

# Phasing out the installation of fossil fuel heating in homes off the gas grid

## Consultation Response

12 January 2022

### Summary

- As an organisation and a sector, we are committed to tackling both the climate crisis and eradicating fuel poverty. As such, we broadly welcome the proposals outlined in this government consultation.
- We support a heat pump first approach, with some flexibility to deploy other genuinely zero carbon technologies where they are most appropriate.
- To best meet these regulations, continued access to the Social Housing Decarbonisation Fund and other government support in timescales aligned to these regulations will be essential for housing associations.
- Our members have concerns about the capacity of the electricity grid to accommodate the significant transition to heat pumps.
- Measures to ensure running costs for residents are affordable needs to be at the heart of this transition to electric heat pumps.

## Introduction

The National Housing Federation (NHF) represents housing associations in England. Our members provide more than two and a half million homes for around six million people. Each year our members invest in a diverse range of neighbourhood projects that help create strong, vibrant communities.

As an organisation and a sector, we are committed to tackling both the climate crisis and eradicating fuel poverty. As such, we broadly welcome the proposals outlined in this government consultation. This document contains our full responses to a selection of the consultation questions and was developed in consultation with a diverse group of members of the NHF with significant numbers of off-gas grid homes. These included meetings with the [Rural Housing Alliance](#) and members across England from Cornwall to North Yorkshire. Some of our off-gas grid members are already well experienced with heat pump deployment and so were able to offer valuable information about the benefits and challenges they have faced so far and anticipate from these proposed measures. We have summarised the key aspects of our response in this section, but you can find our more extensive answers to questions in the consultation later on in this document.

Our members repeatedly raised the point that there is a need for fabric insulation works to take place in many off-gas grid properties before heat pumps are installed to ensure residents find them both comfortable and affordable. Off-gas grid homes are mostly owned by smaller housing associations and so ensuring their access to the Social Housing Decarbonisation Fund and other government funding in the next few years will be essential to ensure they can successfully adapt their homes to heat pumps from 2026. Indeed, as these homes have been earmarked for a faster transition to heat pumps than those on the gas grid, we believe their access to government financial support should be better aligned with these enhanced pathways, with a potential role for housing associations to access the forthcoming Home Upgrade Grant alongside the Social Housing Decarbonisation Fund.

The issue of running costs of heat pumps for residents was repeatedly identified as a barrier to wider deployment. Solutions to this can include government support for fabric insulation works prior to heat pump installation, bringing down electricity costs for example by removing environmental and social levies on electricity bills and placing them on gas (or even better into progressive taxation) and further targeted support for fuel-poor households through measures such as the Warm Homes Discount. Furthermore, we believe any assessment of whether a property is viable to

have a heat pump installed when its current heating system reaches the end of its life should have affordability for the resident at its heart.

Members also repeatedly raised concerns about the capacity of the electricity distribution system to cope with mass heat pump deployment in their areas. We believe work needs to be done to prepare the electricity grid for greater heat pump deployment by 2026 and that the costs of such upgrades to the grid should not fall on landlords or residents who will be required to meet the regulations.

Members in the South West with experience in heat pump deployment raised concerns about the focus on air source heat pumps. Coastal weather systems, such as those affecting one housing association in Cornwall, can erode externally placed air source heat pumps. Our members requested flexibility in the regulations to allow for ground source heat pump deployment, which they are already well versed in, where it is more appropriate. In addition, as many off-gas grid homes are located in areas with significant planning restrictions, ground source heat pumps often allow housing associations to navigate these more effectively. It should be noted however that ground source heat pumps do have greater financial cost than air source heat pumps. As a more general point, while we support a heat pump first strategy, we think flexibility should be introduced in the regulations to allow for other genuinely zero carbon heating solutions where they may be appropriate, for example heat networks or other electric heating.

**For more information about our responses, please contact**  
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## Consultation response

**1. Do you agree with the principle of working with the natural boiler replacement cycle as the key trigger to deploy low carbon heat? Please provide evidence to support your response.**

Yes, we agree with this principle. However, many of our members with off-gas grid homes have already started (and are keen to continue) to deploy heat pumps at a faster rate than natural replacement cycles. Our members informed us that they have had great success in proactively identifying households where the installation of a heat pump will have benefits on their thermal comfort and energy bills. Where they have done so, they have worked with residents to implement fabric insulation and heat pumps as a package prior to natural replacement cycles. They also often use different trigger points such as change of tenancy to identify homes for heat pump transition. We think the government should support this more proactive approach where possible alongside these regulations.

**2. Would a 2026 end date for the installation of fossil fuel heating in homes off the gas grid give industry and consumers sufficient time to prepare for the regulations? Please provide evidence to support your response.**

We support the 2026 end date as this will be essential to support net zero carbon budgets. However, it is vital that the right ecosystem of policy measures are in place to make this regulation viable. Homes, residents and national infrastructure needs to be prepared for this transition ahead of 2026. The costs and availability of heat pumps and accompanying fabric insulation measures needs to be improved to make the transition financially viable for housing associations. Financial and other support for the mostly smaller housing associations with off-gas grid properties must continue to be available through the Social Housing Decarbonisation Fund and other measures to ensure the fabric of their buildings is prepared for heat pump deployment from 2026. Off-gas grid homes often struggle to source sufficient numbers of skilled installers and maintenance staff for heat pumps and so more work to develop skills in these areas is needed.

Our members are also very concerned about the capacity of the electricity grid and local networks to accommodate the large scale adoption of heat pumps in many off-gas grid areas. New housing association developments featuring heat pumps have often required housing associations to contribute towards local electricity grid upgrades and sub stations. We do not believe the costs of upgrading electricity

distribution systems should fall on landlords or residents when they are transitioning existing stock from fossil fuel heating systems to heat pumps as a result of these regulations. Work should be done to prepare the electricity grid in off-gas grid areas for this transition ahead of 2026. Furthermore, many off-gas grid properties will need their own internal electricity systems to be rewired and upgraded to accommodate heat pumps.

For residents, heat pumps can bring great benefits. However, the current high cost of electricity needs to be addressed to make them more viable. Solutions to this might include support for fabric insulation works prior to installation, bringing down electricity costs for example by removing eco and social levies on electricity and placing them on gas (or even better into progressive taxation) and further targeted support for fuel-poor households through measures such as the Warm Homes Discount.

Finally, sustained resident engagement and access to independent, expert advice is essential before a home's existing fossil fuel heating system comes to its natural end. Heat pumps are an unfamiliar technology for most people in the UK and are not a like-for-like replacement for fossil fuel systems. Housing associations are well placed and experienced in resident engagement activities on issues like this. A [report by TPAS and Placeshapers](#) in this area, which the NHF contributed to, highlighted these opportunities. However, a government-led awareness campaign would help build the public's knowledge and understanding of what they can do in their homes to help lower emissions. Housing associations are keen to help the government deliver such a campaign where possible. Furthermore, an accessible and [comprehensive framework](#) is needed to inform, protect and support people throughout and after the clean heat transition. The [Simple Energy Advice](#) website should be expanded to become a central information resource, providing more information on consumer protection and installation processes.

**3. Do you agree with a heat pump first approach to replacement heating systems in fossil fuel heated homes off the gas grid that can reasonably practicably accommodate a heat pump? Please provide evidence to support your response.**

We strongly agree with a heat pump first approach to replacement heating systems in homes off the gas grid. New analysis from the [Energy Systems Catapult](#) finds that all homes are suitable for heat pump installations. The project has not identified any particular type or age of property that cannot have a successful heat pump

installation (with the right energy efficiency measures in place). Furthermore, some of our off-gas grid members already have substantial experience of successfully deploying heat pumps.

However, concerns were raised by some off-gas grid housing associations in the South West who said air source heat pumps may not be suitable for the specific weather conditions of coastal areas, notably due to salt air corrosion. They are supportive of and experienced in deploying heat pumps but prefer the use of ground source due to the climate. We believe any regulations brought in should allow ground source heat pumps to be deployed where they are appropriate. In addition, off-gas grid areas are often subject to strict planning controls and ground source heat pumps can be a route around this. It should be noted however that ground source heat pumps have higher capital costs and often require large pieces of land that may not be available or could be used for additional development.

Furthermore, more work is needed to bring down the capital, running and maintenance costs of heat pumps this decade to make them more viable and attractive in all properties. We also believe the Social Housing Decarbonisation Fund should play a greater role in funding heat pump deployment in housing association homes that fall under these new regulations – while continuing to focus largely on fabric measures.

**4. Do you have any views on the design or content of guidance that will help households and installers determine whether it is reasonably practicable to install a heat pump? Please provide evidence to support your answer.**

Our only concern in the consultation document in this area was a lack of clear reference to including running costs for residents in any viability assessment. We believe there should be an emphasis in the guidance for stakeholders that the decision as to whether it is 'reasonably practicable to install a heat pump' must include affordability to the resident. If the installation of a heat pump would adversely impact a social housing resident's energy bills, particularly if they are in or at risk of fuel poverty, then the installation should not proceed until it is no longer a risk.

**6. Do you agree that the performance of replacement heating systems in homes off the gas grid that cannot reasonably practicably accommodate a heat pump should reflect the current high standards of performance**

**that can be delivered through high temperature heat pumps and solid biomass systems? Please provide evidence to support your answer.**

Yes, although many homes are technically appropriate to accommodate a heat pump, with the right level of fabric insulation in place. High temperature heat pumps run on low carbon electricity and can still be zero emissions if the electricity grid is decarbonised, and could potentially be coupled with solar thermal and solar photovoltaic (PV) technologies to reduce pressures on the electricity grid. It will be necessary to accelerate steps to reduce the running costs of electric heat pumps through removing levies from electricity bills, in order to ensure those households using high temperature heat pumps are able to afford their heating costs. Further targeted financial support for residents in these hard to decarbonise homes would also be welcome to mitigate the higher running costs of their technological solutions.

- 7. Do you agree that future use of solid biomass to decarbonise heat in homes off the gas grid should be limited to rural, off-gas grid areas where air quality can be better controlled, and in ‘hard to treat’ properties that are not suitable for other low carbon heating technologies? Please provide evidence to support your response.**

We believe the use of biomass systems should be minimised at all costs and regulations should be stringent about where such heating systems are permitted. We have concerns about the wider social and environmental impacts of biofuels both in the UK and globally. Furthermore, our members rarely thought these systems would be practicable and sourcing electricity for high temperature heat pumps tended to be much simpler than sourcing biomass fuel.

- 8. Do you have any views on the development of heating fuels and systems which will be consistent with wider government objectives on net zero emissions, environmental sustainability and air quality, and offer a secure and affordable fuel supply to consumers, from 2026? Please provide evidence to support your answer.**

Heat pumps and complementary fabric efficiency measures are the proven solution, which is readily available for roll out across the majority of off grid homes and should be the strategic priority for the government. Development of novel heating fuels may have a small role to play but the timelines associated with the development and deployment of new solutions are not consistent with projected emissions trajectories necessary for net zero. Furthermore, certainty in the technology solutions and thus

investment costs for housing associations who operate 30 year business plans is welcome.

**9. Do you agree with an end date for the use of remaining fossil fuel heating in homes off the gas grid by the late 2030s? Please provide evidence to support your answer.**

Yes, we agree it will be necessary to apply an end date for the use of remaining fossil fuel heating in homes off the gas grid by the late 2030s. Clear information, advice and financial support for housing associations and residents would minimise the number of heating systems being 'held on to' beyond their natural lifecycle. The government should keep the end date under review and consider moving it forward as market and social conditions improve.

**10. Do you have any views on measures the Government could introduce to ensure that fossil fuel heating will no longer be used in homes off the gas grid by the late 2030s? Please provide evidence to support your answer.**

Housing associations already use other natural trigger points for heating system replacements such as new tenancies, so this could be explored. Ensuring the various measures we have noted in this consultation response are implemented will make the transition to heat pumps more viable and attractive for landlords and residents and will hopefully prevent the need for major backstop measures in the 2030s.

**12 Do you have any views on what more could be done to address financial barriers to heat pump deployment? Please provide evidence to support your answer.**

We have touched on the need for financial barriers to both landlord and tenant to be addressed for this transition to heat pumps to be viable. To reiterate, for housing associations impacted by these regulations, continued access to government funding such as the Social Housing Decarbonisation Fund for fabric works and heat pump deployment is essential. For residents, shifting levies from electricity to gas (or better still into progressive taxation) would be extremely valuable, alongside improved and well targeted financial support through measures such as the Warm Homes Discount. We also think there could be a role for the forthcoming Home Upgrade Grant in supporting off-gas grid social housing to meet the requirements of these

specific new regulations. We would welcome discussions with BEIS about the design of Home Upgrade Grant and its interaction with the Social Housing Decarbonisation Fund and social housing sector.