Public Accounts Committee  
House of Commons  
LONDON

SW1A 0AA

10 April 2024

**Scottish Renewables’ written evidence to the House of Commons Public Accounts Committee Call for Evidence on Decarbonising Home Heating**

**About Scottish Renewables**

Scottish Renewables is the voice of Scotland’s renewable energy industry. Our vision is for Scotland leading the world in renewable energy. We work to grow Scotland’s renewable energy sector and sustain its position at the forefront of the global clean energy industry. The sectors we represent deliver investment, jobs, social benefits and reduce the carbon emissions which cause climate change.

Our members work across all renewable energy technologies, in Scotland, the UK, Europe and around the world. In representing them, we aim to lead and inform the debate on how the growth of renewable energy can help sustainably heat and power Scotland’s homes and businesses.

**Executive Summary**

Scottish Renewables welcomes the opportunity to provide written evidence to the House of Commons Public Accounts Committee inquiry into decarbonising home heating.

Scottish Renewables’ written evidence focuses on the importance of district heating for decarbonising home heating.

**Our submission focuses on three key areas:**

* The UK Government should prioritise reducing operating costs for heat pumps.
* Funding gaps should be filled for small to medium sized enterprises, larger properties and place-based financial solutions.
* District heating should play a greater role in decarbonising heat and cannot be compared to individual heat pumps in properties.

**Written Evidence**

Our written evidence is based on and structured according to the National Audit Office’s [report on decarbonising home heating](https://www.nao.org.uk/reports/decarbonising-home-heating/).

Scope of report and overview

1. Although heat is devolved in Scotland, Scotland’s decarbonisation progress is hindered by UK policy on energy costs.

The National Audit Office’s (NAO) report focuses on how to encourage individuals to install heat pumps to heat their homes. Both the UK and Scottish Governments offer grants and loans to households taking up this option. However, grants and loans only address installation costs. The main issue with the operating cost of a heat pump is the high price of electricity compared to gas.

The UK Government must publish its promised consultation on rebalancing the costs of gas and electricity. Alternatively, this issue could be solved with a specific heat pump tariff, with lower electricity prices for those moving to heat pumps.

1. The Sixth Carbon Budget, published by the Climate Change Committee, in its Balanced Net-Zero Pathway states that:

“Our Balanced Net Zero Pathway implies that by 2030, low-carbon heat installations in homes could represent up to around 80% of sales. Of these low-carbon heat installations, 75% are heat pumps (including hydrogen hybrids), 19% are low-carbon heat networks, and 5% are other flexible electric heating with space heat storage or solar thermal”.

To meet the UK’s 2050 (and Scotland’s 2045) climate change targets, interim milestone ambitions must be accomplished.

Scottish Renewables believes that a greater role for heat networks is achievable if a more strategic long-term approach was taken and all UK cities developed city-scale heat networks over the next 10 – 15 years. These large heat networks would utilise waste heat sources and install large heat pumps to take advantage of renewable heat. Heat networks have been recognised in Scotland as the likely method for cities to decarbonise their heating.

1. Heat pumps and district heating are set to be the primary low-carbon technologies deployed in the UK, yet district heating is more than a technology; it is infrastructure, whereas heat pumps are individual solutions. Therefore, it is inappropriate to seek to compare the two technologies on a like-for-like basis.
2. Within policy, secondary technologies, such as batteries and solar thermal are not being supported with support focused on primary heating technologies, yet these secondary technologies have an important part to play.
3. The NAO report only focuses on domestic buildings. Non-domestic buildings need to decarbonise their heating too and could provide anchor loads for heat networks.
4. The UK Government, in its Heat and Buildings Strategy, recognised the need for a “portfolio of green funding and finance options to be available”.

The Scottish Government’s Green Heat Finance Taskforce has published a [Stage 1 report](https://www.gov.scot/publications/green-heat-finance-taskforce-report-part-1-november-2023/) looking at individual innovative financial solutions to the heat decarbonisation funding gap. The Taskforce recognised that individual solutions are only part of the issue, and it is now working on a Stage 2 report examining communal place-based solutions and heat networks. This report is due to be published in summer 2024.

**Part 2: Establishing a pathway to decarbonising home heating.**

1. We agree with the NAO recommendation for a long-term strategic consumer engagement plan. The Scottish Government produced its [public engagement strategic framework](https://www.gov.scot/publications/public-engagement-strategic-framework-heat-transition/) in December 2023 based around the pillars of understanding, participating and acting.

Public engagement is crucial to explain the benefits of heat pumps and heat networks and the externalities of gas heating such as contributing to climate change and poorer air quality.

1. The financial and logistical challenges of decommissioning the relevant gas network must be carefully managed in sync with the overall development, considering the broader implications for existing gas and power networks as well due to reduced demand. This includes the continued use of gas for cooking in addition to heating.
2. Scotland’s H100 hydrogen trial is progressing well. SGN reports continuing construction until August 2024, and this is paving the way for hydrogen supply chain and project development. The project also exemplifies positive and successful community outreach and uptake in the project.
3. Scottish Renewables’ position on hydrogen for heating is that while green hydrogen could be a solution in the longer term, especially for hydrogen valleys or clusters, we have the technology now for decarbonising heat and we should progress our work on district heating and heat pumps where suitable.
4. Scotland’s 32 local authorities are publishing Local Heat and Energy Efficiency Strategies and Delivery Plans in 2024 to bring a local approach to the heat decarbonisation challenge.
5. In November 2023, Ofgem [announced](https://www.ofgem.gov.uk/publications/ofgem-green-lights-regional-energy-planning-roles-speed-net-zero-transition) how it plans to involve local authorities in energy network and heat planning through Regional Energy Strategic Planners (RESPs).

Due to the enormous scale of the network projects needed, and the lack of focus on distribution networks, there is a gap in policy and support for local authorities. This policy and support would work best if driven locally, with RESPs potentially serving as the streamlined voice of local communities. However, it will be critical to ensure that any changes to arrangements are considered holistically to avoid an incremental approach, creating delays and increasing costs across the piece.

We welcome Ofgem’s announcement and look forward to the detailed design of this policy. The democratisation of energy planning must be understood as an enabler to net-zero rather than a box to tick; plans co-developed with local stakeholders will drive faster decarbonisation of our communities.

**Part 3: Progress installing heat pumps.**

1. As set out in the UK Government’s Future Support for Low Carbon Heat consultation, the domestic and non-domestic Renewable Heat Incentive (RHI) schemes made a significant contribution to progress against renewable energy targets and carbon budgets.

The majority of the low-carbon heat projects in Scotland by 2020 had been supported by the RHI. The scheme has funded installations in off-gas grid buildings, new builds and heat networks, as well as in biomethane production.

The Boiler Upgrade Scheme, the successor to the domestic RHI, has a maximum capacity of 45kWth for either a heat pump or biomass boiler installed to replace a fossil fuel system. This limits larger properties, and small to medium sized enterprises (SMEs) from installing clean heating.

There is also no credible alternative to the non-domestic RHI, so there is now an increasing sector of the UK building stock without policy and funding support to reduce their carbon emissions and change to renewable heating sources.

1. As set out in point 1 above, we see the main barrier to the mass roll out of heat pumps being the high operating costs of heat pumps. This could be solved by developing a specific heat pump tariff for cheaper electricity, to encourage higher installations of heat pumps.

This heat pump tariff, alongside a national public engagement campaign would go a long way towards achieving the UK Government’s 600,000 heat pump installation target by 2028.

1. The Clean Heat Market Mechanism (CHMM), when finally introduced, should have a positive impact on sales of heat pumps, as will building standards. However, minimum energy efficiency standards for all tenures would also drive the transition to low-carbon heating.

Energy efficiency must be considered alongside heat decarbonisation, as many as 1 in 3 households in Scotland are in fuel poverty and changing fuel sources must not incur additional costs.

We support the introduction of minimum energy efficiency standards for all tenures, thereby supporting the installation of clean heating systems. To drive cost efficiencies, industry needs a level playing field for all clean heating systems.

Scottish Renewables would be keen to engage further with this agenda and would be happy to discuss our response in more detail.

Yours sincerely,



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**Head of Heat and Solar**  
**Scottish Renewables**