

Boiler alert: addressing the challenges and trade-offs from the decarbonisation of home heat

TWO MINUTE SUMMARY

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SMF

Social Market
Foundation

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This report calls on the Government to demonstrate strong political leadership on the UK's 2050 Net Zero target to win public and industry support for the decarbonisation of Britain's homes.

Informed by a recent expert roundtable and polling evidence commissioned for the SMF, the report highlights a lack of public understanding of Net Zero and the need to transition homes away from natural gas boilers. This public knowledge deficit should be countered by clear messaging, otherwise politicians risk the costs and disruption of replacing boilers in 24.5 million households creating a backlash against Net Zero efforts.

KEY POINTS

- SMF-commissioned polling finds that despite broad support, only 30% of the public can correctly identify the meaning of "Net Zero". More than 30% of the public are unfamiliar with alternatives to gas heating; 30% say they "don't know enough".
- Before a mandatory phaseout of natural gas boilers takes place, a number of key conditions – set out as part of a national roadmap – must be met.
- These include improving public awareness of Net Zero and role of household emissions; a package of support for low-income and vulnerable households; and the establishment of local-level plans for decarbonising home heat.
- The Government should consider approaches to stimulate the market for low-carbon heating systems, including mandating the conversion of all government buildings to alternative heating systems.

Context

Energy use in homes accounts for about 14% of UK greenhouse gas emissions with an additional 6% attributed to electricity consumption in homes. By 2030, home emissions need to have fallen by at least 24% from 1990 levels to be on track to meet the 2050 target.

The scale of the home heat challenge is huge – just 7% of homes in the UK currently have low-carbon, electric heating while nearly 85% (24.5 million homes) are heated by natural gas. A near-full decarbonisation of heat will require replacing gas boilers at a rate of nearly one million per year. Yet, the Committee for Climate Change (CCC) places current UK deployment below 30,000 heat pump units a year, just 2% of annual boiler replacement sales.

Transitioning heating systems also requires mass-disruption and cost to millions of homes over the next few decades; designing fair funding policies will be critical to keeping public support for home decarbonisation and thus the Net Zero agenda.

Public opinion

Research published by BEIS earlier this year found that nearly two-thirds (63%) of people had heard (with varying degrees of awareness) of Net Zero. *Recognition* of the phrase among the public, however, does not translate into a clear understanding of what it *means*. SMF-commissioned polling shows that only one third of respondents were able to select the most accurate explanation for Net Zero from a list of options.

There is evidence that the public are willing to make adaptations to their homes to cut energy usage. More than one in 10 survey respondents had already done so by improving insulation or windows in their

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property, and 30% had installed a SMART meter. The survey indicated that overall, over half of the public are willing to invest in at least one energy efficiency measure.

However, there remains a concerning lack of understanding of alternatives to traditional gas boilers which risks derailing the already fragile (2 in 5 of respondents) support for a mandatory phaseout of natural gas heating. At present, more than 30% of the public are not familiar with alternatives to conventional gas heating, and 30% say they "don't know enough" to offer a view. None of the alternative technologies are familiar to more than 20% of the public

If the take-up of alternative heating systems is to grow significantly, the process of growth has to begin with awareness of their existence among consumers, followed by an understanding of their potential benefits, and ultimately, a ready market able to supply what consumers want.

Conditions for a mandatory phaseout

Decarbonising Britain's homes will likely involve a mandatory date for the phaseout of conventional gas boilers. This report proposes that such a phaseout should only take place once key conditions have been met:

✓ **Higher public awareness of the Net Zero concept** - Any policy requiring significant change and cost in voters' homes in the name of Net Zero is at risk of encountering significant resistance if Net Zero is not better understood.

✓ **Higher public awareness of home heat's role in Net Zero policy** - A marketing campaign would inform consumers of the potential benefits for themselves and the environment of "switching" to alternative heating systems, including the promotion of industry leading certification schemes such as the Microgeneration Certification Scheme (MCS).

✓ **A comprehensive package of financial support for low-income and vulnerable households** - The Government should continue to evaluate the effectiveness of

current grant schemes (such as the Renewable Heat Incentive) and consult on ways to help poorer households finance the transition to alternative low-carbon heating systems.

✓ **The establishment of local-level plans showing each area's suitability for different forms of low-carbon heat** - Technological solutions to the challenge of low-carbon heating will vary predominantly by geography. The Government needs to set a timetable for the development of local energy strategies led by local authorities in partnership with relevant organisations, such as housing associations. Plans should include commitments by local authorities and obligations on housing associations to convert their own stock to stimulate local demand for local installers. Additional and specific funding would be required to ensure the integration of decarbonisation within local planning activity.

✓ **A framework for building a trusted market to protect consumers and provide industry certainty** - A "transparency guarantee" would enable consumers to make informed choices with consumer-friendly independent guidance available through trusted sources (such as the Energy Savings Trust and Citizens Advice). A consultation on current installation standards, such as those of the MCS and relevant performance standards, should also be undertaken to identify where new rules might improve the minimum standards in the industry. Such standards would give confidence to providers and help build trust among consumers.

✓ **Direct stimulation of demand by mandating the conversion of all government buildings to alternative heating systems** - Such a move stimulate the market, initially helping to guarantee a minimum demand level, incentivising investment. It will require the Treasury to make funds available to the relevant departments and agencies. This conversion will also raise public awareness, creating a "model" for the transition. The House of Commons, for example, should be a priority and a way to demonstrate clear leadership.