

DANIEL KAWCZYNSKI MP



HOUSE OF COMMONS
LONDON SW1A 0AA

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Dear Constituent

Heat and Buildings Strategy

Thank you for contacting me about possible green alternatives to gas boilers. Buildings are responsible for around 23 per cent of our national emissions and I am encouraged that the Government has published its Heat and Buildings Strategy which signals a step change in improving the energy efficiency of buildings and how they are heated.

For Net Zero to be a success, we need affordable solutions to decarbonising our homes. At present, the average installed cost of an air-source heat pump in a UK home is between £7,000 and £14,000. For some this cost may be prohibitive, which is why the Government is helping support those who want to make the transition to low carbon heating.

From 2035, all new heating system installed in UK homes will either use low-carbon technologies, such as electric heat pumps, or will support new technologies, such as hydrogen-ready boilers, where the Government is confident clean and green fuel can be supplied. In other words, by 2035 the Government has an ambition that no new gas boilers will be sold.

To kickstart the market, the UK Government has zero-rated VAT on energy saving materials, like heat pumps, until April 2027, and is investing £12 billion in Help to Heat schemes. This includes the Boiler Upgrade Scheme, which provides grants of £5,000 towards the cost of installing an air source heat pump or biomass boiler and £6,000 towards the cost of a ground source heat pump. By the end of June 2023 nearly £65 million of vouchers had been paid out under the Scheme.

In some cases, this funding means that suppliers can offer heat pump installations at a similar price to a gas boiler. For example, Octopus Energy and British Gas both offer complete heat pump installations from £3,000. And as the market grows, we – and experts from across industry – expect costs to fall by 25 per cent or more.

Another possible green alternative is a hydrogen boiler. The Government is working with industry to examine the potential role of hydrogen in heating homes and workplaces. It would work in a similar way to gas boilers today but without any carbon emissions. The UK is already a world leader in hydrogen and the Government is investing £500 million in new hydrogen technologies. Prior to consulting on the role of 'hydrogen ready' appliances, the Government will assess the case for encouraging, or requiring, new gas boilers to be readily convertible to hydrogen, so-called 'hydrogen-ready' boilers, in preparation for any future conversion of the gas network.

In addition, the Hydrogen Strategy confirmed that, dependent on the success of the heating trials and the information gathered, the Government aims to make a strategic decision on the future of hydrogen for heat in 2026. Ahead of this, and to help inform the decision, the Government will launch a trial 'Hydrogen Village'.

The Hy4Heat programme has also supported the development of prototype 'hydrogen-ready' boilers, cookers and fires. As a result, two 'hydrogen homes' have opened to the public in Gateshead to give people an opportunity to experience a zero-emission gas-fuelled home of the future. In addition, there is the opportunity to interact with green technologies inside the showrooms and demonstrate to customers that they can have a choice about how they heat their homes sustainably in the future.

I acknowledge that there may be concern over the disparity between gas and electricity prices involved when heating homes. However, to ensure electric heat pumps will be no more expensive to run than gas boilers, the Government wants to work with energy providers

to reduce the price of electricity over the next decade by shifting levies and obligations away from electricity. I understand that a call for evidence will be held on the different options for rebalancing electricity and gas prices and I look forward to the outcome of that in due course. It is also the case that, over time, the cost of heat pumps is set to fall as demand increases.

The Government recognises that biofuels such as hydrotreated vegetable oil biodiesel 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.


That is why I welcome that the Department for Energy Security and Net Zero published a Call for Evidence to inform the development of the Biomass Strategy. The feedback of this is currently being analysed. The Biomass 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 the UK's 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 improvements can be made.

Biofuels are an important component of the UK's decarbonisation efforts and support is available for biofuels through the Renewable Transport Fuel Obligation (RTFO) which supports the decarbonisation of transport by encouraging the production and use of renewable fuels that do not damage the environment.

Under the RTFO, suppliers of relevant transport fuel in the UK must be able to show that a percentage of the fuel they supply comes from renewable and sustainable sources. Fuel suppliers that provide at least 450,000 litres of this fuel a year are affected. The RTFO covers only biofuels used in the transport and the non-road mobile machinery sectors.

The UK continues to work towards net zero carbon emissions by 2050, thereby eliminating the UK's contribution to climate change, I am encouraged that renewables will continue to play a far greater role in the UK's energy mix.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Kaw', followed by a horizontal line.

Daniel Kawczynski MP
Member of Parliament for Shrewsbury & Atcham