



***British Gas
Net Zero
Homes Index***



Exploring the most pressing climate change issues for families



The British Gas Net Zero Homes Index examines how Britain's families are feeling about the journey to Net Zero, their role in it, and their readiness to make changes to their home and lifestyle.

This is the first publication – and provides a baseline answer to these questions. We intend to update the results twice a year to see how public attitudes are changing.

In this report we use a large sample poll to look in detail at the issues that families feel are most pressing, what people think about climate change and how they think governments and businesses

should respond. We then dig into the changes that will be required in peoples' homes as we go further on reducing emissions, we look at familiarity with low carbon alternatives and willingness to pay for them. Finally, we look at the sources of advice that people turn to when faced with making low carbon choices and who they trust to deliver the Net Zero goal.

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British Gas Net Zero Homes Index

The British Gas Net Zero Homes Index is intended to give a headline picture of the readiness of UK households for Net Zero and how they are feeling about the changes required.

For Summer
2022, the British
Gas Net Zero
Homes Index is

57.5

We conducted a nationally representative poll of 4,008 adults and asked detailed questions to dig deep into public attitudes to understand how families are feeling about the choices ahead in these difficult economic times. The Index itself is calculated from a subset of these questions and presents a view of how positive people are feeling about the path to Net Zero on a scale of 0 to 100.

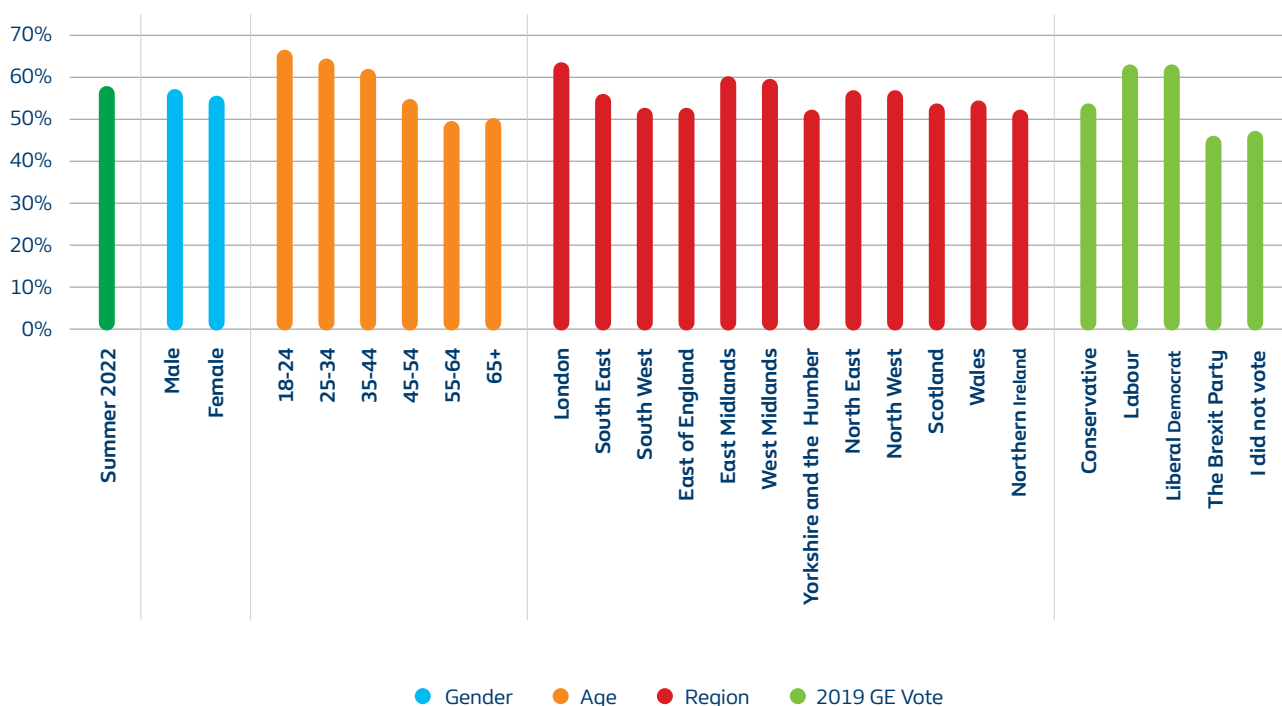
We intend to update the Index twice a year to give a simple way of tracking changing attitudes over time.

As we look to the future, we see potential tailwinds for the Index including growing familiarity with low carbon heating options such as heat pumps together with strong growth in the EV market.

But there are concerning headwinds for the Index too – including the risk that cost of living pressures reduce public support for the Net Zero target or increase pessimism about it being reached.

Looking at different groups within our poll, younger people (69 index for 18 to 24 year olds) have a higher index score than older (51 index for 65s and over), reflecting that across the board they are more concerned about climate change, more willing to act and more willing to pay for measures that cut household emissions. London has the highest index (65) and Yorkshire and the Humber the lowest (53) index. From the 2016 referendum, Remain voters show a higher index score (64) than Leave voters (52). And looking at voting intention for the next general election, those minded to vote Conservative have a lower index score (57) than those planning to vote Labour (63) or Liberal Democrat (67).

Figure 1 - Net Zero Homes Index breakdowns





Climate Change

Climate Concerns

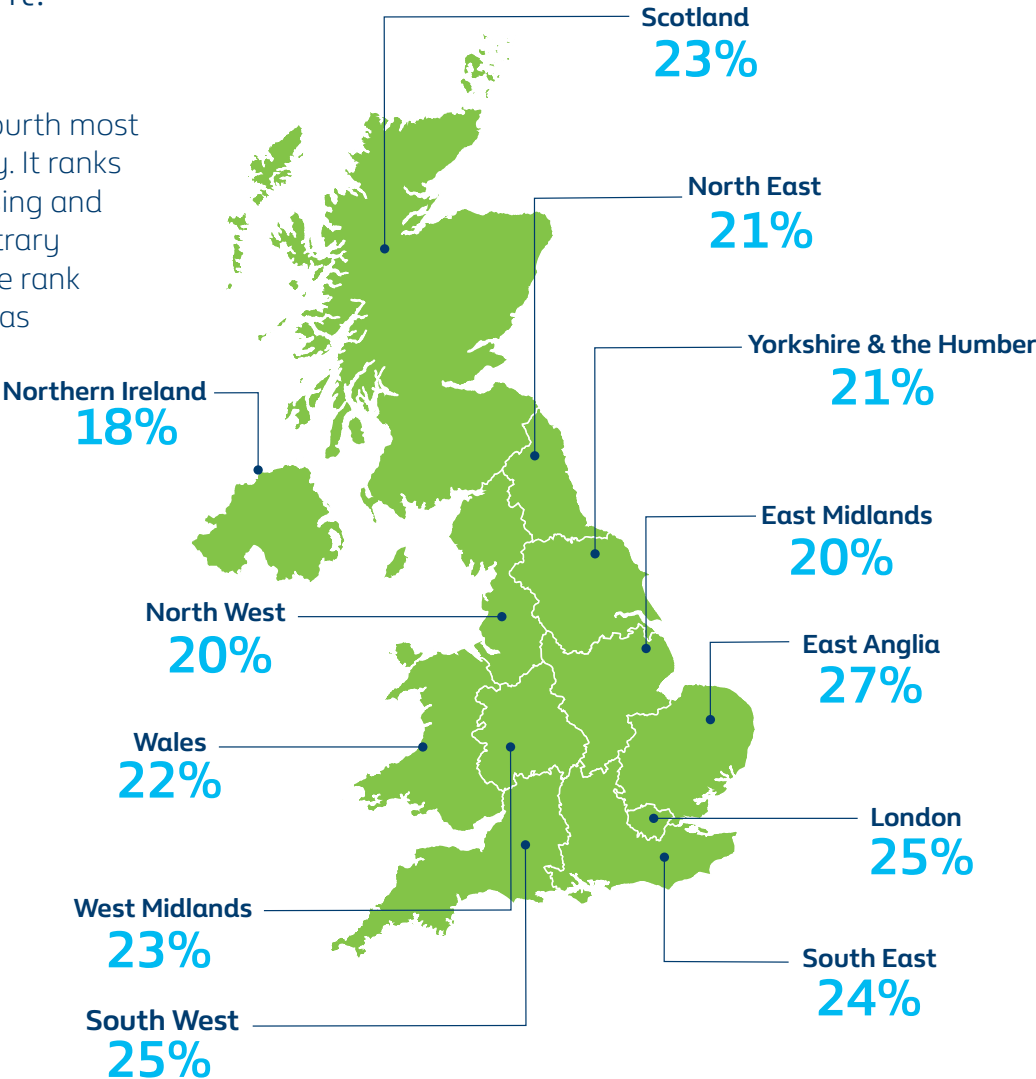
The British Gas Net Zero Homes Index found broad concern about climate change and strong support for measures to tackle it.

Climate change is ranked as the fourth most important issue facing the country. It ranks above immigration, taxation, housing and Brexit in public concerns. And contrary to popular perception, older people rank climate change as high a concern as younger groups.

92% believed climate change was real and 73% believed that it is primarily caused by human actions, such as pollution. Of those believing climate change to be real, 88% said they were concerned about it.

59% of people said that climate change is one of the most pressing issues of our time. Though, this figure varies around the country, with 66% in London saying it is one of the most pressing issues, but only 55% in the North East.

Figure 2 - Concern about climate change by region



When people think about their own local area, only 23% think it has been made worse as a result of climate change. But among younger people (aged 18 to 24) 38% think climate change has already made their town worse. And 40% of Londoners think the capital has already been damaged by climate change.

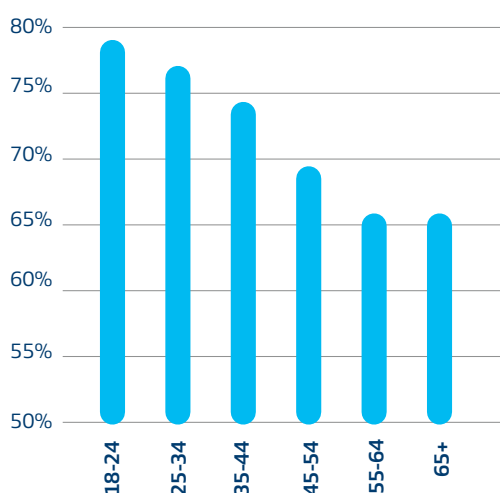
While the public are themselves concerned, they worry that other people are not taking sufficient care of the environment. 55% of the public believed that “most people in the UK do not care about the damage they do to the environment”, with two-thirds of young people believing this.

Targeting Net Zero

In 2019, the Government passed legislation to commit the UK to achieving Net Zero emissions of greenhouse gases by 2050. In our poll, 85% of the public said they had heard of this target, but only 45% said they knew what the target meant. Older people were more likely to say they have heard of Net Zero than younger people.

But when Net Zero was explained, support for it was strong. Overall, 71% said they supported the Net Zero target, with only 7% saying they were opposed. Younger people are more likely to be supportive than older groups. 65% of those who had voted Conservative in 2019 said they supported the Net Zero target, with only 10% of these voters saying they were opposed.

Figure 3 - Support for the Net Zero target



The UK’s official climate watchdog, the Climate Change Committee, recently published a strongly-worded report warning of the risks that current Government policy would not be sufficient to keep on track to meet the Net Zero target. Public opinion seems to reflect this expert view, with 54% saying they were not confident in the Government cutting emissions sufficiently by 2050, with those people not expecting Net Zero to be achieved until 2075. 19% of respondents were so pessimistic that they thought the UK would never achieve Net Zero. Interestingly, younger people are more confident about achieving Net Zero than older groups, with 49% of 25 to 34 year olds confident of meeting the target, compared to only 27% of those aged 65 and over.

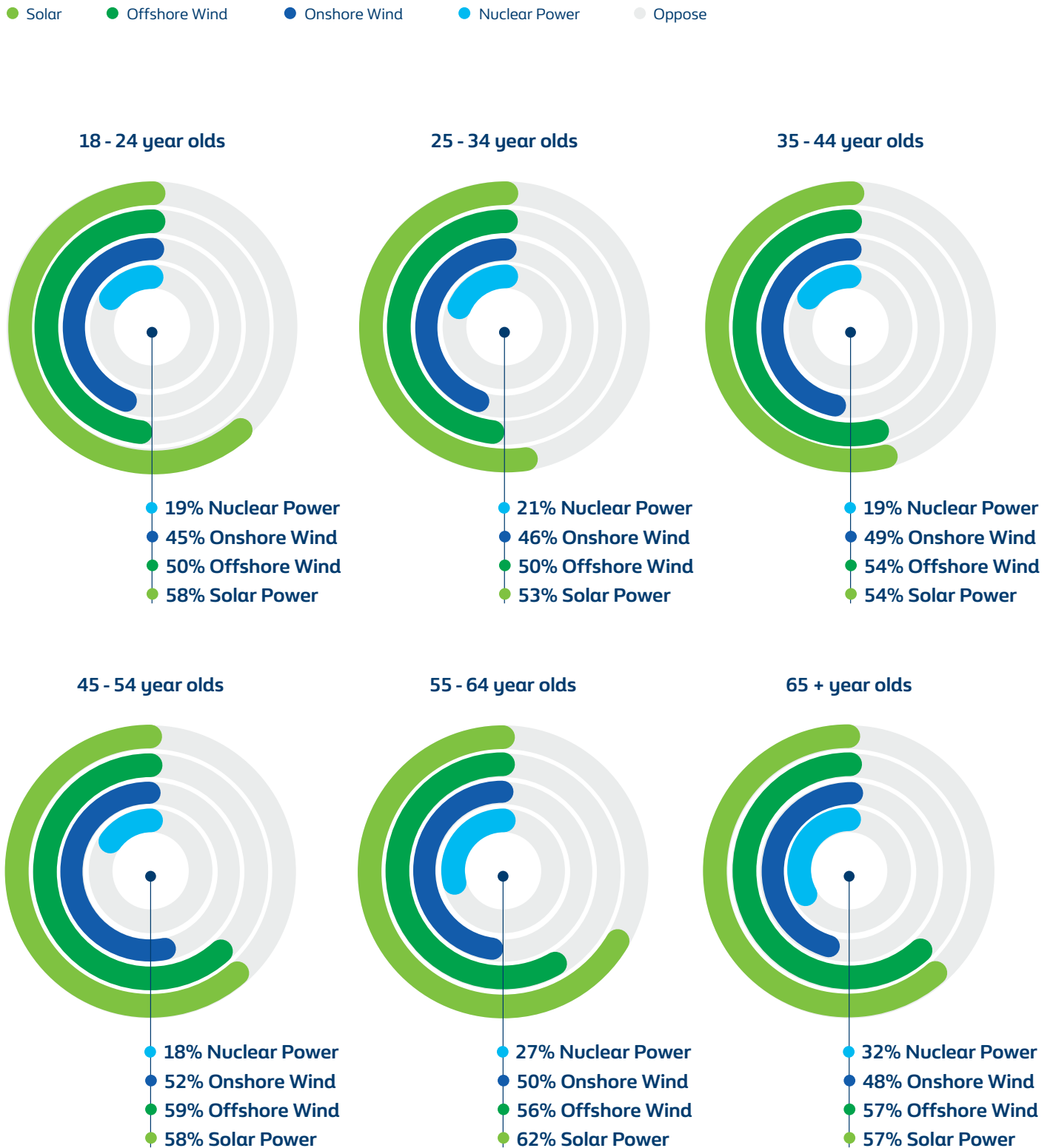
Actions to tackle climate change

The public’s concern about climate change is matched by an appreciation that significant changes will be needed to tackle it. 73% of people believed that tackling climate change would require us “to radically change the way we live our lives”. This holds true across all age groups (72% of 18 to 24 year olds agreed compared to 71% of those aged 65 and older). We also felt it positive that only 20% of the public thought that there was nothing the UK could do to stop climate change.

The UK has made good progress in recent years in reducing emissions. This has been driven by changes in the way electricity is produced, as coal-fired power stations have been replaced with renewables such as solar power and offshore wind. The British public are strongly supportive of continuing this transition. 87% of the public said they supported building more solar power, with just 2% opposed. For offshore wind, 84% supported building more with just 4% opposed. The development of onshore wind has previously faced local opposition and some politicians believe it is unpopular with the public. We found that 81% supported building more onshore wind, with just 6% saying they were opposed. Support for onshore wind does not seem to vary with age, with all age groups showing between 80% and 83% support. But there is an age dimension to opposing onshore wind – only 4% of those under 55 opposed

building more onshore wind, but this opposition rose to 10% among those aged 65 and over. Among the low carbon sources of power that we tested, nuclear power was the most controversial. 48% of the public supported the development of more nuclear power stations, but 23% opposed development. This was strongly driven by age – amongst our youngest age group (18-24) 41% supported and 33% opposed building more nuclear power. Among our oldest age group (65+) 61% supported and 15% opposed new nuclear development.

Figure 4 - Support for electricity generation types



Taking action on climate change is politically popular with the British public. We asked people to imagine that a political party proposed to drop the UK's 'Net Zero' target entirely. 27% said this would make them much less likely to vote for that party in a general election – while only 10% said this would make them much more likely to vote for them. The conclusion that proposing to drop the Net Zero target would (net) reduce likelihood to vote for a party holds for people who voted Conservative, Labour or Liberal Democrats at the last general elections. This was also true for both Leave and Remain voters at the 2016 referendum.

Concern about climate and the environment clearly runs deep. But sometimes it is the tangible forms of pollution that worry us more than those we cannot so easily see. We asked the public whether we should be more worried about plastic waste or polluting gases – the majority (75%) said we should be equally concerned about the two. But where people chose one, more were concerned about plastic waste than polluting gases. This held true across age groups, regions and demographics.

Tackling climate change will require significant investment in low carbon options, from large scale infrastructure like offshore wind farms, to household level purchases such as electric vehicles. In recent years the political discussion of these investments has changed from whether we can afford to make them to whether we can afford not to – and increasingly to how these investments could drive economic growth and create new green jobs. Public attitudes reflect this trend. 46% of the public think action on climate will strengthen the British economy, with only 17% now thinking this will be an economic negative. This positivity is shared across all regions of the country and voters for all main parties.

The public also recognise the co-benefits of action on climate change. With 60% of the public believing that taking action to tackle climate change would be positive for their own quality of life, 68% also believe it will benefit people's health more generally.

Responsibility for tackling climate change

The truth is that tackling climate change will require all of us to take action – governments will need to set policies and fund low carbon options, businesses will need to invest in reducing their emissions and in innovative technologies, and households will need to adopt low carbon choices in their day to day lives, from replacing their car with an electric vehicle to changing their diet.

When asked who has the most responsibility for tackling climate change, the public first chose national government, followed by international bodies like the UN. Larger businesses came next on their list. Household actions ranked in the middle. With the media, academic bodies and charities seen as having least responsibility to act.

Overall, the public believe that the UK Government should be doing more to tackle climate change. 24% thought the Government was doing the right amount on climate change, 20% thought too much, 47% thought too little. The answers to this question varied significantly by age. For our youngest age group, aged 18 to 24, 60% thought the Government was doing too little. For our oldest age group, aged 65 and over, only 39% thought the Government was doing too little.

Businesses are also seen to not be pulling their weight in tackling climate change. 60% of the public thought businesses were doing too little compared with 23% who thought they were doing the right amount and just 17% who thought businesses were doing too much.



Britain's Homes

Emissions

UK greenhouse gas emissions have been halved since 1990. Many of the changes made in recent years to achieve this have been largely invisible to the general public.

Almost two-thirds of emissions reductions have been in the energy sector, primarily by changing the way we generate electricity – replacing coal-fired power stations with renewables such as solar and wind.

But as the UK seeks to tackle the remaining half of our emissions this will increasingly be visible to the public and require households to make changes to their lifestyles in ways with which they are not yet entirely familiar. This will include retrofitting existing homes to improve their energy efficiency, changes to transport choice

like electric vehicles or increased use of active or public transport, the installation of low carbon heating options such as heat pumps, and even changes to people's diets to reduce meat consumption.

Given this need to change, it is positive that we found 78% of the public saying that they were willing to make changes in their own homes to tackle climate change. This was especially true of younger segments – with 83% of those aged under 45 willing to make changes at home. But even in the older groups willingness remained strong, with 73% of those aged 65 and over willing, and only 6% not at all willing to make changes to their home.

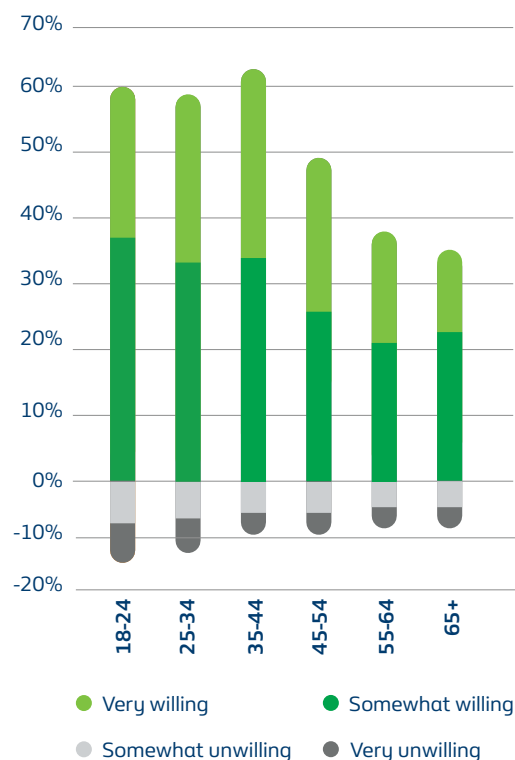
Climate change is sometimes portrayed simplistically as the result of smoky emissions from giant factories, so it would be understandable if people didn't realise the contribution their own home makes. Instead we found pretty realistic views on emissions from British homes. In 2021, the residential sector was responsible for 20% of the UK's CO2 emissions and 16% of the UK's total greenhouse gas emissions. 43% of those willing to make an estimate thought that homes were responsible for between 10% and 30% of emissions with only 9% thinking that homes accounted for less than 5%. A perhaps surprising 9% thought homes were responsible for more than half of all UK greenhouse gas emissions.

Energy Efficiency

One of the most straightforward and effective changes that many homes will need is better insulation. The UK has the oldest and among the most draughty housing in Europe. We asked homeowners how important they felt it was to install improved insulation on a scale from 1 - not at all important to 5 - essential. 27% thought that improved insulation was essential and 50% ranked this either a 4 or a 5. Only 4% thought improved insulation was not important at all, with a further 27% believing that they had already improved their energy efficiency.

Among homeowners, 48% said they were willing to install improved insulation in the next two years, with only 9% saying they were unwilling over that time frame. Willingness varied with age, with 61% of those under 45 willing to improve their energy efficiency in the next two years, compared to only 36% of those aged 65 and over. We might expect this to vary significantly with household income, but the actual effect is limited. For those with incomes of between £15,000 and £25,000, we found 45% willing to install improved insulation in the next two years – among those on much higher incomes of between £45,000 and £70,000 the figure was higher, at 53%, but not dramatically higher.

Figure 5 - Willingness to install improved insulation in the next two years by age group



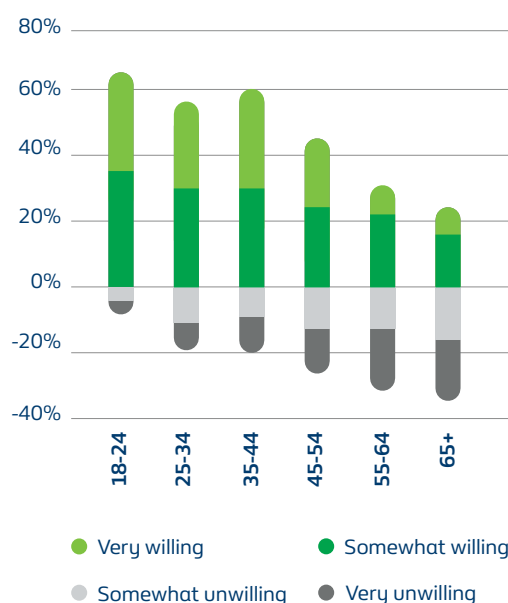
Solar Panels

One of the shifts that has already begun is the increasing role that households can play in our energy system. Almost a million homes across Britain now have solar panels on their roofs. And increasingly consumers are able not only to generate electricity for their own use in this way, but also to store it in batteries, and even sell back to the grid at a profit at times of higher demand.

In our research we found that 20% of homeowners felt that installing solar panels on their roof was essential to tackling climate change and a further 25% thought it important (scoring it a respective 5 or 4 on a scale from 1 - not at all important to 5 - essential). Installing rooftop solar was seen as essential by 34% of those aged 18 to 24, but only by 11% of those aged 65 and over.

Thinking about the next two years, 42% of homeowners said they would be willing to install solar panels, with 25% unwilling and a further 11% saying that these solar panels were not a viable option for their house. Again, willingness varied substantially by age, as can be seen in figure 6 below, 62% of those aged 18-24 willing to install solar in the next two years, falling to just 25% of those aged 65 and over.

Figure 6 - Willingness to install solar panels in the next two years by age group



Heat Pumps

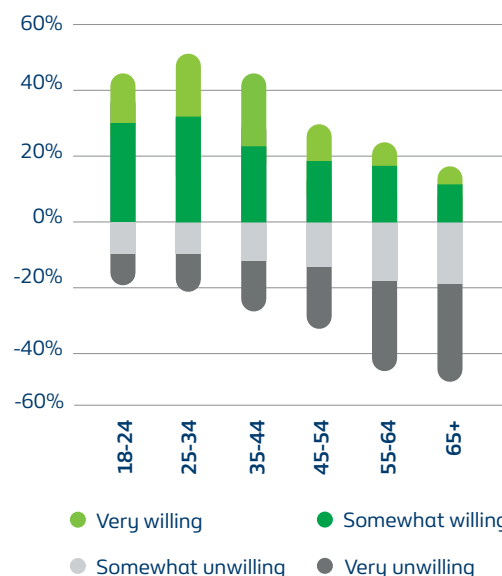
The main source of emissions from Britain's homes is the use of natural gas for heating and cooking. Around 82% of our homes are today connected up to the gas grid and use a gas boiler as their main source of heating. This is much higher than in many other countries – it's 35% in Germany, 34% in France and 50% in the USA. This has largely been a positive for the UK over the decades since North Sea gas came on stream as mains gas heating has been cheaper than alternatives such as oil or electric resistive heating. But this high penetration of mains gas boilers will now need to be replaced in order to combat climate change.

Heat pumps are expected under most Net Zero scenarios to replace many of these gas boilers. Heat pumps are (generally) an electrically driven device that extracts heat from the air, ground or water in a highly efficient way. Heat pumps are a proven technology, but are currently used by fewer than 1% of homes in England. The UK Government has set an ambition to grow the electric heat pumps market from 30,000 installed per year to 600,000 per year by 2028. British Gas is already installing them in customers' homes across Cornwall, Devon, Somerset, Dorset, Hampshire, the Isle of Wight and Gloucestershire – with installations in more areas of the UK coming soon.

In our research we found that 15% of homeowners felt that replacing their gas boiler with a heat pump was essential to tackling climate change and a further 22% believed it was important (scoring it a respective 5 or 4 on a scale from 1 - not at all important to 5 – essential). Replacing a gas boiler with a heat pump was seen as essential by 23% of those aged 18 to 24, but only by 9% of those aged 65 and over.

Thinking about the next two years, 31% of homeowners said they would be willing to install a heat pump in that time. As figure 7 shows, attitudes to heat pumps varied substantially by age, 50% of those aged 18-24 were willing to install a heat pump in the next two years, compared to just 16% of those aged 65 and over.

Figure 7 - Willingness to install heat pumps in the next two years by age group



One challenge for heat pumps, and for the decarbonisation of heating more generally, is a lack of familiarity with the alternatives to traditional boilers. We would expect this issue to diminish as low carbon heating appliances are rolled out more widely and families come to know a friend or family member who has one. But today the public are unsure about their choices. We asked homeowners who currently have a gas or oil boiler what they thought they would replace it with when it came to the end of its life. 37% said they would go for a similar gas or oil-fired boiler. 14% said they would choose a heat pump. 6% anticipated choosing a boiler that runs on hydrogen. But the single biggest group, 38%, said they didn't know what they would choose.

Among those that expected to replace their gas or oil boiler with a similar boiler, 50% said this choice was driven by it being the cheapest option and 48% said it was because it would be straightforward to install. A striking 16% of under 45 year old homeowners said they would choose the similar boiler replacement because they believed this to be the most environmentally friendly option.

For homeowners currently using a gas or oil boiler, price narrowly beats environmental impact when thinking about a replacement. 41% said they would install the cheapest option,

regardless of any environmental impact, with 34% saying they would install the most environmentally friendly option, regardless of the cost. The environmental choice wins out among respondents below 35 years of age, but among 45s and above price is the clear choice.

Electric Vehicle Charge Points

Transport is the biggest sectoral source of CO2 emissions in the UK, accounting for around one-third of total emissions. The transport sector will account for around one-quarter of the £1.3 trillion of investments that the Climate Change Committee estimate will be needed between now and 2050.

Investment in decarbonising transport will largely be in the purchase of new electric vehicles (EVs) but will also include around £50bn of new transport infrastructure. These costs, however, will be more than offset by savings made as electric vehicles are much more efficient to run.

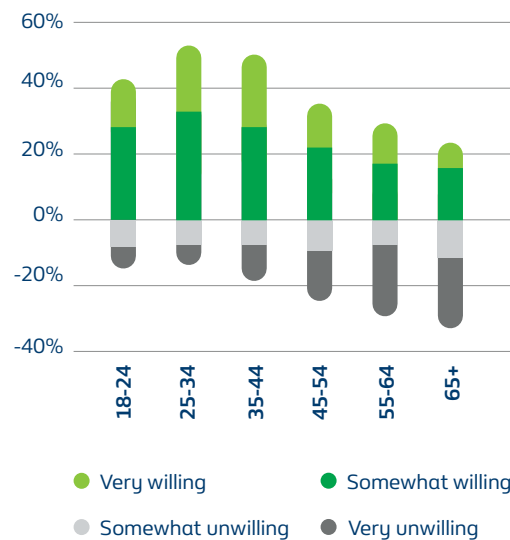
Electric vehicles are proving to be increasingly popular with motorists. Despite overall car sales being down 37% on pre-pandemic 2019 levels, EV sales have increased by 382% and sales of pure BEVs are up by 862%. So far in 2022, sales of all EVs are outstripping traditional petrol and diesel engine car sales.

We found that 16% of homeowners considered that it would be essential for them to install an electric vehicle 'fast charge' point to their home in order to combat climate change and a further 22% thought it important (scoring it a respective 5 or 4 on a scale from 1 - not at all important to 5 – essential). Interestingly the area of the country that was most likely to consider an electric vehicle 'fast charge' point to be essential was London, with parts of the country that are much more dependent on cars for commuting around half as likely as Londoners to say installing an EV charger was essential.

Other Home Interventions

Among homeowners, 35% said they were willing to install an electric vehicle 'fast charge' point to their home in the next two years, with 24% unwilling. The age of the groups surveyed had a strong influence on responses to this question. The cohort most willing to install an EV charger was the 25 to 34 year olds, of whom 52% were willing. The cohort least willing were the 65 years and over where the figure was just 21%.

Figure 8 - Willingness to install an electric vehicle 'fast charge' point in the next two years by age group



The installation of triple-glazed windows was considered to be essential to tackling climate change by 18% of the public, including 28% of those aged between 35 and 44. This upgrade was considered more important by Britons with higher levels of education.

A quarter of the public considered environmentally friendly light bulbs to be essential, with the holders of doctorate level qualifications again the most likely group to think this (40%).

The idea of allowing the times at which energy-intensive appliances are run to be controlled by a family's energy supplier got a mixed reaction. 13% thought this would be essential, but 19% thought this was not important at all. 34% of homeowners said they would be willing to give this control to their supplier, with 37% unwilling.



Costs of Going Green

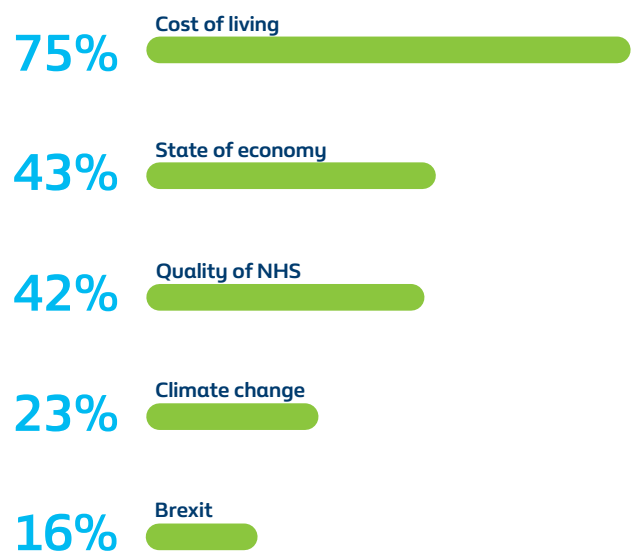
Cost of living

Against the backdrop of inflation approaching 10%, cost of living is today the dominant priority for the British public, far outstripping the economy or even the NHS. 75% of the public identify cost of living as one of the most important issues facing the country – with women more concerned (79%) by rising prices than men (71%). Cost of living tops the list of pressing issues for all age groups, all socio-economic groups, and in all regions and nations of the UK.

The state of the economy is selected as one of the most important issues by 43% and the quality of the NHS by 42%. The threat of climate change is ranked fourth in this priority list, being selected by 23% of the public.

Since 2019, default gas and electricity tariffs have been capped by the regulator, Ofgem. That cap is designed to ensure that people's bills reflect the costs energy suppliers face in

Figure 9 - Most important issues facing the country



purchasing and delivering gas and electricity to households. As a result, the level of the cap is changed by the regulator in response to things like changes in the wholesale prices of gas and electricity. Whilst these prices were at record lows as countries locked down and demand plummeted during Covid-19, recently high demand for gas and reduced supply from some countries have caused wholesale prices to surge. Wholesale gas prices for the coming winter are more than eight times the level seen just 18-24 months ago.

Ofgem increased the level of the price cap by almost £700 from 1 April. The Government announced the Energy Price Guarantee which came into effect from 1 October 2022 to limit rising energy costs. The new scheme reduced the unit cost of electricity and gas so that a household with typical energy use in Great Britain pays, on average, around £2,500 a year on their energy bill, for the next 6 months. The support available from April 2023 has yet to be confirmed. 82% of respondents said they had personally experienced an increase in the cost of their energy bills in the past year. And 89% expect their bills to increase within the next year.

The Energy Price Guarantee comes in addition to the £400 bill discount for every household in the UK from October. Pensioners and those on Universal Credit will get substantially more help from the Government.

Responsibility and policy

In our research, we found 26% of the public felt the UK Government was entirely responsible for recent energy price rises, with a further 49% saying the Government was at least partially responsible. Older respondents were more likely to say the Government was not responsible for this.

The top drivers of higher energy prices are identified by the public as the war in Ukraine (68%) and oil and gas producing countries (such as Russia or Saudi Arabia) increasing their prices (62%). Only 26% blame 'green taxes' on energy for rising prices.

We asked what the Government should prioritise to deal with the cost of energy bills. The top responses were very clearly to build more low-carbon energy sources, such as wind and solar farms (52%) and to make people's homes more sustainable, for example, by installing more insulation (46%). Only 10% said that the right response would be to reverse sanctions on Russian oil and gas.

Going green

Against this backdrop, making homes more energy efficient makes more sense than ever before. We found 51% saying that higher energy prices made them more likely to look at "installing energy efficiency products" in the next 12 months. (Interestingly, when we worded this same question as "installing improved insulation", only 34% said they were more likely to look at this). Younger homeowners were more likely than older to be driven to consider energy efficiency products in the face of higher bills.

The upfront cost of insulation was the most identified reason for people choosing not to improve the energy efficiency of their home (39%). The hassle factor – for example the need to empty your loft – was the barrier for 16% of the public, rising to a surprising 26% of younger people (those aged 18 to 24).

We also tested people's willingness in these tough times to pay extra to make green choices.

For electric cars, we found that 12% were willing to pay an extra £5,000 or more for an EV compared to an equivalent petrol or diesel car. And this did not just reflect the views of those on higher incomes – for example 13% of those with an income of £25,000 to £29,999 had to pay £5,000 more. In total, 54% of the public said they were willing to pay something extra to get an EV. Only 12% said they would only choose an EV if the upfront cost was lower than for an equivalent petrol or diesel car.

For eco-friendly heating systems, such as heat pumps, we found that only 4% would be willing to spend an additional £5,000 in upfront costs. But 33% would be willing to spend at least £1,000 more for a greener alternative to a boiler. Compared to the EV findings above, the decision on low carbon heating did seem to be more determined by income. Just 11% of those with an income of between £25,000 and £29,999 would be willing to spend an additional £2,500 on a low carbon heating system, compared to 21% of those with an income between £35,000 and £39,999.



Advice and Trust

Trust in British Gas

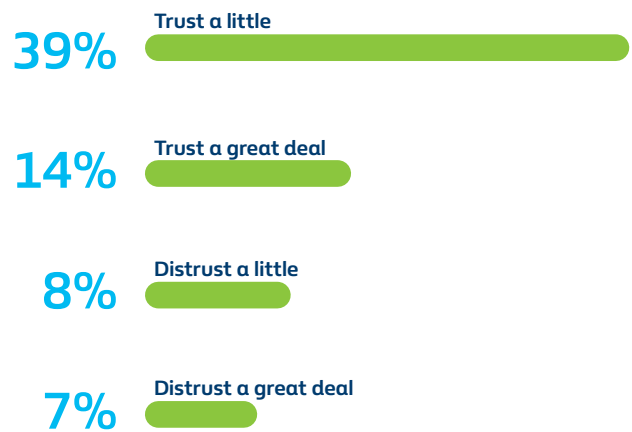
British Gas is ideally positioned to provide a leading voice and play a leading role in the Net Zero transition. It has 200 years' experience delivering for Britain's homes and has the largest heating engineering workforce in the country.

42% of the public say that they trust British Gas to help them reduce emissions from their home, with a net trust score of 21%. Younger respondents have an even more positive view, with 52% of 18 to 24 year olds trusting British Gas to reduce their home emissions, for a net trust score of 33%.

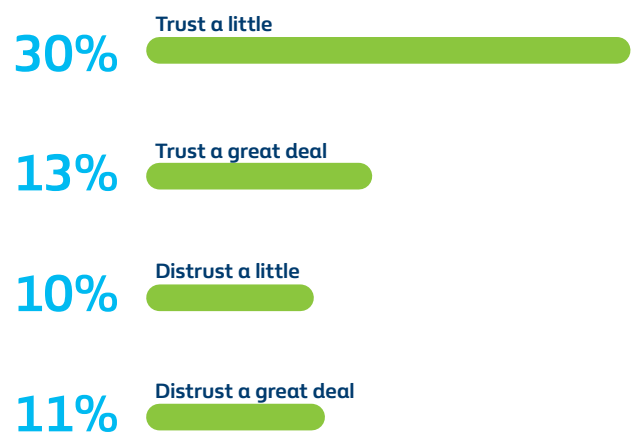
The British Gas heating engineer workforce is even more trusted by the public. 53% say they would trust a British Gas engineer to help them reduce their home's emissions. It is younger respondents who again have the most positive view, with British Gas engineers receiving an impressive net trust score of 46%.

Figure 10 - Levels of trust in British Gas and our Engineers to help families to reduce emissions

British Gas Engineer



British Gas



We know that most energy suppliers these days are talking about the way they can help customers on the journey to Net Zero. We found the public gave positive net trust scores to all the energy supplier brands that we tested for helping to deliver the Net Zero target. But it was British Gas that had the highest levels of trust to deliver on Net Zero at 39%. This was especially true of younger people, where 49% trusted British Gas to deliver the Net Zero target, ahead of, for example, Eon on 34% or Octopus Energy on 35%.

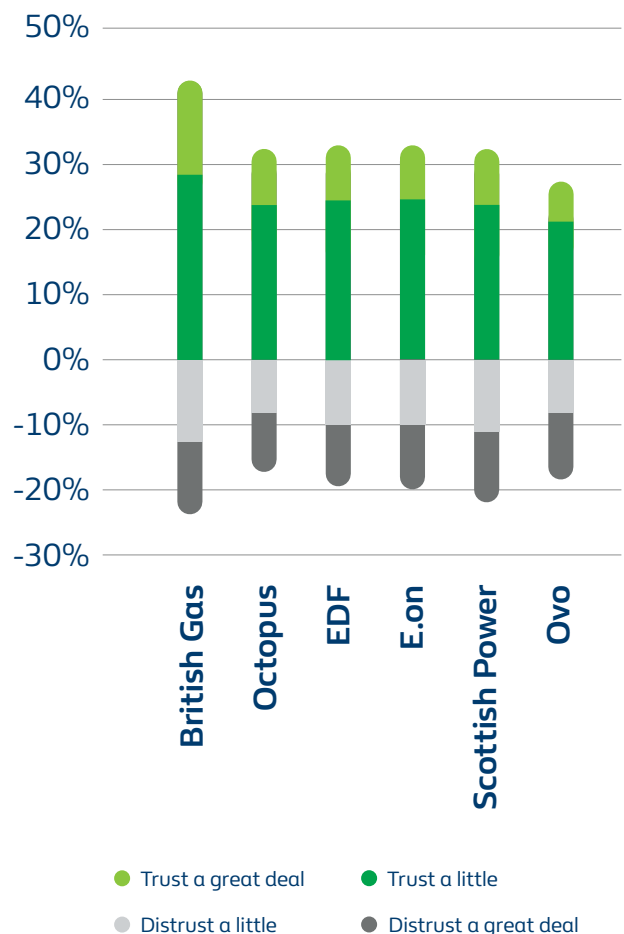
In fact, British Gas had the highest levels of trust among energy suppliers to deliver Net Zero among both men and women, across all age groups, and across all socio-economic groups. British Gas is most trusted among both 2016 Leave and Remain voters and for 2019 voters for the Conservatives, Labour and Liberal Democrats.



Sources of heating advice

We described above the lack of familiarity people have with low carbon alternatives to the traditional boiler. Against this backdrop, we were interested to see who people would trust for advice. The most trusted sources of advice were a local plumber (59% net trust) or friends and family (56% net trust). The UK Government was the least trusted source of advice, with 18% saying they distrusted Government advice a great deal.

Figure 11 - Net Zero Homes Index breakdowns





Methodology & Sample

Public First surveyed 4,008 adults online in June 2022.

All results are weighted using Iterative Proportional Fitting, or 'Raking'. The results are weighted by interlocking age & gender, region and social grade to Nationally Representative Proportions.

