



# The Road to **Net Zero**

**Motivating customers  
for a greener future**



# Introduction



**Carbon Net Zero has recently become a household term with many of us now familiar- to some degree at least- with what it means and most of us forming a view on how governments around the globe are grappling with it. Technically, it refers to “a state in which greenhouse gases going into the atmosphere are balanced by emissions being removed from the atmosphere”. In other, plainer, words, a state of environmental equilibrium.**

The UK Government has outlined ambitious targets to reach Net Zero, contributing to the global ambitions set out in the 2015 Paris Agreement. In June 2019 the UK became the first major economy in the world to pass laws to bring all greenhouse gas emissions to Net Zero by 2050 and, earlier this year it announced its latest Carbon Budget to reduce emissions by 78% by 2035 compared to 1990 levels<sup>1</sup>.

And yet, with such a strong commitment from Government, being one of only 12 regions to enshrine said commitments by law<sup>2</sup>, the Climate Change Committee (CCC) stated the UK is not yet on track to meet its ‘more challenging measures’<sup>3</sup>.

Against this backdrop, we conducted a consumer research study among 3,000 UK adults in early June. Our research is intended to shine a light on how far along the road to Net Zero consumers are and to help us understand the progress being made, some of the barriers to change and what role consumer sentiment continues to play in this movement. Through this insight we might start to explore which influences are most important.

Our findings paint a clear picture of the perennial challenge facing utility companies of balancing instant gratification with effecting long term societal change. We begin with exploring customer behaviour examining both sentiment towards and readiness for carbon Net Zero, before probing the economic reality of edging closer culminating with our key recommendations of how utility companies can help.

1. <https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>

2. <https://eciu.net/netzerotracker>

3. <https://www.theccc.org.uk/about/our-expertise/advice-on-reducing-the-uks-emissions/>



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# Exploring Consumer Behaviour

## What role can we all play in Net Zero?

Although the shift to Net Zero will largely be policy led and funded and delivered by private companies, understanding individual behavioural and societal shifts will be instrumental in reaching the UK's long-term climate change objectives.

Even with 40% of UK emissions coming from households<sup>4</sup>, many consumers still do not understand the significance of the Net Zero targets and their role in helping meet these.

Utility companies have a role to play too in supporting consumers to adopt low carbon-emission lifestyles. But in order to better understand our individual and collective roles, we need to paint a picture of how much we know about Net Zero, and what our beliefs and behaviours are towards climate change.

4. <https://www.theccc.org.uk/wp-content/uploads/2016/07/5CB-Infographic-FINAL-.pdf>  
5. [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_Full\\_Report.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf)



## A snapshot of attitudes towards Net Zero and climate change

Climate change is one of, if not, the biggest challenge the world is facing, so it's encouraging that our research shows that consumer sentiment reflects this.

Notably, over one in three (34%) feel climate change is not taken seriously enough. And with regular reports being published on the issue, such as the UN's Sixth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC), showing the unequivocal impact of human activity on climate change<sup>5</sup>, the issue is even more pressing. Echoing this, 34% of adults surveyed feel climate change is an emergency that we need to deal with urgently, with the same number suggesting, sadly, that we've left it too late to deal with.

This concern rises among younger adults. Arguably the mounting widespread attention on the issue has risen in tandem with the proliferation of social media platforms, highlighting a generational divide when it comes to the views and attitudes on climate change. 45% of Gen Z's feel climate change is an emergency that needs to be dealt with urgently, 42% feel we've left it too late to deal with, and 43% said they're worried about climate change, suggesting a higher level of concern than the older generations.

When asked to think about Net Zero specifically and whether they thought it was achievable, less than one in five UK households (18%) said they think we'll meet our targets by 2050. Less people were optimistic about the timeframes set out, with 33% thinking Net Zero is achievable, but not by 2050. Over a quarter (27%) believe Net Zero isn't achievable. 21% said they don't know whether the target is achievable and would need more information before making a judgement.

Interestingly, those respondents belonging to Generation Z felt stronger about the action that needed to be taken on climate change, half (50%) said the Net Zero target was not achievable in the timeframe, and 15% said they didn't think it was achievable at all.



# 72%

of UK households believe there is no public education around the topic of Net Zero

## Do consumers understand what Net Zero is?

Though Britons feel passionately about climate change and our ability to attain the Net Zero targets set out, this doesn't correspond with their overall understanding of the issue and, chiefly, action required of them.

Encouragingly, 81% of consumers are aware of the term 'Net Zero' and 75% are aware of the Government's Net Zero pledge. Yet, when delving into their true understanding of the term, only 18% revealed they fully understand what it means. Less than two in five (39%) said they have a partial understanding of the term.

Alarming, 43% revealed they do not understand what Net Zero means. But, with 72% of UK households believing there is no public education around the topic of Net Zero, such low comprehension levels are hardly surprising.

Without the basic understanding, this could make it more difficult for consumers to appreciate how their actions and lifestyle choices affect the environment, and what changes they need to make to reduce their carbon emissions.



- I think reaching Net Zero is achievable, but not in the time frame that is set out (by 2050)
- I don't know and would need more information before assessing whether it's achievable or not
- Yes, I think we'll meet Net Zero by 2050
- No, I don't think it's achievable

## Understanding of the term 'Net Zero' in the context of the environment



The research also revealed a clear gender divide when it comes to understanding Net Zero. Men are far more confident than women in their understanding of the term, with almost three quarters (72%) of men saying that they understand what Net Zero means, compared to just two fifths (42%) of women. Only one in ten women (9%) said they fully understand what the term means compared to nearly two fifths (28%) of men.

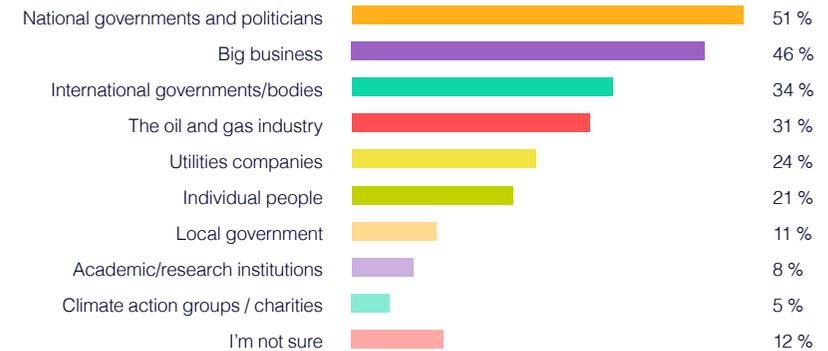
## Where does the responsibility lie?

The research pointed to a shirk in responsibility for solving problems and finding solutions to climate change.

Many UK individuals feel that national governments (51%), big business (46%), the oil and gas industry (31%), and utility companies (24%) are responsible for finding and providing solutions to climate change. One in five (21%) saw individuals as most responsible for finding and solving solutions to climate change.

Thinking about their own households, nearly half (45%) of UK households talked of collective responsibility in reducing carbon emissions, only 22% thought it was their own responsibility.

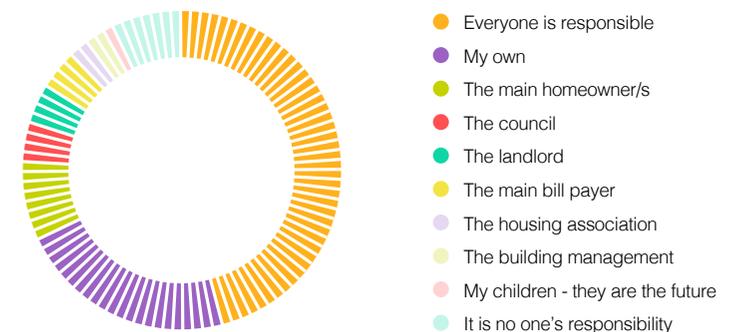
## Who do you think is most responsible for solving the problems / finding solutions to climate change?



For those who are in rented properties, 36% said that believed it was everyone's responsibility in the household to help reduce its carbon emissions. 18% said it was their own, and 14% said the responsibility lay with the landlord of the property.

When probed to think about how big of a lifestyle change, they thought individuals should make in their personal lives to meet Net Zero targets, nearly all respondents recognised a level of personal responsibility was required. Only 6% said no one need make any lifestyle changes. Over half (53%) said only some changes in lifestyles were needed, 27% said a large change in lifestyle was needed. 14% said only a little change was needed.

## Household responsibility in reducing carbon emissions



## What lifestyle changes have consumers already made to reduce their carbon footprint?

To reduce their carbon footprint, many UK households have already or are willing to make changes to their everyday lifestyles.

-  **70%** have been sparing with their energy use at home **19%** have not yet made this change but are willing to
-  **68%** have switched their bills and subscriptions to digital/paperless **19%** have not yet made this change but are willing to
-  **45%** have walked or cycled as their mode of transport rather than drive **21%** have not yet made this change but are willing to
-  **41%** have bought energy or water saving domestic appliances **42%** have not yet made this change but are willing to
-  **37%** have reduced their international travel **22%** have not yet made this change but are willing to
-  **34%** have switched their energy to renewable energy **47%** have not yet made this change but are willing to
-  **32%** have installed new insulation in their home **37%** have not yet made this change but are willing to
-  **23%** have planted more trees **48%** have not yet made this change but are willing to
-  **18%** have shared more data with utility companies so they can make changes for them **48%** have not yet made this change but are willing to
-  **11%** have installing solar panels to generate their own energy **45%** have not yet made this change but are willing to
-  **8%** have bought an electric or hybrid vehicle **50%** have not yet made this change but are willing to
-  **6%** have installed heat pumps **40%** have not yet made this change but are willing to

Of those who have made lifestyle changes, 90% adjusted their energy logistics/usage. This includes switching to renewable energy, installing solar panels, buying energy or water saving appliances and being sparing with home energy usage.

80% of respondents have made administrative changes, which includes switching bills and subscriptions to paperless, sharing more data with utility companies, and 70% adjusted their travel plans, such as reducing international travel, cycling/walking instead of driving, or buying a hybrid/electric car. Research from YouGov also sought to discover how willing individuals were to change their behaviour. They found that 20% of consumers were willing to see the price of overseas travel substantially increase in order to help reduce carbon emissions, and 29% were willing to never drive a petrol/diesel car again.<sup>6</sup>

Looking into the reasons why individuals have already or were willing to make certain lifestyle changes, most respondents were driven by their moral compass, followed by the cost savings of making a change in the long run. Most choices though were driven by personal reasons, rather than because they were enforced by regulation from government.



**A fifth (20%) of all parents said that their children encouraged them to make their lifestyle greener, rising to 29% of all parents with young children.**

6. <https://news.sky.com/story/one-in-four-britons-is-unwilling-to-change-key-habits-that-would-help-tackle-climate-crisis-poll-12267928>

## Lifestyle changes consumers are willing to make and why

Share more data with utilities companies so that they can make changes for me



Install new insulation in my home



Install heat pumps



Plant more trees



Switch bills and subscriptions to digital/paperless



Be sparing with energy use at home (e.g. line-drying laundry, turning down heating)



Buy energy or water saving domestic appliances



Install solar panels to generate my own energy



Switch my energy to renewable energy



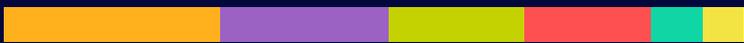
Buy an electric or hybrid vehicle



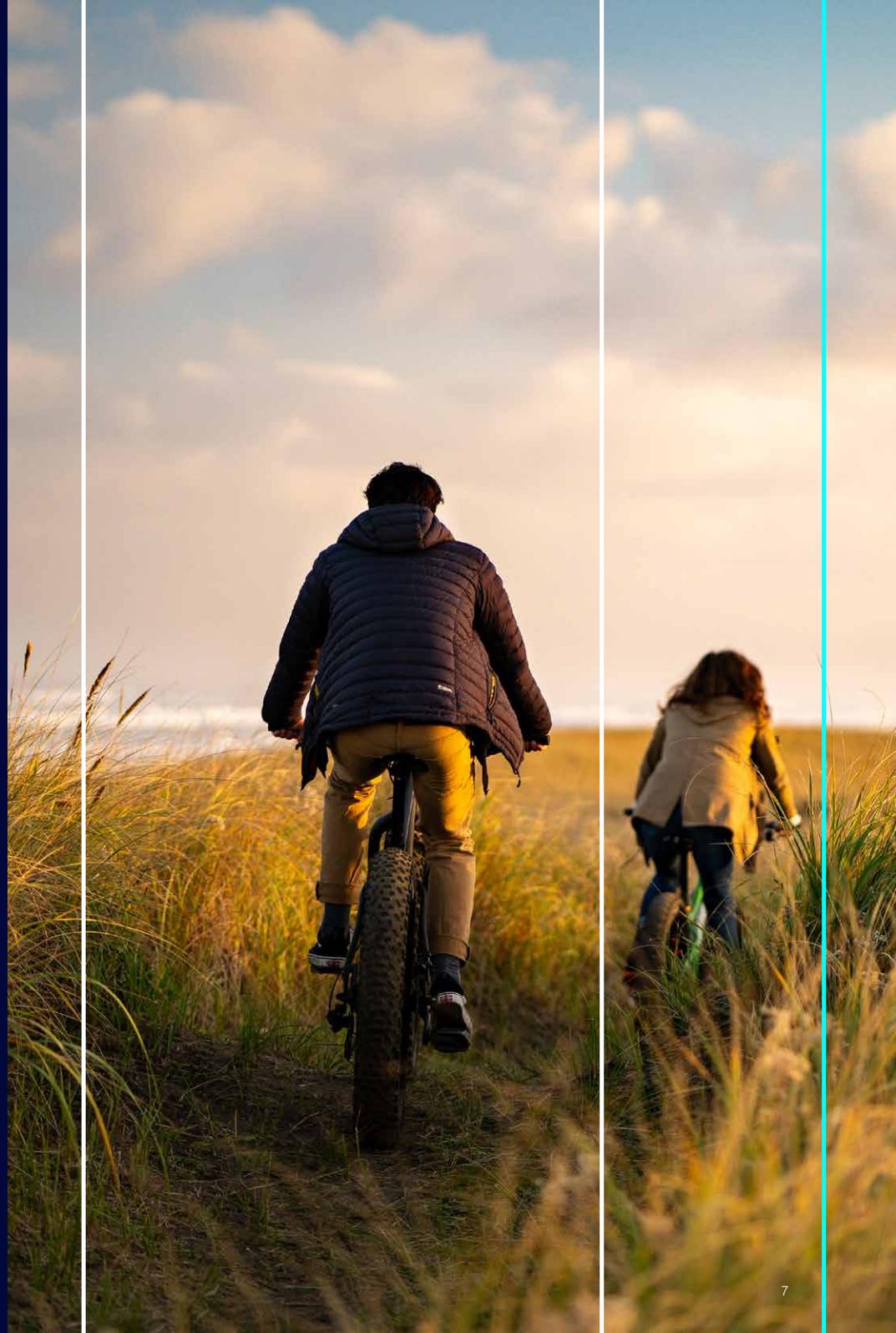
Cycle or walk instead of driving



Reduce international travel



- I think it's morally necessary to help fight climate change
- It will save me money in the long run
- To make myself feel better about the environment
- To make the world a better place for my children/grandchildren
- It will be good for my health
- I will have to do it because of government regulation



# Barriers to lifestyle changes

66% of UK households think that actioning changes to their everyday behaviour will make their day-to-day lives more expensive for them, with 23% thinking it will make it significantly more so. Interestingly, this figure rose among those who fully understand what Net Zero means (74%). Just over half (53%) of those who hadn't heard of and don't understand the meaning of Net Zero said they thought actioning changes to their everyday behaviour would make day-to-day life more expensive.

Our research investigated the reasons why individuals were unwilling to make certain lifestyle changes:

## 21% are unwilling to reduce their international travel

- 48% said they're just not interested in making this change
- 16% said it would make their life more difficult
- 13% said they don't think it will make a difference to Net Zero
- More men (17%) than women (9%) think it won't make a difference to Net Zero

## 21% are unwilling to buy an electric or hybrid vehicle

- 44% said they're just not interested in making this change
- 29% said it would make their life more difficult
- 8% said they don't think it will make a difference to Net Zero
- Despite having more disposable income on average, 50% of over 55s think having an electric or hybrid car is too expensive to set up compared to 32% of 18-34-year olds
- 49% of those who own a petrol or diesel car think it is too expensive to set up. 30% think it is too expensive to maintain

## 25% are unwilling to install solar panels to generate their own energy

- 43% said they're just not interested in making this change
- 22% said it would make their life more difficult
- 22% said they don't think it will make a difference to Net Zero
- 17% said it doesn't bother them
- 49% of homeowners think it's too expensive to set up, and 23% think it's too expensive to maintain

## 30% are unwilling to install heat pumps

- 24% said it would make their life more difficult
- 20% said they don't think it will make a difference to Net Zero
- 15% said it's too much hassle
- 49% of homeowners say they're too expensive to set up
- 25% of homeowners say they're too expensive to maintain

## 29% are unwilling to share more data with utility companies

- 34% said they're just not interested in making this change
- 25% said it would make their life more difficult
- 10% said they don't think it will make a difference to Net Zero
- 6% said it doesn't bother them
- 25% of those who have a smart meter don't think it will make a difference to reaching Net Zero

## 19% are unwilling to cycle or walk instead of drive

- 34% said they're just not interested in making this change
- 33% said it would make their life more difficult
- 23% said they don't think it will make a difference to Net Zero
- 14% said it doesn't bother them
- 7% of those who have a car don't think it will make a difference to reaching Net Zero



Despite UK households overwhelmingly believing that transitioning to Net Zero comes at a higher price, it is the added inconvenience this brings to their daily lives, coupled with a lack of interest in changing their behaviour that are the biggest barriers.

There is a clear disconnect between concerns consumers have over climate change and reaching our Net Zero targets compared to their own responsibility and changes they are willing to make to their everyday lives. This fundamentally comes down to the overall understanding of Net Zero but also how we can reward people with low-carbon lifestyles and nudge consumers into more frugal patterns of behaviour. Without consumers taking a more active role in environmental measures, the UK will not be on track to meet the targets set out.

## So what does this all mean and what role can Utility companies play?

Essentially utility companies can help drive positive behavioural changes by providing more education, insight, and opportunities to use power more efficiently.

For example:

- By using **data** more effectively to show people the impact that they are having. Smart meters play a part but, used alongside greater education to help people understand what the data in their smart meters is telling them, they will be more impactful.
- The provision of **greater educational services** will also help to make Net Zero more accessible and encourage individual change.
- By introducing a wider **range of tariffs** tailored to different income households.
- **Rewarding customers** when they are using power more efficiently. Gamification can be used within households and communities to get everyone working together, and even across schools and businesses to encourage healthy competition.



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# What's the price of Net Zero?

## The realities of edging closer to Net Zero

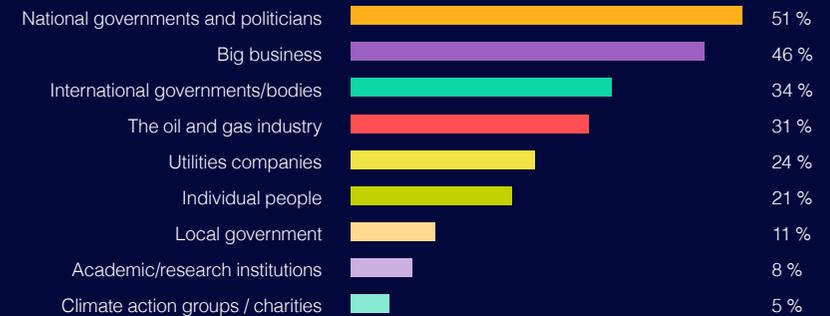
“The environmental impact of seemingly insignificant voluntary actions is far greater than most people realise... Conscious consumption alone certainly can't stop the [global] warming threat, but it's an essential step on our path forward.”

**Robert H. Frank, professor of economics at Cornell University**

The question of who is responsible for achieving Net Zero is not an easy one to answer. It is commonly believed that accountability lies in national governments and big corporations, who have the capability to drastically reduce carbon emissions on a global scale. Indeed, ground-breaking research found that just 100 fossil fuel producers are responsible for 71% of all global green-house gas emissions since 1988.<sup>7</sup> Figures such as these are startling, implying that individuals and communities hold little to no accountability in fighting climate change.



### Who do you think is most responsible for solving the problems / finding solutions to climate change?



But we know that effecting big change, often starts with small steps. Not only do individuals have the power to make a difference in their own lives, but they can use their voice and collective actions to instigate change on a much grander scale. The combined efforts of communities and societies to change the way that they live, and work can have a huge impact on tackling climate change.

In fact, while fossil fuel companies may be in the driving seat when it comes to producing greenhouse gas emissions, it is individuals, households and societies that demand their products. Research by the Climate Accountability Institute found the emissions directly produced by oil, gas, and coal companies amount to about 10 percent of fossil fuel emissions – while ninety percent are from their products.<sup>8</sup> Furthermore, the UK's Climate Change Committee estimated that 62% of what we need to do to meet Net Zero requires behaviour change.<sup>9</sup>

7. <https://www.cdp.net/en/articles/media/new-report-shows-just-100-companies-are-source-of-over-70-of-emissions>

8. <https://www.vox.com/the-goods/2018/10/12/17967738/climate-change-consumer-choices-green-renewable-energy>

9. The Government Response to the Committee on Climate Change's 2020 Progress Report to Parliament: Reducing UK emissions

“I have learned you are never too small to make a difference.”

Greta Thunberg, at the UK COP24 climate Talks, 2018

Using our research, we wanted to explore how far people would be willing to go to make changes needed and what sort of financial sacrifice they could tolerate. Our findings show that almost a third (27%) of people felt large lifestyle changes were needed to make a difference. However, we know that small, incremental behavioural modifications can be just as effective as wholesale lifestyle changes.

## The individual cost of going green

Respondents said that they are willing to pay, on average, £22 extra per month to live a greener lifestyle, which would include things like using a greener energy supplier, driving an electric car, or buying different appliances. This equates to £144 a year.

Parents of children (under nine years old) are willing to pay almost double the average amount, at £43. This compares favourably with those parents of older children (over 18 years old) and people with no children, who would be willing to pay £14 and £19 extra per month respectively.

That parents of young children are willing to spend more to reduce their carbon footprint suggests people are more concerned about securing a safer future for their children and what sort of legacy they will leave.

While climate change is happening now, younger generations are likely to experience the most visible impacts in their lifetime – and for parents, the need to protect their children and create a better world for them could be a bigger driver of behavioural change than a desire to see the effects more instantaneously.

## What other factors influence how much people would pay to live a greener lifestyle?

- Men are willing to pay 44% more than women – at £26 compared to £18 a month.

The gender pay gap among all employees was 15.5% in 2020.<sup>10</sup> This goes some way to indicating why men may be more willing than their female counterparts to spend more money to live a greener lifestyle.

- Millennials (ages 24-38) would pay £34 a month – far higher than baby boomers (ages 54-74) who would pay £13 a month, and Post war (over 75s) at just £9 a month.

Generational divisions in attitudes to climate change are clear across multiple global studies. For example, a Gallup poll conducted in 2018 found that 70% of 18-34-year-olds worry about global warming, compared to 56% of those 55 and above.<sup>11</sup>

Our study points to a trend among younger generations to tackle climate change. This group is more motivated and feels inspired by others- friends and influencers of a similar age- to join in the collective movement.

## How much would people pay over their lifetime to go green?

We wanted to work out the average contribution over an adult's lifespan, so we took the average costs across the three main age groups – £34 a month for 18-34-year olds, £23 a month for 35-54-year olds, and £12 a month for over-55s – and took the current life expectancy in the UK which is 81.5 years.<sup>12</sup>

**Extrapolating these figures, the average lifetime contribution for a UK adult toward living a greener lifestyle would be £15,588.<sup>12</sup>**

10. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/genderpaygapintheuk/2020>

11. <https://news.gallup.com/poll/234314/global-warming-age-gap-younger-americans-worried.aspx>

12. <https://www.macrotrends.net/countries/GBR/united-kingdom/life-expectancy>



The OBR's report suggests that the costs of failing to get climate change under control, aka *not doing anything*, would be much larger than the cost of bringing emissions down to Net Zero.

## The cost of action versus inaction

Living a greener lifestyle could indeed involve day-to-day behavioural changes that come at a cost. Below, we explore in more depth what those changes could be, and crucially, the long-term cost-saving benefits of doing so.

However, a factor that is perhaps less considered, and less understood, is the financial impact of not acting against climate change.

The Office for Budget Responsibility (OBR) recently published eye-opening research, analysing the risk to public finances presented by climate change. The OBR concluded that unmitigated climate change would ultimately have catastrophic economic and fiscal consequences. Public debt could spiral to nearly 290% of GDP, up from today's level of around 100%, thanks to the cost of adapting to a hotter climate and more costly and frequent economic shocks like mass migration or extreme weather events.<sup>13</sup>

Looking at the net cost of Net Zero, The Climate Change Committee estimates the costs to the UK of reaching Net Zero as £1.4tn, offset by savings of £1.1tn, with an overall net cost of £321bn over 30 years.<sup>14</sup> However, against the OBR's research, it's a fascinating and important indicator that while reaching Net Zero may be costly, the net cost benefits could be huge.

## The cost-benefits of going green

With the OBR's findings in mind, it can be beneficial to view behavioural changes to live more sustainably as having significant longer-time cost benefits. In many cases, this could mean making immediate financial sacrifices, and then waiting months, years, or decades to see the financial rewards.

13. <https://obr.uk/frr/fiscal-risks-report-july-2021/>

14. <https://www.theccc.org.uk/publication/sixth-carbon-budget/>

There are four areas that we've identified as being key indicators of the long-term cost benefits of living more sustainably. These are:

### Revolutionising power

In the fight against climate change, we need to find a solution to generate and store power in a far more carbon-neutral way – something utility companies can help with by increasing awareness of where power is coming from and when it is in deficit or surplus on the power grid. In much the same way as us individuals are now mindful of petrol pump prices, we need to enable individuals to have the same level of consciousness when it comes to power generation – especially as demand for power continues to increase.

### Electrifying transport

Micro-transport is a key development in reducing the use of cars for short, energy-wasting journeys, and a growing crop of small, lightweight vehicles are making this possible. But for the transition to be happen quicker, charging facilities need to improve as does the ease of usage throughout the UK.

Electric scooters and bikes could be transformational – they are easy to charge and use- but removing usage barriers and agreement on the legalities of electric scooter use on UK roads and pavements will help with this.

### Decarbonising heat

We have important steps to take to encourage individual households to opt for more renewable ways of heating their home. The reality is alternative boilers need to improve in efficiency and cost before we are likely to see any significant uptake, regardless of government incentive. It's critical that alternative products represent an improvement in performance for households.

### Carbon capture

A big part of carbon capture is, of course, stopping cutting down trees, and planting more. But it's not just about mass plantation of pine trees – we need native trees and forests, coupled with more education to help communities understand which are most effective. Households also need to be aware of the small steps they can take to capture carbon in their own homes.





## Revolutionising power

Over eight in ten (82%) of UK adults say that they do not generate their own energy or power, and that they get all their power from an energy company or supplier. Similarly, 81% of people do not generate energy or power in their local community. Of those who do generate their own power, solar panels are the most popular option, with around one in ten having them either in their household or local community (10% and 11% respectively).

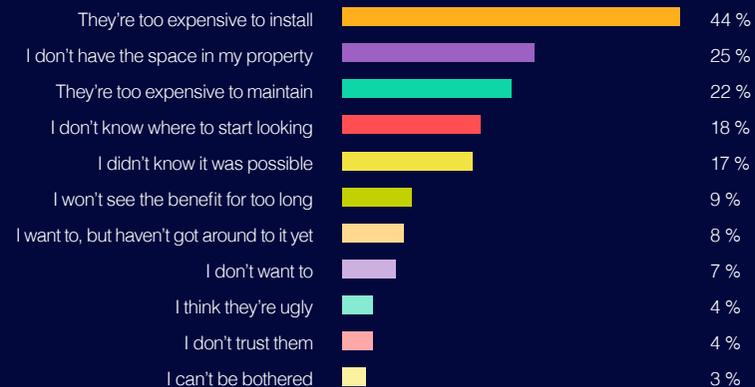
### The long-term view

The average cost of installing a domestic solar panel system is around £4,800. Someone living in London with a PV solar panel installed, with the additional payments from a Smart Export Guarantee, could – on average – save<sup>15</sup>:

- Over £300 a year if they tend to be at home all day
- £295 a year if they're home in the mornings, or £280 if they're home in the afternoons
- £225 a year if they're out all day until 6pm

So, for someone living in London, who tends to be out all day until 6pm during the week, but at home in the mornings on the weekends, it would take approximately **19 years and 7 months** to earn back the money spent on installation. Of course, if flexible working is to become a permanent feature of our working lives, then this figure could look a little different. For someone living in London, who works at home three days a week, then is at an office for two days a week (until 6pm) and is at home in the mornings on the weekends, it would take approximately **17 years and 4 months** to earn back the money spent on installation.

### Reasons for not generating energy/power at home



15. The average domestic solar PV system is 3.5kWp and costs around £4,900, according to the Energy Saving Trust - <https://energysavingtrust.org.uk/advice/solar-panels/>

# Electrifying transport

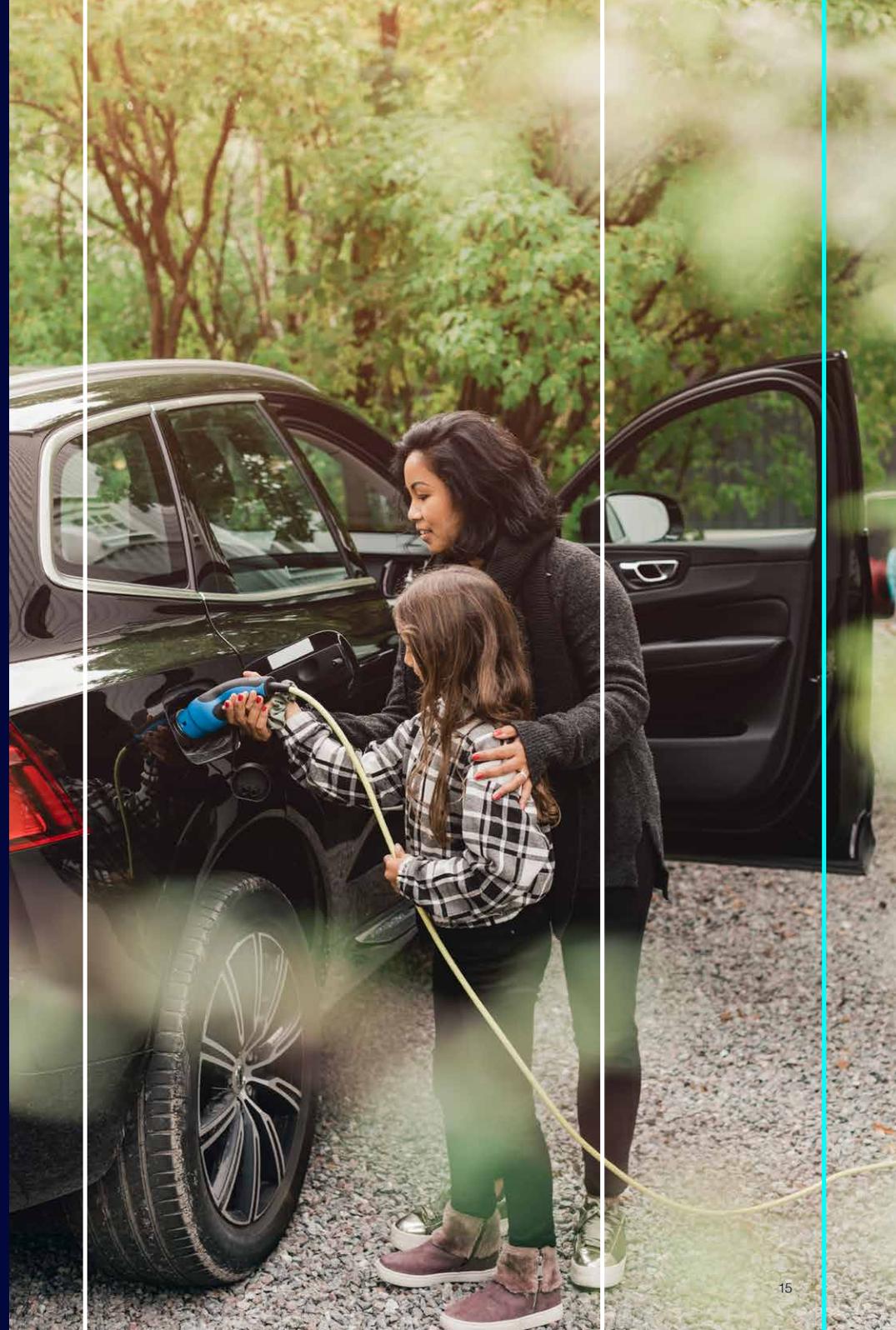
Research has shown that electric cars are better for the environment, as they typically produce lower emissions than internal combustion engine (ICE) vehicles when in use.<sup>16</sup> Driving an electric car rather than an ICE car is one way that individuals can adapt their behaviour to help reach Net Zero. And recently, the Government announced a ban on all new petrol and diesel vehicles from 2030, and hybrid vehicles from 2035, meaning that it'll soon become the law to drive an electric motor. Looking at the most commonly used modes of transport, 55% of UK adults drive a petrol or diesel car, 53% prefer to walk, while 29% generally take public transport. Just 5% prefer to drive an electric or hybrid car.

## What's the cost of running an electric car?

For a typical electric car with a 60kWh battery and a 200-mile range, it costs about £9.20 for a full charge at home. If the average person is driving 46.8 miles a week, then they'll need a full charge approximately every four weeks and two days – which would mean that they spend around £112 a year to keep their car running.<sup>17</sup>

Compared to the average cost of fuelling an ICE car – motorists spend an average of £1,042 a year to fuel a petrol and £1,265 for a diesel, for cars with average fuel economy<sup>18</sup> – electric car owners therefore typically spend a tenth of what ICE car owners spend to keep their car running.

Despite these calculations, the outright cost of buying an electric or hybrid car can be substantial. Two thirds (66%) of petrol and diesel car owners cite price as the main reason why they do not an electric or hybrid car, viewing it as too expensive. Among this same group, almost half (45%) said when electric vehicles become cheaper to buy, they may be influenced to buy one.



16. The Internal Council on Clean Transportation (ICCT) report on 'The effects of battery manufacturing on electric vehicle life-cycle greenhouse gas emissions – February 2018

17. Average costs of charging an electric car and mileage from PodPoint - <https://pod-point.com/guides/driver/cost-of-charging-electric-car>

18. NimbleFins: <https://www.nimblefins.co.uk/average-cost-petrol-car>

# Decarbonising heat

Reducing the amount of carbon produced by heat systems is an important transition in the path to Net Zero, as the way we heat our homes accounts for 15% of the UK's carbon emissions<sup>19</sup>. When it comes to heating our homes, gas is the most common form of heating system, with 62% of UK households saying they use it.

The good news is that over half (55%) of UK households say they would like to switch to a more environmentally friendly heating option. This rises to 63% of parents with children younger than nine.

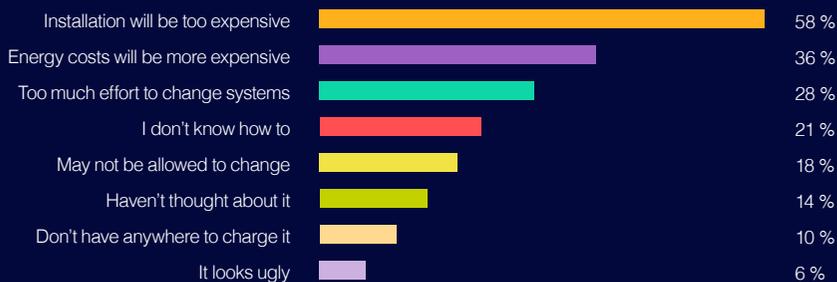
Younger people are also more willing to make the switch – over two thirds (69%) of those aged 18-34 say so, compared to 56% of those aged 35-54, and less than half (45%) of over-55s.

However, like electric cars, cost is viewed as the biggest barrier to switching to a greener heating system. Two-in-five (58%) said installing the equipment was too expensive, and over a third (36%) think the energy costs will be more expensive.

While the upfront costs of installing heat pumps can be costly, estimated between £9,000 and £13,000, like solar panels, the long-term cost-saving benefits can be significant.<sup>20</sup>

With the government's Domestic Renewable Heat Incentive (DHRI), people can get money towards renewable heating costs in their home – including biomass boilers, solar water heating and certain heat pumps – for seven years.

## Barriers to implementing greener heating methods



19. <https://news.sky.com/story/climate-change-household-payouts-considered-to-offset-green-energy-costs-in-bid-to-hit-net-zero-target-12352295>

20. Boiler Guide and This Is Money, <https://www.thisismoney.co.uk/money/bills/article-9756885/As-gas-boilers-banned-2025-heat-pump-save-money.html>

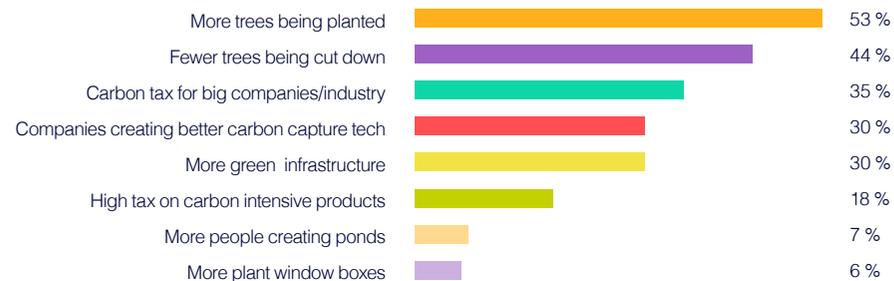
21. <https://www.wired.co.uk/article/carbon-capture>

# Carbon capture

Removing carbon from the atmosphere is a critical part of Net Zero goals, whether it's through natural processes, namely plants and oceans, or through smart storage and utilisation technology.

When asked what the most effective ways of removing carbon from the atmosphere are, over half (53%) said planting more trees, followed by 44% saying chopping down fewer trees.

## Most effective forms of carbon capture



As around half the mass of trees is pure carbon, reforestation is certainly a critical form of carbon capture<sup>21</sup>. Platforms like Ecologi enable people to offset their carbon footprint through tree planting and projects that remove more greenhouse gasses than our carbon footprint puts in. According to Ecologi, £4.70 a month is the individual cost to plant 12 trees and reduce one carbon footprint, calculated as 10.6 tonnes of CO<sub>2</sub>, every year.

But there are other, immediate behavioural changes that households can make to help capture carbon from their own homes.

- House plants – having certain types in the house can improve air quality and remove pollutants and gases.
- Window boxes & herb plants – these can be good for wildlife, helping to grow habits, and are a good option for people who don't have a garden.
- Ponds – these can absorb more carbon than a woodland and are biodiversity hotspots that can act as flood protection.
- Conservative water-use – this is an important way of reducing carbon output and can also be done by using recycled/ grey water to water plants.



**So, what does all this mean for utility companies? And what, realistically, can they do with the extra amount UK households are willing to pay to help with climate change?**

Perhaps the simplest answer to this is in the tailoring of the messaging to individuals. For example, our research showed that those families who have younger children are willing to pay more, so ideally any educational, awareness raising campaigns should highlight the long-term impact of behavioural change. For most of us the lasting impact of said change will not be seen in our lifetimes.

The challenge for utility companies is also in showing how they are investing in transformational changes. Perhaps there is a wider financial provision role here for utility companies to consider in helping with access to longer-term amortisation of debt? The latter point clearly has regulatory implications so certainly cannot be viewed as a 'quick fix'.

Utility companies do however have a huge role to play in ensuring that behavioural changes such as installing heat pumps or solar panels feel more affordable and accessible to the average UK household. Currently upfront costs will likely be a deterrent for those individuals who remain cautious of the long-term cost benefits.



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## How can utility companies help?

Our research has established that individuals have a pivotal role to play as part of our collective effort to reach Net Zero by making changes- small and incremental along with wholesale ones- to the way that we all live and work. But what about the role of utility providers? What part can they play and how can they rise to the challenge of influencing consumers' behaviour?

Thinking about the four key areas in mitigating climate change – revolutionising power, electrifying transport, decarbonising heat and carbon capture – we know that utilities providers can be key drivers of change. In transitioning to meet the challenges of Net Zero, utility companies are working hard to consider each element of their supply chain, where power is coming from, and what is being offset or captured in production.

But when it comes to engaging with consumers, we wanted to explore how people understood the role of utility companies – and with that in mind, how utilities can better support individuals who are willing to make behavioural changes to live a greener lifestyle.



The three key drivers of change are:

- Providing more education
- Incentivisation/ gamification of energy saving
- Transparency over penalisation on non-green products

### Are utility companies doing enough?

When asked about who's responsible for tackling climate change, three quarters (75%) of UK adults agree that the government should do more to help and encourage energy and utility companies to find solutions to climate change, while less than three in ten (27%) people feel that energy companies are working as hard as they can to find solutions.

Three fifths (62%) of UK households think that energy and utility companies should feel personally responsible for climate change, and the same amount think that they are helping, but they could do more.

Millennials are the most trusting of the efforts of energy and utility companies, with over a third (35%) agreeing that they are working as hard as they can to find solutions, compared to a fifth (19%) of Post war (over 75s).

### Lack of trust?

Three fifths (61%) of people think that energy and utility companies see climate change as an opportunity to raise bills and make more money. It's clear that companies face a significant challenge to contradict this sentiment and improve levels of trust from climate-conscious consumers.



**80%**  
of people in the UK are concerned about climate change

## Providing more education

Consumers think that a lot more could be done to educate the public on climate change. Nearly three quarters (72%) think that there is no public education around the topic of Net Zero.

And this knowledge gap is important. In the Government's latest Public Attitudes Tracker, eight in ten (80%) were either very concerned or fairly concerned about climate change<sup>22</sup>. Considering that a large majority of UK adults feel this way, there is a gigantic opportunity for utilities providers to step in to help educate consumers and inform them of the role that they can play in the path to Net Zero.

Thinking about how they can help, less than a fifth (17%) think that utility companies could provide more information and support around getting grants for energy-saving home improvements, and 14% think the same around grants for energy-generation, such as wind turbines and solar panels.

## How do you feel about energy suppliers/utility companies' roles in addressing climate change?



And utility companies have an opportunity to provide tailored education to customers. In becoming more transparent about energy consumption, alternative energy sources and energy trackers, such as smart meters, utilities can provide solutions directly to customers looking for more sustainable ways of living – including, incentives.

22. BEIS Public Attitudes Tracker (March 2021, Wave 37, UK)

## The role of behavioural science & ‘nudges’

In fact, the Behavioural Insights Team – an organisation that explores how behavioural science can be applied to policy and public services – identified a set of ‘nudges’ that would help people change their behaviour to live more sustainably. One of these involves making information clearer on whether a purchase is or isn’t a green choice. Would people choose the non-green option if there was a minimal or non-existent price difference?<sup>23</sup>

This is where utility companies can step in, by establishing clearer grading systems for energy efficiency for products like household appliances, so consumers are persuaded to make greener choices.

And utility companies have an opportunity to provide tailored education to customers. In becoming more transparent about energy consumption, alternative energy sources and energy trackers, such as smart meters, utilities can provide solutions directly to customers looking for more sustainable ways of living – including, incentives.

### Incentivisation of energy saving

Education is critical – once consumers are more informed, they’re more likely to make sustainable choices. But this alone won’t change behaviour.

We know that people can often be put off by the lack of immediate gratification when it comes to making greener choices. Not everyone is willing, or financially able, to wait up to twenty years to see the cost-benefits of spending thousands upfront for a solar panel system, for example. But this is where utility companies can provide solutions that drive change.

Nearly three fifths (58%) of UK adults said they would be encouraged to spend more on a greener lifestyle if they received incentives from the government or company, such as a voucher or money off their bill.

This incentive is especially appealing to millennials, seven in ten (70%) of which would be encouraged to live a greener lifestyle with financial incentives. Similarly, incentivisation is more appealing for parents of young children, at 68% compared to half (50%) of parents with adult children, and three fifths (60%) of those without children.

### Likelihood to spend more on a greener lifestyle if incentivised by the government or a company



“Gamification mechanisms appear to be promising and acceptable tools for incentivising pro-environmental attitudes and promoting water conservation habits in urban contexts.”

**conclusion from a Smart Water grids 2018 study**



23. <https://inews.co.uk/opinion/cop26-behavioural-science-live-sustainably-changes-work-1113821>



## Transparency over penalisation on non-green products

For consumers who will not be driven to change by further education on how their behaviour contributes towards climate change, nor by incentivisation to live more sustainably, then a third way may be to enforce fines or financial penalties for not living a greener lifestyle.

When asked what they thought about financial penalties, UK households are split on whether it would encourage any behavioural change. Half (48%) said that it would be encouraging, a third (34%) said they would not find it encouraging, and around a fifth (18%) were unsure. Younger generations were the most likely to be encouraged by fines – at three fifths (61%) of those aged 18-34.

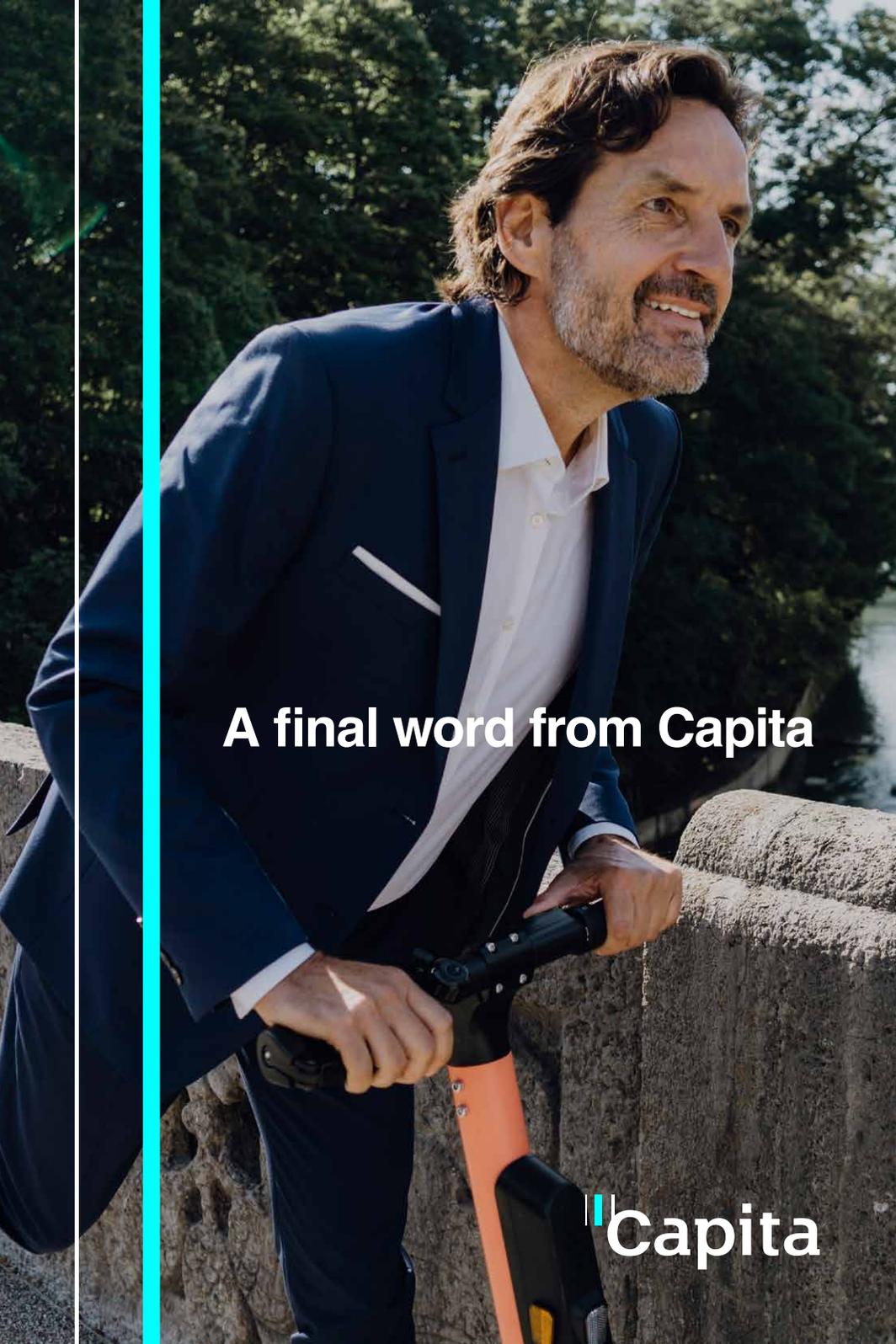
While utility companies can be given strict penalties for polluting the environment, there are far less penalties in place for individual behaviour.

## Taxing Net Zero

While consumers may not face financial penalties for actions like buying meat or using too much water, it's likely that we'll see the introduction of new green taxes as we get closer to the 2050 Net Zero goal. With the consideration of new UK carbon taxes, households could pay hundreds of pounds more a year on food, fuel, flying and shipping costs to help tackle climate change – with the poorest tenth of households estimated to pay an extra £80 a year by 2050, while the wealthiest tenth could face a £400 annual bill to help sectors reach climate goals<sup>24</sup>. This is one way of ensuring that individuals pay for the carbon emissions that they produce.

At a government level, transparency around the costs that households could face, and what this expenditure would be funding, is crucial. But utility companies have a potential opportunity to step in and communicate the benefits of greener choices as alternatives to more costly consumption.

24. <https://www.dailymail.co.uk/news/article-9875751/Britain-hit-net-zero-2050-insists-minister-ahead-climate-report-pay.html>

A man with dark hair and a beard, wearing a blue suit jacket over a white shirt, is leaning on a stone wall. He is smiling and looking towards the right. An orange and black e-scooter is positioned in front of him, with his hands on the handlebars. The background shows green foliage and a body of water.

## A final word from Capita

The Capita logo consists of a stylized 'C' made of three vertical bars of increasing height, followed by the word 'Capita' in a white, sans-serif font.

Our research has highlighted there are some great strides being made along the 'road to Net Zero' with many UK households keen to understand what more they can do to play their part in addressing climate change. While useful to understand consumer sentiment, the true secret to transformational change lies, we believe, with those key decision makers who are involved in product design, accessibility and the provision of services.

Utility companies can play a pivotal role in helping to address the knowledge gaps that exist when it comes to preparing for carbon Net Zero and can play that much needed, perhaps parental, role in incentivising and – where needed – penalising behaviour. Perhaps the time has come for the utilities sector to follow others leads with consumer loyalty schemes and helping to offer greener alternatives?

Behavioural change will need to work in different ways for different people. We need to make Net Zero a society-led change – in much the same way that, historically, educational campaigns around smoking and littering have proved extremely effective. This is perhaps more of a generational shift and a need to illustrate to future generations the financial incentives of using energy efficiently. For example, looking at incentivisation and gamification in practice, water-usage is a key area to spotlight.

Smart meters may be an important solution by encouraging conservative water use through cost savings. Regular automated meter reads can be used to inform people of the environmental impact their usage, and the money-saving benefits of reducing that usage. Making data visible to consumers – through apps that measure, for example, how much water you use for washing your clothes, dishes, or your car – is a clever form of gamification that can lead to more consumers engaging with their individual environmental impact.

Data-driven incentives are also an innovative way of encouraging behavioural change. For example, Southern Water's Target 100 campaign incentivises consumers to limit personal consumption of water to an average of 100 litres a day by 2040 – and stimulates healthy competition by putting equivalent households against one another based on real-time water usage.

Beyond all of this, though at a base level, we need to shift our collective perceptions about energy and, specifically energy consumption, from infinite and plentiful to finite. The time is now. We need to change gears and ensure we are all taking steps to save power at every opportunity.