



Department for  
Business, Energy  
& Industrial Strategy

**Lord Callanan**  
Minister for Business, Energy and Corporate  
Responsibility

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By email: [bethan.aldridge@sparse.gov.uk](mailto:bethan.aldridge@sparse.gov.uk)

4 August 2021

Dear Brian,

Thank you for your email dated 6 July, sharing your recent report exploring the rural dimension to the UK's move towards net zero emissions. I was pleased to read your report and I am grateful for your helpful contribution to the debate on these important issues.

I noted your concerns regarding heating homes in rural areas. Along with transport, heat in buildings is one of the biggest sources of greenhouse gas emissions in the UK, accounting for 23% of total UK emissions. As you state, there are a number of options with the potential to play an important role in decarbonising heat, including heat networks, heat pumps, hydrogen and biogas. Given the diversity of heat demand, including the specific challenges present in rural areas, no one solution can provide the best option for everyone - a mix of technologies and customer options will need to be available to decarbonise heat at scale.

The Government is planning to publish a Heat and Buildings Strategy in due course, which will set out the immediate actions we will take for reducing emissions from buildings. These actions include the deployment of energy efficiency measures and low carbon heating as part of an ambitious programme of work required to enable key strategic decisions on how we achieve the mass transition to low-carbon heat and set us on a path to decarbonising all homes and buildings. Alongside the publication of the Heat and Building Strategy, we are planning to consult on new regulations to phase out heating systems using high carbon fossil fuels such as oil and coal in homes, businesses and public buildings off the gas grid during the 2020s.

As you mention, a large proportion of off gas grid properties are located in rural areas. In 2018 BEIS ran an extensive programme of engagement to seek views on how industry, Government and consumers could work together to phase out the installation of high carbon fossil fuels from rural homes and businesses off the gas grid during the 2020s. Evidence suggests that heat pumps are a cost-effective way of decarbonising heat and can be widely used across most homes including those not connected to the gas grid. BEIS modelling indicates around 80 to 90 per cent of homes currently have sufficient energy efficiency and internal electrical limits to accommodate a heat pump.

The Government also recognises that biofuels such as bioLPG and hydrotreated vegetable oil biodiesel (HVO) may play a role in future off-gas-grid decarbonisation, particularly for properties that are not suitable for a heat pump. However, further evidence is needed to consider what role these biofuels could play, and to develop the policy framework which would support such a role. In gathering further evidence, we are giving particular consideration to the

availability and sustainability of biofuel feedstocks, the total lifecycle emissions for different fuels, and the best uses of biofuels across the economy. A Call for Evidence was recently published by the department to inform the development of a Biomass Strategy. This strategy will review the amount of sustainable biomass available to the UK, including liquid biofuels, and how this could be best used across the economy to achieve our net zero target. It will also assess the UK's current biomass sustainability standards, which are some of the most stringent in the world, to see where and how we can improve them even further.

The department also provides, and will continue to provide, support for households that are off the gas grid to switch to low carbon heating, including in homes where heat pumps are unsuitable. The Domestic Renewable Heat Incentive (DRHI) is targeted at (though not limited to) homes that are off the gas grid, and supports biomass boilers and pellet stoves, and solar thermal (for hot water) systems as well as heat pumps. The DRHI is scheduled to close in 2022, but it will then be replaced by the Clean Heat Grant scheme, which will provide upfront capital grants for the installation of low carbon heating systems in homes and small non-domestic buildings. That scheme is also targeted at supporting buildings off the gas grid to transition from high carbon fossil fuel heating, such as oil, to low carbon alternatives. Biomass boilers will be available as an alternative to heat pumps, providing certain eligibility requirements are met.

The Government is also supporting other technologies that have a part to play in the path to net zero, including heat networks and hydrogen, however these may have a more limited role in rural areas and buildings not connected to the gas grid. Further, we are supporting households to make improvements to the energy efficiency of their homes by allocating support across several existing government schemes, including the Home Upgrade Grant, the Green Homes Grant Local Authority Delivery Scheme, and the Social Housing Decarbonisation Fund.

As you mention, half of all homes in small settlements lie off the mains gas grid. The recently launched Home Upgrade Grant, backed by an initial £150 million of funding, targets support specifically towards these households. The scheme will support energy efficiency upgrades and low carbon heating for low-income households living off the gas grid in England. We are also providing support through the £500m Green Homes Grant Local Authority Delivery Scheme, which will support around 50,000 low-income homes across more than 200 Local Authorities to become more energy efficient. We have committed a further £200m to upgrade more homes under Local Authority Delivery Scheme. Local Authorities are able to bid for this money now in the Sustainable Warmth Competition.

In addition, to develop the skills required to support the transition to net zero we are undertaking work to understand the existing skills base and the mechanisms for increasing the number of installers, including through the Off Gas Grid Installer Skills Research Project which is due to conclude shortly. We are also working with the Department for Education to ensure that new entrants to the market receive high quality training via further education routes. At a local level, the Government is supporting skills development and advice provision through several local supply chain demonstration pilots, which are testing new approaches to supporting home energy retrofit. We are also working with Local Authorities through the Local Energy Programme to develop support for local retrofit programmes by addressing local barriers to clean growth activity.

I also noted your concerns regarding transport in rural areas. The Government's Transport Decarbonisation Plan<sup>1</sup> is clear that every place in the UK will have its own net zero emission transport network before 2050, serving the unique needs of its communities. We fully recognise

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<sup>1</sup> [www.gov.uk/government/publications/transport-decarbonisation-plan](https://www.gov.uk/government/publications/transport-decarbonisation-plan)

the particular challenges faced by rural and remote areas in this regard, and are working, including through our National Bus Strategy and upcoming 'Future of Transport: Rural Strategy', to ensure our policies recognise differing geographies and deliver for people in those communities.

Our National Bus Strategy<sup>2</sup> launched in March and is explicit about seeking to ensure that the needs of rural transport users are given equal consideration to those in urban environments and is supportive of improved connectivity and availability of services in rural areas. The strategy will also support new forms of bus provision in areas that are currently not adequately served by conventional timetabled buses. This will build upon our £20 million Rural Mobility Fund (RMF) which is trialling innovative, demand-led minibuses in rural and suburban settings. We hope the RMF trials will provide us with a better understanding of how to meet the future public transport needs in rural and suburban areas, where the demand and terrain are not the same as urban locations. Through the Rural Mobility Fund, the Government is supporting pilots using zero emission vehicles which will improve our understanding of some of the challenges unique to operations in rural areas.

We also want people across the country to have the opportunity to make the move to electric vehicles. The vast majority of electric vehicle drivers choose to charge their cars at home, overnight (and 85% of dwellings in rural areas have off-street parking) or increasingly at the workplace. For those without access or undertaking longer journeys, public charging is important. We will invest £1.3 billion in accelerating the roll out of charging infrastructure, targeting support on rapid charge-points on motorways and major A roads to dash any anxiety around long journeys, and installing more on-street charge-points near homes and workplaces to make charging as easy as refuelling a petrol or diesel car. Local Authorities in rural areas are able to take advantage of the On-street Residential Charge-point Scheme (ORCS), which assists them with the cost of installing charge-points on residential streets.

Furthermore, the Government will be publishing an Electric Vehicle Charge-point Infrastructure Strategy which will set out our vision and action plan for charging infrastructure rollout needed to achieve our 2030/35 phase out successfully and accelerate the transition to a zero-emission fleet. The Strategy will set out the expected roles for different stakeholders and how government will intervene to address the gaps between the current market status and our vision as well as how we will monitor progress.

I also noted your concerns about energy generation in rural areas. The Government will continue to work with Local Energy Hubs to support projects which are tailored and delivered to meet local needs, joining up work between local areas, investors and central Government.

The Prospering from the Energy Revolution (PFER) programme is demonstrating how a range of local actors including businesses, communities, Local Authorities and academics can accelerate decarbonisation through innovative business models that engage people and unlock system flexibility at the edges of the energy system. The Government will work with industry to closely monitor learnings from the programme through to its end in March 2023 and work with key organisations to ease barriers to the delivery of smart, local energy solutions. As part of the programme, UK Research and Innovation is also funding the Energy Systems Catapult to develop tools to help provide local capability in delivering smart energy projects. For a case study of a PFER project based in Oxford, please see pages 33/34 of our recently published Smart Systems and Flexibility Plan<sup>3</sup>.

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<sup>2</sup>[www.gov.uk/government/publications/bus-back-better](https://www.gov.uk/government/publications/bus-back-better)

<sup>3</sup>[www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021](https://www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021)

Thank you again for writing to highlight your report. I do hope my response is helpful.

A handwritten signature in blue ink, reading "Martin Callinan". The signature is written in a cursive style with a long horizontal flourish at the end.

**Lord Callanan**