Closing the climate gap 2023



An annual report on progress towards sustainable consumer lifestyles in the UK

Ethical Consumer Research Association October 2023



Sponsored by Ecology Building Society



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1.1

Foreword to Ethical Consumer's Closing the Climate Gap 2023

Ecology is happy to again sponsor this report by Ethical Consumer.

We were founded four decades ago to build a greener society, challenge the norm and agitate for positive change. To this day we live by those principles, which align with those of Ethical Consumer in developing this report.

When challenges are global, complex and interlinked, it's easy to feel overwhelmed as individuals or even as nations. No one person or country going it alone can force major change. So collective action must be the way forward. With their long heritage in the UK, mutuals offer a clear example of how collaborative effort and a shared purpose yield results.

As a building society, we were created by a group of progressive people who understood they could achieve more by working together. By pooling resources (their savings), they realised the transformative impact they could achieve, helping others to have their own home.

Our members today value that sense of having a stake in something bigger and the same motivation can bring us together to face the challenges of the climate crisis.



As a business, we look at what we can do within our sector – to champion sustainable building and social enterprise, support efforts to insulate the UK's ageing housing stock, and develop financial products to meet consumer need.

To do that, we need up-to-date, accurate data. So this report's finding of an ongoing shortfall in carbon emissions data is particularly troubling, compounded by the Government's disinterest in rectifying the omission.

Consumers need reliable information to be able to make informed choices and authoritative data can shape priorities and guide actions for businesses and government at all levels.

We sponsor this report because the information it contains gives consumers more power to make better choices – by voting with their feet, their wallets or at the ballot box.

We want everyone who reads the report to ask more questions – of politicians, and of the brands and businesses they use.

If they don't like the answers, the power to change is theirs.

GARETH GRIFFITHS Chief Executive, Ecology Building Society



1.2 Introduction

This is our third annual Climate Gap report. A key aim is to simplify data for consumers on the UK's progress towards decarbonisation and to help identify the key actions we all need to take. The 2030 targets on our food, heating and transport report cards have come from the Climate Change Committee (CCC), which advises and monitors UK Government action on climate change. We used the CCC pathway, because it is thorough, backed up by detailed data and shows that plans can be made, progress can be measured, and a transition is possible.

But, as we discussed in our 2021 report, there are critical problems with the CCC pathway around the fairness and credibility of its carbon budget. Our third key finding (2.3) focuses on this area as does a new section (5) of the report.

1.3 Climate change arrives in the UK

Climate change is not something far away. The CCC's 2023 Progress Report noted that 'For many in the UK, 2022 was the year that climate change arrived, with the UK's first ever 40°C day.' The Intergovernmental Panel on Climate Change (IPCC) Synthesis Report in March 2023, which documented the 'widespread, rapid, intensifying' climate changes that are already happening, amounted to an unprecedented warning, stating not only that we have 'a rapidly closing window of opportunity...', but also that 'the choices and actions implemented in this decade will have impacts now and for thousands of years'.

The international Paris Agreement in 2015 saw 196 countries committing to keep average global warming as close to 1.5 degrees as possible. But global emissions are still rising, and all IPCC models now see us pass 1.5 degrees in the early 2030's. Talking about global average temperatures can also mask the reality of how the impacts vary around the world. Annual Arctic temperatures have risen at a rate three times the global average, already increasing 3.1 degrees from 1979-2019. The more ice is lost in the Arctic, the faster warming happens and the higher the risk of abrupt changes. Extreme weather events are already happening that are totally unpredicted by the models. In 2020, weather-related disasters caused 30 million people to flee their homes.

The pledges countries have made are not enough. We are on track for a global average rise of 2.4–2.6 degrees, and that is if current pledges are met.³ The latest IPCC estimates suggest up to 18% of land-based species could become extinct at 2 degrees of warming.⁴ Its 2022 adaptiation report was described by the UN Secretary General as a "damning indictment of failed climate leadership".

- Just one example is the east coast Australia floods in February 2022. After 3 years of drought from 2017-2020, including the hottest and driest year on record in 2019, more rain fell in 24 hours than London receives in a year.
- https://www.theguardian.com/global-development/2021/may/20/climate-disasters-caused-more-internal-displacement-than-war-in-2020
- 3 https://www.wri.org/insights/explaining-global-stocktake-paris-agreement
- 4 Joelle Gergis, 2023, *Humanity's Moment*, Black Inc, p115.

Vested interests in the fossil fuel industry, and conservative governments around the world, have led to what one IPCC scientist described as a "ruinous delay in our global response". The failure of leadership in the UK is our first key finding and has led us to introduce a new section (7) to this report, formally recognising the need for including reform of our political system into our solutions mapping exercise.

66 For many in the UK, 2022 was the year that climate change arrived, with the UK's first ever 40°C day ??

CCC 2023 Progress Report

66 The choices and actions implemented in this decade will have impacts now and for thousands of years ??

Intergovernmental Panel on Climate Change (IPCC) Synthesis Report, March 2023

1.4 How this report is arranged

As in previous years, this report is focussed on the four 'impact areas' that we calculated to be the most important to reduce the carbon impacts of consumption:

- Food
- Heating
- Transport
- Consumer Goods

However, as consumers we only hold part of the potential and responsibility for making these changes. So we include priorities for government and companies too, which would enable us all to make lower carbon choices more easily.

Now that we are three years into our Climate Gap reporting, we have been able to produce bar charts which show the 2030 targets the CCC thinks are needed, and progress towards them. This has allowed us to redesign our report cards to include some of our suggested campaign actions for consumers (and for companies too) on the same page view.

A narrative follows each report card to explain more about the results, and why these impact areas matter. The notes and sources for each card are linked to for anyone who wants to delve deeper.

There is also a 'Summary Report Card' which combines information from each of the four cards into a single view and which appears in the Key Findings section below.

Accompanying articles were also published in issue 205 of *Ethical Consumer* magazine and on our <u>website</u>. We also publish updates relating to this report throughout the year on the Campaigns page of our magazine.

1.5 Glossary of terms in this report:

1.5 degrees all references to degrees are in Celsius. 1.5 refers to the degrees of average global warming above pre-industrial times (1850–1900).

CO2e Carbon dioxide equivalent or CO2e means the number of metric tons of CO2 emissions with the same global warming potential as one metric ton of another greenhouse gas.

IPCC the Intergovernmental Panel on Climate Change was formed in 1988, to provide an assessment of the scientific consensus on climate change, and combines the work of hundreds of scientists around the world.

Net Zero the term refers to an overall balance between emissions produced and emissions removed from the atmosphere. Problems with this are discussed in 5.2.

Paris Agreement global conferences on climate change (Conference of the Parties, or COP) have taken place every year since 1995. In 2015 the conference was in Paris, and an agreement was reached to keep average global warming as close to 1.5 degrees as possible. Not all parts of the Paris Agreement are legally binding.

1.5 Your feedback

After you have read this report, we'd really appreciate it if you could complete a short survey to help us understand the impact it is having, and improve this in future years.

https://www.surveymonkey.de/r/ZBTJVLM

Key findings and Summary report card

FOUR KEY IMPACT AREAS (c. 75% of total consumer emissions)	Food (c. 26%)	Heating (c. 14%)	Transport (c. 25%)	Selected Consumer Goods (c. 10%)
2019-2030 consumer targets based on the CCC 'Balanced Pathway'	c. 13%* CO2e reduction	c. 23% CO2e reduction	c. 44%* CO2e reduction	40% CO2e reduction
Consumer intentions	34-66% willing	22-50% willing	14-43% willing	37-70% willing
Where have we got to? (current position against baseline)	1% increase (meat/dairy consumption per week, 2021)	11% reduction (2022)	18% reduction (2022)	13% reduction (2020)
What's the gap? (reduction needed from latest position to get to CCC target)	13% still to reduce	14% to reduce	32% to reduce	31% still to reduce
Are we moving fast enough?	✓ × —	~ ~ ~	××✓	~ ~ <

Although the CCC targets have provided a valuable idea of how reductions could be distributed across the impact areas we are looking at, their fairness and credibility are increasingly being challenged. See sections 2.3 and 5 for a critical discussion of deeper changes.

Key to tables:

The multicoloured bar refers to the 3 indicators on each of the 4 report cards.

c. = circa or approximately









c. = circa or approximately	unection	last ellough	target	uata avaitable
Priorities for government	Rebalance agricultural policy	Subsidise heating solutions	Halt airport expansion	Require full supply chain emissions reporting
Priorities for companies	More plant options	Develop creative funding and support political campaigns	Reduce business travel	Report supply chain emissions
Priorities for consumers In each impact area, supporting political campaigns is at least as important as reducing our own emissions	Reduce meat and dairy	Insulate and choose heat pumps where possible	Reduce travel where possible. Choose electric	Increase repair and buying secondhand

See Section 9 for the references for this card.

^{*} some targets have been updated, see references for details.

2.1 UK political leaders become openly hostile towards climate action

Just as "code red for humanity" is declared,⁵ UK political leaders have become openly hostile to taking timely climate action.

This year the UK government had already decided to scrap plans for food waste reporting, to maximise fossil fuel extraction from the North Sea, and to continue with unabated road building and airport expansion. Then on September 20th the Prime Minister announced a high-profile series of further regressive steps, including further retreats on phase-out targets for cars and gas boilers.

Meanwhile, Friends of the Earth, ClientEarth and Good Law Project were already taking the UK government to court for the second time over its net zero strategy, for its heavy reliance 'on unproven and high-risk technological fixes at the expense of near-term action'. Even the politely spoken CCC noted that its confidence in the UK meeting its targets had 'markedly declined', as the 'commitment of Government to act has waned'.

This is not exactly news, and we have noted the recent failures of UK governments in earlier reports. But the actions of the current administration are so damaging, that this observation has to become the leading point in any analysis of climate actions in the UK in 2023.

If we were in any doubt that our current political systems were not fit for purpose, the current year of climate denial at the highest levels of our society has meant that it is now undeniable. As such, we have introduced a new section into the Report (at section 7) exploring how electoral reforms urgently need to become part of the solutions we are looking at here too.

Both ClientEarth and the CCC emphasise that real action with 'no regrets' policies is possible and must be pursued now.

Despite this consumer choices are changing in some areas

Our summary report card has a new multicoloured bar next to 'Are we moving fast enough', representing the twelve impact areas we are looking at across the four report cards. In four (meat, residential emissions, electric car registrations and secondhand/repair rates, all marked green and with a tick) we appear, at first glance, to be more or less in line with the CCC 2030 targets.

However, some of the apparent progress shown by 'Where have we got to?' is caused by external circumstances rather than policy success. For example, emissions from residential heating did fall in 2022 and seem to be ahead of the CCC target. But, the CCC found the mild winter temperatures to have accounted for almost two thirds of the drop in emissions, with the rest likely due to high gas prices. In other words, the government's callous disregard for the ability of

- 5 The UN Secretary General describing the latest IPCC Assessment.
- $\frac{\text{www.clientearth.org/latest/press-office/press/uk-government-faces-fresh-legal-challenge-over-unlawful-climate-plans}$

2.2

poorer people to heat their homes, rather than its support for insulation, has helped to deliver real-world cuts in carbon.

With transport, although we see an 18% reduction from the baseline, the larger reductions we saw in 2020 due to Covid are now being reversed, and this result is likely to worsen in our next report. Even though flights in 2022 were not back to pre-pandemic levels, aviation emissions almost doubled from 2021 to 2022, and while emissions from cars need to fall by more than half to meet the CCC 2030 target, they are climbing again.

In the majority of areas we are measuring, progress is either insufficient or moving in the wrong direction.

2.3 There is increasing unease that the Climate Change Committee's targets are not robust enough

As we stated in our 2021 report, the UK's 2030 target (known as its Nationally Determined Contribution or NDC) has been rated as 'Insufficient' for limiting warming to 1.5 degrees, when compared against what would be considered a 'fair share of global effort'. The Climate Action Tracker assessment states, 'If all countries were to follow the UK's approach, warming would reach over 2°C and up to 3°C." Like the CCC, Climate Action Tracker think it is not feasible for the UK to achieve sufficient reductions domestically, and that it must develop much more ambitious plans to support climate action in other countries, with technology transfer and finance.

Many current pledges in developing nations are not currently financed, despite it being acknowledged as far back as the Kyoto conference in 1997 that different countries clearly have varying capacity and responsibility, and agreed in Paris in 2015 that richer nations should provide US\$100bn a year to help poorer nations adapt.

Climate finance such as this was the CCC's answer to how the UK could contribute more, without making faster or deeper changes here in the UK. But the UK government doesn't want to do either, and has been underspending by billions on its pledge. A new section in this report (5) will explore questions of fairness and credibility. There is clearly potential to do more both domestically and globally.

2.4 Insulation and heat pumps continue to be the furthest off targets of all our measures

Despite the figures for heating on the summary card, which we explain in 2.2, as last year, the UK is keeping up its tradition of doing very badly on reducing energy demand. Insulation and heat pump installations need to speed up dramatically as shown on the Heating report card.

7 https://climateactiontracker.org/countries/uk/targets/

2.5 Previous slight progress on food appears to have reversed

Despite the visible rise in plant-based food options in shops and eateries, the reported figures for average dairy consumption per week have risen, although the latest available data is two years old. Eating out figures dropped in 2020-21 due to the Covid pandemic, but household purchases had risen. The CCC 2023 Progress report stated that it was 'too early to say' if meat consumption reductions were on target. We are still waiting for an update from WRAP later this year in order to see if food waste has been reducing or not.

2.6 The quality of data still needs urgent attention

As in the previous two reports we are finding that, when we try to answer the climate gap question, in some cases, the best available data is two or more years old. It is not possible to manage an economy rationally towards urgent climate goals without meaningful and timely performance data. It is instructive to compare the resources the ONS has to produce (say) monthly inflation figures, with those it has for climate impact reports. This therefore remains a key finding of this research.

2.7 Consumer goods carbon footprints rising

Of the 40 companies we check each year for full Scope 3 emissions reporting, which includes the production and processing of materials going into products and the use of products after sale, the proportion reporting rose from 60% to 70%. However, of those that had year-on-year Scope 3 figures to compare, more were going up than down. Some may have got less carbon intensive, but if growth outstrips efficiency, we aren't getting anywhere.

2.8 Companies concerned about the climate crisis probably need to get more politically active too

Given the reflections on the brokenness of the UK's current political system in 2.1 above, and the closing windows of opportunity around us, we probably need companies to join in some of the political actions too. Some of the campaigns we began suggesting last year for individuals, such as Zero Hour, welcome business members too. We have therefore added joining some campaigns to the actions for companies on our report cards too and one very obvious new one specifically for businesses: https://businessdeclares.com.

3.1 Food (c.26% total UK emissions)



The CCC targets have provided a valuable idea of how reductions could be distributed across the impact areas we are looking at. However, see sections 2.3 and 5 for discussion of deeper cuts.

More details on each campaign appear in Section 6

= campaigns to support

See Section 9 for the references for this card.

Food report card narrative

Meat and dairy

Dietary changes have a huge potential for reducing greenhouse gases, not only those released during production, but also those that could be captured by land not used for production. Although reducing food waste is important too, switching to plant-based diets would have much more impact. In the unlikely event the whole world switched and all the land used for livestock was rewilded, it has been calculated as possible that all the fossil fuel emissions of the last 16 years could be drawn down by the recovering ecosystems.

We have continued to use figures from DEFRA's Family Food Dataset, which suggest a 4% reduction in meat consumption and 3.5% increase in dairy consumption between 2019-2020 and 2020-2021. Due to Covid and restrictions, amounts of meat and dairy eaten out were lower, but household purchasing higher.

The CCC stated that while the public have reported eating less meat since 2009, data on the amount of meat available "does not correlate and it's not clear why". It felt more policy intervention was required, and it was 'too early to say' if we really were on track to meet their targets. But it also said "The apparent willingness of the public to make dietary changes suggests that the CCC's more ambitious Tailwinds pathway, with a 28% decrease in meat consumption by 2035, is achievable."

It said the government had set out no plans to support the public to shift to a lower-carbon diet, and repeated a recommendation to DEFRA to encourage a 20% shift away from all meat and dairy products by 2030.

Food waste

Reduction in food waste can lower emissions by avoiding unnecessary food production and reducing methane production from its decomposition. The government has set an ambition for municipal food waste to be reduced by 50% by 2028, while the CCC wants targets brought forward.

Although the CCC felt food waste as a key indicator to be on track, the latest available figures were still from 2018, but the Waste and Resources Action Programme (WRAP) expect to publish updated household and supply chain food waste figures later in 2023.

- 8 George Monbiot, 2023, *Regenesis*, Penguin Books, p135.
- **9** George Monbiot, 2023, *Regenesis*, Penguin Books, p83.



The CCC targets have provided a valuable idea of how reductions could be distributed across the impact areas we are looking at. However, see sections 2.3 and 5 for discussion of deeper cuts.

More detail on each campaign appear in Section 6

= campaigns to support

cw = wider political campaigns

See Section 9 for the references for this card.

Heating report card narrative

Insulation

Heating accounts for about 14% of UK emissions, and over three quarters of that is from homes. Our homes are among the worst insulated in Europe. Government funded insulation installations for fuel-poor homes were over 1.5 and 2 million in 2010-2012, but suddenly dropped to the hundreds of thousands, and have still not been revived over 10 years later. With targets of an average of more than 1 million installations needed per year, and only 100,000 in 2021, it's clear that we're way off.

In the energy price crisis, the CCC also points out that unlike other nations which invested in permanent measures to improve energy efficiency, the UK Government response did not include reducing energy waste, and leaves homes as vulnerable as before to future price rises. They have however introduced a new "Great British Insulation Scheme" in 2023, which eligible households can access through their energy supplier. Let's hope it has impact.

Heat pumps

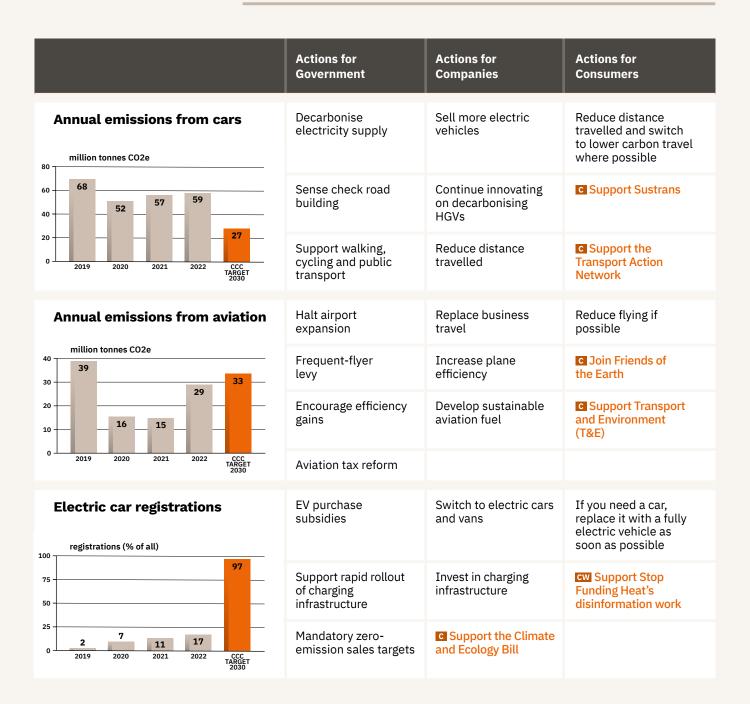
A heat pump is an extremely low carbon heating option, even more so as the electricity grid decarbonises further. The CCC Pathway projected 130,000 heat pump installations in 2022, but the UK managed 69,000 (in homes). The government commitment is to install 600,000 heat pumps a year by 2028 but key indicators, such as the average cost of installation and the number of trained retrofit assessors and heat pump installers, are significantly off track.

Lack of a clear message around the role of hydrogen, which is seen by the CCC at most as a back-up role in hybrid heat pump systems and only in limited areas of the country, has lead to uncertainty, but heat pumps are a 'no regret' option in many cases and need to be installed at pace now. The energy price crisis makes the shift even more important.

Residential emissions

Emissions from residential heating did fall in 2022 and seem to be even ahead of the CCC target. However, most of the indicators they measure, such as the installations explained above, are off track. They state, "While overall emissions appear to be on track, this is likely to be temporary as a result of recent high gas prices and mild weather."

One way to cut carbon is by using smart thermostats and radiator valves to only heat homes when and where its needed. Price rises that lead to people unable to keep warm are not the answer.



The CCC targets have provided a valuable idea of how reductions could be distributed across the impact areas we are looking at. However, see sections $\underline{2.3}$ and $\underline{5}$ for discussion of deeper cuts.

More detail on each campaign appear in Section 6

= campaigns to support

cw = wider political campaigns

See Section 9 for the references for this card.

* Note that some targets have been updated.

Transport card narrative

Transport accounts for about a quarter of our emissions, but the pandemic showed us it is possible to make rapid and deep cuts. The only indicator on track on this card is electric car sales. However, reducing car demand is crucial alongside switching to electric cars, because they have problems of their own due to the materials and energy needed.

Overall emissions from cars rose slightly in 2022, when they actually need to fall by 55% to meet the CCC 2030 target, or in other words, more than half. Although its not something we are tracking, van usage is also on the increase, reflecting the rise in home delivery.

We also found out that efficiency of engines is going backwards. While the technology is improving, this is offset by larger vehicle sizes, meaning the average new internal combustion engine CO2 intensity is now at its highest in 10 years. SUVs as a percentage of new car sales have doubled from 2012-22, from around 15 to 30%. As a percentage of new electric car sales SUVs are approaching almost 50%.

The CCC noted that measures to reduce car demand are largely absent from the government's carbon plans. More support is needed for alternatives such as walking, cycling and public transport. But the cost of bus and rail travel rose by 80% and 43% from 2010-2021, compared to the cost of car travel rising 27%.

Although emissions from flights still hadn't climbed back up to pre-pandemic levels in 2022, they had almost doubled compared with the previous two years. The target for aviation emissions in particular could be much more ambitious, especially as in the UK, only 15% of people take 70% of all flights. ¹⁰ Further airport expansion applications are still under consideration to accommodate continued growth but our campaigns (in Section 6) list some ways to challenge this. For example, Friends of the Earth has links to various airport campaigns, as well as local groups around the country, and also showcases lots of inspiring examples of local council action.

10

	Actions for Government	Actions for Companies	Actions for Consumers
Clothing, furniture & electricals million tonnes CO2e	Collaborate on carbon pricing internationally	Decarbonise supply chains	Try to reduce overall levels of consumption where possible
15 — 16.90 — 16.80 — 14.60 — 10.14	Invest in more timely data collection	Design lower impact product lines	© Support Extinction Rebellion
0 2018 2019 2020 OUR TARGET 2030		© Support the Climate and Ecology Bill	
Supply chain carbon reporting % of companies reporting	Require supply chain (scope 3) carbon reporting annually	Report supply chain emissions annually	Choose brands reporting on carbon in their supply chains
75 — 63 — 70 — — — — — — — — — — — — — — — — —		Reduce in line with Paris goals	C Subscribe to Ethical Consumer!
25 38 CUR TARGET 2022 2023 CUR TARGET 2025		© Subscribe to Ethical Consumer!	© Support the Climate and Ecology Bill
Consumer repair and re-use % of items bought secondhand/repaired	Extend repairability obligations	Design for repairability	Choose second hand products and repair
36 39 39 20 28 20		Price spare parts fairly	© Support the Restart Project
10 0 2021 2022 2023 OUR TARGET 2030		C Join the Wellbeing Economy Alliance	cw Support Transparency's work

The CCC targets have provided a valuable idea of how reductions could be distributed across the impact areas we are looking at. However, see sections $\underline{2.3}$ and $\underline{5}$ for discussion of deeper cuts.

More detail on each campaign appear in Section 6

c = campaigns to support

CW = wider political campaigns

See Section 9 for the references for this card.

* Note that some targets have been updated.

Selected Consumer Goods report card narrative

In this section we try to tease out meaningful data about the climate impacts of the consumption of other material goods in the UK.

(a) Carbon footprints of clothing, furniture and electrical goods

The most obvious reflection on the 2023 consumer goods report card is that the carbon footprints of these purchases appear to have reduced. However, the three year delay in this data from DEFRA means that the reductions it is showing are those occurring in the first year of the Covid pandemic. We need to use this dataset as it is the only one in town which is attempting to be comprehensive in this area, but it doesn't really help us with recent trends.

It remains a key finding in this year's report that the government should work to address data quality in consumption emissions particularly.

(b) Producer carbon disclosure

The encouraging growth of comprehensive carbon reporting at major consumer brands in the UK that we identified in the last report appears to be slowing down.

With only four new ones joining the 24 from last year, the rate of increase is not sufficient for it to reach 100% by 2025.

14 of those that reported were actually reporting carbon emission increases. 12 were reporting reductions, and two were in their first year of reporting. If we are to make net zero by 2050 (or earlier) we need to be seeing reductions everywhere.

The Appendix contains the detailed findings in this dataset and more explanation appears in section 4 below.

(c) Consumer repair and re-use

After encouraging increases of repair and buying second hand between 2021 and 2022, we are seeing reported decreases this year.

However, for all but clothing repair, we still see increased levels of these activities from that reported in 2021 and we are still on target to achieve our increase targets for 2030.

Given that cost-of-living issues actually became more acute over the last 12 months it is interesting to see that repairing and buying second hand do not appear to be directly correlated to economic hardship.

4.

Our primary research for the Consumer Goods impact area

As we mentioned in our first Climate Gap report in 2021, the CCC does not collect data on the impact of consumer goods because much product manufacturing takes place overseas. Therefore we have extrapolated our own reduction target (of 40% by 2030) from its wider scenarios.

The CCC said in its 2022 report: "We do not currently track UK consumption emissions against an indicator pathway but intend to set one out in the coming year, against which we will track future progress." ¹¹ Disappointingly, we could find no mention of this in the 2023 report.

We are therefore, as in previous years, using the following three sources as best available proxies for consumption impact data. 4.2 and 4.3 constitute primary research.

4.2 Carbon footprints of consumer goods

For this element we use estimates of UK consumption emissions that are released annually by DEFRA using calculations from the University of Leeds. They use the value of UK imports of various types combined with emissions data from exporting countries to calculate an amount.

It is not great that the latest available data is from 2020. We have mentioned previously that, if managing carbon reduction is to be a priority for our society, there should be adequate resources directed to timely measuring and reporting of key data. We compared this to share price movements which are tracked and reported by the millisecond.

11

UK consumption emissions of various goods, in Ktonnes CO2e

	2018	2019	2020
Clothing	5,265	5,554	4,640
Footwear	1,300	1,332	1,051
Furnishings, carpets etc	4,551	4,351	3,861
Household textiles	1,885	1,729	1,645
Household appliances	644	534	493
Telephone and telefax equipment	925	993	782
Audio-visual, photo and info processing equipment	2,392	2,356	2,141
	16,962	16,849	14,613

The figures show a 13.3% reduction in tonnes of CO2e between 2019 and 2020 for the areas we are looking at. This is almost certainly the impact of the Covid pandemic feeding through into the data, since we also know that the wider UK economy contracted by 11% in the same year. ¹²

As in our 2022 report, when we came to enter the figures for previous years into our table, we found that they were different to the ones reported in DEFRA's earlier spreadsheets. It is the updated ones which appear in the table above.

DEFRA explained: "These statistics are no longer classified as experimental statistics because the methodology used to produce them is now fully developed according to current understanding and science. Major improvements to the method for removing tax on imported goods have been introduced... The previous method over-estimated the value of imports... The result of this change in the imports calculation is a reduction in the imported emissions reported in the consumption-based account." 13

For the areas we are looking at, these changes have meant that the annual tonnes of CO2e emitted have almost halved from 30 million to 14 million.

It remains a key finding in this year's report that the government should consider working to address the area of data quality in consumption emissions particularly. It was encouraging to see this in the CCC's 2023 report:

"The Government should increase investment in, and improve the collection and reporting of, consumption emissions data. This should include (a) establishing a short- and medium-term strategy to improve the underlying methodology to ensure it can capture key improvements in the carbonintensity of imports (b) ensuring the resource to enable annual emissions statistics to be produced promptly each year." 14

- 12 https://www.macrotrends.net/countries/GBR/united-kingdom/gdp-growth-rate
- https://www.gov.uk/government/statistics/uks-carbon-footprint/carbon-footprint-for-the-uk-and-england-
- 14 CCC, 2023, Progress Report to Parliament, p417.

4.3 Producer emissions disclosure

In our first report we explained how we had set a target for 100% for a selection of large consumer goods companies to be reporting annually on their 'scope 3' (manufacturing) emissions by 2025. For most of these companies this is where 97-99% of their emissions are taking place. In 2025 we plan to move on to formally tracking the actual decline (if any) in the collective reported emissions.

Of the 40 companies we selected to review, 28 were demonstrating some attempt to measure and report on these emissions this time round. This was up from 24 last year. It is only resource constraints here at Ethical Consumer that prevent us from expanding this dataset to include more companies and to be more representative of changes actually happening.

Disappointingly, of those reporting, 14 of them were actually reporting emission increases. 12 were reporting reductions, and two were in their first year of reporting. If we are to make net zero by 2050 (or earlier) we need to be seeing reductions everywhere.

The Appendix contains the detailed findings in this dataset.

Supply chain emissions disclosure summary

Sectors (# of companies searched)	2021 Reporting	2022 Reporting	2023 Reporting
Clothing (10)	2	6	7
Furniture (10)	2	2	4
Electrical (10)	8	9	9
White Goods (7)	1	4	5
Global Apparel (3)	2	3	3
TOTAL	15	24	28
% reporting	37.5	60	70

It would be good to see explanations from more of the companies still not reporting as to why. They are: Argos, Dreams, Electrolux, Furniture Village, Haier, John Lewis (in two categories), LG, Oak Furniture Land, Poundland, Sports Direct and TK Maxx

Rates of repair and buying secondhand

4.4

For this research, for the third year in a row, we commissioned a YouGov Survey of a representative sample of the UK population. We asked them to estimate how many new clothing items they had bought in the last 12 months. We then asked them to estimate how many secondhand clothing items they had bought in the same period. We used these figures to calculate an average of how many secondhand items were bought for every new item.

We asked the same questions for furniture and electrical goods and also for rates of repair compared to new purchases across the three sectors surveyed. The conclusions are summarised in the tables below.

After encouraging increases of repair and buying secondhand between 2021 and 2022, we are seeing reported decreases this year.

However, for all but clothing repair, we still see increased levels of these activities from that reported in 2021.

Given that cost-of-living issues actually became more acute over the last 12 months it is interesting to see that repairing and buying secondhand do not appear to be directly correlated to economic hardship.

Average number of second hand purchases compared to new						
	2021	2022	2023	% change from 2022		
Clothes	25	37.3	34.6	-7.2		
Furniture	33	48.9	43.9	-10.2		
Electricals	21	23.2	23.6	1.7		
Average	26.3	36.5	34.0	-6.8		

Average number of items repaired compared to new purchases						
	2021	2022	2023	% change from 2022		
Clothes	19.2	22.6	16.6	-26.5		
Furniture	37.3	48.7	45	-7.6		
Electricals	32.4	36.2	36.5	0.8		
Average	29.6	35.8	32.7	-8.7		

In our inaugural report we set a 40% increase target for 2030 for both rates of repair and for buying secondhand. Although reported rates have dropped this year, they could still be on target for all activities here except perhaps repairing electrical goods which, it is widely accepted, probably needs greater help from regulators and manufacturers to make this target possible.

Deeper change is needed

5.1 Fairness

The CCC's Balanced Pathway is aiming for net zero in the UK's territorial greenhouse gas emissions by 2050, with interim targets including a 63% cut by 2035 (the halfway point of its plan for 2020-2050), and a 40% cut by 2030. This appears to be almost in line with IPCC pathways giving the world a more than 50% likelihood of limiting global warming to 1.5 degrees, which require global greenhouse gas emissions to fall by a median of 43% (34-60%) by 2030.

However, as the CCC states, the latest estimates for the overseas emissions from UK consumption, (which also do not include land use) were 57% higher than the UK's territorial emissions. There are a lot of emissions for which the UK is responsible, which are not included in its targets. As mentioned in 5.2, the CCC pathway also includes the use of carbon removal technologies which are highly problematic.

The UK also has more historical responsibility for greenhouse gas emissions, as part of the Global North, which despite representing only 19% of the global population has contributed 92% of the emissions that overshoot the level of CO2 in the atmosphere considered to be safe.¹⁷

The impacts of climate change are also grossly uneven. The Global South already bears over 80% of the costs of climate breakdown, measured in losses due to drought, floods, landslides, storms and wildfires. 99% of climate related deaths are projected to happen in the Global South by 2030. As we mentioned in 2.3, assistance from richer nations has been promised but not delivered. A 'global stocktake' has just been completed as a component of the Paris Agreement, and identified 'an urgent need to rapidly scale up finance for adaptation, to meet the growing needs and priorities of developing countries. 19 20

- 15 CCC Sixth Carbon Budget Charts and Data, tab Advice Report Ch.9&10, Figure 10.1, line 92.
- 16 IPCC 2023 Synthesis Report, chart page 21.
- Jason Hickel, 2022, *Less is More*, Penguin Books, p115.
- 18 Jason Hickel, 2022, Less is More, Penguin Books, p116-7. Citing the Climate Vulnerability Monitor.
- 19 https://unfccc.int/topics/global-stocktake/about-the-global-stocktake/why-the-global-stocktake-is-a-critical-moment-for-climate-action
- https://unfccc.int/sites/default/files/resource/sb2023_09_adv.pdf

A fairer budget

5.1a

The Zero Carbon Sooner report, written by Tim Jackson of the Centre for the Understanding of Sustainable Prosperity (CUSP) and published in October 2021, calculates a 'fair remaining carbon budget' for the UK. It starts with IPCC figures for the remaining global carbon budget that would give us a 67% rather than a 50% chance of staying below 1.5 degrees of average warming – a two out of three rather than 50/50 chance of avoiding much higher risks. After dividing this global budget per capita, it reduces the UK's share by a proportion related to its above average emissions, and concludes that to not exceed our fair share, we need reductions of 95% of 2020 carbon emissions (on a consumption basis) by 2030.

Work by Oxfam, Lucas Chancel at the World Inequality Lab and Climate Uncensored backs up the necessity to consider how the global carbon budget is shared, not only for fairness and equity, but also for scientific and practical reasons. First to enable poorer countries to improve quality of life, but also say Climate Uncensored, 'It is not only more effective, but it is also necessary, to curb the huge emissions of wealthy nations, rather than try to cut emissions from countries that already have low or very low emissions per person. A similar reasoning holds true within nations.' ²¹ For example, as Chancel points out, the top 10% of global emitters (771 million individuals) emit on average 31 tonnes of CO2e per person per year and are responsible for about 48% of global CO2 emissions. The bottom 50% are responsible for close to 12% of global carbon emissions (3.8 billion individuals who emit on average 1.6 tonnes per person)' ²²

In Europe, the top 10% emit around 30 tonnes CO2e each per year, while the bottom 50% emit about 5 tonnes.²³ Based on current UK and EU targets, Oxfam estimates that in 2030 the per capita consumption emissions (including investments) of the richest 10% will remain 5-6 times above the global average level compatible with 1.5 degree warming, the poorest 50% will be below the level required, and the middle 40% will be over two times above it.

To reduce emissions on the scale and at the speed needed to keep warming to 1.5 degrees, it makes sense to focus more attention where there are more emissions to cut. Otherwise, as Oxfam warns, 'Maintaining such high carbon footprints among the world's richest people either requires far deeper emissions cuts by the rest of the world's population, or it entails global heating in excess of 1.5°C'.²⁴ Oxfam states simply 'It is time to use regulation and taxation to end extreme wealth altogether, to protect people and the planet.'

What we lack is a detailed model, along the lines of the CCC work, that maps out a pathway, sector by sector, for fairer decarbonisation towards safer targets. Until this detailed pathway mapping work is done, we are still using the CCC's targets (whilst noting the flaws) for the Climate Gap assessments we are making in this report.

- 21 https://youtu.be/3SPVIUV2_uY
- 22 https://wid.world/news-article/climate-change-the-global-inequality-of-carbon-emissions/
- 23 https://www.nature.com/articles/s41893-022-00955-z
- 24 https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621305/bn-carbon-inequality-2030-051121-en.pdf

Credibility

5.2

The CCC argued that its pathway, or 'carbon budget', met the requirement of the Paris Agreement to represent 'highest possible ambition', but it was limited by its idea of what was credible. However, ideas of what is credible can shift. Our aviation chart in the Transport section shows that during the pandemic, emissions dropped to less than half the level aimed for in the CCC pathway by 2030. The Swedish climate activist Greta Thunberg also pointed out what has been shown in the last few years: "we *can* act fast and change our habits and treat a crisis like a crisis" [our emphasis].

A credibility problem of a different sort lies in the Balanced Pathway's reliance on carbon removal technologies, such as Biomass with Carbon Capture and Storage (BECCS), as we first noted in our 2021 report. The theory is that we can overshoot the carbon budget (calculated to keep warming under 1.5 degrees), and then suck emissions out of the atmosphere again with BECCS.

However, the higher impacts of an overshoot is a risk in itself, as is relying on a technology which is untested at scale, and which would add to pressures on other critical planetary boundaries associated with land use, water use and biodiversity. The CCC's Balanced Pathway removals for 2050 are mainly from BECCS, and are over 100 million tonnes CO2e/year which is not insignificant (our current total consumption emissions are about 700 million).

The balance in 'Balanced Pathway' refers to a balance of technologies and behavioural change. While we certainly need technologies to have the best chance of limiting the worst impacts of the climate crisis, perhaps the credibility of any plan to really do so relies on finding ways to accelerate behaviour change.

There is important work being done by the Centre for Research into Energy Demand Solutions (CREDS) focusing on reducing energy demand, a much less risky approach than relying on carbon removal technologies where decarbonisation cannot keep up with rising demand (see more in 5.3 below). Importantly, a lower energy demand also 'provides flexibility to ratchet up climate ambition further'. CREDS are not alone in suggesting that societal changes that reduce energy demand can also bring multiple other benefits, including healthier diets, active living, clean air, warm homes, rebalancing work and driving down inequality.

The problem of growth

5.3

Global efforts to shift to renewable energy have been significant, with the world producing 8 billion megawatt hours of clean energy more in 2020 than ten years earlier. But we are not keeping up with growth, which caused energy demand to grow by 48 billion megawatts over the same period. Even if we could keep up, producing renewable energy infrastructure requires metals and minerals that would be needed in far greater quantities than we are currently extracting. Jason Hickel, in his book *Less is More* suggests we'd need a 2,700% increase in lithium extraction for batteries to store the energy too.²⁶

As we discuss in *Ethical Consumer*'s shopping guides, lithium production also takes huge amounts of water, which already at present levels of extraction is causing farmers to abandon land because they have no water for irrigation. Lithium mines have also leaked chemicals which have poisoned rivers from Chile to Argentina.

Mining is almost always linked to unjust models of exploitation. 'The patterns of extraction that characterised colonisation remain very much in place today', notes Hickel, with around 10 billion tonnes of raw materials flowing from poor to rich countries every year. If we're not careful, so-called clean energy could become as socially and environmentally as destructive as fossil fuels.

Of course we need to shift to renewable energy and electric cars, but we also need to radically reduce the amount we use. A similar story emerges for the concept of the circular economy. Of course we need to do more recycling of materials, but most of our material use, such as food, energy, infrastructure (at least in the near term) or mining waste, can't be recycled. And, our material demand is growing faster than improvements in recycling.

Hickel describes growth as 'broadly equivalent to the rate at which our economy is metabolising the living world'. Or in other words, we use the word growth, 'to describe what has now become primarily a process of breakdown.' 'Degrowth – reducing material and energy use – is an ecologically coherent solution to a multi-faceted crisis', he says. This presents a challenge to the narrative enshrined in the CCC's Sixth Carbon Budget which states: 'The UK has offered a positive example of emissions reduction alongside economic growth, and the goal should be to continue that example'.

Hickel doesn't have a blueprint, but he does list a number of steps to illustrate that we can make big reductions in material use without any negative impact on human welfare, in fact we could improve people's lives:

- End planned obsolescence
- Cut advertising
- Shift from ownership to usership
- End food waste
- Scale down ecologically destructive industries

Jason Hickel, 2022, Less is More, Penguin Books, p140-3

26

How to get there is a bigger question. At the moment, 'we have a political system that allows a few people to sabotage our collective future for their own private gain'. But perhaps new ideas are gaining momentum, with movements from the school climate strikes to Extinction Rebellion, La Via Campesina to Standing Rock. In 2023 a conference titled Beyond Growth even took place in the European Parliament building. We talk more about wider political reforms in section 7.

6.

Direct political campaigns to support

In the 2022 Climate Gap report we wrote at length about how it was now widely recognised that reducing individual impacts would not be enough to create the required consumer carbon emissions reductions quickly enough, and that consumers also needed to consider political engagement at the same time.

We therefore introduced a 'top five political actions for consumers' in each of the four impact areas of our climate gap report: Food, Heating, Transport, and Consumer Goods. We've reproduced short descriptions of them and contact details again here for convenience, and more information about why we chose the ones we did appears in the 2022 report.

This year we've also introduced the notion that, because of the problems we are having with our political leadership in this area, we're going to need companies to join in campaigning too where appropriate.

The Climate and Ecology Bill, for example, welcomes corporate supporters. Where it is clear to us that corporate members are welcomed in a campaign we have put a 'CORP' icon next to them in the list below. Some campaigns also appear under actions for companies in the report cards earlier in this report.

We would also recommend that companies look specifically at joining Business Declares: 'A quiet but powerful gathering of stakeholders, professionals and people in business, to show business support for government action on climate and nature.' (https://businessdeclares.com).

6.

Food

Reducing food consumption emissions in the UK – the top five political actions for consumers.

1. Support the Climate and Ecology bill, which aims to require the UK government to systematically address all consumption (and other) impacts according to the best available science.

www.zerohour.uk/ CORP

Support 'Sustain', an alliance of organisations working together for a better food system. Amongst other things they work on: future trade deals, public procurement and agricultural policy.

www.sustainweb.org/get-involved/ CORP

Support 'Feedback', a charity campaigning for (amongst other things) mandatory food waste reporting.

feedbackglobal.org/about-us/get-involved/ CORP

Join the Vegan Society, which campaigns for more plant options on menus, for more plant options to be 'procured' into public institutions, and on agricultural policy too.

www.vegansociety.com/take-action/campaigns/climate-emergency

Support Animal Rising for non-violent protest action to speed the transition to a plant-based food system.

www.animalrising.org

6.2 Heating

Reducing home heating emissions in the UK - the top five political actions for consumers.

Support the Climate and Ecology bill, which aims to require the UK government to systematically address all consumption (and other) impacts according to the best available science.

www.zerohour.uk/ CORP

Support Warm this Winter - a coalition of environmental and antipoverty groups like Greenpeace and Oxfam calling for: emergency support with heating bills, help to upgrade homes, access to cheap renewable energy and an end to expensive oil and gas.

www.warmthiswinter.org.uk/get-involved

Join United for Warm Homes, a Friends of the Earth project to support people to set up local campaigns in their own communities.

unitedforwarmhomes.uk/

4. Support the Great Homes Upgrade – A similar campaign to the above, from the New Economics Foundation with a toolkit for actions supporters can take locally.

greathomesupgrade.org/

5. Support Just Stop Oil – A high profile non-violent direct action campaign, whose name says it all.

juststopoil.org/

6.3 Transport

Reducing transport emissions in the UK – the top five political actions for consumers.

1. Support the Climate and Ecology bill, which aims to require the UK government to systematically address all consumption (and other) impacts according to the best available science.

www.zerohour.uk/ CORP

2. Support Transport & Environment (T&E), a Europe-wide coalition of environmental groups campaigning for a zero-emission mobility system.

www.transportenvironment.org/get-involved/campaign-with-us/

3. Join Friends of the Earth, which has been a key player, along with other groups, opposing airport expansions, and arguing for a frequent flyer levy and aviation tax reform.

friendsoftheearth.uk/climate/airport-expansions

4. Support Sustrans, a high profile national charity promoting walking and cycling.

www.sustrans.org.uk/ CORP

5. Support the Transport Action Network, which supports local groups to fight cuts to bus services and to oppose damaging road schemes.

transportactionnetwork.org.uk/

Consumer Goods 6.4

Reducing consumer goods emissions in the UK – the top six political actions for consumers.

Support the Climate and Ecology bill, which aims to require the UK government to systematically address all consumption (and other) impacts according to the best available science.

www.zerohour.uk/ CORP

Join the Wellbeing Economy Alliance (WEAll) - from degrowth to zero carbon procurement, the WEAII is a new global network of organisations working to transform the economic system.

weall.org/about CORP

Support the Restart Project which is campaigning for a right to repair in the UK.

therestartproject.org/right-to-repair/

Subscribe to Ethical Consumer – (yes we know) because we use our publishing to pressurise companies to report Scope 3 emissions emissions and to design coherent carbon reduction plans.

www.ethicalconsumer.org CORP

Support Extinction Rebellion which uses non-violent civil disobedience to address the climate emergency in decentralised groups.

extinctionrebellion.uk/ CORP

In 2023 we added supporting WRAP to possible business actions under this section. The Waste and Resources Action Programme (which operates as WRAP) works with businesses, individuals and communities to achieve a circular economy, by helping them reduce waste, develop sustainable products and use resources in an efficient way.

wrap.org.uk CORP

7. Wider political reforms

As we wrote in the introduction to this report, if we were in any doubt that our current political systems were not fit for purpose, the current year of climate inaction has meant that it is now undeniable.

In recognition of this, we have introduced this new section into the Climate Gap report, where we can signpost campaigns for wider political reform that consumers could support. These can sit alongside our advice on reducing personal carbon impacts, and our signposting of direct political campaigns to support such as the sustainable food organisation Sustain.

Although this is a huge subject, there are a few really obvious reflections that can help. The first is that calls for reform of the voting system are not new, and one organisation we identify has been working on the subject since 1884.

The second observation is that the kind of problems we are seeing in the UK (such as the rise of far right and climate denying voices) are not restricted to this country. One group we talk about, for example, is looking to address corruption in political funding globally.

Thirdly, it is pretty clear that new technologies (such as social media) are playing an important role in undermining sensible political conversation in this space too (globally) which will require new campaign ideas and responses. So we are trying to identify organisations working to address this too.

Fourthly, we note that the current government has been trying to shut down accountability in Parliament, through the courts, on the streets, and in civil society. Because of this we are also identifying organisations pushing back against this.

Finally, we should note that we are well aware that there are many conversations out there about how more radical reforms to our democratic systems may be necessary. There is much talk around ideas like 'citizens assemblies', 'participatory budgeting' and 'radical devolution'. We have not begun to map these yet here but may begin to do so in the future.

Reforming the voting system

The Electoral Reform Society has been fighting for proportional representation and a better functioning democracy in the UK since 1884. It is a democratic membership organisation welcoming individual members and has successfully campaigned for the use of proportional representation in Scottish, Northern Irish and Welsh elections.

www.electoral-reform.org.uk/

Reforming political finance

Although Transparency International works on corruption around the world it has a UK chapter with a specifically 'money and politics' topic area.

Within this, it 'aims to end the corrupting influence of big money in UK politics and to instil integrity into the conduct of those in public office.'

It has a Friends of TI UK programme for supporters to engage with its work and networks.

www.transparency.org.uk/

Addressing climate disinformation

Stop Funding Heat is a spin off organisation from Stop Funding Hate. It is 'concerned at the way newspapers, news sites and online platforms spread climate lies in the pursuit of sales, clicks or vested interests'. By alerting brands to problem content they may decide to disassociate from, they can make climate disinformation less profitable for publishers. Supporters can help them identify problem content and much more.

stopfundingheat.info

The Conscious Advertising Network (CAN) is a not-for-profit coalition of more than 180 advertisers, agencies and civil society groups, all working together to embed human rights within commercial and political decision making in relation to advertising.

www.consciousadnetwork.com

Protecting the right to protest

In April 2023 the Public Order Bill finally passed the House of Lords in the UK. The bill further restricts people's fundamental rights to peaceful protest. Amongst the groups campaigning for its repeal are Amnesty International.

www.amnesty.org

Liberty is another group working in this area. It says: 'There is a democratic crisis in the UK. The Government are shutting accountability in Parliament, through the courts, on the streets and in civil society. Help Liberty keep these avenues of accountability open so we can all stand up to power.'

www.libertyhumanrights.org.uk

8. Consumer intentions

In the two previous iterations of the Climate Gap report we have looked at and highlighted recent surveys which shed light on consumer willingness to take each of the actions identified in the report. We have continued to do this where new data is available and information appears in the summary report card.

For each of the four impact areas, we give figures showing the range of results found for different surveys relating to the three indicators tracked on the individual report cards. Here is a breakdown:

FOOD: 34-66% willing

This refers to 34% willing to reduce dairy consumption, 37% willing to reduce meat consumption, 66% making an effort to reduce food waste.

HEATING: 22-50% willing

This refers to 22% said they were likely to choose a heat pump, 42% had cavity or solid wall insulation installed, 50% said they were willing to reduce how much they heat their home.

TRANSPORT: 14-43% willing

This refers to 14% expecting to buy an electric car, 36% willing to fly less, 43% willing to reduce car travel.

CONSUMER GOODS: 37-70% are willing

This refers to 37% that had chosen brands that have ethical practices/values, 49% avoid buying new goods and mending and buying second hand instead, 70% expressing some willingness to reduce their overall consumption.

For each of these ranges, more detail and references are available in Summary report card 'notes and sources' in Section 9.

9.

Notes and sources for the Report Cards

9.1 Notes and sources for the summary report card

Row 1: Titles

- B1 Estimates of food impact vary most widely, from as low as 13% (not including land use change) to as high as 30% (including land use change). We have gone for a mean point of the figures that include land use change.
- C1 Calculated from DEFRA, 2021, Consumption Emissions, and Final UK greenhouse gas emissions national statistics: 1990-2019
- D1 Calculated from DEFRA, 2021, Consumption Emissions, and Final UK greenhouse gas emissions national statistics: 1990-2019
- E1 Calculated from DEFRA, 2021, Consumption Emissions, and Final UK greenhouse gas emissions national statistics: 1990-2019

Row 2: Targets

Note that summary table targets are shown as CO2e reduction, whereas the targets in each separate report card are often in other units.

- B2 c.13% carbon reduction from diet change and food waste. Taken from the Sector chart for Agriculture, line 486, in the Sixth Carbon Budget Charts and data in the report. This uses the same graph as last year, which was read off as 15%, but now we have the actual figures which show 13%.
- C2 This refers to the overall emissions target for residential buildings on the heating report card. See references for targets on that card.
- In previous years on this report card we used a target for the whole transport sector including for example HGVs and vans as well as cars and aviation. To be more consistent with the Transport card we are now using only figures for cars and aviation. Calculated from same sources as Transport card which give figure for emissions in 2019 as 68mt for cars, and 39mt for aviation = 107mt; as well as targets for 2030 as 27mt for cars, and 33mt for aviation = 60mt. 60/107 = 56%, or a 44% cut.
- E2 See Consumer Goods Report Card notes.

Row 3: Intentions

These figures show the range of results found for different surveys in each impact area.

Food: 34% reported being willing to reduce dairy consumption, 37% willing to reduce meat consumption, 66% are making an effort to reduce food waste.

Dairy: IPSOS Earth Day 2022 April 2022 Global Survey. Stated 34% in UK said they were likely to make the following changes within the next year: 'Eating fewer dairy products or replacing dairy products with alternatives such as soya milk'.

Meat: www.eating-better.org/news-and-reports/news/eating-better-2022-public-attitudes-survey-results/ states 61% willing to eat less meat, but this is mainly for cost and health reasons. As we are looking for intentions related to making more sustainable choices we did not use this survey.

We used the IPSOS Earth Day 2022 April 2022 Global Survey, which stated 37% in UK said they were likely to make the following changes within the next year: 'Eating less meat, or replacing the meat in some meals with alternatives such as beans'.

Food waste: https://wrap.org.uk/resources/report/uk-household-food-waste-tracking-survey-2022-behaviours-attitudes-and-awareness which states 'Levels of agreement with the statement I have been making more of an effort lately to reduce my food waste have been on a static trend since April 2020'. Remains at 66%.

C3 Heating: 22% said they were likely to choose a heat pump, 42% had cavity or solid wall insulation installed, 50% said they were willing to reduce how much they heat their home.

NB: from Spring 2023 the Public Attitudes Tracker is now conducted by the DESNZ rather than the BEIS.

Insulation: DESNZ Public Attitudes Tracker: Heat and Energy in the Home: Summer DESNZ Public Attitudes Tracker: Heat and Energy in the Home: Summer 2023, UK: 21 SEPTEMBER 2023 fig 6.1

Heat pumps: DESNZ Public Attitudes Tracker: Heat and Energy in the Home: Summer 2023, UK: 21 SEPTEMBER 2023 page 9

22% of all respondents were likely to install any type of heat pump (air source, ground source or hybrid) or already had a one installed. Not including those who already had a heat pump installed, 20% of all respondents said they were likely to install a heat pump of any type.

Reducing heating: Steentjes, K., Poortinga, W., Demski, C., and Whitmarsh, L., (2021). UK perceptions of climate change and lifestyle changes. CAST Briefing Paper 08 cast.ac.uk/wp-content/uploads/2021/03/CAST-Briefing-08.pdf

D3 Transport: 14% expecting to buy an electric car, 36% willing to fly less, 43% willing to reduce car travel.

Cars: DESNZ Public Attitudes Tracker: Net Zero and Climate Change Summer 2023, UK 21 SEPTEMBER 2023 Official Statistic. Fig 4.1 Self reported behaviours (actions already claimed)

Reducing car use: 37% (replace with public transport) to 49% (replace with walk cycle)

Remained at 43% averaged out (though choosing public transport had risen from 34% last year, and choosing to walk or cycle had fallen from 53% last year)

Aviation: IPSOS earth day 2022 April 2022 Global Survey, How likely might you in the next year?.... Reduce flying = 36%

Electric cars: https://www.rac.co.uk/drive/features/rac-report-on-motoring-2022/ states 14% drivers expect their next vehicle to be battery electric powered, up from 10% in 2021. Figure rises to 43% if you include conventional and plug in hybrids. 2021 used https://www.ofgem.gov.uk/publications/one-four-consumers-plan-buy-electric-car-next-five-years-according-ofgem-research which included EV or hybrid vehicles. 2022 used a Yougov survey just after a heatwave, when 40% said they were willing to "switch to an electric car".

E3 Consumer Goods:

Carbon footprint: 70% express some willingness to reduce overall consumption. [No new data found in 2023] Steentjes, K., Poortinga, W., Demski, C., and Whitmarsh, L., (2021). UK perceptions of climate change and lifestyle changes. CAST Briefing Paper 08 cast.ac.uk/wp-content/uploads/2021/03/CAST-Briefing-08.pdf

Carbon disclosure: 37% have "Chosen brands that have ethical practices/ values (up 7%)"

www2.deloitte.com/uk/en/pages/consumer-business/articles/sustainable-consumer.html

Repair and reuse: IPSOS earth day 2022 April 2022 Global Survey: Avoid buying new goods and mending and buying second hand instead 49%

Row 4: Where have we got to

These are current reductions against the baseline, rather than a reduction made in the latest figures

- B4 Latest figures for food are not measured in emissions, but in consumption per person per week.
- C4 See Heating card for residential buildings emissions. 57mt in 2022 is an 11% cut from 64mt baseline.
- D4 See Transport card. 59Mt for cars and 29mt for aviation = 88mt. This is an 18% cut from 107mt baseline.
- E4 See Consumer Goods card. Carbon footprints of 40 selected clothing, furniture and electrical goods companies down from 16.8mt in 2019 to 14.6mt in 2020 is a 13% cut from baseline.

Row 5: What's the gap?

Reduction still needed – this looks at the latest position against the target, rather than how much of the original cut needed remains.

- **Food:** consumption has increased marginally, so full reduction needed remains at 13%.
- c5 **Heating:** from 57mt in 2022 to 49mt target requires a 14% reduction.
- D5 Transport: from 88mt in 2022 to 60mt target requires a 32% reduction.
- **Consumer goods:** from 14.61mt in 2020 to 10.09mt target requires a 31% reduction.

The multi-coloured bar refers to the three indicators in each of the four impact areas. See 2.2.

Actions needed

See individual report card references for sources.

Food report card: notes and sources

CCC Targets

Meat: CCC, 2020, The Sixth Carbon Budget, the UK Path to Net Zero, page 165 Dairy: CCC, 2020, The Sixth Carbon Budget, the UK Path to Net Zero, page 165

Food waste: CCC, 2021, Progress in Reducing Emissions, Report to Parliament, page 119.

Year on year figures

Meat: Calculated from DEFRA Family Food Datasets. Household Purchases and Eating Out are used, both carcase and non-carcase meat. Note that the CCC, Progress in reducing emissions 2023 report to parliament states, 'The public have reported eating less ruminant meat (i.e. beef and lamb) since 2009, though ruminant meat availability data do not indicate a similar trend and it is not clear why these do not correlate' p247.

Dairy: Calculated from DEFRA Family Food Datasets 2020-2021. Both Household Purchases and Eating Out datasets are used but only milk, yoghurt and fromage frais, cream, cheese is counted for Household Purchases, and cheese, yoghurt and fromage frais and milk for Eating Out, with cheese in other products such as quiche ignored for simplicity. All is counted at 1:1 apart from hard cheese which is counted at 10 grams of milk for each gram of cheese.

Food waste: CCC, June 2022 Progress in reducing emissions 2022 Report to Parliament, read off the graph on page 379. No update available in the 2023 report, which stated, "The Waste and Resources Action Programme (WRAP) expect to publish the latest update later in 2023".

Priority actions for government

Eating Better Alliance. Three of 24 levers for government, food service, retailers, food producers and investors. www.eating-better.org/better-by-half/government/

Two of eight policy recommendations from Global Feedback. www.tabledebates.org/blog/why-climate-emergency-demands-food-waste-regulation

Priority actions for companies

Eating Better Alliance. Three of 24 levers for government, food service, retailers, food producers and investors www.eating-better.org/better-by-half/

Heating report card: notes and sources

CCC Targets

Insulation: CCC 2022 Progress Report, Charts and Data, tab C4 from line 156. Including target amounts of cavity & solid wall, and roof insulation, starting from 2021. No longer including floor as the annual figures (found in 2022 Progress Report as stated, but not 2023) do not.

Heat pumps: CCC, 2021 Progress in Reducing Emissions, Report to Parliament, page 111

Emissions: CCC, 6th Carbon Budget Sector Specific Summary for Buildings on p45 had a graph which was read as showing a 23% cut needed for all buildings. CCC 2022 Progress Report, Charts and Data, tab C4 line 23 showed 64 Mt actual emissions for Residential buildings. In the absence of a Residential only target we are using the all building cut of 23%.

Year on year figures

Insulation: CCC 2022 Progress Report, Charts and Data, tab C4, line 158-160. No figure found in 2023 Charts and Data. Figure no longer includes cumulative installations since 2019, as the cumulative target stated above starts counting from 2021.

Heat pumps: CCC 2023 Progress Report, Charts and Data, Fig 5.2, line 40. Restated from actual figures rather than read from a graph.

Emissions: CCC 2023 Progress Report, Charts and Data, Fig 5.3. Restated from actual figures rather than read from a graph.

Priority actions for government

All these actions and targets are inferred from their discussion in the CCC 2021 Progress in Reducing Emissions, Report to Parliament, CCC 2021. Some also appear explicitly in the Joint Recommendations document too at p9.

Priority actions for companies

Skills gaps are explicitly referred to in CCC's 2021 Progress Report to Parliament. Joint Recommendations at p23.

Develop creative funding instruments is an explicit request of the Heat Pump Federation (www.hpf.org.uk/campaigns) but is widely discussed elsewhere, such as www.local.gov.uk/financing-green-ambitions-full-report Installing the technologies in commercial buildings is common sense.

A smart system plan is part of the CCC's 2021 Progress Report to Parliament. Joint Recommendations at p28.

Transport report card: notes and sources

CCC Targets

Cars: We are restating a new target on the basis of finding actual data rather than reading off a graph. The 2023 supporting Charts and Data on the tab for Fig 4.3 list car emissions as 68.93mt in 2019. The Sixth Carbon Budget – Dataset (Version 2 – December 2021) on the tab titled 'Subsector level scenario explorer' shows abatement by sector, and lists cars and vans together as having 52.57mt abatement by 2030. The 2023 supporting Charts and Data on the tab for Fig 4.3 list car emissions alongside van emissions, and over 5 years up to 2019, cars make up about 80% of the emissions of cars and vans combined. If we assume cars should account for 80% of the abatement of cars and vans together, that would be .80*52.57mt = 42mt by 2030. Using a 2019 figure of 68.93mt, and abating 42mt, would leave 26.9mt. 26.9/68.93=.39 which would mean a 61% reduction.

Aviation: We are restating a new target on the basis of finding actual data rather than reading off a graph. 2023 Progress Report, Charts and Data, Fig 10.2.

Electric cars: CCC, 6th Carbon Budget p98. In the Balanced Pathway the 100% date is set for 2032 at the latest.

Year on year figures

Restated from actual figures rather than read from a graph.

Cars: 2023 Progress Report, Charts and Data, Fig 4.3.

Aviation: 2023 Progress Report, Charts and Data, Fig 10.2, line 39. **Electric cars:** 2023 Progress Report, Charts and Data, Fig 4.2, line 25.

Priority actions for government

CCC's 2021 Progress Report to Parliament. Joint Recommendations. Various pages.

Halt airport expansion and aviation tax reform are part of the CCC's 2021 recommendations.

A frequently flyer levy has been raised by the CCC previously and is widely supported: www.bbc.co.uk/news/science-environment-56582094

www.transportenvironment.org/challenges/planes/subsidies-in-aviation/

Priority actions for companies

Sell more electric vehicles is a re-framing of a government action above.

Decarbonising HGVs is inferred from the CCCs 2021 Report to parliament, Reducing distance is common sense.

Aviation actions appear in the Joint recommendations CCC's 2021 Progress Report to Parliament p21-22 and are inferred as actions companies can take too.

Electric car actions are inferred from above.

Selected consumer goods report card: notes and sources

Titles

% of total UK emissions: Annual greenhouse gas and carbon dioxide emissions relating to UK consumption in the following categories: clothing; footwear; furnishings, carpets etc; household textiles; household appliances; telephone and telefax equipment, audio-visual, photo and info processing equipment. In our first report, they made up 26 million tonnes of CO2e which was only 3.6% of total emissions (of the 703 million tonnes total in 2018). However, because the larger dataset contains some other large elements (like miscellaneous goods and services, other recreational equipment, other major durables for recreation and culture etc) which would take the total well above 10% this is the number we have chosen for a broad understanding of relative impact in this area. In time, we may be able to discover more about these elements, which would allow us to include them in our measurements with more confidence.

Targets

Carbon footprint: We are applying the CCC's territorial targets to imported emissions. The CCC's scenarios include interim targets (on the way to net zero by 2050) of a 68% cut by 2030 on 1990 levels and 78% by 2035. Territorial emissions fall from 522 million tonnes in 2019, to 316 in 2030, in other words, a cut of 40% by 2030.

Other sector specific programmes, such as that from WRAP for textiles, have set similar targets. WRAP's is for a 50% reduction by 2030. wrap.org.uk/media-centre/press-releases/changing-clothes-reduce-climate-change-textiles-2030

Carbon disclosure: If companies need to be reducing supply chain (scope 3) emissions by (say) 40% by 2030, then how can we track whether this is happening? We can only do this if they are publishing what these emissions are. Not many are doing it properly right now, and we can't wait until 2030 for them to begin reporting, by which time it may be too late. Therefore we have set a target for 100% reporting by 2025. At that point we can move to tracking the decline (if any) in the collective reported emissions between then and 2030.

Repair and reuse: If rates of repair and buying secondhand are increasing then this should be reducing consumer demand for new products. We set a 40% increase target for this too. Although this will not, on its own, lead to a 40% reduction in the carbon impact of consumption it will make a contribution, and hedge against producers failing to meet their own 40% target.

Year on year figures

Carbon footprint: Annual greenhouse gas and carbon dioxide emissions relating to UK consumption in the following categories: clothing; footwear; furnishings, carpets etc; household textiles; household appliances; telephone and telefax equipment, audio-visual, photo and info processing equipment. https://www.gov.uk/government/statistics/uks-carbon-footprint – UK full dataset 1990 – 2020 Including conversion factors by SIC code...using the Summary Product tab and the table for CO2e.

Carbon disclosure: Bespoke Ethical Consumer Research into the state of Scope 3 (supply chain) emissions reporting at the 40 largest consumer goods companies (clothing, furniture, electricals and household) operating in the UK. The detailed table appears at the <u>Appendix</u>.

Repair and reuse: Average rates of repair and secondhand items purchased annually compared to new purchases of furniture/household, clothing and electrical products. YouGov opinion survey commissioned by Ethical Consumer August 30th 2023.

Priority actions for government

Carbon pricing: Carbon pricing can also encourage a shift of production and consumption choices towards low carbon options. See e.g.: OECD June 2021: "Effective Carbon Rates 2021. Pricing Carbon Emissions through Taxes and Emissions Trading."

This has the advantage of impacting all product supply chains simultaneously. It has the disadvantage that, without mitigating steps being taken, it can have the greatest impact on the poorest people.

Repair: A 'right to repair' law came into effect in the UK in July 2021. The Green Alliance particularly has been vocal in asking for improvements: greenallianceblog.org.uk/2021/07/06/the-uks-new-right-to-repair-is-not-a-right-to-repair/

Priority actions for companies

Actions inferred from the targets

Spare parts: The pricing of spare parts was an issue raised by the Green Alliance.

Appendix

Supply chain emissions reporting by 40 large consumer goods companies 2023 $\,$

Company	Reporting year	Supply chain emissions reporting (Y/N)	Scope 1+2 emissions in CO2e (kt)	Scope 3 emissions in CO2e (kt)	Percentage of Scope 3 to Scope 1+2	Scope 3 going up or down?	
ELECTRICAL	ELECTRICAL						
Amazon	2022	Υ	16,290	54,000	77	down	
Apple	2022	Υ	1121	20280	95	down	
Dell Technologies	FY2023	Y/Partial	376	13709	97	up	
НР	2022	Y	243	26748	99	down	
Lenovo Group	2022-3	Υ	209	18741	99	ир	
LG *		N/Partial					
Microsoft	2022	Υ	427	12571	97	up	
Panasonic	FY2022	Υ	2060	98050	98	down	
Samsung Electronics	2022	Υ	11944	124715	91	up	
Sony	2022	Υ	1195	16160	93	down	
WHITE GOODS							
Arcelik	2022	Υ	117	26950	99	up	
BSH	2022		717	35250	98	First	
Electrolux *		N					
Haier *		N					
Miele	2020	Υ	129	12191	99	down	
Toshiba	2021	Υ	920	23946	96	down	
Whirlpool	2022	Y/Partial	461	53347	99	Down	
GLOBAL APPAR	EL BRANDS	5					
Adidas	2022	Y	164	7524	98	up	
Inditex	2022	Υ	463	17223	97	up	
Nike	FY2022	Υ	275	9953	97	down	

^{*} Companies not reporting

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Company	Reporting year	Supply chain emissions reporting (Y/N)	Scope 1+2 emissions in CO2e (kt)	Scope 3 emissions in CO2e (kt)	Percentage of Scope 3 to Scope 1+2	Scope 3 going up or down?	
CLOTHING COM	CLOTHING COMPANIES						
ASOS	2021-2	Υ	15	1739	99	up	
Asda	2021	Υ	625	29,748	98	down	
Н&М	2022	Υ	61	7093	99	down	
JD Sports Fashion	2022-3	Υ	83	5569	99	up	
John Lewis *		N					
Marks and Spencer	2022-3	Υ	363	6100	94	up	
Next	2023	Υ	86	2047	96	up	
Primark Stores	2022			6452		up	
Sports Direct/Frasers *		N					
TK Maxx *		N					
FURNITURE							
Argos *		N	762				
B&Q	2022-3	Υ	227	20862	99	Up	
DFS	2022	Υ	22	439	95	up	
Dreams *		N					
Furniture Village *		N					
IKEA	2022	Υ	540	25699	98	down	
John Lewis *		N					
Oak Furniture Land *		N					
Poundland *		N					
scs	2021-2	Y/Partial	6	104	95	First year	

^{*} Companies not reporting

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