

AHSS HEAT IN BUILDINGS STRATEGY : CONSULTATION RESPONSE

Heat in buildings strategy - achieving net zero emissions: consultation

<https://consult.gov.scot/energy-and-climate-change-directorate/heat-in-buildings-strategy/>

The Scottish Government is consulting on a draft Heat in Buildings Strategy that sets out proposed actions for transforming our buildings and the systems that supply their heat, ensuring a transition to zero emissions by 2045.

This draft Heat in Buildings Strategy outlines the steps the Scottish Government will take to reduce greenhouse gas emissions from Scotland's homes, workplaces and community buildings and to ensure that we remove poor energy performance as a driver of fuel poverty.

SUBMISSION TO THE SCOTTISH GOVERNMENT

The Architectural Heritage Society of Scotland (AHSS) welcomes the invitation to respond to the Scottish Government's consultation on *Heat in Buildings Strategy – achieving net zero emissions* and the opportunity to influence the direction of travel.

The AHSS focusses on Scotland's built heritage, seeking to convey to stakeholders why a historic asset is of value and how it might be best preserved. It aims to be pragmatic in doing so, accepting that change is often required in order to retain or regain sustainable uses.

The AHSS has approximately 1,000 members and currently comprises five regional groups. The study of Scottish architecture is promoted by lecture series, conferences, publications, visits and study tours. The AHSS also provides advice to planning authorities and to Scottish Ministers about policies, guidance and applications which may affect the historic environment. Through its regional groups and, where appropriate, the National Conservation Committee, the AHSS comments upon applications for statutory consents which have, or are likely to have, a significant impact upon Scotland's built heritage. In the year 2019-20 the AHSS considered 4,877 cases.

The AHSS would welcome the opportunity to address any of the points raised in this paper and to assist the Scottish Government further alongside any calls for evidence that may follow.

This is an extensive consultation and the AHSS will respond only to some of the questions as shown below.

Chapter 2: A 2045 Pathway for Scotland's Homes and Buildings

1. To what extent do you support the pathway set out for achieving the 2045 net zero target and the interim 2030 target?

- The AHSS strongly agrees with Scottish Government targets

2. What are your views on any risks of unintended consequences from this pathway?

- That listed buildings and conservation areas will suffer damage to their quality and character unless great care is taken.
- That listed buildings must be treated as individual entities, not just as numbers in the existing building stock, ones in need of retrofitting. This points out the necessity of relaxations for listed buildings, ones that are justified by the low, original CO2 released in their construction, especially compared to the high embedded CO2 of modern buildings. Concrete is a major culprit, but there are high environmental costs involved in producing most other common building materials, including insulation, heating systems and electronics. Even brick and timber, because of the highly mechanized methods used to produce them, are not without embedded CO2 emission costs. If there is to be an equitable treatment for most listed buildings, it is essential that lifetime CO2 costs enter the equation.
- That traditionally constructed buildings (usually pre-1919, have solid wall construction and are vapour permeable) will be damaged by inappropriate energy efficiency measures.
- That joinery, internal features and finishes of historic buildings may well suffer from a consistently higher temperature and drier atmosphere caused by energy efficiency measures.
- That a very significant proportion of Scotland's domestic buildings are pre-1919 and built using traditional techniques and materials. The suggestion that this should be a voluntary add-on in the training courses would be unlikely to produce the number of trainees with these extra skills and knowledge necessary to meet with the size of the task. It is essential that knowledge of traditional buildings and building techniques is included as a key and central part of retrofit courses.

3. What are your views on our assessment of strategic technologies in low and no regrets areas to 2030?

- The AHSS does not intend to answer this question.

4. What function should a new heat target serve?

- Heat targets should be matched to the buildings' capacity to meet them.

5. How do you think a new heat target should account for the need to deliver against our statutory fuel poverty targets?

- The AHSS does not intend to answer this question.

6. Do you agree that a new heat target should apply to heat in buildings, distinct from industrial heat?

Yes No

- The AHSS does not intend to answer this question.

7. What form should a new heat target take and why?

- The AHSS does not intend to answer this question.

8. At what level should the target(s) be set and for what date?

- The AHSS does not intend to answer this question.

Chapter 3: People

9. What are the most significant actions we can take to ensure that Scotland's people and organisations are meaningfully engaged in the net zero heat transition?

- Sustained and high profile campaigns in the media and social media.
- Scotland's property owners and users need to understand that the care and maintenance of the fabric of the building is of primary importance and will help to support the transition to net zero. The expression 'the greenest building is the building you already have' (Carl Elefante) must be stressed. Listed buildings and other traditional buildings have intrinsic importance and contain embodied energy.
- There needs to be a robust skills supply chain available to maintain all of Scotland's homes, from the traditional to the most recent.
- The government needs to build consumer confidence in and understanding of systems. Consumers should be confident that advice is accurate and impartial with interventions appropriate to the building type and location. The UK and Scottish Governments should be careful not to promote heating and ventilating systems that cannot be maintained in the long-term. Accordingly, components must be durable and easy to repair. Reliable gas boilers that still function will have to be disposed of as part of the de-carbonisation of energy programme. Consumers will consider this wasteful. The proposed time-frame for developing new systems appears to be unrealistic.
- District heating is an attractive option for some locations but households will need to have supplementary heating for chilly summer days.
- Provision has to be made for conditions of prolonged high and low temperatures and an understanding of regional variations is essential.

10. What in your view are the opportunities, if any, available to key organisations, such as local government, businesses and trade associations and community or other non-government organisations, in supporting this public engagement activity?

- All organisations with a membership/influence base must make energy efficiency a cornerstone of their environmental policy.

11. In your opinion, could any of the proposals set out in this strategy unfairly discriminate against any person in Scotland who shares a protected characteristic? (age, disability, sex, gender reassignment, pregnancy and maternity, race, sexual orientation, religion or belief)

- The AHSS does not intend to answer this question.

12. In your opinion could any of the proposals set out in this strategy have an adverse impact on children's' rights and wellbeing?

- The AHSS does not intend to answer this question.

13. What further action can we take to support people to make informed choices on the energy efficiency and heating options available to them?

- All organisations with a membership/influence base must make energy efficiency a cornerstone of their public image and environmental policy.
- It is essential that the energy efficiency choices made are appropriate to the building fabric and respect the design of the building regardless of whether or not it has any formal designation. Sustainable materials must be used for any interventions.
- The government should make information freely available to the public. The management of traditional buildings should be dealt with in a clearly marked section of this publicity material.

14. What is your view on the current level of support and advice provided through existing services such as Home Energy Scotland and the Energy Efficiency Business Support service?

- Material should be clear and assume that the reader has little knowledge. Acronyms should be avoided.
- General information is available but Home Energy Scotland does not, for example, appear to include a discussion of the merits or demerits of installing an electric boiler.
- Inexpert members of the public need specific guidance on how they could be changing their businesses to become more energy efficient. Energy Efficient Business Support services web-site does not do this.

15. Are there any further suggestions that you could provide on how the customer journey through these delivery services could be improved, in light of the ambitions set out in this strategy?

- Every address should receive notification of the changes required and guidance on how to achieve them, including information about the appropriateness of possible changes to different property types.

16. What are the most appropriate steps we can take within our powers to ensure sufficient consumer protection for supported energy efficiency or zero emissions heat installations?

- The AHSS does not intend to answer this question.

17. Do you have views on whether we should adopt the use of the UK government's TrustMark quality assurance framework?

- The AHSS does not intend to answer this question.

18. In your view, is there any further action that we, or other key organisations (please specify), can take to protect those on lower incomes, and those in or at risk of falling into fuel poverty, from any negative cost impact as a result of the zero emissions buildings transition?

- The AHSS does not intend to answer this question.

19. What are your views on our approach to phasing out funding for fossil fuel heating systems by 2024 where it is not detrimental to our fuel poverty objectives? Do you think that this could be achieved any sooner than 2024, and if so how?

- The AHSS does not intend to answer this question.

20. What changes can be made to the Strategy to help maximise positive impacts and minimise negative ones on people experiencing fuel poverty and other vulnerable groups?

- The principle of setting two different targets, for 2030 and a higher one for 2040 should be re-examined. Retrofit is expensive and intrusive. To be forced to carry out costly works twice within ten years is not a fair way to proceed. In addition, some works carried out to meet the first target will have to be removed to make way for works required to meet the second target, increasing waste and carbon emissions.

It would be better to either;

- set one target and stick to it; or
- make sure any retrofit work for the first target can be retained and added to later with little impact to achieve the second target.

Chapter 4: Place

21. What are your views on how we can support place-based deployment of zero emissions heat within our delivery programmes?

- Change the taxation framework to aid the strategy with incentives like income tax and VAT relief.
- We need to reflect on the impact on our visual environment. The quality of our streetscape has an important impact on mental health and well-being and this needs to be managed carefully. Installations that address climate change also need to take into account the character of the place, in relation to all environments – not just historic environments and conservation areas.
- The AHSS is surprised to see the photograph of Coalburn (p50) being promoted as a positive outcome. We do not agree that this collection of air to air heat pumps is a solution that should be widely promoted. The quantity of externally mounted equipment presents a visually depressing image and is a good example of what should be avoided.

22. What is your view on how best to engage, and support, local communities in the planning and implementation of the heat transition in their area?

- Each local authority should employ an energy czar to be funded by the Scottish Government. The immediate purpose of this official would be to liaise with community councils to increase the level of urgency in the private sector and to lead the way by project managing the retro-fitting of local authority owned buildings.

23. What role do you think community anchor organisations could play in supporting the heat transition?

- Vital, see 22 above.

24. In your opinion, what steps can we take to ensure that policies set out in this strategy do not unfairly impact Island and other remote communities?

- The AHSS does not intend to answer this question.

25. What is your view on the timescales proposed for Local Heat and Energy Efficiency Strategies (LHEES)?

- The AHSS does not intend to answer this question.

26. Do you agree with the approach to LHEES we have set out? If not, please give reasons to support this.

Yes No

- The AHSS does not intend to answer this question.

27. What are your views on what Permitted Development Rights might help enable in the heat transition, in addition to those we have already included in the Permitted Development Rights review programme?

- Current restrictions on permitted development rights should be retained unaltered.
- If the decision is taken to vary current restrictions on permitted development rights listed buildings and heritage buildings in conservation areas should continue to be treated differently. Design guidance should be developed so interventions such as air source heat pumps do not blight buildings.
- A well-resourced and properly functioning planning system, that is speedier, more helpful, more cost effective for applicants and their agents, and with more fully trained conservation officers, would be beneficial to the overall strategy.

28. In your view, is there further action that can be taken to ensure that our electricity systems are ready for heat decarbonisation? If yes, please provide further information.

Yes No

- The AHSS does not intend to answer this question.

29. What are your views on the changes set out above for the electricity networks and are there further actions by government, the regulator or industry that would make these more cost effective? Please provide evidence to support any suggestions.

- The Scottish National Parks and other designated landscapes as well as the setting of listed buildings and conservation areas must continue to be protected from visual damage from transmission lines and inappropriate turbine positioning.

30. In your view, what changes are needed to ensure that those least able to pay, including those in fuel poverty, are not unfairly impacted by the transition in our electricity and gas networks?"

- The AHSS does not intend to answer this question.

31. What are your views on the changes set out above for the gas networks?

- The AHSS does not intend to answer this question.

32. Are there further actions by government or industry that you think would make the changes set out more cost effective? Please provide evidence to support any suggestions.

- The AHSS does not intend to answer this question.

33. What evidence can you provide on the potential for heat networks in Scotland that can help inform a new ambition for deployment within the final Heat in Buildings Strategy?

- The AHSS does not intend to answer this question.

34. What evidence can you provide on the potential for heat derived from energy from waste to qualify as low or zero emissions?

- The AHSS does not intend to answer this question.

35. What views do you have on mechanisms to support this and the use of wider sources of waste heat?

- The AHSS does not intend to answer this question.

36. With the sustainable market for heat networks described above in place by the early-2020s, are there any further gaps that must be filled to support subsequent

delivery of heat networks? If so, what are these and are there particular types of organisation that would be key in filling these?

Yes No

- The AHSS does not intend to answer this question.

Chapter 6: Kick-starting investment in the transition

37. What are your views on the range of actions identified above to kick start the investment in the transition over the next 5 years?

- The AHSS does not intend to answer this question.

38. Do you agree with the strategic funding priorities we have set out?

Yes No

- The AHSS does not intend to answer this question.

39. In your view, should equal funding be allocated across these priorities or should certain priorities be weighted in terms of impact for Scotland?

- The AHSS does not intend to answer this question.

40. What are the opportunities and challenges we face in maximising our £1.6 billion investment?

- The challenge is that it will not prove to be nearly enough for the stated purpose.

41. What are your views on the role of government funding over the next five years? For example, should it be focused towards significant increases in the volume of renewable heat and energy efficiency measures installed or more targeted at specific priority groups or technologies?

- The AHSS does not intend to answer this question.

42. What are your views on how we can use our funding to leverage and encourage private sector and other forms of investment?

- Integrate tax incentives into the strategy.

43. What are your views on the effectiveness of our existing delivery programmes in supporting different client journeys, including for those in or at risk of fuel poverty? (for example, landlords, home owners, non-domestic building owners – public and private, domestic and non-domestic tenants). In your opinion, are there any gaps in support?

- The AHSS has been alerted to an instance where the programme has failed to be effective. An architect member recounted the experience of a client who had received an assessment of their premises by Zero Waste Scotland. The assessment was

based on notional data and national statistics. It did not measure the actual heat loss through the building or take the particular characteristics of the building onto account. The conclusions were severely compromised as a result and the client was given erroneous advice and proposed solutions that would not deliver any improvement in efficiency as a result or do anything to tackle climate change.

- Whenever an assessment is carried out, it needs to address the specific property, rather than being based on broad assumptions and statistics.
- While we recognise the importance of the zero emissions buildings transition, it is important that the Scottish Government recognise that different client groups or 'different client journeys' have different priorities and that the positive qualities of the historic built environment, together with its embodied energy, must be respected.
- The AHSS believes that the historic environment and traditional buildings are inherently sustainable and are part of the solution to dealing effectively with the climate emergency. The AHSS wishes to stress that technical solutions designed for modern buildings can be inappropriate for traditional structures. Traditional structures are designed to allow moisture to be breathed out whereas new builds are often designed to be fully sealed. Good maintenance of traditional buildings is the essential first step towards improving energy efficiency. Sensitive appropriate interventions should be based on a full understanding of the technical construction, local environment and historical and cultural significance of the building.
- The AHSS would like to see PAS 2035 strengthened in relation to appropriate and inappropriate measures for traditional buildings.
- The AHSS would like to support a review of environmental and social obligations in electricity bills, compared with the low level of these in gas bills.
- Energy Performance Certificates (EPCs) as currently assessed are starting from a baseline that does not acknowledge the different heat management system embodied in traditional buildings. Correct assessment of such buildings is required to avoid costly, unnecessary and inappropriate interventions. See number 48 below.

44. Is there any action we can take to further tailor our support to meet the ambitions set out in this strategy, including in relation to fuel poverty? (Please include any evidence you may have to show what this might achieve).

- The AHSS does not intend to answer this question.

Chapter 7: Working Towards A Long-Term Market Framework

45. What are your views on the approach outlined above to take action towards a long-term market framework for net zero emissions in buildings?

- The AHSS does not intend to answer this question.

46. What are your views on how we can achieve a fair and equitable cost distribution for the net zero transition, including ensuring we tackle fuel poverty?

- The AHSS does not intend to answer this question.

47. What financing mechanisms are needed to encourage investment from householders, businesses and the private sector?

- Targeted tax incentives.

Chapter 8: Developing a Regulatory Framework for Zero Emissions Buildings

48. What are your views on the regulatory actions set out in the proposed regulatory framework?

- The framework spends a significant amount of time discussing EPCs and the failings in relation to net zero. The document does not take into account that EPCs, as currently assessed, also fail to evaluate traditional buildings in a number of ways, for example wall thickness. This failure of assessment means many buildings are evaluated from the wrong baseline and advice based on an EPC assessment could involve costly, unnecessary and inappropriate interventions, all in the name of energy efficiency. As a consequence the energy efficiency sought may not be realised. This has the potential to damage consumer confidence and understanding, the well-being of homeowners, and the long-term condition of traditional buildings.
- Historic Environment Scotland are working on and have published research about traditionally built properties and energy efficiency measures. This applies to all traditionally built properties, not only those designated or listed or in conservation areas. We recommend that HES and Scottish Government work together and develop an alternative approach to EPCs.

49. What are your views on the timeframes for the application of the regulation we have set out?

- The AHSS does not intend to answer this question.

50. Alongside our regulatory approach, we are developing our delivery programmes to support the acceleration towards net zero emissions for buildings (as set out in Chapter 6: Kick starting investment in the transition). What are your views on how our delivery programmes could support compliance with regulation?

- The AHSS does not intend to answer this question.

51. What other mechanisms/support may be required to ensure that regulation is fair and equitable for all?

- The AHSS does not intend to answer this question.
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Chapter 9: The Economic Opportunity

52. What are your views on the plans set out to maximise the economic benefits to Scotland from the heat transition?

- The AHSS does not intend to answer this question.

53. What role could technology-specific milestones play in supporting supply chain development, and how should these milestone levels be developed?

- The AHSS does not intend to answer this question.

54. Is there anything further that can be done to ensure that Scotland realises the economic opportunity available from the heat transition?

- The focus on skills needs to be broader than new technologies. Traditional buildings skills are required to ensure that buildings are wind and watertight. Appropriate building materials (eg cast iron gutters and downpipes, slates for use in repairs, good quality timber for window repairs) need to be locally available for tradespeople to access them without long lead times. SMEs need to be supported and empowered.

55. What more can be done to support the development of sustainable, high quality and local jobs in the heat and energy efficiency supply chain across the breadth of Scotland?

- Instigate quicker training schemes and expand the skills sector across the built environment.
- Expand the apprenticeship programme run by Historic Environment Scotland (HES).

56. In your view, what are the opportunities and constraints presented by the role of the wider public sector in maximising the economic benefits to Scotland?

- It is an opportunity for the wider public sector to show a lead, if they are supported by increased funding.
- The public sector can act as a key source of expert information on energy efficiency, the retrofitting of buildings and funding sources, especially to isolated communities.
- The wider public sector must operate to standards which can confidently be replicated in other buildings of similar construction. For example, grant aid for external insulation on local authority properties which does not allow for the removal of rainwater goods and their repositioning outside the new external insulation, does not do this and leads to future problems.

57. In recognition of the skills consultation, published alongside this strategy, what further action can be taken to support skills development in Scotland over the lifetime of this strategy?

- Educating and deploying a much larger and more flexible workforce.
- Expanding HES's apprenticeship programme.

58. Are you aware of any barriers to the reskilling of existing oil and gas heating engineers to equip them to install low and zero emission heating?

- The AHSS does not intend to answer this question.

59. How can we support the development of more opportunities for young people?

- Educate them in the economic and social value that the Scottish built heritage provides.
- Extend HES's volunteer programme to expose young people to new career possibilities.

Chapter 10: Working with the UK Government

60. To what extent do you agree that the issues identified must be addressed jointly by the UK and Scottish governments to unlock delivery in Scotland?

- It is essential that new energy policies involve both the Scottish and UK governments. For instance, the long-standing problem of the way VAT is structured to discourage repairs, and encourage demolitions, should be addressed. VAT parity is required between new-build activity and repair, maintenance and retrofit/energy efficiency measures. Without well-maintained buildings energy efficiency retrofitting will not provide the positive outcomes sought.

61. Are there any further areas where joint action is required? For example, to ensure no one is left behind in the transition and fuel poverty is addressed.

- The AHSS does not intend to answer this question.

Chapter 11: Monitoring, Evaluation and Future Decision Making

62. Do you agree with our proposals for a monitoring and evaluation framework? If not, please state your reasons and suggested improvements.

Yes No

- The AHSS does not intend to answer this question.

63. What are your views on how lessons learned from heat and energy efficiency policy and programmes should be shared with the sector and key stakeholders to ensure that Scotland benefits from the public investment outlined above?

- It is vital to emphasise the importance of these policies and programmes to the wider Scottish public so that they accept ownership. This should be done through all available means.

64. Finally, is there any other information you would like to provide us with that is relevant to the development of Scotland's Heat in Building Strategy?

- The AHSS is pleased to respond to this consultation on behalf of Scotland's built heritage. The society will continue to support the Scottish Government and Historic Environment Scotland in their aims to successfully incorporate the built heritage into a greener future.
- The Tenements (Scotland) Act 2004 was amended by the Climate Change (Scotland) Act to include insulation as maintenance. Multi-tenure or mixed use buildings will be given until 2040-45 to improve their energy efficiency and install a zero emissions heat supply. To aid this ambition, the Tenement Condition Workplan published in March 2021 should be expedited. It is essential that all work recommended to tenement property owners is carried out on the basis of proven research and that historic fabric and the way it functions is respected.

Environmental Report

Following publication of the draft Heat in Buildings Strategy, an associated Environmental Report will also be published.

65. What are your views on the accuracy and scope of the information used to describe the Strategic Environmental Assessment (SEA) environmental baseline set out in the Environmental Report?

- The AHSS does not intend to answer this question.

66. What are your views on the reasonable alternatives set out in the Environmental Report?

- The AHSS does not intend to answer this question.

67. What are your views on the predicted environmental effects as set out in the Environmental Report?

- The AHSS does not intend to answer this question.

68. What are your views on the findings of the SEA and the proposals for mitigation and monitoring of the environmental effects set out in the Environmental Report?

- The AHSS does not intend to answer this question.

General questions

69. Is there any further information you wish to provide on the content set out in this draft Strategy?

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70. Is there anything you would like to highlight about the role, opportunities for and constraints of, specific types of organisation (such as local government, other public

sector, trade associations, individual business organisations, charities, environmental organisation, community groups) in contributing to the transition to zero emissions buildings, in particular over the next five to ten years?

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RESPONDENT INFORMATION:

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Responding on behalf of an **Organisation – The Architectural Heritage Society of Scotland (AHSS)**

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

Evaluation

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

	Very dissatisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Very satisfied
How satisfied were you with this consultation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Very dissatisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Very satisfied
How would you rate your satisfaction with using this platform (Citizen Space) to respond to this consultation?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>