

## Aldersgate Group response to Energy Security and Net Zero Committee Inquiry on Heating our Homes

August 2023

### Background

The Aldersgate Group represents an alliance of major businesses, academic institutions and civil society organisations, which drives action for a competitive and environmentally sustainable UK economy.<sup>1</sup> Our corporate members represent all major sectors of the economy, such as Associated British Ports, Aviva Investors, BT, CEMEX, the John Lewis Partnership, Johnson Matthey, Michelin, Nestlé, Siemens, SUEZ, Tesco, and Willmott Dixon. They believe that ambitious environmental policies make clear economic sense for the UK, and we work closely with our members when developing our independent policy positions.

### Questions

#### 1) What policy changes are needed to deliver energy efficient homes across the UK?

The current energy efficiency market is nascent and not operating at the scale needed to address the UK's energy demand challenges or its net zero goals. The Aldersgate Group urges **the Government to design a three-pillared public policy framework, which creates a long-term market for energy efficiency investments in homes and supports all the key elements required for such a market**, including regulatory clarity on future energy efficiency standards, fiscal incentives, skills investment, access to affordable finance, access to reliable information, and improved consumer trust. This framework should be coordinated by the Department for Energy Security and Net Zero (DESNZ), with support from the Department for Education (DfE), the Department for Levelling Up, Housing and Communities (DLUHC) and HM Treasury.

The first pillar is to **create demand and awareness through regulation and fiscal incentives**. Smart, long-term and properly enforced regulation is essential to kickstart both public and private investment in retrofitting. This must be backed up by clear fiscal incentives that make installation of energy efficiency measures more attractive to homeowners and landlords.

- **Transform and broaden existing government proposals for a Minimum Energy Performance Certificate (EPC) in different types of property, and require all homes to be EPC C by 2035.** Recent government minimum EPC proposals, which have included regulatory requirements and targets for different property types, have been insufficient to increase uptake, resulting in stagnation in the market. Regulation that applies to all housing types is now required. A comparable level of demand

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<sup>1</sup> Individual recommendations cannot be attributed to any single member and the Aldersgate Group takes full responsibility for the views expressed.

creation has been seen in the automotive sector, where the phaseout of petrol and diesel cars has led to innovation and investment in EVs across all major European manufacturers.

- **The Government should extend zero VAT on energy efficiency products to all products, not just those installed by tradespeople.** Building material price increases have affected the price of energy efficiency measures. This inflation, when combined with inflation across the consumer price index (CPI), is inhibiting spending power. The number of skilled tradespeople available to make installations is also too low. Reforming the policy will allow individuals to purchase and install materials themselves where appropriate without specialist training - thereby ensuring energy efficiency upgrades continue when the skilled installers required to meet demand are being trained up.
- **The Government should use Stamp Duty (whether through reforms or rebates) to incentivise households to install energy efficiency measures.** [Onward UK](#) has recommended providing rebates to the value of 50%, with the work to take place in the first 24 months of moving in. [UK Green Building Council](#) has outlined alternative options, such as an energy-adjusted Stamp Duty Land Tax which happens at the point of sale.

The second pillar is to **guarantee delivery capability and trust**. Introducing policies that increase demand for retrofitting must be complemented by a supply of trained installers and appropriate materials, along with measures to build trust in the sourcing and installation of energy efficiency measures.

- **Establish an Energy Advice Service.** In a [survey](#) run by Kingfisher, 33% of respondents said they did not know what the options for retrofitting their homes were, with 31% saying they were unsure if the investment was worth it. Navigating planning permission, finding reliable suppliers and installers, and understanding which measures are suitable for properties of different ages and EPC ratings, are all technical and lengthy tasks which act as barriers to action. Similarly, ensuring energy efficiency measures both heat homes in winter and keep them cool in summer, is something homeowners may not initially consider when they begin to make plans for insulation measures. There is therefore an urgent need for a trusted body to act as an information destination, to raise awareness of the benefits and types of energy efficiency retrofits, and streamline the process of installation. This service must be sufficiently funded and backed by a public awareness campaign.
- **BEIS and DfE must utilise the recommendations of the [Green Jobs Taskforce](#) and the knowledge of the Green Jobs Delivery Group to create and urgently publish an Energy Efficiency Installation Strategy, outlining a plan for upskilling the necessary tradespeople to install energy efficiency measures across the country.** The Strategy must include a range of policy measures to

embed energy efficiency into the education system for future tradespeople, and incentivise employers to hire and train additional installers on energy efficiency measures within the next 12 months.

- **An Energy Efficiency Installation Strategy should incorporate financial and training tools.** To increase uptake of education and training, apprenticeship T-Levels must be well-promoted in secondary schools as an alternative career path to university, and the Government should offer funded training for individuals looking to become a tradesperson to install energy efficiency measures, which could be offered as a grant through the UK Infrastructure Bank. Measures to incentivise employers to hire additional apprentices should also be introduced. These can include increasing the incentive for employers to take on apprentices to £3000p/a (this higher rate was introduced during the pandemic, but has since been reduced to £1000), and offering relief on Employer National Insurance to companies which take on multiple apprentices for delivering retrofitting measures. Finally, the [Home Decarbonisation Skills Training Competition](#) should be repeated and expanded to meet demand.

The third pillar focuses on **enabling access to finance**. To secure a successful increase in energy efficiency demand and delivery, finance is vital. Research conducted in 2022 found the number one reason people said they would not pursue energy efficiency measures in their homes because they could not afford the upfront costs, with [34%](#) citing this as a barrier. Therefore, once the regulatory regime creates demand, and delivery has been guaranteed through the right skills and supplies, enabling finance will be the underpinning requisite to unlocking energy efficiency in homes.

- **For those unable to pay, Government should ensure that existing public funding schemes – such as the Public Sector Decarbonisation Scheme (2020), Boiler Upgrade Scheme (2022), and Energy Company Obligation (ECO) 4 (2022) – are expanded over time.** The benefits of government grants take time to materialise. Undoing the boom-and-bust cycles seen with public grant schemes such as the Green Homes Grant – which cost £314m of taxpayers' money but benefited just [47,500 homes](#) and supported only 5,600 jobs due to its short-term design – is vital. Setting longer-term funding stability will generate greater returns for HM Treasury through increased employment tax and reduced borrowing for energy support schemes beyond winter 2022–23.
- **The UK Infrastructure Bank (UKIB) should offer innovative financial products to individuals looking to install energy efficiency measures.** It was welcome to see the strategic steer provided by Prime Minister Rishi Sunak during his time as Chancellor of the Exchequer in March 2022, for the UKIB to focus on energy efficiency as a key priority. The UKIB should look to offer 0% loans – which HM Treasury will see returns on through tax revenues arising from increased employment in the construction industry – and loan guarantee mechanisms for installing energy efficiency measures. If the UKIB is unable to lend directly to

customers, a state-backed guarantee scheme to allow retail banks to fill this role would achieve a similar outcome.

- **The Bank of England should offer a Green Term Funding Scheme**, based on the Bank's existing Term Funding Scheme, to provide [cheaper credit](#) to banks to lend to homeowners looking to install energy efficiency measures. Similar schemes have already been offered successfully in Japan and China.

## 2) What are the key factors contributing to the under-delivery of the UK's government-backed retrofit schemes?

It is critical that Government learns the lessons from failed attempts to incentivise nationwide retrofitting, most notably the Green Deal (2012–15) and the Green Homes Grant (2021–22). There were a number of issues that played a role in the under-delivery of both schemes:

- **Administrative issues.** The [Department of Energy and Climate Change](#) "identified high administrative costs as an area to improve in a lessons learned exercise" from the Green Deal in 2015. These costs included complex loan application processes and time-consuming requirements for suppliers to identify eligible households. In the case of the Green Homes Grant, the delays dispensing grant vouchers and making payments to contractors left homeowners [unable to pay tradespeople](#) for work carried out.
- **Inconsistent messaging.** The key selling point of the Green Deal was the so-called 'golden rule', a stipulation that loan repayments must be lower than the total savings made on energy bills over a 25-year period. But, with interest rates offered at [7–10%](#) APR, a rate considerably higher than the loans offered on the high street at the time, very [few](#) retrofitting measures met the Green Deal's own golden rule, making the scheme unaffordable. Short timelines, last minute extensions, and funding cuts also hamstrung the Green Homes Grant.
- **Supply chains.** The failure of the Green Deal was partly caused by shallow supply chains and a [lack of skilled installers](#) to administer the work, while the Green Homes Grant was cancelled after just six months, with [86% of people](#) reporting a poor experience with the scheme following similar challenges. As concluded by the [Public Accounts Committee](#), the failure of these government-backed schemes has led to a long-term perception that energy efficiency supply chains are not robust and that installers are not trustworthy. This creates hesitancy, reinforcing the uptake of traditional solutions like gas heating.
- **Lack of a long-term strategy.** The [Energy and Climate Change Committee](#) in 2013 labelled it as "unacceptable" that the Department for Energy and Climate Change did not set any objectives for the Green Deal. The Green Homes Grant, whilst only being introduced as a short-term stimulus, was strategically flawed from the start by the

delay of the Heat and Building Strategy which outlined the Government's plan to decarbonise the housing sector. The scheme was also run in a short window over the winter months when households are inevitably going to be reluctant to make upgrades.

### **3) Which standards and assessment frameworks are needed to deliver a reliable, skilled workforce capable of transitioning UK homes to modern heating solutions?**

To reach net zero, the UK needs to rapidly scale up the workforce to install modern, low-carbon heating solutions. The [Heat Pump Association](#) estimates that 12,400 installers will be needed by 2025 to install 300,000 heat pumps per year and 50,200 will be needed by 2030 to install one million heat pumps in total. To meet low-carbon heat network demands, as many as [35,000](#) new direct jobs in the sector will need to be created by 2050. It is critical this workforce is reliable, skilled, and capable.

The Government should introduce a new version of the Building Research Establishment's Home Quality Mark or the Each Home Counts Quality Mark, which should apply to older homes rather than just new buildings. A certification scheme is required to provide quality assurance which guarantees appropriate energy efficiency and low-carbon heating measures for each property type, and to help build trust following the failures of the Green Deal. This could be introduced as [Building Renovation Passports](#) (BRP). A BRP generates a digital logbook and renovation roadmap based on the requirements of each property, to ensure high-quality retrofits for current and future residents. The Government should mandate the use of BRPs, in a similar way to the legal requirement for an MOT and create a digital database to monitor the progress of upgrades.

### **7) How will the public be able to afford the switch to decarbonised heating?**

#### *Energy Efficiency*

A major step in decarbonising home heating will be improving the energy efficiency of the UK's homes, thereby reducing overall demand for energy. Though this will involve an initial cost, in the long run, greater energy efficiency will reduce emissions *and* costs for the public. Without support, those unable to make an initial investment in energy saving measures will be hit harder over the long run, due to increased energy costs for the same amount of thermal heating. This is where Government can help to bring down the public's total energy costs, by supporting households with grants to install insulation, smart meters, and other energy saving measures.

#### *Heat pumps*

Currently, heat pumps are expensive and are unaffordable to many low-to-middle-income households. The Energy Saving Trust estimates that the typical cost of installing an [air source](#) heat pump is around £14,000 whilst a typical [ground source](#) heat pump costs around £28,000. The cost of replacing a gas boiler, in contrast, will typically cost about £4,000. Heat pumps are also currently more expensive to run than a gas boiler, due to the fact that

electricity prices bear disproportionate policy and network costs in comparison to gas bills. Nesta calculates that, on a whole life cost per year basis, heat pumps cost between [£450 to £770](#) a year more depending on property type.

A large reason why the upfront cost of heat pumps is high is because the UK's heat pump industry remains relatively nascent and underdeveloped, with a [lower rate of installation](#) per household than almost every other country in Europe. As the industry scales to meet the UK Government's target of 600,000 installations per year by 2027, upfront costs will fall. The Government's [Heat and Building Strategy](#) sets out an ambition to reduce the cost of heat pumps by at least 25-50% by 2025 and towards parity with gas boilers by 2025.

It should be noted, however, that heat pumps are several times more efficient than both natural gas and hydrogen boilers, as they can generate three units of heat for every one unit of energy consumed. Moreover, heat pumps also provide access to a cooling solution, unlike all other forms of home heating. As the UK continues to experience increasingly high temperatures, this will be crucial to improving public health and reducing medical costs incurred from overheating.

### *Electricity prices*

To reduce the running costs of heat pumps (the bulk of the total lifetime cost), policy change is required and the price of electricity must be reduced. We welcome the commitment from the Government to 'rebalance' policy and network charges from electricity to gas bills, in order to incentivise the shift to decarbonised heating systems. The Government should use the Review of Electricity Market Arrangement (REMA) to explore how best to decouple gas and electricity prices. This will be essential to prevent fossil fuels which, whilst generating only 40% of electricity, set the price of electricity from all sources [98% of the time](#) in the UK.

It should be highlighted that regardless of whether the Government pursues decoupling, as the UK's renewables fleet expands, gas will eventually be displaced from the merit order, and thus the amount of the time that it sets the marginal price on wholesale electricity will diminish. This is because renewables remain cheaper than gas, even as prices fall to pre-crisis levels. Enabling the electrification of home heating will allow households with access to low-carbon heating solutions to save money on heating and cooling.



## 9) Do the current EPC frameworks help consumers make informed decisions on transition?

The CCC has said that the current EPC framework is “[not for purpose](#)” and as such does not help consumers make informed decisions. The major issues with the EPC framework are as follows:

- **Neither the Energy Efficiency Rating (EER) nor the Environmental Impact Rating (EIR) are a direct measure of energy efficiency.** EER measures energy cost, meaning installing a more efficient fossil fuel boiler or installing solar PV is often the cheapest and easiest way to improve the rating. This disincentivises the transition to low-carbon heating. EIR, meanwhile, measures the relative emissions intensity of fuels and energy consumption. As electricity generation continues to decarbonise, the EIR will incentivise households to install direct electric heating (over a heat pump) and will have offer no incentive to install energy efficiency measures.
- **The metrics used in EPC ratings can actively disincentivise heating system upgrades due to outdated measures of efficiency.** As noted by the [Independent Review of Zero](#), the EPC rating of a property can sometimes show a worse score after installing a heat pump.
- **EPCs can overestimate energy use and carbon emissions.** Research by [CarbonLaces](#) found EPCs overestimate energy consumption by up to 344% and carbon emissions by up to 308%, with higher overestimations for lower EPC properties.
- **There are concerns over the quality of EPCs assessments.** The [Environmental Audit Committee](#) expressed concerns over the minimal training EPC assessors have to complete and the overreliance on theoretical desktop calculations over on-site (and thorough) inspections.

Given that the Government is increasingly relying on EPC ratings to drive change (through targets, linked-funding, and regulations) and measure progress towards net-zero homes, as well as the impact EPC can have on [property value](#), the EPC framework urgently needs reform.

Both, the [CCC](#) and the [Independent Review of Net Zero](#) have suggested adopting a new set of metrics to account for actual energy consumption whilst providing the right incentive to make properties more energy efficiency and adopt low-carbon heating.