

Introduction

Scottish Renewables is the voice of the renewable energy industry in Scotland, representing over 270 organisations working across the full range of technologies providing clean, sustainable, low-carbon heat, power and transport to Britain's homes and businesses.

We welcome the aims of the Scottish Energy Efficiency Programme to reduce energy demand and decarbonise the heat supply of Scotland's built environment. We also support the level of ambition contained within the programme and the recognition that a long term, coordinated programme will be required.

However, we have some concerns with the trajectory of the emission reduction pathways set out in the draft Climate Change Plan which SEEP has adopted as its objectives, and these concerns are highlighted in our response.

A summary of our key points are as follows:

- The current title of the programme does not adequately reflect its aim, which is not only to improve energy efficiency but also to decarbonise heat supply. Given the significant role played by the decarbonisation of heat in Scotland's emissions pathway, we believe it is important that the name of the programme accurately reflects its objectives.
- A clear action plan, containing timescales for delivery and interim targets is required for the delivery of our low-carbon heat and energy efficiency ambitions.
- Local Heat and Energy Efficiency Strategies (LHEES) should be considered as part of the SEEP agenda in a holistic, integrated approach to tackling climate change and fuel poverty strategically at a local and national level.
- The Scottish Government should target the use of existing low-carbon heat technologies where possible, as early as possible.

Our detailed comments on the Strategy's proposals are outlined below.

Thinking about current Government schemes and the delivery landscape, we would welcome stakeholders' views on:

What currently works well, including aspects of existing schemes that should be retained?

Financial incentives such as the Home Energy Scotland Loan scheme, District Heating Loan Scheme and Low Carbon Infrastructure Transition Programme are required to drive uptake for

low-carbon heat and maximise investment in renewable heat in Scotland. These existing loan schemes should be continued and the Scottish Government should explore where these have been particularly successful and could be expanded.

Since the launch of the Non-Domestic RHI in 2011 and the Domestic RHI in 2014 the scheme has played an important role in encouraging the use of renewable heat technologies. We recommend that steps are taken to increase the number of renewable heat projects being deployed in Scotland over the next three to four years, capitalising on the support available under the RHI. The continuation of the RHI or equivalent beyond 2021 will be critical to give long-term certainty to the renewables industry.

What are the main delivery challenges faced at present and how might these be overcome?

In June 2016, Scottish Renewables organised a workshop in partnership with the Energy Saving Trust (EST) to identify the key barriers facing the microgeneration sector in Scotland. The full report is available on the EST website¹ but we have summarised the main points relating to this consultation below, along with other challenges identified by members.

Consumer confidence and demand

Performance estimates given by installers for renewable technologies, particularly heat pumps and biomass, are often incorrect, which can lead to overestimated savings and income which may lead to significant customer dissatisfaction with their system. Similarly, the in-situ performance of renewable technologies due to poor design or installation also needs to be improved.

In order to overcome these barriers, consideration should be given to reviewing and updating (where possible) the guidance for householders on performance estimates delivered through Home Energy Scotland and the EST website. In the short term, improvements could also be made to consumer information and advice to help enable consumers to compare products and make better choices.

One of the key barriers to renewable heat uptake is a lack of knowledge of the low-carbon heat options available and how they can be best utilised. As SEEP will be one of the main policy tools for achieving heat decarbonisation it is imperative that the policy considers how best to address this and adopt an effective educational awareness-raising campaign targeted at consumers.

¹<http://www.energysavingtrust.org.uk/sites/default/files/reports/Microgeneration%20workshop%20feedback%20report%20September%202016%20FINAL.pdf>

Compliance

In some circumstances, a building warrant is required for installing renewable technologies in a home. While we understand the necessity for warrants in certain situations, obtaining a warrant could take as long as 30 weeks. This is particularly problematic for householders looking to replace an existing heating/hot water system who may be left without these services for a considerable length of time. This issue could be overcome by the Scottish Government using its powers over building control to shorten the timescales for obtaining a warrant.

Section 6 of Scotland's new Building Standards sets out measures that should be incorporated into new buildings to conserve fuel and power. Despite new measures coming into force in October 2015 we believe that current regulations requiring installation of renewable technologies do not go far enough. We would like to see the continued assessment of building standards to evaluate impact on the uptake of low-carbon heat technologies.

Planning

Scottish Planning Policy requires planning authorities to "support the development of a diverse range of renewable energy technologies, guide development to appropriate locations and provide clarity on the issues that will be taken into account when specific proposals are assessed".

However, more progressive planning policies would help deliver the step change in development needed to meet Scotland's renewable energy targets. Experience in other parts of the UK and in Europe has found that a strong planning framework plays a key role in ensuring a significant uptake of renewable and low-carbon heat technologies. The Scottish Government should consider a similar commitment to district heating as set out in the London Plan², which requires development proposals to evaluate the feasibility of combined heat and power. The development of SEEP must be considered in line with the ongoing review of the planning system.

Property values

Scottish Renewables is concerned that information about renewable energy technologies installed in homes is not taken into consideration when a property is valued. Information on technologies' output, potential cost savings and environmental impact should be included in the Home Report as well as in the property's associated marketing materials.

² <https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-chapter-five-londons-response/poli-0>

We are aware that this was considered in Scotland's Sustainable Housing Strategy (2013)³ and the Joint Housing and Delivery Plan (2015)⁴, however there is no indication that the Scottish Government is looking to address this issue.

As the SEEP consultation considers how building owners can be incentivised to take action on energy efficiency and low-carbon heat we believe that this issue should be addressed as part of its development. Any change would need to be backed up with a wider education process to ensure owners are familiar with new technologies and are aware of the benefits they can deliver. Longer term, this could help raise awareness and change people's perceptions of investing in renewable technologies to reduce carbon emissions.

How can Scotland best meet this vision and underpinning objectives in a way that is both socially and economically sustainable and supports long term inclusive growth?

Scottish Renewables supports the draft Climate Change Plan's (CCP) strong ambitions on heat, given that heat accounts for 53%⁵ of energy demand in Scotland. However, we recognise that the emissions pathways for both domestic and non-residential sectors are very ambitious and, as these have been adopted as the objectives of SEEP, we have detailed our concerns below.

While we welcome the ambition set out in the draft CCP we are concerned that the pathways to supply 80% of domestic and 94% of non-domestic buildings' heat with low-carbon technologies by 2032 are extremely challenging. We are particularly concerned with timescales for delivery which will see focus on energy efficiency up to 2025, with a move away from gas not taking place until after 2025. As a result, the emissions reductions from heat are heavily back-loaded through this time period and a huge step change in delivery is required post-2025.

While we understand decisions relating to the future of the gas network are anticipated within the coming years - the outcome of which could have a significant impact on the roll out of low-carbon heating technologies - Scottish Renewables believes the Scottish Government should target the use of existing low-carbon heat technologies where possible, as early as possible. This will help smooth the emissions reduction pathway between now and 2030 while giving much needed certainty to the existing renewables sector.

As highlighted in the Committee on Climate Change's report 'Next Steps for UK Heat Policy'⁶, gas boilers typically have a lifetime of around 15 years. Therefore, in order to meet the 2032 target contained in the draft CCP, where there is a requirement for a new boiler, low-carbon systems will have to be installed now to avoid the need for premature scrappage. This highlights the need to push forward with existing renewable heat technologies prior to 2025.

³ <http://www.gov.scot/Publications/2013/06/6324>

⁴ <http://www.gov.scot/Publications/2015/05/3392>

⁵ <https://www.gov.uk/government/collections/total-final-energy-consumption-at-sub-national-level>

⁶ <https://www.theccc.org.uk/publication/next-steps-for-uk-heat-policy/>

Given the significant role played by the decarbonisation of heat in Scotland's emissions pathway it is critical that a detailed sector road map which outlines the technologies considered to be 'low-carbon' and 'renewable' is delivered and implemented as quickly as possible. Scottish Renewables' recent papers 'A Vision for Low-Carbon Heat in Scotland'⁷ and 'Biomass Heat in Scotland: 16 Priorities for Action'⁸ provide further information on our recommended policies to achieve our targets and raise awareness of the positive contribution this sector can make to individuals and communities. Scottish Renewables would also welcome sight of the underlying modelling work to allow us to understand how the 2032 targets and emission reduction trajectories are currently anticipated to be met, including the associated system requirements.

We would welcome stakeholders' views on how to set appropriate milestones for energy efficiency improvements and heat decarbonisation of buildings to ensure that the level of emissions reduction ambition (i.e. near zero carbon buildings) is achieved.

In order to encourage the full range of zero-carbon energy technologies to come forward we would like to see the introduction of further targets for the proportion of heat to be delivered from renewable sources.

Section 44 of the Climate Change (Scotland) Act 2009 places a duty on public bodies to act in a way best calculated to contribute to the delivery of the targets set out in Part 1 of the Act. Along with reducing overall energy demand, installing low-carbon and renewable sources of heat could go a long way towards achieving our targets. Public sector buildings offer significant renewable heat potential and can act as a catalyst to market growth. However progress in this area remains slow. If there were a requirement for public sector bodies to opt in to renewable or low-carbon district heating networks (where the supplier could demonstrate that heat can be delivered at competitive market rates), or to proceed with their own renewable or low-carbon heat scheme as an alternative, uptake would almost certainly improve.

Scottish Renewables supports the Scottish Government's ambition for district heating but would highlight the need for a significant proportion of these schemes to include renewable heat in order to achieve our wider renewable heat targets. The UK National Comprehensive Assessment of District Heating and Cooling (2015)⁹, estimated that "4TWh p.a. (7%) of Scotland's total heat demand in 2025 could be met by district heating and cooling on a socially cost effective basis". We believe that the Scottish Government should indicate how much of this would need to come from renewable sources to ensure that the level of emissions reduction to which it aspires is achieved.

⁷ <https://www.scottishrenewables.com/publications/vision-low-carbon-heat-scotland/>

⁸ <https://www.scottishrenewables.com/publications/biomass-heat-scotland-16-priorities-action/>

⁹ <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>

How might regulation and standards be used most effectively across the different sectors and when should they be applied across the lifetime of the programme?

As noted in the previous answer, we believe that the public sector has a crucial role in helping to decarbonise heat supply and reduce energy demand. Regulations and standards will be required to ensure delivery.

What is the best approach to assessing energy efficiency and heat decarbonisation improvements to buildings? How could existing approaches best be used or improved and at what level and scale (e.g. unit, building or area) should assessment be carried out?

The assessment of energy efficiency and heat decarbonisation improvements to buildings under SEEP must align with proposals to create Local Heat and Energy Efficiency Strategies (LHEES). Further consideration of how this process is managed would need to be given.

What is needed to encourage private investment in energy efficiency and heat decarbonisation, including the take-up of loans by a wider range of owners and occupiers?

We recognise the need to attract private sector investment and support as outlined in the consultation, however there is very little in the consultation on how this would be achieved. It would appear that the role of the private sector in SEEP is limited or not understood at this stage. There is confusion in the sector as to what is actually going to be done and what areas of focus there will be.

Private investment in energy efficiency and heat decarbonisation would be encouraged by ensuring that both are accurately considered when valuing properties as described in a previous section.