

A photograph of a row of terraced houses in various colors (red, white, yellow) with gabled roofs and chimneys, set against a clear blue sky. The houses are multi-story with bay windows and decorative architectural details.

EUA
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Business, Energy and Industrial Strategy Committee inquiry

Decarbonising heat in homes

Energy and Utilities Alliance response

About EUA

The Energy and Utilities Alliance (EUA) provides a leading industry voice helping shape the future policy direction within the sector. Using its wealth of expertise and over 100 years of experience, it acts to further the best interests of its members and the wider community in working towards a sustainable, energy secure and efficient future. EUA has seven organisational divisions - Utility Networks (UN), the Heating and Hotwater Industry Council (HHIC), the Industrial & Commercial Energy Association (ICOM), the Hot Water Association (HWA), the Manufacturers' Association of Radiators and Convector (MARC), the Gas Vehicle Network (GV Network) and the Manufacturers of Equipment for Heat Networks Association (MEHNA).

EUA represents all the main heating manufacturers in the UK along with the majority of major installation companies, training providers and component manufacturers. Approximately 98% of heating measures installed in UK homes come from an EUA member.

The Energy and Utilities Alliance (EUA) is a company limited by guarantee and registered in England. Company number: 10461234.

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The logo for the Energy and Utilities Alliance (EUA) features the letters 'EUA' in a large, bold, maroon sans-serif font. A small grey triangle is positioned at the bottom right of the letter 'A'.

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The logo for the Heating & Hotwater Industry Council (HHIC) consists of the letters 'HHIC' in a bold, blue sans-serif font. A red circle is placed above the letter 'i'. Below the letters, the full name 'HEATING & HOTWATER INDUSTRY COUNCIL' is written in a smaller, blue, all-caps sans-serif font.The logo for the Industrial & Commercial Heating Equipment Association (ICOM) features the letters 'ICOM' in a bold, green sans-serif font. Below the letters, the full name 'Industrial & Commercial Heating Equipment Association' is written in a smaller, blue, all-caps sans-serif font.The logo for the Hot Water Association (HWA) includes a red icon of three wavy lines representing water on the left. To the right, the words 'hot water association' are written in a red, lowercase sans-serif font.The logo for the Manufacturers' Association of Radiators and Convector (MARC) features a circular icon with three vertical bars of different colors (red, yellow, blue) on the left. To the right, the letters 'marc' are written in a red, lowercase sans-serif font. Below the letters, the full name 'Manufacturers' Association of Radiators and Convector' is written in a smaller, blue, all-caps sans-serif font.The logo for Utility Networks features the letters 'EUA' in a bold, maroon sans-serif font. Below the letters, the words 'Utility Networks' are written in a smaller, maroon, all-caps sans-serif font.The logo for the Gas Vehicle Network (GVN) includes a stylized icon of three overlapping circles (blue, grey, green) on the left. To the right, the letters 'GVN' are written in a bold, blue sans-serif font. Below the letters, the full name 'Gas Vehicle Network' is written in a smaller, blue, all-caps sans-serif font.The logo for the Manufacturers of Equipment for Heat Networks Association (MEHNA) features the letters 'MEHNA' in a bold, multi-colored sans-serif font (M: blue, E: orange, H: green, N: blue, A: orange). Below the letters, the full name 'Manufacturers of Equipment for Heat Networks Association' is written in a smaller, blue, all-caps sans-serif font.

Executive Summary

Past and current policies

- 0.1.** Previous policies have been varied and inconsistent. The focus should be on simple, strategic policies which minimise disruption for consumers.
- 0.2.** Heat decarbonisation policies have, thus far, not penetrated the crucial section of the market between high income, able-to-pay households and those in fuel poverty.
- 0.3.** Devolved administrations are successful at delivering coherent, accessible policies, such as HEEPS in Scotland which brings a range of programmes together under a unified umbrella along with consumer-friendly advice.

Future policies for net zero

- 0.4.** The Government should prioritise policies which will reach the vast majority of households. We believe this means focusing on decarbonisation of the gas grid with hydrogen.
- 0.5.** The Government must introduce policies which support hydrogen production at scale as well as carbon capture and storage; the UK has an opportunity to become a world leader in these fields.
- 0.6.** Legislation should be introduced to ensure all boilers sold from 2025 are 'hydrogen-ready' to ensure a smooth transition and raise awareness amongst consumers of the need to decarbonise domestic heat.
- 0.7.** Greater incentives will be needed to support the wider deployment of heat pumps, particularly in off-grid areas where upfront costs will be higher; subsidy schemes to date have not delivered the levels of deployment which were expected and needed.

Viable technologies

- 0.8.** A range of technologies will be needed to achieve decarbonisation but a hydrogen gas grid and heat pumps are the two of the primary technologies emerging.
- 0.9.** Hydrogen will be a key component of the future energy mix and will decarbonise the majority of homes with minimal disruption and familiar appliances for consumers.
- 0.10.** Heat pumps could be an ideal option for some new build and off-grid homes but the latter may need to utilise renewable drop-in fuels such as bio-oil or bioLPG.

Scaling up technologies

- 0.11.** Retrofitting heat pumps in existing properties can be complex and costs an average of £26,300 which is beyond the reach of the vast majority of households.
- 0.12.** In-home disruption of retrofitting heat pumps may put many consumers off. Subsidies may be better targeted at supporting hydrogen conversion and decarbonising hard to treat properties.
- 0.13.** 'Blue' and 'green' hydrogen are viable and should be support to commercialisation; blending up to 20% in our current methane gas grid could kick-start demand and supply of hydrogen.

Distribution of costs

- 0.14.** Protecting vulnerable consumers, such as those in fuel poverty, is a key challenge; they will need to be supported through the transition with a holistic, whole home approach to retrofitting which ensures low running costs.

0.15. Use of general taxation may be needed to support the transition to low carbon heating for most households, especially those off-grid or with low incomes.

Incentives and regulations

0.16. The Government should set out clear timescales and a roadmap for heat decarbonisation to give industry and consumers adequate notice.

0.17. Mandating the phasing in of 'hydrogen-ready' boilers would be a clear regulatory indicator akin to mandating condensing boilers in 2005.

Engaging households

0.18. Awareness of the need for heat decarbonisation and low carbon heating technologies remains very low; this needs to change for a transition to be possible.

0.19. Installers should be at the heart of engaging consumers as they are a trusted source of impartial information; they are well placed to advise consumers.

0.20. Consumer choice should be protected and the Government should avoid picking winners amongst technologies; we must bring them on the journey to net zero and allow them to make choices on what is best for their home.

Governance and delivery

0.21. BEIS and Ofgem will be the primary deliverers and regulators of the transition to low carbon heat but local authorities must also be empowered and resourced to lead on the adoption of technologies which suit their area.

Question 1

1.1. The impact of previous government policies and schemes in this area has been varied and inconsistent. When policies to reduce emissions and improve efficiency in heating systems have been simple, strategic, and, crucially, minimised disruption and costs to consumers, they have been successful and have had a wide-ranging impact. For example, mandating condensing boilers in 2005 has had a significant impact on the efficiency of millions of heating systems across the UK without carrying with it disruption, high costs or a change of appliance for consumers.

1.2. On the other hand, government schemes which have been laden with bureaucratic burdens on consumers and / or installers have not delivered the anticipated uptake, have had a negligible impact on decarbonising domestic heat and, in some cases, have even undermined the public reputation of the low carbon heat sector. As the Select Committee will be aware, the Green Deal was a prime example of this as whilst it ostensibly offered a range of measures, both funded and unfunded, it created a complex set of administrative hoops for consumers and installers alike. Making policies and schemes as flexible and simple as possible should be a core aim of government policies in this area.

1.3. The target audience of policies and schemes must also be carefully considered. Subsidies from the UK Government have, thus far, largely encompassed either the high end of the able-to-pay market or those in fuel poverty and / or social housing. Thus, they have failed to make any significant impact on the bulk of the market between these two sectors where action on decarbonisation will have the greatest impact. For example, the Renewable Heat

Incentive (RHI) was only accessible for consumers who could afford the high upfront costs needed for many of the measures covered by the scheme. At the time of the RHI being announced, EUA argued that a part-voucher, part-subsidy payments model would deliver far greater deployment. EUA is pleased to see that front-loaded subsidy is a key feature of the Green Homes Grant although early figures seem to suggest a relatively low number of installers are participating in the scheme; this could hamstring its reach even if demand from consumers is high.

1.4. The devolved administrations have had more success with delivering coherent, popular policies and scheme relating to the decarbonisation of homes. In Scotland, the Home Energy Efficiency Programmes for Scotland (HEEPS) has successfully combined a single, unified umbrella for Scottish schemes with a network of regional advice centres to provide consumers with guidance on the various options and how to access them. By outsourcing the management of HEEPS to the Energy Saving Trust, the Scottish Government has ensured that consumers can access a range of advice on all of the schemes and loans available, in addition to all of the other information they offer such as general advice on saving energy and water.

1.5. Since their creation, the HEEPS, currently under the consumer-facing name of Home Energy Scotland, have encompassed a range of schemes. These include interest-free loans which are popular with consumers, very simple to understand and administer, and flexible to suit the requirements and preferences of each household; this is not something which consumers in England have available to them. In the past, HEEPS have

included schemes to upgrade fuel poor homes and social housing with local authorities as delivery partners; this kind of partnership working is superior to anything found in England and leverages the detailed knowledge that councils will have of their communities. Additionally, HEEPS offer schemes to landlords as well as homeowners which increases the reach of the Scottish Government's policies on the decarbonisation of domestic properties into the private rented sector which is one of the least efficient sections of Britain's housing stock.

1.6. Overall, EUA believes that there have been two key successes from the approach of the Scottish Government which the UK Government should adopt: simplicity for the consumer and consistency of message. Unlike in England where a consumer would need to look up each individual policy or scheme, check their eligibility, seek out relevant advice, etc., HEEPS provides consumers with a single point of contact to access all of the information they might need on a range of schemes. HEEPS also projects a consistent consumer-facing profile which remains the same despite individual schemes being created and expiring over time.

Question 2

2.1. The Government needs to prioritise policies which will reach the vast majority of households which, as mentioned in our answer to the previous question, could deliver significant emissions savings. EUA believes that the long term decarbonisation pathway for existing and new British homes needs to be laid out by the end of this Parliament. Whilst this may seem like a very short timescale, giving a clear signal to the energy industry and consumers alike will be vital to ensure that we can meet our 2050 net zero target.

2.2. We believe that for the vast majority of households currently on the gas grid, decarbonisation of that grid will deliver a net zero fuel, in the form of hydrogen, with minimal disruption or change of technology. For this to happen, the Government must put in place the policies and regulations to support the production of hydrogen at scale, its distribution through existing networks and uptake of appliances by consumers. The UK has an opportunity to lead the way on the development of a hydrogen economy and on leveraging the significant infrastructure asset of our gas grid. As part of this process, the Government will need to make strategic decisions on related technologies, such as carbon capture, usage and storage (CCUS), in order to enable a hydrogen strategy. Without a long term plan for decarbonising the gas grid, the UK could miss another opportunity to lead on a clean transition and it will take us even longer to reach our net zero goals, thereby losing out on cumulative emissions savings from acting decisively.

2.3. In terms of upstream production, the Government should focus on developing regulated asset base (RAB) funding models to incentivise private investment in

hydrogen infrastructure; this must include CCUS facilities, gas storage and hydrogen and CO₂ pipelines. The production itself may need to be incentivised with a new contracts for difference process, or a similar scheme, with attention paid to the differences in costs and capacity for 'green hydrogen' produced via electrolysis using renewably generated electricity and 'blue hydrogen' produced from steam methane reformation (SMR) of natural gas or biomethane.

2.4. The Government should continue with projects to establish the viability of hydrogen production, transmission and usage in dedicated appliances. As part of the Buildings and Heat Strategy, the Government should also set out how and when it anticipates key decisions being made on a transition to a hydrogen gas grid. For example, work has been ongoing in Leeds for some time on how the city's gas network could be the first to transition; the Government should build on this to give local authorities the ability to signal their preferred pathway to heat decarbonisation and give industry certainty on the long term role for hydrogen. The latest Ofgem Network Innovation Competition awards for a hydrogen transmission project, and the H100 SGN project, are good examples of forward thinking towards achieving net zero.

2.5. EUA also believes that the Government should legislate to ensure all boilers sold from the middle of this decade should be 'hydrogen-ready' i.e. a few components can be easily switched out to convert the unit from one which runs on natural gas and/or biomethane to one which runs on hydrogen. This would ensure a smoother transition for households with a compliant boiler. We have submitted an industry-

agreed definition to BEIS of what constitutes such an appliance.

2.6. For the off-gas grid sector, the Government must also put in place additional policies to support the wider deployment of low carbon heating appliances, such as heat pumps, in suitable properties. The Green Homes Grant may be more successful in this regard than the RHI but it is unlikely to support the level of deployment which will be necessary, particularly in off-grid homes. Many consumers are unlikely to have the disposable income or the desire to accept the costs and disruption associated with retrofitting a heat pump to their property; this is particularly true for off-grid, rural properties where insulation requirements are likely to be greater and costlier. Therefore, part-subsidy schemes, such as the Green Homes Grant, will likely need to be complemented by other measures such as green finance, stricter energy efficiency requirements for the private rented sector, targeted support for high cost and low income households and a concerted campaign to raise awareness of the need for a transition to low carbon heating and the options which will be available to consumers.

Question 3

3.1. EUA believe that a range of technologies will be necessary to deliver decarbonisation given the varied housing stock in the UK. A gas grid decarbonised through the use of biomethane and hydrogen offers a viable low carbon alternative to natural gas heating for the 85% of properties on the gas grid. By switching the gas in the grid, heating systems can be decarbonised with minimal disruption to consumers and with appliances which, although new, will be familiar to, and popular with, them. Studies have shown that hydrogen is a key component to any future energy scenario which seeks to keep the overall cost to the economy down and to maintain consumer choice. A hydrogen gas grid could also retain the strategic benefits of our current gas grid, for example the ability to store energy through line packing, meeting peak heat demands in a way the electricity networks cannot.

3.2. The more extensive the electrification of heat is, the greater the burden on the electricity grid will be during the peak of heat demand in the colder months of the year. A Navigant study estimated that if the majority of buildings were heated using standalone heat pumps, system peak demand could increase from 59 GW today to 204 GW in 2050. This would be approximately 75% higher than for a more balanced scenario including hydrogen which highlights the capacity considerations which we believe will necessitate a mix of technologies, of which hydrogen is the single largest.

3.3. Heat pumps are suitable replacements for certain heating systems off the gas grid and could deliver large carbon savings and low running costs. For new build homes, heat pumps installed offer greater cost and carbon saving efficiencies and this

could be encouraged where a low carbon gas grid connection is not feasible. Heat networks could also be a viable option so long as a low carbon heating source is used. The option of high temperature heat pumps could also improve the viability of heat pumps in properties which are more difficult to insulate.

3.4. For particularly difficult to treat off-grid homes, such as older or unconventionally constructed properties, heat pumps are unlikely to deliver the level of warmth consumers expect, even with extensive insulation and large radiators. These properties represent a major challenge as they require substantial energy efficiency retrofitting to use some low carbon options effectively. Most currently use oil or LPG and renewable alternatives such as bio-oil, hydrotreated vegetable oils (HVO) or bioLPG would be viable, low carbon replacements. However, connection to a decarbonised gas grid should still be considered where economical, given the large number of properties within 50 metres of a gas main but not connected. Given that both bio-oil and bioLPG are chemically identical to the fuel they replace, they are a true 'drop-in' replacement, thereby avoiding the changes to appliances, radiators, pipework, etc. which would be necessary with other off-grid heating alternatives.

3.5. EUA envisages that by 2050, the majority of homes will be heated by boilers running on hydrogen supplied by our current gas grid. The outlook for off-grid homes will be far more varied with the vast majority using either bio-oil, bioLPG or a heat pump, depending on the features of each property. Further consideration should be given to the potential for hybrid systems where homes are heated predominantly by a heat pump which is supported by a

bio-oil or bioLPG boiler during the colder months or when hot water demand is high. This would also be a particularly suitable solution where the existing off-grid system is a combi-type, meaning no hot water storage cylinder is present.

Question 4

4.1. When it comes to heat pumps, the technology is mature and ready for mass deployment. However, the key barriers to scaling up deployment are high upfront costs and the level of potential disruption involved with retrofitting them.

4.2. Installing heat pumps in existing homes and can be costly and complex, particularly given the requirement to upgrade the fabric efficiency of the property to very high levels in order to compensate for the relatively low flow temperature of heat pumps. A 2019 report commissioned by the Climate Change Committee (CCC) found that the typical cost of installing a heat pump and sufficient insulation in an existing property to be £26,300 as opposed to £4,800 for installation in a newly built property. The CCC's report states that "the prohibitively high retrofit costs [of retrofitting] mean that they would not be cost-effective and would be unlikely to be retrofitted in practice." This raises the question of whether heat pumps are better focused on new build properties as opposed to existing properties where high levels of Government subsidy would most likely be needed to overcome those high upfront costs which even the new Green Homes Grant, capped at £5,000, does not come close to covering.

4.3. The disruption to consumers of installing a heat pump can also be a barrier for many. Heat pump units occupy a large amount of space inside the home, which can be prohibitive for smaller properties, and their lower flow temperatures necessitate the replacement of standard sized radiators with much larger heat emitters or underfloor heating. Compared to the relatively simple replacement of one boiler for another, for example, this can be a

barrier to uptake amongst most consumers.

4.4. In terms of the scaling up of hydrogen as a low carbon heating fuel, the barriers are fewer on the consumer side of the equation and greater on the production of the fuel itself. As previously indicated, there are manufacturers who have already produced 'hydrogen-ready' boilers which can be easily converted from methane to hydrogen. Other manufacturers are developing hydrogen boilers and other appliances which will soon be market-ready and are likely to be competitively priced, particularly as demand increases and supply chains mature. As previously alluded to, consumer acceptance of hydrogen appliances is likely to be high as they would be very similar to natural gas appliances already in use and would deliver the flow temperatures, and therefore the level of responsiveness and comfort, which consumers are accustomed to.

4.5. However, the extent to which hydrogen can be produced, and how it is produced, in order to meet demand is the key question which needs to be addressed in order for the technology to be scaled up. As previously mentioned, producing 'green hydrogen' via electrolysis and 'blue hydrogen' from SMR, are both viable options. The scaling up and commercialisation of these processes will be a crucial step to developing a hydrogen economy. This will require both policy and financial support from the Government as well as private investment which should be unlocked by clear signals to the industry. CCUS will be vital to ensuring 'blue hydrogen' is produced in a way which is in step with our commitment to becoming a net zero economy. The Government's prevarication over supporting CCUS in the

last decade has undoubtedly hampered the UK's ability to become a leader in this technology which will be crucial for decarbonising many sectors, particularly energy intensive ones. Although the Government appears to be proactively supporting CCUS now, we cannot afford for the same uncertain policy outlook to develop for hydrogen as this would disrupt the progress we need to make in the coming years in scaling up hydrogen and realising the economic benefits and export opportunities it could bring.

4.6. In order to stimulate demand for hydrogen, it can be blended into our existing gas network; this measure would also deliver the added benefits of reducing the carbon intensity of the grid and avoiding the need for on-grid consumers to make any in-home changes. The HyDeploy project has shown that hydrogen could safely make up as much as 20% of the volume of gas in the grid which would equate to around 29 TWh; this represents an ambitious initial hydrogen production goal for the industry which would provide a clear signal if adopted by the Government. Kick-starting hydrogen production was referred to by the Prime Minister in the recent *Ten Point Plan for a Green Industrial Revolution*. Blending may only be a stepping stone towards a shift to a 100% hydrogen grid but it would kick-start bulk hydrogen production, investment in infrastructure and the necessary supply chains.

Question 5

5.1. Protecting vulnerable consumers, such as those in fuel poverty, is a key challenge for decarbonising domestic heat and one which is often overlooked when policymakers and the industry talk of inevitably higher costs following the transition to low carbon sources. The Energy Companies Obligation (ECO) has been somewhat successful in upgrading the energy efficiency of fuel poor homes, however, simplistic and short term measures such as insulation are often favoured by energy companies rather than a more holistic approach to upgrades which ought to include modernising heating systems too. This kind of holistic approach will certainly be needed when it comes to transitioning fuel poor households to low carbon heating as they will not be able to afford the costs associated with this.

5.2. EUA does not believe that existing levies on bills are a barrier to the adoption of low carbon heating as such. They may need to be modified to incentivise this in the future but at present the best approach is one of providing subsidies and raising awareness of the need for heat decarbonisation and the options available to achieve this. Given the typical cost of a transition to low carbon heating, it seems implausible that a typical household, even those not in fuel poverty, could afford this outright. Therefore, it is likely that to a certain extent this transition will need to be subsidised through uncomplicated grants, funded by general taxation, in order to ensure the cost burdens fall evenly across society.

5.3. The creation of a more unified body charged with delivering fuel poverty measures in England has recently been dismissed by Ofgem after being suggested by Cadent Gas as part of its RIIO-2 submission. Pooling the resources

which are currently available would better mirror the successful approach taken in Scotland.

5.4. For the majority of homes, on the gas grid, the socialisation of costs is made easier. It also can be regulated through Ofgem. Off-grid homes pose a challenge, being more expensive to decarbonise, with retrofit costs for the building fabric being the starting point. It would be unfair for the burden to fall directly on consumers to meet upfront, compared to a socialised cost on decarbonising the gas grid being spread over decades.

Question 6

6.1. The Government's ambitions need to be communicated clearly to consumers, ideally with a roadmap setting out how the vast majority of UK households will be decarbonised. This will need to differentiate between homes to be built and those already built, between homes on the gas grid and off of it and also between households who are able to make some form of contribution to their transition and those whose costs will need to be met by Government-funded schemes.

6.2. EUA believes that a clear policy position which the Government should adopt is to mandate the phasing in of 'hydrogen-ready' boilers to replace natural gas boilers. A 2025 date for mandatory installing of such boilers would mean that by 2035, approximately 16 million homes are made ready to switch fuel, based on current boiler replacement rates. This would incur very little additional cost for the consumer but it would enable their boiler to be easily converted to run on hydrogen at the point where their local gas network is converted.

6.3. Given the high upfront costs which we have mentioned several times in our submission, the Government will need to continue to provide incentives for low carbon heating systems, particularly for off-grid households for whom hydrogen will not be an option and who are likely to face higher costs than those for on-grid consumers. The Green Homes Grant is a step in the right direction as it addresses upfront costs but its budget and time limited nature indicate that it will not be sufficient to drive mass adoption of low carbon heating technologies. Consumers are generally disinterested in their heating system and awareness of available technologies, the environmental impact of

heating systems and the need for a transition to low carbon heating remains stubbornly low.

6.4. The Government could consider setting targets for the supply of low carbon heating fuels off-grid, offering industry an opportunity to use existing heating systems and giving consumers some choice on how they heat their homes. For changes in the system, such as heat pump replacement of boilers and direct electric heaters, financial incentives to combat high upfront costs will be essential to generate take up without resorting to banning the use of certain technologies.

Question 7

7.1. Data from BEIS's public attitudes trackers show us that consumers are generally not aware of low carbon heating technologies which is concerning given that we need the opposite to be true for a smooth transition to occur. It should be acknowledged that whilst most consumers wish to make a contribution towards meeting our net zero target, the majority do not seek out ways of doing so. Cost, disruption and comfort are the key considerations and consumers will expect for these concerns to be addressed through the transition to low carbon heat. Changing the fuel on-grid consumer use through biofuels and hydrogen meets this challenge. It also keeps the consumer in the driving seat in choosing what heating systems they want. Regulation that makes the gas network redundant will inevitably reduce consumer choice.

7.2. As mentioned in our response to question 1, we believe that much can be learned from the Scottish Government's approach to engaging consumers. This approach is rooted in making advice and the patchwork of schemes available to consumers as accessible and hassle-free as possible. By placing the potentially confusing array of schemes and advice behind a single, user-friendly brand, the Scottish Government has made engaging with the topic of heating, energy efficiency and low carbon options far easier. Contrast this with the ever-changing schemes such as the Green Deal, RHI, Green Homes Grant, etc. in England.

7.3. EUA believes that a vital part of the answer to this dilemma will be to ensure that installers are at the heart of the process. Studies show that consumers trust installers as a source of informative, impartial advice on the options available to them. Instead of sidelining installers and

tying both them and consumers up with restrictive regulations and bureaucratic accreditation requirements, the Government should view installers as a key route to consumers and their decision making. Installers will be aware of the suitability of different technologies for certain properties and can advise consumers on the costs they would face. They can also work to minimise disruption in consultation with consumers although inevitably disruption can only be avoided by replacing a fossil fuel heating system with a similar alternative as opposed to an extensive whole home retrofit of a very different technology.

7.4. We believe that protecting consumer choice and avoiding picking winners amongst low carbon heating technologies is vital. Scenarios with a dominant technology, such as wholesale electrification of heat, would completely remove consumer choice and would be detrimental not only to the viability of a timely transition to low carbon heat, but also to the willingness of consumers to positively participate in that transition. It has often been said that we need to bring consumers on the journey to net zero and doing this necessitates an approach which allows them to make their own decisions on what is best for their home, so long as the end goal of net zero is reached.

Question 8

8.1. EUA believes that BEIS and the devolved administrations will be the primary deliverers of the transition to low carbon heat. They set the policy agenda and implement incentives and requirements relating to domestic energy use and are therefore best placed to lead on this and co-ordinate the industry from a national perspective. However, there should also be a strong ongoing role for local authorities which should be empowered to develop plans for their area's transition to net zero. Councils know their communities best and this knowledge should be harnessed to ensure solutions are tailored to local factors.

8.2. These organisations will need to be properly resourced by the Treasury. It is clear that a mass transition to low carbon heating cannot be done on the cheap. It will be one of the major infrastructure priorities of the coming decades and therefore should be funded accordingly.