people and businesses may be compromised.

## Chapter 2

### 3 Do you agree with limiting this Standard to 'new buildings' as defined within section 2.2?

**Do you agree with limiting this Standard to 'new buildings' as defined within section 2.2?:**

We agree with this approach. However, one important consideration is that the definition of 'new' includes the conversion of existing buildings. This may have the consequence of making existing heating systems redundant before their time, potentially leading to the unintended consequence of creating carbon emissions through the decommissioning of potentially modern and efficient systems. The current inflexible approach of the proposed Standard means that there will be no scope for this to be considered on a case-by-case basis.

### 4 Do you agree with:

**Please explain your view.:**

a) We agree with this approach provided that there is the requisite infrastructure in place to support the electrification of heat. The Scottish Government notes that the proposed approach 'places a duty on the developer (or building owner/ tenant/ occupier) to take action where they have the agency and power to do so'. In many cases, however, this approach will rely on there being capacity within the energy networks, over which the developer has little to no agency.

b) We agree with this approach as it provides scope to use existing heat networks that may be powered by gas, which will eventually be replaced with biogas, green hydrogen or other zero carbon technologies. Electricity will also be supplied entirely by renewable sources in the near future and therefore should be assumed to have little impact on emissions.

In addition, we believe that the Standard should be as straight forward to understand and achieve as possible, and we agree that factoring in embodied carbon or up-stream emissions from energy networks would not be appropriate at this time.

### 5 What evidence can you offer on ways of ensuring zero direct emissions from heating that could be compliant with this Standard?

**What evidence can you offer on ways of ensuring zero direct emissions from heating that could be compliant with this Standard?:**

### 6 What are your views on section 2.6, specifically regarding what mechanism the Scottish Government could use to ensure compliance with the Standard?

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### 7 What steps can the Scottish Government take to support industry to deliver this Standard, and how could we make compliance with this Standard easier?

**What steps can the Scottish Government take to support industry to deliver this Standard, and how could we make compliance with this Standard easier?:**

The infrastructure challenge is particularly important to address, and we go into more specific detail in our answers to questions 9, 10 and 13. However, in terms of awareness, it will be important that the Scottish Government continues to engage with the property industry ahead of any new Standard being implemented.

While it is necessary to regulate for the transition to zero emissions heat and cooling in new buildings, the proposed Standard is causing significant uncertainty within the development industry due to the unknowns of what the Standard could entail and the short timeframes proposed. Development is an industry that plans in the long-term and decisions need to be taken now on future projects that go beyond 2024. The uncertainty in how homes and buildings will be permitted to be heated could have an impact on delivery.

The consultation notes that the Scottish Government would like to ensure consistency with the rest of the UK to help ensure the transition to zero carbon heat is as smooth as possible. We would therefore like the Scottish Government to explore the possibility of matching key implementation dates with other governments in the UK, most notably with the Future Homes Standard.

### 8 How do we ensure that consumers are protected from increased energy bills, while giving developers flexibility to comply with the Standard?

**How do we ensure that consumers are protected from increased energy bills, while giving developers flexibility to comply with the Standard?:**

Combined with the fabric improvements that are being proposed in the current review of Section 6, giving developers the flexibility to comply with the standard in the most appropriate way to the development will help to create cost efficiency for consumers. The market is responsive to operating costs and it is there for in the interests of developers to keep such costs down.

However, at a more fundamental level the cost of electricity or heat provided by heat networks is out-with developer's and consumers' control. The government would be best placed to mitigate any potential costs consumers may face as a result of the Standard through the energy markets.

### 9 What are your views on new buildings connecting to an existing heat network, where development takes place within a heat network zone? Do you envisage any unintended consequences as a result of this proposal?

**What are your views on new buildings connecting to an existing heat network, where development takes place within a heat network zone? Do you envisage any unintended consequences as a result of this proposal?:**

Heat networks will be an important element in the decarbonisation of heat in new homes, particularly in areas within the immediate locale of an existing network. However, our position remains that developers should be afforded flexibility to decide on what the best zero carbon heat solution is for each project. We would therefore caution against a blanket compulsion to connect to a heat network within certain zones as is suggested in this consultation.

It should be borne in mind that there may be cases when district heating is unlikely to deliver real benefits through the poor efficiencies of distribution. In addition, other technologies, such as heat pumps, may offer better 'upstream' emission reductions than a connection to a heat network that is powered by gas.

We are also concerned about the potential lag time between the intended completion date of the building/development and the eventual connection to the heat network. In circumstances where a connection to a heat network would take additional time, it is conceivable that a property would be required to have a heat pump installed initially, only for it to then be connected to a heat network at a later date. This would not only be inefficient and costly, but there would be an embodied carbon cost resulting from the duplication in heat technologies.

A delay to being able to connect into a district heat network could have cost and time implications for a development. This could occur if there is a constraint on getting the necessary infrastructure to the development or if there is a capacity restriction. Our members have previously noted delays to connecting to heat networks as a result of significant hold-ups in getting approval to expand the network from agencies such as Network Rail.

It may also be more cost effective for a developer (or building owner/ tenant/ occupier) in terms of both installation and running costs to heat a building other than using a heat network.

Some of our members have expressed a view that it should not be the role of development in Scotland (nor the eventual occupiers of such properties) to create the base load for a private heat network company to establish a monopoly. Of course, it may be the case that many developments do decide to connect to existing heat networks; however, there is still concern about the lack of choice for the consumer.

### 10 Do you agree with the Scottish Government's proposal to introduce this Standard in 2024? What are your views on this Standard being brought into force for new buildings consented earlier than 2024?

**Do you agree with the Scottish Government's proposal to introduce this Standard in 2024? What are your views on this Standard being brought into force for new buildings consented earlier than 2024?:**

We believe that any implementation date must be achievable. We have strong reservations on whether the infrastructure needed to create zero emissions buildings will be in place in time for the Standard to be implemented in 2024.

Our members have raised significant concerns about the ability for electricity networks to meet the increased demands from the electrification of heat, let alone when this demand is combined with the added pressures from greater use of electric vehicles. It is our view that in many cases inadequate electricity network capacity will act as a barrier to developments being able to achieve the Standard in 2024.

To give an example of the scale of the potential issues, we are aware of a development that has recently received an upgraded electricity connection from its distribution network operator (DNO) to support the delivery of much needed new homes. However, despite this new connection, it is estimated that if the homes remaining to be built in the development were to use heat pumps, rather than the gas network as originally planned, then the potential demand could be four times more than the new electricity connection can provide. Given the current difficulty in obtaining connections from DNOs, there is a fear that developers will

simply not be in a position to meet the Standard.

Elsewhere, our members have highlighted that the electrical infrastructure throughout Scotland, including in our major cities, is already incapable of delivering fossil fuel free developments. There are schemes currently underway that are stalling due to the capacity issues in the network preventing them from implementing low and zero carbon heat. If the new standard came into effect before these issues are mitigated, then we are concerned that the Standard could represent an impenetrable barrier to new development.

## Chapter 3

### 11 How can opportunities be maximised for the supply chain involved in the delivery of new homes (ranging from product suppliers to on-site operatives), including skills?

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### 12 What do you envisage the key challenges would be for developers, and wider-building industry, in meeting this proposed Standard? How could this sector be supported to address those challenges?

**What do you envisage the key challenges would be for developers, and wider-building industry, in meeting this proposed Standard? How could this sector be supported to address those challenges?:**

As highlighted in our answer to question 10, our members have raised significant concerns about the ability for electricity networks to meet the increased demands from the electrification of heat, let alone when this demand is combined with the added pressures from greater use of electric vehicles. It is our view that in many cases adequate electricity network capacity will act as a barrier to developments being able to achieve the Standard in 2024. Hydrogen could offer an alternative in areas where the electricity grid is unable to support compliance, and there is potential to align the Standard to the Scottish Government's ambition for the hydrogen industry.

On the potential compulsion to connect to a district heat network, we are also concerned that a delay in being able to connect into a district heat network could have implications for a development. This could occur if there is a constraint on getting the necessary infrastructure to the development or if there is a capacity restriction.

### 13 What are the key challenges for the energy networks regarding the deployment of zero emissions heating in new developments? How could this sector be supported to address those challenges?

**What are the key challenges for the energy networks regarding the deployment of zero emissions heating in new developments? How could this sector be supported to address those challenges?:**

Capacity of the current electricity networks is a key concern and must be addressed ahead of the Standard coming into effect. To do otherwise would be to erect a barrier to development that could prohibit the supply of new homes and other buildings in Scotland. As things currently stand, we do not believe that network capacity will allow for the Standard to be implemented in 2024.

The Scottish Government should commission research into the ability for networks to adapt to the new Standard and make clear recommendations on steps that need to be taken to address potential barriers.

The Scottish Government should also seek an agreement with the UK Government, distribution network operators and regulators to ensure that the energy industry is enabled to increase capacity in the electricity network when needed and at speed. There must also be substantial additional funding available if the cost for enhancing the network is not to fall on the eventual occupier of the property (particularly through their energy bills) or make new development in certain parts of Scotland unviable. Current expectations of up-front investment from developers will not be sufficient to address the challenge of forward funding infrastructure or pursuing the Scottish Government's 'infrastructure first' policy.

Any investment in the electricity network will have a lasting and important impact on Scotland being able to achieve net zero by 2045, as it is clear that the net zero future of Scotland is linked to the electrification of our economy. It is therefore vital that significant investment to increasing capacity is made commensurate to the scale of the challenge at hand.

Another potential solution to address this challenge could be the creation of a national infrastructure agency tasked with ensuring essential infrastructure, such as enhanced energy networks, are delivered at scale and pace. There are currently a number of different agencies and government funds that are available to help the transition to net zero and an overarching body could help to pull these different stands together to deliver the infrastructure needed to support the Standard.

### 14 How do you see this Standard interacting with wider-energy system changes, and what role do you see for flexibility and smart technologies?

**How do you see this Standard interacting with wider-energy system changes, and what role do you see for flexibility and smart technologies?:**

### 15 What can be done to encourage greater consumer awareness and understanding?

**What can be done to encourage greater consumer awareness and understanding?:**

At a fundamental level, it is important that the Scottish Government does more to publicise the changes to consumers once the new Standard is implemented. Continued engagement with the industry will also help to ensure that all stakeholders are informed of the significant proposals, particularly among small and medium sized businesses.

**16 What approach should be taken when considering new non-domestic buildings, and what are the specific challenges and opportunities relating to new non-domestic buildings?**

**What approach should be taken when considering new non-domestic buildings, and what are the specific challenges and opportunities relating to new non-domestic buildings?:**

The non-domestic sector is significantly more diverse than the residential sector and finding a one-size all Standard will be more challenging. We therefore agree with the proposal to phase in zero carbon heat and cooling.

Again, capacity within electricity networks has been highlighted as a key challenge to overcome, as will the need for certainty ahead of the introduction of any new standard.

Requiring a very ambitious fabric standard across the non-domestic building stock may be technically feasible, but there could be unintended consequences such as increasing the embodied energy of a building and there may be significant additional costs for developers, building owners and occupiers.

One particular aspect that has been highlighted to us by members is that Section 6 has not kept abreast of developments within the industry and still promotes mechanical ventilation and comfort cooled spaces for commercial premises. It is important that future regulations incentivise passive designs with natural ventilation. Not only will this help to reduce energy demand and costs for building operators but could help to address some of the concerns highlighted above on the capacity of the electricity networks.

There also needs to be greater cognisance of new technologies that will play a pivotal role in determining a zero-carbon future whilst facilitating a greener grid. Technologies such as battery storage and heat pump chillers are not promoted in the current assessment methodologies.

Lastly, it is understood that blue or green hydrogen could be the optimum solution for parts of this sector (for example, industrial buildings). We think, therefore, there needs to be a greater alignment between the Standard and the proposal to phase in hydrogen gas later this decade. This could be an important step in the Scottish Government's ambition to be a world leader in the hydrogen industry.

**17 By introducing this Standard, what challenges or opportunities might result for households on low incomes (for example, around affordability or access), and how can the Scottish Government best take account of these?**

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## About you

**What is your name?**

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**Are you responding as an individual or an organisation?**

Organisation

**What is your organisation?**

**Organisation:**
Scottish Property Federation

**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?:**

**Please enter comments here.:**

**Matrix 1 - How would you rate your satisfaction with using this platform (Citizen Space) to respond to this consultation?:**

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