



3rd Floor North
200 Aldersgate Street
London EC1A 4HD
Tel: 03000 231 231
citizensadvice.org.uk

21 March 2023

By email: domesticboilersconsultation@beis.gov.uk

Dear Gas Boiler Policy Team

Citizens Advice response to the consultation on improving boiler standards and efficiency

Citizens Advice welcomes the opportunity to respond to this Consultation as part of its statutory role to represent energy consumers in Great Britain.

Please see below our response to question 26 only.

26. What opportunities and challenges would requiring all newly installed domestic-scale natural gas boilers to be hydrogen-ready from 2026 present? Please provide evidence and reasoning to support your answer.

Citizens Advice believes there are a number of issues which present significant challenges to the policy to require all domestic newly installed natural gas boilers to be hydrogen-ready. We believe that the policy poses risks to consumers by sending unhelpful signals. We are also unsure that cost parity at the household level can be guaranteed.

We also believe that there are issues with some of the assumptions made in the impact assessment, in addition to a lack of detail on the likelihood of heating technology scenarios where we believe further evidence must be sought.

Patron HRH The Princess Royal Chief Executive Dame Clare Moriarty

Citizens Advice is an operating name of the National Association of Citizens Advice Bureaux.

Charity registration number 279057. VAT number 726 0202 76. Company limited by guarantee. Registered number 1436945.

England registered office: 3rd Floor North, 200 Aldersgate Street, London EC1A 4HD.

Signals

We consider that mandating hydrogen-ready boilers is likely to be a helpful signal for consumers living in areas where hydrogen is highly likely to materialise as a viable option for home heating. However, as a blanket GB or UK-wide policy it is also an unhelpful signal to consumers in areas where hydrogen is unlikely to provide fuel for heating.

For consumers living in an area where hydrogen materialises, already having a hydrogen-ready boiler would mean consumers would not face the up front costs to install hydrogen boilers at a point in time which is likely to be outside their control.

By contrast, for consumers living in areas where hydrogen does not materialise, and electric heat pumps or heat networks are the only low carbon option, this proposal will prolong the use of natural gas with a hydrogen-ready boiler even if there is no realistic chance of the property ever receiving hydrogen.

For these consumers, this could send very unclear messages at a time when information, protection and support is needed to help consumers navigate the net zero transition with confidence.

Assumptions

The impact assessment and justification for this proposal is based partly on an assumption¹ that the policy would have no impact on the number of heat pumps installed, and that the policy has no impact on fuel demand or carbon emissions.

We do not agree with either of these assumptions and believe the mandation of hydrogen-ready boilers is highly likely to impact consumers' choices. We believe this impact will have the greatest detrimental impact on consumers in areas where electrification will be the only low carbon heating option.

Given plans to decarbonise the power sector by 2035, any impact this policy has on the uptake rate of heat pumps must also have a correlating impact on carbon emissions. The impact assessment does not explicitly consider this, however, the effect is acknowledged elsewhere. The consultation states that *"mass deployment of hybrids would also deliver large reductions in emissions compared to the continued deployment of natural gas boilers up to 2035, contributing to*

¹ BEIS/DESNZ, [Improving boiler standards and efficiency Consultation Stage Impact Assessment](#), March 2023, para 40(c)

our near-term carbon budgets". If mass deployment of hybrids delivers emissions reductions then the same must be true where heat pumps are deployed compared to the deployment of natural gas boilers, whether they are hydrogen-ready or not. This appears to undermine a fundamental assumption of this policy.

We recommend further work is undertaken to evaluate the impact assessment assumptions and explore impacts the policy would have on the uptake of alternative technologies and the emissions impacts this would have.

The impact assessment also assumes that the policy is justified because of the benefits based primarily on avoided scrappage costs in a High Hydrogen scenario against a counterfactual of doing nothing. This scenario is described as where:

"hydrogen has proven feasible and preferable as a solution for heating most UK buildings and we assume its rollout will start in pilots by the end of the 2020s and accelerate in the early 2030s. In this scenario, boilers can still be installed after 2035 in areas that haven't converted to hydrogen yet, provided that they can switch from burning natural gas to burning hydrogen when the area is converted".

Citizens Advice is concerned that the consultation does not provide any indication of the likelihood that this scenario will arise or the locations it would arise in, particularly when the CCC's Balanced Net Zero Pathway² puts hydrogen use for heating at 11% of homes.

If the CCC's Balanced Pathway were to materialise, then of the 23 million existing homes which currently use gas boilers, this policy would send an unhelpful signal to 20.4 million (89%) households. It would increase the chance that these households continue using natural gas boilers (which are hydrogen-ready) in anticipation of hydrogen even if this does not happen. As stated above we consider this unhelpful signal is highly likely to impact consumers' choices and impact the rollout of other technologies with a corresponding impact on emissions.

Citizens Advice therefore believes that based on the UK Government's impact assessment, this policy proposal cannot be justified unless there is a high probability that the high hydrogen scenario assumed will materialise.

To ensure consumers receive the appropriate signals, Citizens Advice recommends the UK Government seeks up to date advice from the Climate Change Committee and others to

² CCC, [Sixth Carbon Budget](#), December 2020

consider the likely balance of heat technologies, the locations³, and how a GB or UK wide mandation policy fits within it.

Cost parity

Citizens Advice agrees with the UK Government's condition that cost parity must be achieved and we note that this is a key assumption in the impact assessment's view on scrappage costs.

If these consumer costs are not like for like, we believe it would undermine the justification for the proposal.

Citizens Advice is therefore concerned about how true cost parity could be practically achieved at the household level. Firstly, the consultation states that evidence so far indicates prices will be between 10% and 20% higher and that for costs to be kept as low as possible, hydrogen-ready boiler sales need to reach mass-market levels.

If manufacturers can guarantee parity on retail prices it is still unclear how this would ensure that prices offered by installers and paid by consumers are on a cost parity basis. There is also a risk that a premium could be paid by consumers on the basis of environmental claims that may not materialise, a lack of clarity on the differences between hydrogen blend-ready and 100% hydrogen-ready, and for ongoing maintenance.

Enabling costs

The consultation notes that having a hydrogen-ready boiler installed does not necessarily mean that the property is fully ready to be heated using hydrogen. Citizens Advice is aware that work in the hydrogen trials indicates that some homes may require new pipework to be installed within the home to connect the meter to hydrogen appliances.

However, if consumers are expected to fund this work in the future then it should be explicit what these costs might be and what potential levels of disruption are involved to ensure consumers have all the information they need on both current and future costs to make decisions.

³ The Climate Change Committee in response to the Government's Heat and Buildings Strategy reiterated its recommendation that Ofgem and BEIS (now DESNZ) "*identify areas which are unlikely to be suitable for hydrogen, allowing these areas to prioritise electrification or other alternative sources*" - CCC, [Independent Assessment: The UK's Heat and Buildings Strategy](#), March 2022

We agree with the condition of cost parity, however **Citizens Advice recommends this condition is expanded to ensure it is meaningful at the household level for appliances, installation, maintenance and future enabling costs.**

Market support

As noted by the consultation, the UK Government expects the upfront costs of hydrogen-ready boilers to reach price parity with those of existing natural gas boilers once they match the current levels of production. The consultation also states that requiring mass-market levels to lower costs supports the case for introducing mandation.

Citizens Advice recognises the economics that mandating hydrogen-ready boilers would support supply chains and innovation.

However, we do not believe it can be considered fair that consumers who are unlikely to use hydrogen for heating are incentivised to purchase these appliances to provide this type of market support. This would act as an effective cross-subsidisation and would impact consumers choices. We also consider it could disproportionately impact the uptake of other low carbon technologies and the market support for them where this may also be needed.

The appropriate balance of requiring consumers to provide market support to any technology is dictated by the likely heating scenarios. For example, under the CCC's Balanced Pathway scenario if 89% of homes do not use hydrogen and would likely use heat pumps or be on a heat network then it would be logical that market support for most consumers would be more appropriately directed towards those technologies. Equally, in a high hydrogen scenario it would be appropriate for market support to shift towards hydrogen appliances.

We therefore reiterate our recommendation. To ensure consumers do not face additional or unnecessary costs by purchasing technologies and by supporting a market that is not compatible with the heating scenario for their property or location, the UK Government should seek up to date advice on the probability and location of heating technologies.

We have not provided responses to any other questions.

Patron HRH The Princess Royal Chief Executive Dame Clare Moriarty

Citizens Advice is an operating name of the National Association of Citizens Advice Bureaux.

Charity registration number 279057. VAT number 726 0202 76. Company limited by guarantee. Registered number 1436945.

England registered office: 3rd Floor North, 200 Aldersgate Street, London EC1A 4HD.