

ENERGY EFFICIENT SCOTLAND: Consultation

March 2019



Scottish Government
Riaghaltas na h-Alba
gov.scot

Contents

| | |
|--|----|
| MINISTERIAL FOREWORD | 3 |
| INTRODUCTION..... | 5 |
| Background | 5 |
| This consultation..... | 5 |
| Next Steps | 6 |
| PART 1: SUITE OF LEGISLATION..... | 7 |
| What you told us | 7 |
| Heat Networks Bill | 9 |
| Local Heat & Energy Efficiency Strategies | 9 |
| Private Rented Sector Energy Efficiency Standards..... | 10 |
| Owner Occupied Energy Efficiency Standards | 10 |
| Social Rented Sector Energy Efficiency Standards | 11 |
| Non-domestic Sector Energy Efficiency Standards | 11 |
| PART 2 - TIMEFRAME FOR DELIVERY | 12 |
| What the Route Map proposed | 12 |
| What you told us | 12 |
| Delivering our vision | 13 |
| Pace of Delivery..... | 13 |
| Quality and supply chain implications | 16 |
| Impact on Fuel Poverty & Climate Change..... | 17 |
| What the evidence tells us..... | 18 |
| PART 3 – PRIVATE RENTED SECTOR..... | 20 |
| What you told us | 20 |
| Extending PRS Standards to EPC Band C..... | 20 |
| PART 4 – SUPPLY CHAIN | 21 |
| Impact on Supply chain: skills and capacity..... | 21 |
| Next steps..... | 23 |
| PART 5 – HEAT NETWORKS | 24 |
| Incentives for Market Growth..... | 24 |
| CONSULTATION QUESTIONS - SUMMARY..... | 28 |
| RESPONDING TO THIS CONSULTATION | 30 |



Last year we published the Energy Efficient Scotland Route Map and launched the Energy Efficient Scotland Transition Programme, which is delivering real measures on the ground, helping tackle fuel poverty and reduce greenhouse gas emissions.

Since then we have consulted stakeholders on our proposals, debated them in Parliament and have allocated £145million in the 2019/20 budget for the delivery of Energy Efficient Scotland. In addition, our Fuel Poverty Bill is making its way through parliament. The bill aims are to set a target relating to the eradication of fuel poverty and to create a new definition of fuel poverty; and to mandate the production of a Fuel Poverty Strategy.

Energy Efficient Scotland is committed to delivering energy efficiency improvements to all properties across Scotland. To do this, and in advance of the first review of the Programme, we are considering the long-term plan of delivery, to make sure we get the best balance of improvements to properties,

driving down prices and wider economic benefits and the creation of jobs through appropriate support for local supply chains.

We promised to look again at the proposed targets and their implementation, and to seek views and gather evidence on whether Energy Efficient Scotland can be accelerated and how the risks of doing so can be overcome as well as to realise any opportunities from this.

Whether we're delivering over two decades or just one, quality must come first. We must build on our existing programmes and learn lessons from elsewhere. We're pleased to welcome the recommendations of the industry-led Quality Assurance Short Life Working Group and are now seeking wider views on their recommendations to help inform the design of a future quality assurance framework.

As well as seeking further evidence on the target date, this consultation also sets out the suite of legislation we are beginning to prepare to support the delivery of Energy Efficient Scotland. This includes a Heat Networks Bill as well as secondary legislation setting minimum energy efficiency standards for homes in the private rented sector, revised energy efficiency standards for non-domestic properties and steps to place Local Heat and Energy Efficiency Strategies on a statutory footing. Later this year we will publish our proposals for how we will support and require action in owner occupied homes.

Energy Efficient Scotland, as well as improving the fabric of our homes and buildings, will also support the development of heat networks that supply low carbon and affordable heat to households and organisations across Scotland. We already provide a range of support for district heating through the District Heating Loan Fund and the Low Carbon Infrastructure Transition

Programme and are seeking views on what further support the sector needs.

We have always said that making our homes and buildings warmer, greener and more energy efficient is a shared endeavour and we're pleased that we can continue this conversation. We encourage you to respond to this consultation and look forward to hearing your views.

A handwritten signature in black ink, appearing to read 'Kevin Stewart', with a stylized flourish extending from the end.

KEVIN STEWART MSP

Minister for Housing, Local Government and Planning

A handwritten signature in black ink, appearing to read 'Paul Wheelhouse', with a stylized flourish extending from the end.

PAUL WHEELHOUSE MSP

Minister for Energy, Connectivity and the Islands



OUR VISION
BY 2040 OUR HOMES AND
BUILDINGS ARE WARMER,
GREENER AND MORE EFFICIENT

INTRODUCTION

Background

Over its 20 year lifetime Energy Efficient Scotland will make our buildings warmer, greener and more efficient - supporting efforts towards eradicating fuel poverty, reducing greenhouse gas emissions, as well as contributing to sustainable economic growth. Energy Efficient Scotland brings together a programme of work to improve the energy efficiency of Scotland's buildings and to decarbonise their heat supply.

Over its lifespan, we estimate that investment of £10-12 billion of public and private funding will be required. This will help create a substantial Scottish market and supply chain for energy efficiency services and technologies. We estimate that for every £100 million spent on energy efficiency improvements in 2018 approximately 1,200 full-time equivalent jobs were supported across the Scottish economy.

Our Route Map to an Energy Efficient Scotland published in May 2018, sets out a pathway to realising this vision and the actions we will take over the next 20 years. These actions will build on our existing, well established and successful domestic and non-domestic energy efficiency schemes, such as the Home Energy Efficiency Programmes for Scotland, the Small and Medium Enterprise (SME) Loan Scheme and the Home Energy Scotland (HES) Loan Scheme.

They also include proposals to introduce a framework of standards, which will be phased

in gradually over the lifetime of the programme, helping to make it the norm to invest in energy efficiency. For Scotland's homes, this phased approach will allow property owners to plan in advance for upgrades, give certainty to the Scottish supply chain so that they can invest in and grow their businesses, and allow Scotland to reap the economic benefits of the programme.

This consultation

If we can do things faster then of course we will. This consultation therefore seeks to gather evidence which could support a change to the proposed timeframe to deliver standards for all properties across Scotland in an achievable and realistic way. For example by considering how possible uncertainties associated with an accelerated programme of target setting and implementation can be overcome. This document also sets out the suite of legislation that we will bring forward to support delivery of Energy Efficient Scotland; seeks views on the recommendations of the Short Life Working Group on Skills and Supply Chain; and explores what additional incentives could be put in place to support growth of the district heating market. It is split into five parts:

- **In Part 1**, we respond to earlier consultations on the legislative requirements for Energy Efficient Scotland and set out the suite of legislation that we

will bring forward to support delivery and underpin the programme.

- **In Part 2**, we explore alternative time horizons for the long-term domestic energy efficiency target, seeking views on whether Energy Efficient Scotland can be accelerated and if so, how the risks of doing so can be overcome.
- **In Part 3**, we propose to build on work to bring forward regulations that would require landlords in the private rented sector to ensure their properties meet EPC Band E from April 2020, increasing to EPC Band D from April 2022 by suggesting that all properties in the private rented sector should reach EPC Band C from 2025 when there is a change in tenancy.
- **In Part 4**, we outline the recommendations made by the industry-led Quality Assurance Short Life Working Group and seek views on the approach being proposed.
- **In Part 5**, we are seeking views on possible additional actions that the Scottish Government could take to support the development and expansion of district heating networks in Scotland.

This consultation builds on earlier consultations on energy efficiency and fuel poverty including, amongst others: the Consultation on Scotland's Energy Efficiency Programme; Energy Efficiency and Condition Standards in the Private Rented Sector; the Fuel Poverty Strategy Consultation; Energy Efficient Scotland Consultation: Making our homes and buildings warmer, greener and more efficient; the Consultation on the Energy Efficiency Standard for Social Housing post-2020 (EESH2); and our two consultations on Local Heat and Energy Efficiency Strategies and the Regulation of Heat Networks.

Next Steps

Following the consultation we will analyse and respond to the responses received. The feedback will inform further development of the Energy Efficient Scotland Programme and future updates of the Route Map, which we will next issue in the autumn of 2019.

PART 1: SUITE OF LEGISLATION

The Energy Efficient Scotland consultation¹ outlined the existing legislation that is in place to support delivery of energy efficiency measures on the ground and sought views on whether any new legislation is required.

The legislation that is already in place gives a range of powers and duties to Scottish Ministers, local authorities and energy suppliers, specifically to:

- set energy efficiency standards for domestic and non-domestic buildings;
- make payments for energy efficiency improvements; and
- reduce emissions and alleviate fuel poverty.

The Energy Efficient Scotland consultation set out proposals for energy efficiency targets, which would see all homes meet EPC Band C by 2040, where cost effective and technically feasible, and would see all non-domestic buildings assessed and improved to the extent that is technically feasible and cost-effective by 2040.

The Scottish Government has also consulted on the regulation of district heating in Scotland² including to introduce a licensing and consenting regime that is commensurate with the scale of the market. This included proposals to place a duty on Local Authorities requiring them to produce Local Heat and Energy Efficiency Strategies. We have proposed that local authorities undertake a socio-economic assessment to determine future energy efficiency and heat decarbonisation objectives across their areas. The strategies would enable local authorities to zone areas according to the most appropriate form of low carbon heat, including

district heating, and enable them to plan multi-year delivery programmes.

What you told us

Whilst a number of responses to the Energy Efficient Scotland consultation supported the delivery of energy efficiency measures on the ground, others called for greater systematic enforcement of existing legislation. A range of additional actions were identified as needing new legislation, including:

- to allow local authorities to enforce energy efficiency improvements;
- regulations to require consequential improvements where other building work is being undertaken;
- requirements to improve the efficiency of heating systems;
- quality standards to ensure high quality retrofit; and
- requirements to display running cost information in sale and rental adverts and agreements.

Some respondents also recommended consolidating existing legislation and ensuring that existing and future legislation is in line with the rest of the UK. Others noted that the Tolerable Standard should be amended so that properties failing to meet energy efficiency standards are removed from the housing stock.

Respondents also supported the principle of a framework of energy efficiency standards as they provide certainty of the long-term trajectory of improvements, helping them plan for the investment required.

¹ https://consult.gov.scot/better-homes-division/energy-efficient-scotland/user_uploads/188061_sct0118873760-1_energy-p8.pdf

² <https://www2.gov.scot/Resource/0052/00527606.pdf>

Detailed Consultation Analysis Reports can be found at:

- <https://www.gov.scot/publications/consultation-analysis-energy-efficient-scotland-making-homes-buildings-warmer-greener-more-efficient/>
- <https://www.gov.scot/publications/scotlands-energy-efficiency-programme-analysis-second-consultation-local-heat-energy-efficiency-strategies-regulation-district-communal-heating/>

Proposed Suite of Legislation – *what we're going to do*

As we have previously set out there is already a range of existing legislation available that can be used to support the delivery of Energy Efficient Scotland, which is primarily derived from the Climate Change (Scotland) Act 2009 and the Energy Act 2008. This legislation can be used to determine and set long term energy efficiency standards, providing certainty for building owners and the supply chain, and place duties on local authorities to prepare Local Heat and Energy Efficiency Strategies.

However, we do not currently have the necessary legislation to provide for a regulatory regime for district heating that is commensurate with the scale of the market.

Given the mix of existing powers and need for new legislation, we are preparing to bring forward a suite of primary and secondary legislation to underpin Energy Efficient Scotland. We believe this strikes the balance between strengthening the programme's legislative underpinning without duplicating existing powers.

The remainder of this section outlines the various legislative components we will prepare, including:

- **Heat Networks Bill**
- **Local Heat & Energy Efficiency Strategies** (secondary legislation, Section 44 Climate Change (Scotland) Act 2009)
- **Minimum Energy Efficiency Standards for the Private Rented Sector** (secondary legislation, Section 55 Energy Act 2011; Section 64 Climate Change (Scotland) Act 2009)
- **Minimum Energy Efficiency Standards for Owner Occupied Homes** (secondary legislation, Section 64 Climate Change (Scotland) Act 2009)
- **Assessment of Energy Performance of Non-domestic Buildings** (secondary legislation, Section 63 Climate Change (Scotland) Act 2009)

Heat Networks Bill

Subject to Parliamentary time and securing an available slot in the legislative programme, the Scottish Government will prepare legislation to introduce regulation for district and communal heating in Scotland, where the regulation of heat is a devolved matter.

The Heat Networks Bill aims to introduce a new regulatory framework which will transform the way that heat networks are developed in Scotland by taking a more strategic approach. It is proposed that the Bill introduce:

- a **District Heating Licensing regime** which would set minimum technical and consumer standards to ensure that market participants are operating within a level playing field. Standards will be issued and monitored at a national level.
- **District Heating Zones** which will identify the areas that are most appropriate for district heating through a robust socio-economic assessment undertaken as part of a local authority's Local Heat and Energy Efficiency Strategy (LHEES)³.

We are also exploring how to build on our proposed **District Heating Consenting** process and whether further measures can be introduced to encourage a pipeline of heat network projects for delivery, in line with the socio-economic outcomes identified in LHEES. Further discussion of this issue is at **Part 5**.

To support the development of the Bill, we will shortly establish a Working Group on Heat Network Regulation which will work to ensure that regulation is commensurate with the scale of the market.

³ Subject to Scottish Public Procurement Regulations, the designation of zones will see local authorities offer supply to public sector buildings, providing an 'anchor load' of heat load to reduce the demand risk faced often faced by investors.

Local Heat & Energy Efficiency Strategies

Energy Efficient Scotland will run for 20 years, carry significant public and private investment and will involve activities as varied as improving the energy efficiency of buildings, decarbonising the heat supply to off-gas grid properties and supporting the development of heat networks. As such, there is an important role for strategic planning for the programme at both a local and national level from the outset, and to inform investment decisions.

In 2017 we set out proposals for local authorities to prepare LHEES which would support a coordinated approach to the local planning and delivery of energy efficiency and heat decarbonisation programmes within Energy Efficient Scotland, and to ensure that national level policies and ambitions are delivered on the ground. It is proposed that LHEES will:

- Conduct an authority-wide assessment of the energy performance and heat demand of the existing building stock, enabling potential for improvement to be identified and target-setting for energy demand and carbon reduction;
- Undertake a socio-economic assessment of potential energy efficiency and heat decarbonisation solutions, allowing Local Authorities to identify and prioritise local projects for delivery; and
- Cost and phase delivery over the lifetime of Energy Efficient Scotland, ensuring local and national support is in place to support building owners and sending strong investment signals to the supply chain.

To date we have funded 23 local authorities to pilot LHEES and will shortly publish an evaluation of the first round of LHEES pilots.

We are committed to funding the remaining nine local authorities to undertake similar pilots during the Transition Phase of the Programme.

The Scottish Government recognises that local resources and conditions will vary between Local Authorities. As we continue to work with local government to develop and implement LHEES we will closely consider how the Strategies can be flexible to meet local needs. We are encouraging Local Authorities to test the joint-development of LHEES in the third phase of pilot projects, to learn how any duty may be jointly discharged in future.

To ensure strategic planning takes place consistently and to ensure that the benefits of LHEES are felt across Scotland, we believe that the requirement to produce LHEES would be best placed on a statutory basis, most likely by way of secondary legislation under Section 44 of the Climate Change (Scotland) Act 2009, and delivered by our partners in local government.

Before bringing forward such regulations we will work with local authorities to fully understand the resource implications and mutually agree the circumstances and time to place LHEES on a statutory basis. This will allow co-production of guidance on the development and implementation of LHEES through a jointly-led Working Group this year.

Private Rented Sector Energy Efficiency Standards

The Energy Efficient Scotland Route Map set out our intention to bring forward regulations that will require landlords of privately rented homes to meet minimum EPC standards from April 2020.

Initially minimum energy efficiency standards will be introduced under Section 55 of the Energy Act 2011, and will require landlords of privately rented homes to ensure their properties achieve EPC Band E from 1 April 2020 at a change of tenancy, and then EPC Band D from 1 April 2022 at a change of tenancy.

We will publish draft regulations and draft guidance for consultation in May 2019. Regulations will be laid in Parliament after the Summer recess subject to securing a suitable Parliamentary timeslot.

We've previously consulted on extending PRS standards to EPC Band C, with all privately rented homes achieving this level by 2030. Part 3 of this consultation document summarises responses received to this proposal and seeks views on next steps.

Owner Occupied Energy Efficiency Standards

The Energy Efficient Scotland Route Map proposed that all homes meet EPC Band C by 2040, where cost effective and technically feasible. For owner occupiers, the Route Map proposed that this is met in two phases: an encouraging phase running until 2030, with mandatory action taken thereafter if sufficient progress on improvement had not been achieved.

Respondents to the 2018 consultation told us that having a clear end point was important, although views were mixed on whether home owners should be required to meet energy efficiency targets, and on whether 2040 was too much time or not enough.

We will publish a more detailed consultation seeking views on proposals for both the encouraging and mandating phase later in 2019. Following that consultation we will consider the timing of regulations, under Section 64 of the Climate Change (Scotland) Act 2009, for owner occupied homes, and will consider whether these should be brought forward early, within this Parliamentary Session, in order to provide long-term certainty for the sector.

The introduction of standards for owner occupied homes will help energy efficiency policies to reach dwellings whose owners may be most reluctant to undertake energy efficiency upgrades, and which therefore are least likely to be reached by government programmes where participation is voluntary. Equally, they will help to provide certainty to those in multi-occupancy blocks. Early introduction of standards may also help raise the profile of the requirement for owner occupier properties to meet an EPC Band C, so that even if enforcement does not commence until years later, owners may

consider installing upgrades in case they decide to sell their property at a later date.

Social Rented Sector Energy Efficiency Standards

The Energy Efficiency Standard for Social Housing (ESSH) was launched in March 2014, and aims to encourage social landlords to improve the energy efficiency of the social housing stock in Scotland. Under ESSH, landlords are required to ensure their properties meet a minimum energy efficiency rating, broadly EPC Band C or D, depending on the type of property and the fuel used to heat it. The Scottish Housing Regulator (SHR) is responsible for monitoring compliance with ESSH, and their latest performance data reveals continued encouraging progress, with 80% ESSH compliance (2017/18).

The Scottish Social Housing Charter, issued under Section 31 of the Housing (Scotland) Act 2010, sets the standards and outcomes that all social landlords should aim to achieve when performing their housing activities. A revised Charter came into effect from April 2017, and this includes achievement of ESSH by 31 December 2020.

The Energy Efficient Scotland Route Map proposed a challenging and aspirational target to maximise the number of social rented homes meeting an EPC Band B by 2032. It also proposed a target of EPC Band D by 2025, below which no social house should be let, subject to limited temporary exemptions.

There was support in principle for the proposal to maximise the proportion of social housing meeting EPC Band B by 2032. However, there were some concerns, particularly from social landlords, around the difficulty and cost of making improvements in some housing, the diminishing returns on further improvements which limit the value-for-money of investment, and concern that landlords would be under pressure to make improvements even if they were not cost-

effective, and which might result in a shift from fuel poverty to rent poverty.⁴

Consideration of milestones and activity post-2020 (ESSH2) is ongoing, with analysis and assessment of the ESSH2 proposals and consultation returns through the ESSH Review Group.

Non-domestic Sector Energy Efficiency Standards

The Energy Efficient Scotland Route Map proposed that all non-domestic buildings will be assessed and improved to the extent that is technically feasible and cost-effective by 2040.

Regulations on the Assessment of Energy Performance of Non-domestic Buildings were introduced in 2016 under Section 63 of the Climate Change (Scotland) Act. Currently these regulations apply to buildings over 1,000 m². We aim by 2040 to extend regulations so that they apply to all non-domestic buildings. The expansion of regulations will be phased, with the size of buildings being affected decreasing over time and development of appropriate sensitivity to heritage issues and deliverability.

In 2018 we undertook work to establish a more detailed profile of Scotland's non-domestic buildings. In 2019, we will commission research to support development of appropriate future standards and convene an industry working group to consider proposals for amended regulations. We will consult on amended non-domestic regulations in 2020, with the intent of them coming into force from 2021.

⁴ Analysis of responses to the public consultation on Energy Efficiency Standard for Social Housing post-2020:
<https://www.gov.scot/publications/consultation-analysis-energy-efficiency-standard-social-housing-post-2020-essh2/>

PART 2 - TIMEFRAME for DELIVERY

What the Route Map proposed

The Energy Efficient Scotland Route Map, published in May 2018, set out a pathway to making our homes and buildings warmer, greener and more efficient. It set out the steps we would take to ensure that all homes and non-domestic buildings are improved so that they achieve a good level of energy efficiency, where technically feasible and cost-effective.

Framework of Standards

Energy efficiency standard in the **social rented sector** - Maximise the number of social rented homes achieving EPC Band B by **2032**.

Energy efficiency standard in the **private rented sector** - Private rented homes to reach EPC Band E by **2022**, EPC Band D by **2025**, and EPC Band C by **2030** (where technically feasible and cost effective)

Energy efficiency standard for **owner occupiers** - All owner occupied homes to reach EPC Band C by **2040** (where technically feasible and cost effective) using a period of encouragement to 2030 before compelling home owners to improve the energy efficiency of their properties

Energy efficiency target for **households in fuel poverty** - All homes with households in fuel poverty to reach EPC Band C by **2030** and EPC Band B by **2040** (where technically feasible and cost effective).

Underpinning Energy Efficient Scotland is a framework of standards, phased by tenure, taking into account the progress that has been made to date. For Scotland's homes, on which this part of the consultation is focused, that means achieving at least EPC Band C by 2040, where technically feasible and cost-effective. It is the timing of this

framework which we are now seeking views on.

What you told us

A broad range of those responding to the consultation agreed that there is value in setting long-term targets. Views on the level of ambition were mixed, with some respondents expressing concerns that achieving at least EPC Band C is unrealistic or too ambitious. Some respondents highlighted instances where properties may not be able to reach an EPC Band C, with the majority of respondents agreeing that instances where a property does not need to reach EPC Band C should be allowed. These responses related to all sectors.

There were similarly mixed views about the proposed target date i.e. 2040. The most common response was that 2030 would be a more appropriate date, however a number of different combinations of EPC ratings, dates and tenures were also proposed, including suggestions that all homes should reach EPC Band C by 2032, 2035 and 2040.

The Scottish Parliament also considered the timescales for Energy Efficient Scotland, with a majority supporting an amendment in May 2018 calling on the Scottish Government to bring forward the date for all homes to achieve EPC Band C to 2030, from 2040. Most recently, and with regard to the 2040 target date contained in the Fuel Poverty (Target, Definition and Strategy) Bill, the Local Government and Communities Committee's Stage 1 Report on the Bill, published on 29 January 2019, recognised arguments that the reduction of fuel poverty will lean heavily on applying technologies which are still in development. Accordingly, the Committee considered it to be realistic to build in time for these technologies to come on-stream.

We want to ensure we avoid adverse consequence of increasing fuel poverty levels due to higher installation or operating costs for householders who would be required to implement further upgrades at unnecessary expense in order to move to the low carbon technologies that would be required to change objectives that are in synch with both our fuel poverty targets and energy efficient programme.

The remainder of this section explores what going faster, i.e. bringing forward the target from 2040, would mean in practice and seeks views on the impacts of doing so and how these could be mitigated.

Delivering our vision

As the standards framework has proposed to ensure that the number of socially rented homes reaching EPC Band B is maximised by 2032, that homes with fuel poor households achieve EPC Band C by 2030 (and EPC B by 2040) and all privately rented homes reach EPC Band C by 2030, the issue of going faster relates specifically to owner occupied housing.

Energy Efficient Scotland builds on our previous energy efficiency programmes such as our Home Energy Efficiency Programmes for Scotland which have been running for many years. These programmes have helped to raise awareness and build relationships to encourage take up, supporting the delivery of energy efficiency measures to households across Scotland. In considering the speed of travel to achieve the vision, we must consider momentum within the sector, as well as the need to change public attitudes and opinions towards energy efficiency, particularly as we expand out into the self-funding segment of the owner occupied sector.

The latest Scottish House Condition Survey shows that there are approximately 930,000 owner occupied dwellings with an EPC rating below Band C. The following sections outline what delivery would look like under the existing Route Map proposal for all homes to achieve EPC Band C by 2040 and what

delivery would look like if the target is moved a decade earlier.

Pace of Delivery

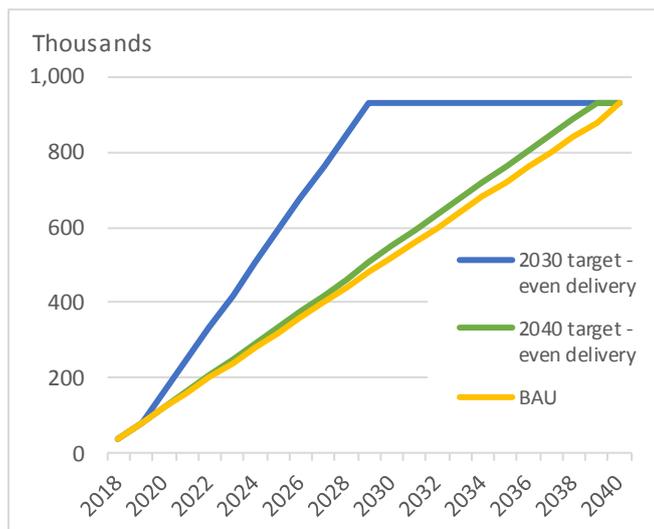
Responses to the consultation in 2018 supported target setting and generally supported the aspiration of reaching EPC Band C for all housing as an appropriate way of achieving the vision of Energy Efficient Scotland. In establishing a robust, credible and evidence based pathway, we must balance the aspiration to engage positively with home owners across Scotland, with the need to secure energy efficiency improvements.

The Energy Efficient Scotland Route Map proposed that all owner occupied homes meet EPC Band C by 2040 and that this should be achieved in two phases: an encouraging phase up to 2030, with a compliance or mandating phase commencing thereafter.

Currently, the number of owner occupied dwellings with an EPC below C is decreasing by around 40,000 per annum.⁵ Assuming this can be maintained over the next 20 years, Figure A shows that this would be approximately in line with an even delivery path to the 2040 target. However, without further stimulus it is likely that the rate of homes achieving EPC Band C will drop below the rate we've seen in recent years as the number of "easy wins" (easier-to-treat properties whose owners are more engaged with energy efficiency) diminishes. In contrast, if the deadline for the EPC Band C target is moved forward from 2040 to 2030, an immediate and sustained doubling of the current annual rate of improvement, up to 80,000 homes per annum, would be required.

⁵ See Table 3 below.

Figure A. Possible delivery paths of EPC Band C target, assuming business as usual delivery remains at 40,000 dwellings p.a.



The accelerated rate of delivery required by a 2030 target will most likely lead to increased demand for existing Scottish Government funded schemes such as our Area Based Schemes, Warmer Homes Scotland programme and our low-cost loans, requiring a significant increase in funding for energy efficiency. This raises the question of where this additional funding would come from, with the options being cutting budgets for other Scottish Government programmes or raising additional revenue through increasing taxes or through placing additional levies on energy bills where all the levers may not be within the control of Scottish Ministers.

The pressure on Scottish Government budgets from a 2030 target, or even from a 2040 target if business as usual delivery falls, may require an obligation to be placed on households to improve their homes to an EPC Band C as an alternative to providing additional public funding. The Route Map outlined that, if sufficient progress had not been made in the owner occupied sector, we would take steps to make it compulsory to reach EPC Band C from 2030.

One of the options for the mandating action would be to introduce a requirement that dwellings must be at an EPC Band C at the point of sale. While this could help increase the rate of improvement, especially amongst owners who are more reluctant to undertake

improvements, estimates using data from the Scottish House Condition Survey on the length of tenure at an address show that over a ten year period a requirement for improvement triggered at the point of sale would only capture around a third of the stock falling below EPC Band C.

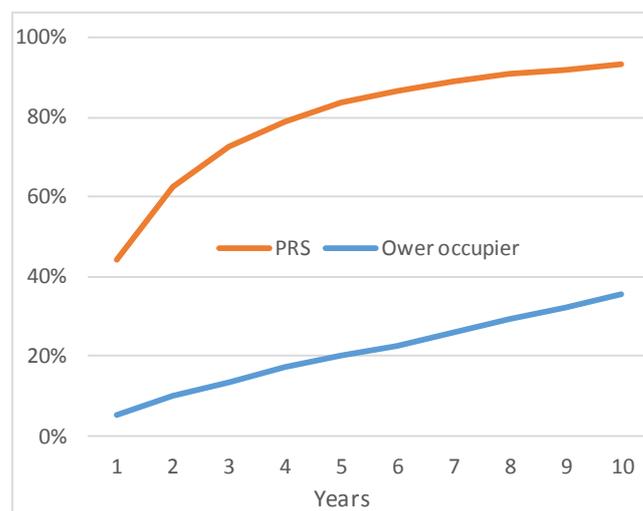
Table 1. Proportion of dwellings with an EPC below C experiencing at least one change in ownership (owner occupier sector) or tenancy (private rented sector)

| At end of year | Owner occupier sector | Private rented sector |
|----------------|-----------------------|-----------------------|
| 1 | 5% | 44% |
| 5 | 20% | 83% |
| 10 | 36% | 93% |
| 15 | 51% | 96% |
| 20 | 65% | 98% |

Source: Scottish Household Survey (combined 2014-2016 data), using length of tenure at current address.

In contrast, over 90% of privately rented dwellings are estimated to have at least one change in tenancy in ten year period.

Figure B. Proportion of dwellings with an EPC below C which will have had at least one change in ownership/tenancy over a ten year period.

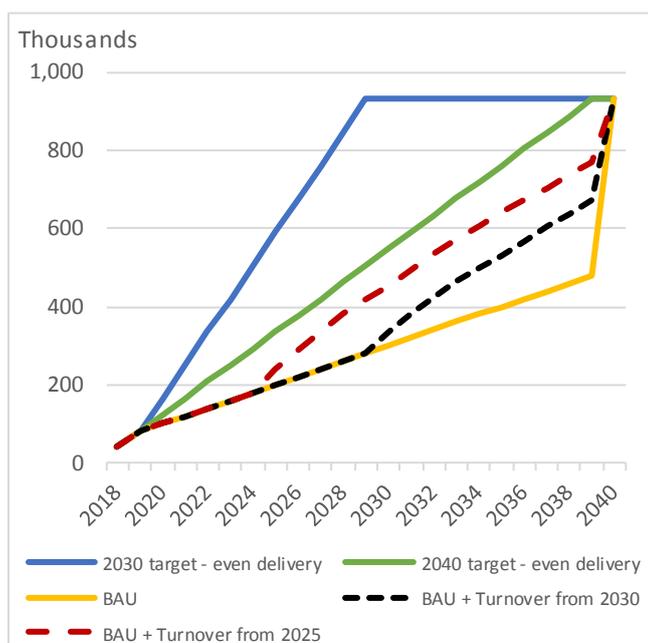


Source: Scottish House Condition Survey (combined 2014-2016 data).

Figure C illustrates the impact of reaching an EPC Band C if the business as usual falls to 20,000 per annum due to a diminishing pool of “easy wins”. In this scenario, even meeting a 2040 target will be stretching, and business as usual delivery may need to be

supplemented by regulating at the point of turnover.⁶ While such regulation will narrow the gap between the business as usual and the level of delivery required to hit the 2040 target, it will still leave a backlog of dwellings needing to be upgraded in 2040, even if regulation begins in 2025 instead of 2030.

Figure C. Possible delivery paths of EPC Band C target, assuming business as usual delivery falls to 20,000 dwellings p.a.



Given that turnover will have a slower effect in the owner occupier sector than the private rented sector, we are interested to hear views on what other trigger points could be used to require improvement and on the timescales for such actions. Further proposals on what this mandatory phase could look like will be set out this Autumn.

As discussed earlier, a 2030 target would be extremely stretching even if the current

business as usual of 40,000 dwellings can be maintained. Figure C shows that if the business as usual declines to 20,000 dwelling per annum, even regulating at the point of turnover would not be enough to prevent this gap from widening. Therefore there could be significant additional demands on the public purse, as well as the need for more sweeping regulations. Moving this date forward may also mean that many more dwellings could be exempt from the EPC Band C requirement due to cost effectiveness and technical feasibility considerations. The longer time frame of 2040 could help maximise the proportion of dwellings which meet the EPC Band C target, through reduced upgrade costs as a result of technological progress and greater supply chain capacity.

CONSULTATION QUESTIONS

1. With regards to achieving an accelerated delivery of the standards proposed, do you think mandatory action for owner occupiers would be required? Please provide a rationale for your answer.
2. What trigger points, e.g. sale, renovation, etc. could be used to require owner occupiers to undertake energy efficiency improvements?
3. If you think mandatory action would be required to achieve an accelerated delivery of standards, when should mandatory energy efficiency targets be introduced in the owner-occupied sector?

⁶ The impact of regulating at the point of turnover depends on how many properties would have been upgraded anyway due to the business as usual. The impact of turnover regulations would be maximised if these dwellings would not otherwise have been upgraded, while the impact would be minimised if these dwellings displace other properties from energy efficiency programmes. The modelling takes a midpoint assumption that dwellings which turn over are no more, and also no less, likely to have been upgraded than other dwellings through the business as usual.

Quality and supply chain implications

It is widely acknowledged that the capacity of the supply chain will need to increase in line with the scale of Energy Efficient Scotland and with estimates of around £12 billion in investment needed to fully deliver its objectives. Whilst this presents both a challenge and an opportunity for suppliers in Scotland, there are a number of considerations relating to supplier capacities and capabilities. These include:

- Remote rural and island areas where there is a large number of micro-sized businesses (10 employees or less) and in some areas insufficient capacity to meet demand⁷.
- An ageing workforce with not enough young people entering the trades.
- The impact of Brexit on Scottish suppliers who rely on EU workers.
- A shift towards having to deal with more hard to treat properties which will require much greater levels of interventions across a broad range of measures. Consequently this will require a greater skills set amongst suppliers.

- General cynicism with previous schemes, in particular the UK Government's Green Deal.
- The need to develop suppliers in line with the quality assurance expectations of the Programme to ensure consumers receive high quality work with adequate consumer protection.
- The general need to raise awareness amongst suppliers of the Energy Efficient Scotland Programme to provide them with confidence that there is a sufficient market available to them to justify bringing in more staff and upskilling their workforce more generally.
- It is acknowledged that some of these challenges are complex to deal with (for example attracting young people to the trades) and many of these will take a significant amount of time to deal with.

CONSULTATION QUESTION

4. From a supply chain perspective, do you think bringing forward the timescales for the Programme would have a positive or negative effect on quality, skills & capacity and consumer protection? Please provide a rationale, and evidence where possible.

⁷ Local Construction Skills Needs for Scotland, June 2018
<https://www.citb.co.uk/research-and-insight/skills/local-construction-skills-needs-for-scotland/>

Impact on Fuel Poverty & Climate Change

The Energy Efficient Scotland Route Map already sets out an additional, more stretching target for households that are in fuel poverty, which would see them prioritised so that they achieve EPC Band C by 2030, and then EPC Band B by 2040, where technically feasible, cost-effective and affordable.

These timescales are consistent with the targets set in the Fuel Poverty (Target, Definition and Strategy) Bill and will guide our delivery programmes, ensuring that support continues to be targeted to those most in need. Accelerating the target for all homes may risk increasing levels of fuel poverty by forcing households to install low carbon or renewable technologies that may be more expensive to run – therefore increasing fuel costs and before the cost of the technologies have been further driven down by innovation in the sector.

Meeting the targets for the various sectors set out in the Energy Efficient Scotland Route Map, including making steady progress in the owner occupier sector towards achieving at least an EPC Band C by 2040, is in line with the trajectory for the reduction in heat demand set out in the Climate Change Plan, which would see demand in domestic properties fall by 15% by 2032. Bringing this target forward to 2030 would support efforts to reduce emissions more quickly. However, it risks forcing some households to take decisions about their heating systems prematurely, which may result in stranded assets or households having to make multiple changes to their heating systems over the next twenty years. A longer time horizon to 2040 is more in line with the longer-term decarbonisation of the heat supply and will more readily enable optimisation across demand reduction and supply, which is important if we are to reduce emissions to near zero in a cost-effective manner.

CONSULTATION QUESTION

5. In your view, how would accelerating Energy Efficient Scotland help, and/or how would it hinder, plans to address fuel poverty?

6. With regards to reducing the emissions associated with the supply of heat, what are your views on consideration of energy efficient improvements alongside changes to heating systems?

What the evidence tells us

In considering your responses, the following may assist in understanding the implications of an accelerated target.

Reaching EPC Band C – the scale of the task for owner occupiers

Based on the most recent (2017) Scottish House Condition Survey, there are around 1.4 million dwellings with an EPC rating below Band C. The social housing sector is the most efficient, with more than half (55%) achieving at least EPC Band C, as compared with 39% of properties in the private rented sector and 37% in the owner occupier sector.

There are approximately 930,000 owner occupied dwellings with an EPC below C which will require upgrading over the next 10-20 years, depending on the time horizon specified.

Modelling, undertaken with the National Household Model,⁸ shows that almost all the stock in the owner occupier sector could achieve an EPC Band C based on a standard set of upgrades, such as insulation measures and efficient heating systems, as well as renewables such as heat pumps and solar PV. The total cost of achieving a near 100% compliance rate⁹ is estimated in the region of £6 billion, at an average (mean) cost of around £6,000 per upgraded dwelling.

Within this total cost, some dwellings could potentially be much more expensive to upgrade than rest of the stock. In particular, costs could be higher in rural areas, because of the greater prevalence of larger, detached dwellings, with stone walls, that are off the gas grid, which will require more extensive upgrades to reach an EPC Band C. A

⁸ The [National Household Model](#) is an open-source tool developed for the UK Government to model the impact of upgrading the domestic housing stock. The stock file used in the modelling reported in this consultation was based on a three-year (2011-13) combined Scottish House Condition Survey dataset.

⁹ 99% of the owner occupier dwellings were modelled to be able to reach an EPC Band C based on the upgrades available within the NHM.

comparison of the average modelled upgrade costs between rural and urban locations is included in Table 2. The modelling undertaken through the National Household Model uses a standard cost, scaled to the amount of insulation or size of heating system installed. It therefore captures the higher average cost in rural areas due to the different profile of rural dwellings. However, in addition to this, the cost of upgrading dwellings in rural areas could potentially be higher than in urban areas due to factors such as higher transport costs, less competition amongst installers, as well as rural areas being less suitable for the economies of scale from area-based schemes. These could result in the same sized measure costing more to install in rural areas than in urban areas.

Table 2. Capital costs and simple payback periods of upgrading owner occupier stock to EPC Band C¹⁰

| | Total cost (£bn) | Average (mean) cost (£) | Average simple payback period |
|--------------|------------------|-------------------------|-------------------------------|
| Rural | 2 | 11,000 | 16 |
| Urban | 4 | 5,000 | 13 |
| Total | 6 | 6,000 | 14 |

Although costs are higher in rural areas, so are the fuel bill savings, which means that that the average payback period in rural areas is not significantly longer than in urban areas. Furthermore, as a safeguard against the impact of excessive costs for some dwellings, in the Energy Efficient Scotland consultation we proposed that dwellings will not need to be fully upgraded to EPC Band C if it is not cost effective.

Work on the definition of cost effectiveness and technical feasibility is ongoing. As reported in the Energy Efficient Scotland Consultation in May 2018, by focusing on the dwellings with the lowest capital cost, a 75%

¹⁰ Simple payback is calculated as the annual fuel bill savings divided by the capital cost of the package of upgrades. More complex payback calculations could adjust for replacement costs of measures with shorter lifetimes, amongst other refinements.

attainment rate can be achieved at an average (median) cost of around £3,500. At this cost level, attainment would vary by location, with around 60% rural dwellings meeting EPC Band C, compared to around 80% in urban areas.

The ultimate cost and attainment rate for the EPC Band C target will depend on the final definitions of cost effectiveness and technical feasibility, as well as trends in the costs of energy efficiency upgrades, which could potentially reduce over the twenty year time period of the programme due to technological progress. The Scottish Government has commissioned further research to inform the development of these proposals.

Current levels of delivery

The Scottish Government is on track to making available £500 million to improve the energy efficiency of Scotland’s buildings and tackle fuel poverty over the four years to 2021. This is in addition to funding under the Energy Company Obligation and private investment which is also helping to improve the energy efficiency of buildings in Scotland.

Data from the Scottish House Condition Survey show that in recent years, the number of dwellings with an EPC below C in the owner occupier sector has been reducing by an annual average of around 40,000.

The current rate of improvement is likely to be driven predominantly by our Home Energy Efficiency Programmes for Scotland and grant funding that is provided under the Energy Company Obligation. These programmes are predominantly targeted at fuel poor households and only require small levels of customer contribution, if at all. A much smaller proportion of the support currently on offer is targeted at self-funding owner occupiers.

Table 3. Annual reduction in owner occupier dwellings with an EPC below C¹¹

| Year | Reduction | |
|----------------|---------------|---------------|
| | SAP 2009 | SAP 2012 |
| 2011 | 29,000 | |
| 2012 | 41,000 | |
| 2013 | 79,000 | |
| 2014 | 70,000 | |
| 2015 | 23,000 | 21,000 |
| 2016 | 1,000 | 28,000 |
| 2017 | 71,000 | 61,000 |
| Average | 45,000 | 37,000 |

Source: Scottish House Condition Survey, various years; Estimates have been provided for both SAP 2009 and SAP 2012 because a longer time series is available for SAP 2009; Estimates rounded to nearest thousand.

The Route Map set out that, through Energy Efficient Scotland, we would continue to provide grant funding to fuel poor households, as well as making available low-cost loans to help self-funding households spread the upfront cost associated with improvement works. As such, it is likely that the rate of improvement seen in recent years for owner occupied homes will begin to fall as we:

- target harder to treat dwellings that may be more costly or technically challenging to upgrade;
- move further out into the self-funding segment of market who have yet to take action and are not at present actively engaged on energy efficiency.

As a result it is likely that we will have to work harder to maintain current rates of improvement in future years. The Route Map outlined that if insufficient progress had been achieved during the 2020s, owner occupied households may be mandated to make improvements.

¹¹ Fluctuations in the figures from year to year can be the result of sample error, as well as dwellings moving between sectors (with the private rented sector having grown relative to the owner occupier sector in the earlier part of this period), as well as dwellings being upgraded to reach a C.

PART 3 – PRIVATE RENTED SECTOR

In Part 1 of this document we have set out our intention to bring forward regulations this Autumn that would require landlords in the private rented sector to ensure their properties meet EPC Band E from April 2020, increasing to EPC Band D from April 2022.

Under these regulations, the required works will be capped at £5,000 to reach EPC Band E, and then a further £5,000 to reach EPC Band D. However, it is proposed that the required level of work to achieve EPC Band C is determined by what is technically feasible and cost-effective. Work is underway to further define cost-effective and a definition will be published in due course. Technical feasibility will be determined through an assessment of the property and work, via a Short Life Working Group, is underway to develop this new assessment.

We are now considering extending these standards to EPC Band C, a proposal previously proposed in the Energy Efficient Scotland Route Map. This proposed that all privately rented homes should meet EPC Band C by 2030, where technically feasible and cost-effective

What you told us

Responses to that consultation indicated general agreement that all PRS properties should reach EPC Band C, and that it would be helpful to set a long-term trajectory to reach this band. Some respondents raised concerns regarding the risk of stock being removed from the private rented sector if standards are not aligned with those for the owner occupied sector.

By setting out a long-term trajectory of standards now, landlords can plan improvement works and the investment needed to bring properties up to the required standard

Extending PRS Standards to EPC Band C

It is proposed that the EPC Band C standard will initially apply to properties where there is a change in tenancy¹² after 1 April 2025. A property will meet the standard if it has a valid EPC showing an energy efficiency band C or above. Where the EPC shows a band D or lower, the owner will need to undertake works and lodge an updated EPC showing an energy efficiency rating of band C or above, unless exceptions have been granted by the relevant authority.

Properties failing to meet the minimum requirements would be subject to civil fines. Fines will be set following review of the current system in the early 2020s.

CONSULTATION QUESTIONS

7. What are your views on using change of tenancy as a trigger to require the increased standard?
8. What are your views on using 1 April 2025 as the date to start applying the minimum standard of C when there is a change in tenancy?
9. With regards to providing a useful tool to landlords planning and executing improvement works, what are your views on basing any cap of required works on a definition of cost-effectiveness and technical feasibility?

¹² A change in tenancy is where a new tenancy agreement is required under the Private Housing (Tenancies) (Scotland) Act 2016.

Impact on Supply chain: skills and capacity

The Programme's long-term ambition for improving the energy efficiency of Scotland's buildings, and the significant estimated investment of £10 - £12 billion over its lifetime, presents a significant economic opportunity. It is therefore crucial that local suppliers, particularly small and medium enterprises (SMEs) and micro-sized businesses, are able to participate in the programme to ensure that benefits are realised in communities across Scotland. This is particularly important as a recent reports on local skills needs for Scotland in construction¹³ identify potential regional skills and capacity gaps.

To develop a set of actions to achieve and fully implement a robust quality assurance (QA) framework for Energy Efficient Scotland that reflected the needs and views of the Scottish supply chain, an industry-led Short Life Working Group (SLWG) was set up including representatives from across industry, consumer organisations and enterprise and skills agencies. The Group met throughout 2018 and considered quality, skills and capacity, consumer protection, the non-domestic sector and procurement.

Overall, the Group felt that there was a need for robust quality assurance criteria under Energy Efficient Scotland which would require close inspection and the imposition of sanctions on suppliers who failed to meet the criteria. They also felt that the Programme should be based around the skill and competence of the operatives undertaking the work and that the protection of consumers should underpin every element of the Programme. At the same time, they agreed that the requirements should not place a high cost or administrative burden on suppliers

especially SMEs and micro-businesses and that the economic opportunities presented by

the Programme should be accessible to all suppliers regardless of size or location.

The SLWG also identified a number of challenges and opportunities relating to the mobilisation of the Scottish supply chain:

- Industry engagement – we need industry buy-in and confidence in the Programme. We have already established that Energy Efficient Scotland is a long-term programme with a significant financial investment but we need to ensure that industry is enabled to build capacity within the supply chain. It is therefore crucial that the Scottish Government continues to engage with industry.
- Customer care – to ensure robust consumer protection, it is important that the supply chain has the customer care skills required to operate within a householders' personal space. We are committed to ensuring robust consumer protection across the Programme.
- Technical skills and capacity – it is important to identify any gaps in skills and training to make sure that the supply chain is competent and appropriately-trained to deliver the aims of the Programme. There is work underway (which originated in this SLWG) by the Energy Skills Partnership to develop a skills and training matrix which will identify gaps and develop new training opportunities in collaboration with Scotland's colleges to address these.

All of these will take time and they build upon the challenges and opportunities already mentioned in Part 2, 'quality and supply chain considerations'.

Overall, the Group made 19 recommendations for Energy Efficient Scotland and their report was published on 26th March 2019. A summary of the recommendations can be found below. However, for more background on each of these please refer to the final report which

¹³ Local Construction Skills Needs for Scotland, June 2018
<https://www.citb.co.uk/research-and-insight/skills/local-construction-skills-needs-for-scotland/>

can be found at
<http://www.gov.scot/ISBN/9781787816961>

Quality

Recommendation 1. There should be Quality Assurance criteria developed which detail the key mandatory requirements for suppliers wishing to participate in Energy Efficient Scotland.

Recommendation 2. There should be a Quality Mark for Energy Efficient Scotland and suppliers wishing to take part in the Programme will have to demonstrate that they meet all of the requirements (set out in Recommendation 1) through a robust vetting and verification process to achieve the Quality Mark. All approved suppliers should be listed on a publicly available directory and where possible the use of operative ID cards should be considered.

Recommendation 3. The verification process must not place an undue administrative or financial burden on SMEs, particularly micro-businesses.

Recommendation 4. Define what success looks like in terms of quality for the building, consumer and funder, and set specifications for the final output of work.

Recommendation 5. A new designer role should be considered to ensure that a whole building approach is taken and that only the most appropriate improvements are applied in practice.

Recommendation 6. Independent inspections of installations must be carried out as part of Energy Efficient Scotland to ensure quality standards are being consistently met.

Skills & capacity

Recommendation 7. Suppliers carrying out installs under Energy Efficient Scotland must meet appropriate skills and competencies. A skills and qualifications matrix should be developed and clearly communicated to the supply chain to reflect this.

Recommendation 8. The skills and competency requirements of the designer role should be determined and an analysis of current capacity within the workforce should be undertaken.

Recommendation 9. A mobilisation plan for developing skills for the supply chain should be published to help provide pipeline security and build capacity.

Recommendation 10. Energy Efficient Scotland should be well advertised to the supply chain via roadshows, events, webinars and trade publications.

Recommendation 11. Investment in Energy Efficient Scotland must support inclusive economic growth

Consumer Protection

Recommendation 12. There should be a clear, simple and well-defined complaints process with support available for the consumer to navigate the process.

Recommendation 13. There should be data sharing between key agencies in Scotland to monitor the frequency and nature of complaints, and identify and deal with non-compliant and rogue companies promptly.

Recommendation 14. Consumers and suppliers should be encouraged or required to enter into a contractual agreement outlining the responsibility of the supplier completing any of the retrofit stages.

Recommendation 15. A campaign of awareness raising about Energy Efficient Scotland and energy efficiency retrofit in general should be undertaken during the transition period and beyond.

Recommendation 16. There should be support and advice for consumers on guarantees and warranties.

[Quality Assurance Short Life Working Group Recommendations Report](#)

Non-domestic sector

Recommendation 17. Work to identify improvement targets for non-domestic buildings should be fed into ongoing supply chain activity.

Recommendation 18. Examine whether there is a need for a qualification for individuals completing installation work on non-domestic buildings under Energy Efficient Scotland.

Procurement

Recommendation 19. Procurement relating to Energy Efficient Scotland should comply with existing supplier-friendly public procurement policies and legislation, with a particular focus on micro-sized businesses. Scottish Government should continue work with partner organisations to bolster existing guidance to SMEs and where necessary produce programme specific guidance for Local Authorities and COSLA on procurement under Energy Efficient Scotland.

Next steps

We are considering these recommendations in the context of the development of other key elements of the Programme including assessment and delivery and work that is already underway across the Scottish Government. We will therefore revisit all of the recommendations in due course and will formally respond following this consultation. We also want to engage more widely on the Group's findings and have therefore set out a number of questions below.

CONSULTATION QUESTIONS

Considering the recommendations made by the Quality Assurance Short Life Working Group:

10. The Short Life Working Group have made recommendations which they believe represent the actions required to ensure that Energy Efficient Scotland will achieve consistently high levels of quality, health and safety and consumer protection. Do you agree? If not, what more or less should be done?

11. Do you have any views on how this can be achieved whilst at the same time ensuring maximum participation from suppliers across Scotland regardless of their size and geographical location?

12. What do you think the role of Scottish Government should be in ensuring the quality criteria are consistently met?

PART 5 – HEAT NETWORKS

Competition and Markets Authority (CMA) Heat Networks Market Study and Consumer Protection

On 7 December 2017, shortly after the publication of our second consultation on the regulation of district and communal heating, the CMA launched a Market Study to determine whether domestic consumers were well-served by heat networks.

The Authority published its Final Report on 23 July 2018¹⁴ and concluded that, while most users of heat networks received similar prices and service compared to gas and electricity customers, statutory regulation of the sector is now required to ensure consumer protection is in place ahead of the expected growth in district and communal heating schemes.

The Scottish Government has taken leading steps in the UK in this area and **we accept and support the CMA’s findings and we will work to incorporate these within our regulatory framework.**

Our own work, together with that of the Competition and Markets Authority and the Association for Decentralised Energy (ADE) provides clear evidence that regulation of the sector is now required.

The Scottish Government notes that the UK Government is now working to develop proposals for a regulatory framework for heat networks in England and Wales.

The Scottish Government is working constructively with the UK Government to harmonise standards where there is value in doing so, but will continue to develop our own

¹⁴ **Heat Networks Market Study Final Report**, Competition & Markets Authority, 23 July 2018: https://assets.publishing.service.gov.uk/media/5b55965740f0b6338218d6a4/heat_networks_final_report.pdf.

Bill and regulatory framework to suit the needs of Scottish communities - such as those in our islands and remote areas.

The Scottish Government continues to call for the devolution of consumer protection in relation to heat networks in order to allow these needs to be prioritised within our proposed licensing system.

Incentives for Market Growth

Appropriately sited, low carbon heat networks are one of the ‘low regrets’ heat decarbonisation solutions that can support Scotland to meet our ambitious carbon reduction targets.

In line with independent advice from the Committee on Climate Change, the Scottish Government is currently focussing on encouraging the deployment of ‘low regrets’ solutions ahead of decisions on the decarbonisation of the gas grid.

The 2015 National Comprehensive Assessment of District Heating and Cooling estimated that 6.7% of Scotland’s heat demand could be met by heat networks in 2025¹⁵. We believe that heat networks can play an even greater role in the future years, beyond 2025.

In light of this, the Scottish Government has set out its ambitions for a growth in heat

¹⁵ **National Comprehensive Assessment of the Potential for Combined Heat and Power and District Heating and Cooling in the UK**, Ricardo Energy & Environment Report for the Department for Energy and Climate Change, 16 December 2015: <https://www.gov.uk/government/publications/the-national-comprehensive-assessment-of-the-potential-for-combined-heat-and-power-and-district-heating-and-cooling-in-the-uk>

networks¹⁶ and at March 2018, there were over 800 district and communal heating networks in Scotland, supplying over 25,000 final customers¹⁷.

Alongside our partners, we have done a significant amount to support heat network schemes in Scotland. For instance, we have:

- Established the **District Heating Loan Fund**, offering low rate, unsecured capital loans to overcome a range of technical and financial barriers. Since 2011, we have offered over £15 million to 50 different projects across Scotland, providing affordable warmth to householders, creating local employment, reducing costs for businesses and cutting emissions;
- Launched the **Low Carbon Infrastructure Transition Programme (LCITP)** to support the acceleration of low carbon infrastructure projects across the public, private and community sectors. LCITP can support the development of investment grade business cases to help projects secure public and private capital finance and can provide financial support for capital;
- Formed the **Heat Network Partnership** to coordinate support identifying and developing district heating projects and a strategic approach by local authorities, to build capacity, and to share best practice;
- Created **Scotland's Heat Map**, with versions available to the public and to local authorities and other key public sector partners; and

- Introduced a **50% reduction in Non-domestic Rates** for district heating schemes in April 2017.

In spite of this, the upfront cost of constructing district and communal heating networks often remains higher than other energy distribution networks.

Projects therefore require sufficient users over a long term to strike a balance by recouping costs while keeping bills affordable.

The Scottish Government understands that reducing this 'demand risk' can reduce the cost of capital and support the deployment of more heat networks and we have considered how this may be done throughout the development of our proposals.

For instance, we have proposed that within areas identified as Heat Network Zones, there will be particular consideration of public sector buildings as the 'anchor load' for networks and future expansion, within the confines of public procurement regulations.

In addition, we are considering requirements for the public sector to assess potential connection to heat networks during the preparation of LHEES and the encouragement of connection or the supply of surplus heat.

As part of our January 2017 **scoping** consultation, we sought views on a regulatory scenario in which homes and businesses may be compelled to connect to a heat network under development and / or one in which heat networks would be granted exclusive rights.

¹⁶ **Heat Policy Statement Towards Decarbonising Heat: Maximising Opportunities for Scotland**, the Scottish Government, 11 June 2015.

¹⁷ Energy Trends: March 2018, special feature article – Experimental statistics on heat networks, the Department for Business, Energy and Industrial Strategy, 29 March 2018: <https://www.gov.uk/government/publications/energy-trends-march-2018-special-feature-article-experimental-statistics-on-heat-networks>.

Views were mixed on the proposed power to compel existing buildings to connect to heat networks. Even among those who broadly supported the proposed power, several respondents qualified their answer and noted specific issues that would have to be considered. Views were also mixed on the effectiveness of exclusive concessions¹⁸.

Following the consideration of Scottish Government's powers we note that:

- Compulsory connection – for either homes or businesses – would require strong consumer protections to balance the associated risk.
- Granting of exclusive rights to develop and / or operate a new heat network within an identified District Heating Zone could exclude other forms of heat supply in the area at an early stage in the transition to low carbon heat.
- We also foresee that the such measures are likely to give rise to a range of legal issues in connection with compliance with the European Convention on Human Rights, their relationship to reserved matters in respect of consumer protection and including competition law competence of the Scottish Parliament and State Aid regulations.

The Scottish Government acknowledges that similar measures have been implemented successfully in Denmark and in some other European countries.

However, we note that such regimes emerged to ensure security of supply or have had strong steps to mitigate the risks, such as the regulation of prices and other consumer protections.

¹⁸ Consultation on Heat and Energy Efficiency Strategies, and Regulation of District Heating, Why Research, 14 November 2017: <https://www.gov.scot/publications/analysis-responses-consultation-heat-energy-efficiency-strategies-regulation-district-heating/>

We want to see the growth of heat networks in Scotland continue and accelerate, and recognise that there may be further ways that the Scottish Government can assist with this.

The introduction of a regulatory framework and licensing system will provide certainty to the sector and investors. This can reduce the risk premium on the cost of capital faced by projects by setting clear standards and providing the kind of rights that other utility companies receive, as well as raising consumer acceptance and awareness.

As such, we are seeking evidence from the sector on whether further incentives or on-the-ground assistance could be made available to support the deployment of heat networks – or whether there are specific mitigations to the risks outlined above that may be considered. This is to ensure that the strategic opportunities identified as part of LHEES are converted into projects that are delivered on the ground.

CONSULTATION QUESTION

13. Taking the above into account, what further incentives could drive further heat demand onto networks?

14. Taking the above into account, what further assistance could support the growth of appropriately-sited, low carbon heat networks?

Respondents may wish to consider:

- How any incentivising measures can build on the LHEES and District Heating Zoning processes or through the licensing system outlined in Part 1;
- Whether the risks of the incentivising measures considered in earlier consultations can be mitigated, within current legal competence;

- Whether there are any business models which can come forward that will support a reduction in the cost of capital for heat networks, and what role could the Scottish Government have in this;
- The specific barriers to the delivery of commissioned projects on the ground and whether there are opportunities or powers within the Scottish Government's devolved competence to reduce or remove these.

We encourage respondents to provide an estimate of the impact any incentivising measures suggested may have in supporting the deployment of heat networks in Scotland.

CONSULTATION QUESTIONS - SUMMARY

Part 2

Pace of Delivery

1. With regards to achieving an accelerated delivery of the standards proposed, do you think mandatory action for owner occupiers would be required? Please provide a rationale for your answer.
2. What trigger points, e.g. sale, renovation, etc. could be used to require owner occupiers to undertake energy efficiency improvements?
3. When should mandatory energy efficiency targets be introduced for the owner occupied sector? Should they be introduced before 2030?

Impact of Pace on Supply Chain

4. From a supply chain perspective, do you think bringing forward the timescales for the Programme would have a positive or negative effect on quality, skills & capacity and consumer protection? Please provide a rationale, and evidence where possible.

Impact on Fuel Poverty & Climate Change

5. In your view, how would accelerating Energy Efficient Scotland help, and/or how would it hinder, plans to address fuel poverty?
6. With regards to reducing the emissions associated with the supply of heat, what are your views on consideration of energy efficient improvements alongside changes to heating systems?

Part 3

Private Rented Sector

7. What are your views on using change of tenancy as a trigger to require the increased standard?
8. What are your views on using 1 April 2025 as the date to start applying the minimum standard of C when there is a change in tenancy?
9. With regards to providing a useful tool to landlords planning and executing improvement works, what are your views on basing any cap of required works on a definition of cost-effectiveness and technical feasibility?

Part 4

Impact on Supply Chain: skills and capacity

Considering the recommendations made by the Quality Assurance Short Life Working Group:

10. The Short Life Working Group have made recommendations which they believe represent the actions required to ensure that Energy Efficient Scotland will achieve consistently high levels of quality, health and safety and consumer protection. Do you agree? If not, what more or less should be done?
11. Do you have any views on how this can be achieved whilst at the same time ensuring maximum participation from suppliers across Scotland regardless of their size and geographical location?
12. What do you think the role of Scottish Government should be in ensuring the quality criteria are consistently met?

Heat Networks

Questions

13. Taking the above into account, what further incentives could drive further heat demand onto networks?

14. Taking the above into account, what further assistance could support the growth of approximately-sited, low carbon heat networks?

RESPONDING to this CONSULTATION

We are inviting responses to this consultation by 17 June 2019.

Please respond to this consultation using the Scottish Government's consultation platform, Citizen Space. You can view and respond to this consultation online at <https://consult.gov.scot/better-homes-division/energy-efficient>.

You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 17 June 2019.

If you are unable to respond online, please complete the Respondent Information Form (see 'Handling your Response' below) to:

Energy Efficient Scotland
Programme Management Office
Better Homes
Scottish Government
2H North
Victoria Quay
Edinburgh EH6 6QQ

It would be helpful to have your response by email or using the electronic response form. The electronic response form can be accessed at the following website address: <https://consult.scotland.gov.uk>. You can also email your response to EnergyEfficientScotland@gov.scot

Handling your response

If you respond using Citizen Space (<http://consult.scotland.gov.uk/>), you will be directed to the Respondent Information Form. Please indicate how you wish your response to be handled and, in particular, whether you are happy for your response to be published.

If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information

(Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

Next steps in the process

Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material, responses will be made available to the public at <http://consult.scotland.gov.uk>.

If you use Citizen Space to respond, you will receive a copy of your response via email. Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so.

Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please send them to:
EES Consultation
EES Programme Management Office
Better Homes
Scottish Government
2H North
Victoria Quay
Edinburgh EH6 6QQ

Scottish Government consultation process

Consultation is an essential part of the policy-making process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: <http://consult.scotland.gov.uk>. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

Responses will be analysed and used as part of the decision-making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review;
- inform the development of a particular policy;
- help decisions to be made between alternative policy proposals; and
- be used to finalise legislation before it is implemented.

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

Next steps

The Scottish Government will review responses to the consultation and the issues raised during engagement with stakeholders to inform the phased development and implementation of the Programme.



Energy Efficient Scotland

RESPONDENT INFORMATION FORM

Please Note this form **must** be completed and returned with your response.

To find out how we handle your personal data, please see our privacy policy:

<https://beta.gov.scot/privacy/>

Are you responding as an individual or an organisation?

Individual

Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email

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

Publish response with name

Publish response only (without name)

Do not publish response

Information for organisations:

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

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

No



Scottish Government
Riaghaltas na h-Alba
gov.scot

© Crown copyright 2019

OGL

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.scot

Any enquiries regarding this publication should be sent to us at
The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-78781-695-4 (web only)

Published by The Scottish Government, March 2019

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS510726 (03/19)

W W W . G O V . S C O T