

Delivering Net Zero for Scotland's Buildings Changing the way we heat our homes and buildings

A Consultation on proposals for a Heat in Buildings Bill

Fairer Scotland Impact Assessment Record

Lead Minister:

Minister for Zero Carbon Buildings, Active Travel, and Tenants' Rights

Lead official:

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Directorate/ Division/ Team:

Directorate for Energy and Climate Change

Heat in Buildings Policy and Regulations

Heat Strategy, Community Energy & Consumer Policy Unit

Is this new policy or revision to an existing policy:

New Policy

STAGE 1 – PLANNING

Background

1.1 The climate emergency and the cost-of-living crisis makes the need for urgent action to reduce emissions and energy demand from buildings across Scotland more important than ever.

1.2 Our 2022 Programme for Government (*A Stronger and More Resilient Scotland*)¹ reinforced this message. Measures to reduce our energy demand and end our dependence on fossil fuels will limit our exposure to the spiralling gas prices which have caused the recent surge in costs.

1.3 Scotland has legally binding targets to achieve “net zero” greenhouse gas emissions by 2045, with interim targets for a 75% reduction by 2030, and 90% by 2040. The Scottish Government’s Climate Change Plan Update² says that emissions from heating our homes and all other (non-domestic) buildings will need to fall 70% by 2030 compared to 2020.

1.4 Making our homes and buildings more energy efficient will help to reduce our energy demand and result in homes that are warmer and easier to heat. However, we know that better insulation and other energy efficiency measures – where those improvements are possible – will not be enough on their own. Meeting our net zero target will need all homes and buildings in Scotland – including schools, offices, hospitals and shops – to reduce their greenhouse gas emissions to zero.

1.5 It is critical that, as we take action to reduce emissions from Scotland’s homes, we do so in a way that supports a just transition and the reduction of fuel poverty. Our ambitious statutory fuel poverty targets require that in 2040 no more than 5% of households are fuel poor, no more than 1% are in extreme fuel poverty and the fuel poverty gap is no more than £250 (in 2015 prices).

1.6 We can only do this by replacing heating systems which burn fossil fuels like gas boilers, oil boilers and liquid petroleum gas (LPG) boilers. These systems are known as ‘direct emission heating systems’³ and are the way that we heat most of our homes⁴. We refer to these as polluting heating systems in our consultation. We need to change these to clean systems, like electric heat pumps, or in some areas use district heat networks, or hydrogen which has been made using renewable electricity. We refer to these as clean heating systems in our consultation.

1.7 This consultation sets out proposals that might be included in a “Heat in Buildings” Bill. It also sets out the other elements that we propose to include as part of the Bill, including our plans for the growth of heat networks, and a strong and reliable supply chain.

¹ Programme for Government 2022 to 2023 - gov.scot (www.gov.scot)

² Securing a green recovery on a path to net zero: climate change plan 2018–2032 - update - gov.scot (www.gov.scot)

³ Securing a green recovery on a path to net zero: climate change plan 2018–2032 - update - gov.scot (www.gov.scot)

⁴ Scottish house condition survey: 2019 key findings - gov.scot (www.gov.scot)

1.8 We know that our proposals are likely to generate strong opinions and debate. That's why this consultation is so important. We need to hear as many views as possible on our proposals, and suggestions on how these might be amended or delivered differently, as well as for alternative approaches.

Challenge for Scotland's Buildings

2.1 Our plans for decarbonising Scotland's buildings were set out in our 2021 Heat in Buildings Strategy. This made clear the ways in which legislation requiring us all to reduce our energy demand and change our heating systems will be essential to reducing emissions from Scotland's buildings and delivering our public net zero goal by 2045.

2.2 The Heat in Buildings Strategy said that no one should be left behind in the heat transition to net zero. This means removing poor energy efficiency as part of our wider proposals and actions to help reduce fuel poverty. We believe that the proposals laid out in this consultation will make heating our homes and buildings cleaner and greener

2.3 We are introducing standards for new buildings (domestic and non-domestic) which will prohibit the use of Direct Emission Heating systems (polluting heating systems) from 2024. We now need to focus upon Scotland's existing homes and buildings.

Direct Emission Heating – Polluting Heating systems

3.1 By 'Direct Emission Heating' we mean heating systems which burn fossil fuels like gas boilers, oil boilers and liquid petroleum gas (LPG) boilers and which produce greenhouse gas emissions when we use them. In the consultation document we refer to these as 'Polluting heating systems'.

Zero Direct Emission Heating – Clean Heating systems

4.1 By 'Zero Direct Emission Heating' we mean a heating system such as individual heat pumps, or connection to a heat network, or electric system such as storage heaters which release no harmful gases into the atmosphere systems (direct greenhouse gas emissions). In the consultation document we refer to these as 'Clean Heating systems'.

4.2 As well as changes to the heating systems in individual properties, for example using air source heat pumps, we are also supporting efforts to build "heat networks" across Scotland, which could play an important part in reducing or removing emissions associated with heating buildings on that network.

Whom will it affect (particular groups/businesses/geographies etc)?

5.1 Socio-economic disadvantage encompasses low income, low wealth, material deprivation and geographical area deprivations with communities and interest and of place as cross cutting issues. Socio-economic background is a mechanism by which disadvantage can persist across generations.

5.2 The Heat in Buildings Bill Proposals will impact homeowners, business owners, landlords, building owners, tenants and residents across Scotland in communities and geographies of all types. It will also impact all socio-economic groups and demographics across Scotland. However, we expect the proposals, should they be implemented, to affect different groups in different ways. Evidence suggests that the following groups may be more impacted than others:

- Those with low incomes and/or low wealth
- Those in comparatively disadvantaged or deprived areas
- Those with disadvantaged socio-economic background

What main outcomes do you expect the policy/strategy/plan to deliver?

6.1 Our plans for decarbonising Scotland's buildings were set out in our 2021 Heat in Buildings Strategy. This made clear the ways in which regulations requiring us all to reduce our energy demand and change our heating systems will be essential to reducing emissions from Scotland's buildings and delivering our public Net Zero goal by 2045.

6.2 The Strategy also made clear that no one should be left behind in the heat transition. This means ensuring that poor energy efficiency is removed as a driver of fuel poverty and that our proposals and actions as a whole help reduce fuel poverty. We believe that the changes and improvements delivered by the proposed way forward laid out in this consultation will make our homes and buildings cleaner, greener, and easier to heat.

6.3 We are introducing standards for new buildings (domestic and non-domestic) which will prohibit the use of polluting heating systems from 2024; we now need to focus upon Scotland's existing homes and buildings. At the moment, 21% of our emissions come from our domestic and non-domestic buildings, with around 5,000 clean systems installed per year in Scottish homes. However, to reach our net zero target, this number must increase.

6.4 As well as changes to the heating systems in individual properties, we are also progressing work to deploy "heat networks" across Scotland, which could play an important part in reducing or removing emissions associated with heating buildings on that network. We believe that they will play an important part in the heat transition across Scotland.

6.5 The Bute House Agreement⁵ included a commitment to "phasing out the need to install new or replacement fossil fuel boilers, in off gas [areas] from 2025 and in on gas areas from 2030, subject to technological developments and decisions by the UK Government in reserved areas". It said that the Scottish Government would

⁵ Scottish Government and Scottish Green Party Shared Policy Programme (www.gov.scot)

consult on the introduction of primary legislation – a Bill – which would provide the means to deliver this.

6.6 The Consultation sets out proposals on the ways in which regulations made using the powers in a “Heat in Buildings” Bill might look and operate. It also sets out the other elements that we propose to include as part of the Bill, including our plans for the growth of heat networks, and a strong and reliable supply chain.

Proposed Measures for the Heat in Buildings Bill

Proposal 1 - Setting a Heat in Buildings Standard for all buildings

7.1 We are proposing to include powers into the Heat in Buildings Bill to establish a ‘Heat in Buildings (HiB) Standard’. This will affect **all buildings** in Scotland and will comprise three separate, but linked, parts:

- a prohibition on the use of polluting heating systems after the end of 2045 for all buildings;
- In owner occupied homes – require such homes to meet a minimum energy efficiency standard by the end of 2033; and
- In private rented homes – require landlords to meet a minimum energy efficiency standard by the end of 2028.

Proposal 2 – Scope of the Heat in Buildings Standard (extra time to take action)

8.1 The HiB Standard set out in Proposal 1 will mean that all homes meet the energy efficiency and Clean Heating requirements by 2045. However, we know that, in some cases, extra time might be needed to help people undertake the necessary works, or to take into account individual circumstances.

8.2 This is why we are proposing to introduce the HiB Standard affecting only main heating systems in a property. We are also proposing to give extra time in the period to 2045 to those already using bioenergy to meet the clean heat requirement of the Standard. Where there is no clean heating solution available to some homes and businesses, we are also proposing to give extra time until cleaner alternative fuel options become available.

Proposal 3 – Phasing of the Heat in Buildings Standard (Property purchase)

9.1 To help us contribute to our interim targets to reduce emissions by 2030 we are proposing to require those purchasing a property to comply with the prohibition on polluting heating within a specified amount of time following completion of the sale (likely two years).

9.2 This ‘trigger’ will apply only after we have developed and consulted on further regulations which will help implement the proposals. This proposal places no new obligation on the seller.

Proposal 4 – Phasing of the Heat in Buildings Standard at other points in time

10.1 In the future it may make sense, or be possible, to require people to end their use of polluting heating, for example, when their current boiler comes towards the end of its life.

10.2 We are proposing to include in the Bill powers to allow Scottish Ministers to require property owners to end their use of such polluting heating in other circumstances – but these powers would be the subject of further consultation as well as needing the future consent of the Scottish Parliament. .

Proposal 5 – Connecting to and developing Heat Networks

11.1 We know that heat networks are one of the clean heating systems that will enable people to comply with the HiB Standard. We want to see growth in this sector and we know that there is significant interest from local authorities and private investors in owning and operating these networks.

11.2 To attract more investment in this sector we are proposing that we provide local authorities and Scottish Ministers with powers to require buildings within a Heat Network Zone to end their use of polluting heating systems (by a certain date and with a minimum notice period).

11.3 Where a building is within a Heat Network Zone we are also proposing that building would not be affected by the property purchase trigger. This is to help preserve the business case for the network. Buildings within these zones will be required to meet the Standard when a heat network becomes available, either by connecting to that network or by installing another clean heating solution.

11.4 For new buildings within a Heat Network Zone, we are considering the creation of powers to allow local authorities and Scottish Ministers to require developers to connect to that network.

11.5 In the development of Heat Networks, the use of ‘excess’, ‘surplus’ and ‘waste’ heat are currently underused resources. If this can be fed into a heat network it may increase the number of viable heat networks across Scotland. That is why we are also proposing that occupiers of non-domestic properties are required to provide information about unused heat on their premises, and potentially require buildings with unused heat to provide this to a local heat network (where cost effective).

Proposal 6 - Dealing with individual circumstances

12.1 We know that property owners are all different, with different means and facing different circumstances. This means that their ability to change their home in order to meet the HiB Standard will vary greatly. We plan to take proper account of these individual circumstances through the use of exemptions and agreement of extra to give individual homeowners or landlords some extra time to meet the HiB Standard depending on their individual circumstances.

12.2 This is why we are proposing to establish formal powers to exempt those who can't, or perhaps should not have to meet the HiB Standards. We are also

considering the use of modifications to the Standard to account for individual building circumstances or unique characteristics.

12.3 We also need to make sure there is a proper route for people to appeal where they feel the requirements are incorrect or unfair.

Proposal 7 – Public sector buildings

13.1 There are around 23,000 non-domestic buildings owned by public bodies. We believe that the public sector should show leadership by moving to use clean heating systems by the end of 2038 and have set out proposals to achieve this.

Proposal 8 – Amendments to existing legislation

14.1 Finally, our Heat in Buildings Strategy set out a provisional target for renewable heat of at least 22% by 2030. However, this target doesn't capture the ways in which Scotland is performing on heat decarbonisation and emissions as a whole. We think the proposed Bill gives us an opportunity to change this.

14.2 The final proposal in the consultation therefore proposes the inclusion of powers to require a new or amended target which could be more understandable and provide a better illustration of our progress, as well as a better signal and greater confidence to clean heating and building retrofit installers and business.

Timeframe for completing the Fairer Scotland assessment

15.1 The Fairer Scotland assessment will be published in November 2023.

Who else in the organisation will be involved in the assessment and what roles will they be playing? We'd expect involvement from policy and analytical teams as a minimum. It is rarely appropriate for one person to conduct the assessment alone.

16.1 Heat in Buildings Unit - The Unit is leading on the development of the bill and is therefore also leading the work on the Impact Assessments, including the Fairer Scotland Duty.

16.2 Heat Strategy Unit – This team developed the Heat in Buildings Strategy and relevant impact assessment which feed in to this assessment

16.3 Wider policy areas – Other policy areas have provided input relevant to their own concerns regarding the decarbonisation of heat in buildings in Scotland, including colleagues working in the housing, fuel poverty, energy networks, and consumers teams.

16.4 Analysts – We have sought input from analysts working in and OCEA and CAD who work with the wider policy areas involved in the assessment.

STAGE 2 – EVIDENCE -

What does the evidence suggest about existing inequalities of outcome, caused by socio-economic disadvantage, in this specific policy area?

17.1 This evidence suggested the potential for the following inequalities of outcomes in relation to the Heat in Buildings policy area:

Access to information and financial services

18.1 Households who are on a low income or in fuel poverty may not have savings to pay for/contribute towards decarbonisation measures. They also may not be able to access loans or payment plans to allow them to do so due to financial exclusion.

18.2 People experiencing socio-economic disadvantage are more likely to find it difficult to access financial services as they are often categorised as high risk for some products such as loans, and may already have debts that are difficult to manage. At the same time, they are also less likely to have savings to buffer any new financial pressures, such as the cost of a new heating system. This financial exclusion creates financial problems in a number of ways, including exclusion from affordable loans leaving people who need a loan with no option but to use high-interest credit; lack of savings making people vulnerable to financial shocks and not having a bank account prevents them from paying by direct debit. As an example, most utility suppliers charge more for using other methods of payment, such as pre-payment meters, pay-point cards in convenience stores, postal orders or cash.

18.3 Those particularly vulnerable to financial exclusion include: housing association tenants; young people not in employment, education or training; those leaving care; lone parents and divorced people; disabled people, those with mental health problems and carers; people living in isolated or disadvantaged areas; prisoners, ex-offenders and families of prisoners; members of ethnic minorities; migrants; asylum seekers and refugees; homeless people; older people; women; people with a Post Office Card Account or basic bank account; people with low incomes.

18.4 Some groups are particularly vulnerable for reasons which are separate from, or interact with, having a low income, such as disabled people and older people. Nevertheless, low income is an exacerbating factor for all groups.

18.5 Those responding to the 2021 consultation on the Heat in Buildings Strategy suggested that energy suppliers should work with government to educate and inform customers on the benefits of adopting low carbon heating and the choices available to them.

18.6 Access to the internet may affect peoples' ability to obtain information on their energy choices, the support available, local suppliers of zero carbon technologies and in other ways impact their ability to participate in installing, and getting the most out of zero and low carbon heating systems and energy efficiency measures.

18.7 The proportion of households in Scotland with internet access was at 88 per cent in 2019 (please note that the Scottish Household Survey 2019 has been used for these statistics due to issues of methodological consistency with newer versions).

Household internet access increased with net annual household income. Home internet access for households with a net annual income of £10,000 or less was 65 per cent in 2019, compared with almost all households (99 per cent) with a net annual income of over £40,000. Access differed by area of deprivation: 82 per cent of households in the 20% most deprived areas in Scotland had internet access at home compared with 96 per cent of households in the 20% least deprived areas. Internet access also varied by tenure: 79 per cent of those in social rented housing had internet access compared with 91 per cent of households who owned their home. We need to ensure that all consumers have access to information and choice of zero and low carbon heating systems and energy efficiency measures.

Education and employment

19.1 Research shows that the benefits of decarbonising heating in, and improving the energy efficiency of, residential buildings are linked to employment opportunities.

19.2 Indoor temperature is linked to productivity and can therefore impact upon the ability of school-age children to carry out homework or study for exams at home, which can have a knock-on effect on their educational attainment, and ultimately their employment opportunities.

19.3 There is evidence that other links between educational attainment and warm homes exist. For example, according to the Energy Saving Trust avoidance of physical (particularly respiratory health in children) and mental stresses through warmer and more comfortable homes has been linked to decreased absenteeism from school by children and from work by adults; with potential impacts on academic performance, labour productivity and earning power.

19.4 Living in an energy inefficient home is costly, and the poorest housing is often occupied by the most vulnerable people, and households experiencing fuel poverty face difficult decisions about how much to spend on heating and how much to spend on food. A more energy-efficient home could therefore lead to better nutrition for people vulnerable to fuel poverty - by making fuel bills more affordable a 'heat or eat' situation can be avoided. Improved nutrition could subsequently lead to improved concentration and improved chances of educational attainment for school-age children, and better performance (and therefore future employment opportunities) for adults. However, there are also risks that low and zero emissions heating will increase running costs in some settings as a result of levels of insulation, size of property, heating system efficiency and energy prices.

Housing tenure

20.1 People who experience socio-economic disadvantage may be more restricted in their choice of housing tenure and neighbourhood. For example, evidence suggests that those on lower incomes are less likely to be home owners. This excludes them from the benefits associated with owning property, such as a greater level of security and an additional source of income for those that rent out property.

20.2 A higher proportion of single parents and people who are unemployed and seeking work live in socially rented properties than in other housing tenures.

20.3 There are differences in the proportion of people who report that they are managing well financially depending on the tenure of their property. In 2019 the proportions of each group are as follows: owned outright (75%), owned with mortgage (61%), private rented sector (45%) and social rented sector (28%)

20.4 In terms of relative poverty after housing costs, (the commonly used poverty indicator in Scotland), in 2017-2020, 7% of people buying with a mortgage and 14% who owned outright were in poverty. These compare to 39% for those living in social housing and 34% for those in private rented housing. In 2019-2022 the proportion of all working age adults in relative poverty was 21%

20.5 However, due to the size of the tenure, homeowners accounted for 370,000 (36%) of all people in relative poverty after housing costs in 2017-2020, i.e. more than in private rented housing (250,000 or 24%) and slightly lower than in social rented housing (410,000 or 40%)

20.6 Any increase in property prices related to requirements to finance upgrades and heating system conversion may also make it more difficult for those renters who are trying to buy property. Research on the relationship between property prices and energy efficiency in England and Wales has found that properties with a higher EPC rating achieve a higher sale price. This is a positive impact for property owners, however it may have negative implications for renters and exacerbate existing housing inequalities experienced by socio-economically disadvantaged households.

Location

21.1 Evidence also suggests that location of households across Scotland can influence the level of social housing available, the prevalence of fuel poverty rates, health outcomes and rates of those who can manage well financially.

21.2 Differences in housing costs between areas can limit the neighbourhoods that people on lower incomes can live in. For example, while not all people living in deprived areas will be on low incomes, they are more likely to be. In 2019, 47% of socially rented households were in the most deprived areas compared to 17% of privately rented households and 12% of owner-occupied households. This has been increasing since 2013.

21.3 The Scottish House Condition Survey 2021 stated that the fuel poverty rate for rural (23%) households was similar to the fuel poverty rate for urban (19%) households. However, the rate of fuel poverty for rural households (29%) is higher than for all other areas.

21.4 The rate of fuel poverty among households using electricity as primary heating fuel was 41%, higher than for households using gas (16%), oil (23%) and other fuel (22%) as their primary heating fuel. This reflects the higher per unit cost of electricity relative to gas, and oil.

21.5 The National Islands Plan acknowledges that extreme fuel poverty rates are higher for most of the island authorities and provides a framework for action in order to meaningfully improve outcomes for island communities.

Health

22.1 Living a cold home can have negative impacts on health. Energy efficiency measures (e.g. insulation, draught proofing) reduce heat loss in a building and therefore reduce cold areas where moisture can condense and create damp, mouldy conditions. A fabric first approach may therefore have a positive impact by making it easier for people to heat their homes, and tackling health inequalities in Scotland associated with cold homes. Housing improvements are considered to have most powerful impact when targeted at vulnerable or disadvantaged groups as they are more likely to live in poor quality housing.

22.2 Housing is recognised as having an important influence on health inequalities in Scotland, with key pathways through housing quality and fuel poverty. Cold and damp homes may cause or exacerbate a number of health outcomes, primarily excess winter mortality, respiratory health conditions and mental health problems. Health, housing quality and fuel poverty are therefore closely linked: cold and damp homes are harder and more expensive to heat, and this has implications for the health and resources of people living in them. Income is often key to this relationship as housing quality and housing affordability are closely linked. People with more wealth can typically afford a ‘better’ place to live, which are generally more efficient and cheaper to heat, whereas “deprived and vulnerable households – especially those who do not have access to social housing - are more likely to live in energy inefficient housing, and less likely to have the resources or resilience to deal with the negative impacts of cold homes and reduced income”.

22.3 Caution is required around any unintended consequences of retrofitting – there is an increasing evidence base on the possible adverse impacts of air tightness on indoor air pollution from radon and other pollutants, and the need for better (and correctly used) ventilation to address this.

Poverty

23.1 Consultation responses on the draft Heat in Buildings Strategy highlighted a concern that heating costs are likely to rise for a significant proportion of consumers who opt for low and zero emission heating and that the cost of installing and running low and zero emission heat systems could tip some households at the margins of affordability into financial stress. Groups identified as worthy of particular consideration included households just below the radar of interventions that are firmly targeted on those already clearly in fuel poverty and those experiencing in-work poverty.

23.2 The Scottish House Condition Survey (2019) estimates 24.6% (around 613,000 households) of all households were in fuel poverty, with 12.4% or 311,000 households living in extreme fuel poverty. Fuel poverty is increasingly recognised as a multidimensional complex phenomenon, and households may move in and out of fuel poverty as conditions and circumstances change (Baker et al., 2018). It is often linked to other elements of socio-economic disadvantage.

23.3 The Scottish House Condition Survey (2021) reports 495,000 households (19.6% of all households) were estimated to be in fuel poverty, of which 241,000 (9.5% of all households) were in extreme fuel poverty. Overall rates of fuel poverty differed between the social (34%) and private sector (15%). Similarly households in

the social sector were more likely to be in extreme fuel poverty (15%) compared to households in the private sector (8%). Households that are in both income poverty and fuel poverty tend to live in more energy efficient dwellings than other fuel poor households, potentially because of high energy efficiency standards in the social rented sector. They are more likely to use gas for heating, live on the gas grid and live in urban locations compared to other fuel poor households. These characteristics point to low income as a key reason for their experience of fuel poverty.

23.4 Conversely, households who are not in income poverty but experience fuel poverty have a higher likelihood of living in low energy efficiency properties, using electricity for heating, and living in rural areas compared to those households in income and fuel poverty and Scotland overall (Scottish Household Survey, 2019).

23.5 Lived experience research into fuel poverty in Scotland also highlighted that tenants in fuel poverty, whether private or social, can feel that they have little control over replacing or changing their heating system as decisions are made by their landlord. These barriers were more likely to be present for households in extreme fuel poverty and echo findings in the Evidence Review.

What does the evidence suggest about any possible impacts of the policy/programme/decision, as currently planned, on those inequalities of outcome?

24.1 The Proposals for a Heat in Buildings Bill are not directly aimed at any particular socio-economic group, but are aimed at the homes they live in and buildings they visit. It is anticipated that in the long term these proposals will impact positively on all sectors of society through the provision of buildings that are easier, cleaner and greener to heat.

24.2 However, in the short term issues such as the installation and running costs of low and zero emissions systems might have an effect on certain groups who experience socio-economic disadvantage, including those who experience inequality of outcome in terms of:

- Access to information and financial services
- Education and employment
- Housing,
- Location
- Health
- Poverty

Inequality of outcome: Access to information and financial services

25.1 There is opportunity to reduce inequalities of outcome through the Proposals for a Heat in Buildings Bill by ensuring that financial incentives offered to people to install zero and low carbon heating systems and energy efficiency measures are designed to support all citizens, including vulnerable groups who may be suffering from financial exclusion.

Financial support and advice

26.1 The Scottish Government currently provides free and impartial advice and support through the Home Energy Scotland (HES) and Local Energy Scotland (LES).

- HES provides in-depth advice to householders on low and zero emissions heating technologies, other domestic renewables, and more complex energy efficiency improvements. It also acts as a referral scheme for Scotland's flagship fuel poverty scheme, Warmer Homes Scotland, and as a gateway to domestic grants and loans programmes from Scottish Government for energy efficiency improvements to homes in Scotland.
- LES manages CARES – the Scottish Government's Community and Renewable Energy Scheme. CARES supports communities across Scotland to engage with, participate in and benefit from the energy transition to net zero emissions.

Future Support

27.1 We are committed to working on the design and scope of our support and advice schemes - making sure that they reflect our regulations and help those who need it the most in the best way possible. We will continue to work closely with as many stakeholders (including those representing groups with lived experience of fuel poverty) as possible as we continue to do so in order to ensure these schemes are fit for purpose and help reduce fuel poverty. We know how concerned people will be about these potential costs – especially in the light of the recent and current surge in our cost of living. That’s why we are absolutely determined to get this right, and to make sure that we deliver a just transition.

27.2 Public funding, support and independent advice services will continue to play a big part in helping people make the changes needed by the proposals in this document – but it can’t and won’t meet all of the costs, and we will need private finance and investment to play a big part. That is why our Green Heat Finance Task Force is looking at new ways to help people and organisations make their properties warmer, greener and more efficient, and to overcome the upfront costs.

27.3 Place or area based delivery can also help achieve the right outcomes and reduce the costs involved. Our long running Area Based Schemes, delivered by Local Authorities, are good example of this, and can attract larger scale institutional investors and regenerate entire neighbourhoods. We will work with local government to explore ways to build on our Area Based Schemes and achieve these goals.

Inequality of outcome: Housing tenure

28.1 We will take steps to ensure that everyone, including owner occupiers, tenants, private and social landlords, SMEs and communities, has the opportunity to help shape the decisions we take at a national and local level on how we heat our homes and buildings in the future. We will consult extensively with stakeholders and citizens as on these proposals through a wide ranging public consultation that will seek to engage with consumers on a number of levels, and will follow up with another impact assessment that builds on the findings of this impact assessment.

Inequality of outcome: Location

29.1 We acknowledge that the transition to zero emissions buildings may look different in different communities and require approaches tailored to place. It will be important for local communities to shape and be involved in decisions about solutions that are most appropriate for their local area.

29.2 Scotland’s local authorities will use Local Heat and Energy Efficiency Strategies (LHEES) and Delivery Plans to set out the long term plan for decarbonising heat in buildings and improving their energy efficiency across an entire local authority area. Local government also has a key role in initiatives like Area Based Schemes, leading heat network development, and efforts to improve the heat and energy efficiency in our social housing. We will work with Local Government to determine its role as part of the regulations which will come from this Bill, and what powers and resource might be needed.

29.3 LHEES could also help people receive appropriate support and advice, with support and advice tailored to local areas and communities across Scotland. Local authorities should publish their first LHEES by the end of 2023 and on a five yearly basis after that – meaning that these plans can help target support and advice as our new regulations are introduced.

29.4 We also recognise that the costs of delivering energy efficiency measures are higher in rural and island areas, where fuel poverty is most prevalent. A rural uplift included in the new HES grant applies to both the heat pump and energy efficiency grants. This is on top of funding for heat pumps up to £7,500 and for energy efficiency improvements – up to 75% of the combined cost of the improvements and up to the maximum grant amount of £7,500. This uplift increases the heat pump grant flat rate and the maximum limit of the energy efficiency grant to £9,000.

29.5 In 2019, the Scottish Government published a National Islands Plan. Included within this plan's objectives are commitments to reduce levels of fuel poverty and to contribute to climate change mitigation and adaptation and promote clean, affordable and secure energy. Work is ongoing in relation to these commitments.

29.6 We continue to target areas and communities with higher levels of fuel poverty through our Area Based Schemes. Local schemes are designed and delivered by councils, in conjunction with utility companies and local delivery partners, targeting fuel poor areas to provide energy efficiency measures to a large number of Scottish households and help reduce fuel poverty. ABS funding enables local delivery partners to offer energy efficiency measures at no cost or a reduced cost to owner occupiers and private landlords with fewer than four properties.

29.7 Local Energy Scotland manages the Community and Renewable Energy Scheme (CARES), which helps communities to engage with and benefit from the energy transition to net zero emissions. It provides advice and support – including funding – to communities across Scotland, looking to develop renewable energy, heat decarbonisation and energy efficiency projects.

Inequality of outcome: Health

30.1 There are a number of positive health impacts that the Bill proposals may play a role in delivering. For example, a shift away from fossil fuel removes combustion and therefore the risk of carbon monoxide poisoning. Efforts to improve energy efficiency and heating in buildings could positively impact on infant physical development, long-term physical and mental health and education (with less missed days at school due to illness). Moving towards zero emissions heating technologies such as heat pumps can also provide a more constant heating regime for a home or building due to the operational requirements of a heat pump. This may also benefit occupants by providing more consistent levels of comfort.

30.2 However, if a property is not kept well ventilated through construction, technological or natural mean, energy efficiency measures which improves airtightness, can lead to increased indoor air pollutants; risk of overheating in the summer months and rise in humidity, which can result in increased dust mites and mould impacting respiratory conditions and allergies.

Ventilation

31.1 These proposals recognise that it will be important to understand the need for passive measures, such as ventilation and shading, that could be applied to buildings during the course of improving their efficiency.

Energy Efficiency Standards

32.1 We know that in order to mitigate potential health impacts, robust standards for energy efficiency installations are required.

32.2 We are proposing to include powers in the Heat in Buildings Bill to set a minimum standard of energy efficiency. While the details of how this will operate in practice will be laid out in a future consultation, our current thinking is based on the installation of a straightforward list of measures. This list will be developed to prioritise those that could have the most impact for homes with the lowest amount of cost and disruption. Any homeowner who had installed these measures – or as many of them as are feasible for the type of home they live in – would be considered to have reached a good level of energy efficiency and met the new standard.

Inequality of outcome: Poverty

33.1 The Scottish Government currently provides free and impartial advice, support and in some cases finance, through Home Energy Scotland (HES)

33.2 The HES advice service acts as a referral scheme for the Scottish Government funded financial support schemes. These include our Area Based Schemes (ABS) and our flagship fuel poverty scheme, Warmer Homes Scotland, which provides installation of grant funded heating and energy efficiency measures. It is also a gateway to domestic grants and loans programmes for heat and energy efficiency improvements, including the PRS Landlord Loan scheme and HES Grant and Loan Scheme. The new HES grant provides funding for heat pumps up to £7,500 and for energy efficiency improvements – up to 75% of the combined cost of the improvements and up to the maximum grant amount of £7,500. A rural uplift of £1,500 applies to both the heat pump and energy efficiency grants. This uplift increases the heat pump grant flat rate and the maximum limit of the energy efficiency grant to £9,000. An additional £7,500 of funding is available as an optional interest free loan for both heat pumps and energy efficiency measures.

33.3 We know that property owners are all different, with different means and facing different circumstances. We plan to let people apply for an abeyance based on different factors, including ability to pay including risk of or being in fuel poverty.

Evidence

34.1 We continue to build the evidence base on the interactions between our fuel poverty, child poverty and climate commitments, and are applying that knowledge to our policy design and to our programmes, mitigating any risk of unintended consequences, and tracking progress and learning by doing in order to adjust immediately where unintended consequences nevertheless arise.

Evidence that suggests alternative approaches to the policy / programme / decision? E.g. Evidence from around the UK? International evidence?

35.1 The UK Government Heat and Buildings Strategy was published on 19 October 2021 and sets out the broad direction of UK Government policy making in regards to this area. The Scottish Government will continue to work with the UK Government as it implements its Strategy.

35.2 More recently the UK Government⁶ announced revised plans in regards to its progress towards Net Zero, with the following changes relating to the built sector:

- Delay the ban on installing oil and LPG boilers, and new coal heating, for off-gas-grid homes to 2035, instead of phasing them out from 2026. Many of these homes are not suitable for heat pumps, so this ensures homeowners are not having to spend around £10-15,000 on upgrading their homes in just three years' time.
- Set an exemption to the phase out of fossil fuel boilers, including gas, in 2035, so that households who will most struggle to make the switch to heat pumps or other low-carbon alternatives won't have to do so. This is expected to cover about a fifth of homes, including off-gas-grid homes - those that will need expensive retrofitting or a very large electricity connection.
- Scrap policies to force landlords to upgrade the energy efficiency of their properties, but instead continue to encourage households to do so where they can.
- Raise the Boiler Upgrade Grant by 50% to £7,500 to help households who want to replace their gas boilers with a low-carbon alternative like a heat pump.

35.3 Scottish Government officials keep track of the policies and regulatory frameworks being introduced in European countries and further afield to help inform our own decision making.

Key evidence gap? Is it possible to collect new evidence quickly in areas where we don't currently have any? For example, through consultation meetings, focus groups or surveys?

36.1 We have collected a large base of evidence from both regularly updated statistics publications and continual work undertaken to build knowledge in this area. When further data becomes available we will seek to incorporate it into further impact assessments.

Involving communities of interest in the process (including those with lived experience of poverty and disadvantage)

37.1 Key stakeholder groups representing households and businesses that stand to be impacted most significantly by these proposals will be asked to provide input and opinion on the impacts of the Heat in Buildings Bill Proposals on them and the groups and people they represent. Following the publication of the draft consultation,

⁶ [PM recommits UK to Net Zero by 2050 and pledges a “fairer” path to achieving target to ease the financial burden on British families - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/pm-recommits-uk-to-net-zero-by-2050-and-pledges-a-fairer-path-to-achieving-target-to-ease-the-financial-burden-on-british-families)

we will engage widely through public-facing events and focused discussions with stakeholders in discussion of specific issues in the consultation.

37.2 We are also carrying out other Impact Assessments including an Islands Communities Impact Assessment, Child Rights and Wellbeing Impact Assessment and Equalities Impact Assessment . Residents of Island Communities, children and those with protected characteristics are all impacted differently by these proposals and many of these impacts have related or crosscutting impacts that also fall under the scope of the Fairer Scotland Duty. For example, they are subject to different building types, geographies, heating systems, costs, access to information and technology and can be impacted by fuel poverty.

37.3 Specifically, the Scottish Government will undertake the mitigating actions outlined within this FSD and subsequent policy development will have regard to the Fairer Scotland guidance and undertake additional FSDs as relevant.

STAGE 3 – ASSESSMENT AND IMPROVEMENT

Pros and cons of these options?

38.1 The proposals for the Heat in Buildings Bill have been written with the intention of having a positive impact in decarbonising heat and reducing emissions from buildings while considering our legal obligations in tackling fuel poverty as well as other socio-economically disadvantaged groups. The options set out below will help to mitigate inequalities of outcome that may nonetheless arise.

Adjustments to proposals to address inequalities associated with particular groups - Particular communities of interest or communities of place who are more at risk of inequalities of outcome?

39.1 We have identified the following mitigation measures to combat the negative impacts identified:

- The Scottish Government currently provides free and impartial advice, support and in some cases finance, through Home Energy Scotland (HES), Local Energy Scotland (LES), the Green Public Sector Estate Decarbonisation and Business Energy Scotland (BES).
- The HES advice service provides in-depth advice to householders and landlords on low and zero emissions heating technologies, other domestic renewables, and more complex energy efficiency improvements. It acts as a referral scheme for the Scottish Government funded financial support schemes. These include our Area Based Schemes (ABS) and our flagship fuel poverty scheme, Warmer Homes Scotland, which provides installation of grant funded heating and energy efficiency measures. It is also a gateway to domestic grants and loans programmes for heat and energy efficiency improvements, including the PRS Landlord Loan scheme and HES Grant and Loan Scheme.
- LES manages the Community and Renewable Energy Scheme (CARES), which helps communities to engage with and benefit from the energy transition to net zero emissions. It provides advice and support – including funding – to communities across Scotland, looking to develop renewable energy, heat decarbonisation and energy efficiency projects.
- People will have different levels of knowledge and understanding about clean heating and energy efficiency options, and will value good and impartial advice. We intend to make sure that this remains available; we will do this by listening to what people want and need, working with installers and continuing to develop and build on the support that we already provide – especially in the early years following our regulations.

- Our advice and support programmes will continue to support energy efficiency measures, and for those households requiring additional support these services will continue to provide help on tariff switching, energy behaviours and make onward referrals to ensure that all households, including those with socio-economic disadvantage receive the support for which they are eligible.
- Public funding and support will continue to play a big part in helping people make the changes needed by the proposals in this document - but it can't and won't meet all of the costs, and we will need private finance and investment to play a big part. That is why our Green Heat Finance Task Force is looking at new ways to help people and organisations make their properties warmer, greener and more efficient, and to overcome the upfront costs
- We know that in order to mitigate potential health impacts, robust standards for energy efficiency installations are required. We are proposing to include powers in the Heat in Buildings Bill to set a minimum standard of energy efficiency. While the details of how this will operate in practice will be laid out in a future consultation
- Place or area based delivery can also help achieve the right outcomes and reduce the costs involved. Our long running Area Based Schemes, delivered by Local Authorities, are good example of this, and can attract larger scale institutional investors and regenerate entire neighbourhoods. We will work with Local Government to explore ways to build on our Area Based Schemes and achieve these goals.
- Scotland's local authorities will use Local Heat and Energy Efficiency Strategies (LHEES) and Delivery Plans to set out the long term plan for decarbonising heat in buildings and improving their energy efficiency across an entire local authority area. Local Government also has a key role in initiatives like Area Based Schemes, leading heat network development, and efforts to improve the heat and energy efficiency in our social housing. We will work with Local Government to determine its role as part of the regulations which will come from this Bill, and what powers and resource might be needed.
- LHEES could also help people receive appropriate support and advice, with support and advice tailored to local areas and communities across Scotland. Local authorities should publish their first LHEES by the end of 2023 and on a five yearly basis after that – meaning that these plans can help target support and advice as our new regulations are introduced.

- We also recognise that the costs of delivering energy efficiency measures are higher in rural and island areas. A rural uplift included in the new HES grant of £1,500 applies to both the heat pump and energy efficiency grants. This is on top of funding for heat pumps up to £7,500 and for energy efficiency improvements – up to 75% of the combined cost of the improvements and up to the maximum grant amount of £7,500. This uplift increases the heat pump grant flat rate and the maximum limit of the energy efficiency grant to £9,000. An additional £7,500 of funding is available as an optional interest free loan for both heat pumps and energy efficiency measures.
- In 2019, the Scottish Government published a National Islands Plan. Included within this plan's objectives are commitments to reduce levels of fuel poverty and to contribute to climate change mitigation and adaptation and promote clean, affordable and secure energy. Work is ongoing in relation to these commitments.
- We will take steps to ensure that everyone, including owner occupiers, tenants, private and social landlords, SMEs and communities, has the opportunity to help shape the decisions we take at a national and local level on how we heat our homes and buildings in the future. We will consult extensively with stakeholders and citizens as on these proposals and will follow up with another impact assessment that builds on the findings of this impact assessment.

39.2 We continue to build the evidence base on the interactions between our fuel poverty, child poverty and climate commitments, and are applying that knowledge to our policy design and to our programmes, mitigating any risk of unintended consequences, and tracking progress and learning by doing in order to adjust immediately where unintended consequences nevertheless arise.

STAGE 4 - DECISION

39.3 This decision stage allows Deputy Directors (or above) to consider the assessment process from Stages 2 and 3, agree any changes to the policy, proposal or decision and confirm that due regard to meeting the Fairer Scotland Duty has been given in this case.

What changes, if any, will be made to the proposal as a result of the assessment? Why are these changes being made and what are the expected outcomes?

40.1 During the development of proposals, we have tested them against the principles of fairness and proportionality, feasibility, and affordability. As a result we have refined the initial scope of the proposed regulation in order to mitigate the potential direct impact on home owners. We have, at this stage, decided that it would not be proportionate or fair to use potential triggers which may have resulted in individuals having to use their own funding to carry out the necessary changes in a more rapid timeframe, which we concluded was unfair and unachievable for many. To provide appropriate levels of flexibility allowing for individual circumstances to be properly taken into account, the proposals include options for exemptions, reflecting the need for fairness.

40.2 These changes will result in a more even-paced trajectory towards the 2045 target for the building sector, but will present a credible and just path on this journey which will be supported by our other work on delivery and just transition. Our proposals for regulation-making powers within the proposed Heat in Buildings Bill will allow Scottish Ministers over the period to 2045 to consider when it may be appropriate to introduce further regulations – when it is fair and proportionate to do so, taking account of the anticipated growth and normalisation of the clean heat market. The Scottish Parliament will be afforded full scrutiny of any such regulations and will be able to determine whether it is fair and just for them to be introduced at points in future on the journey to 2045. This gives assurance that regulation-making powers can only ever be used in a fair and proportionate manner. Our proposal that all homes must end their use of polluting heating after 2045 means that Scotland's building sector is not at risk of failing to achieve net-zero.

40.3 The consultation is not the final stage of this process, and is a genuine opportunity to listen to feedback and adjust our proposals accordingly. We will feed in the results from the consultation into the design of the final bill and it will come under considerable scrutiny on its passage through Parliament.

If no changes are proposed, please explain why.

42.1 Changes have been included to ensure the proposals are fair for the people of Scotland.

Sign off of the Fairer Scotland Assessment

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