Big Leeds Climate Conversation

Big Leeds Climate Conversation

Final Report

December 2019

Big Leeds Climate Conversation

Contents

Executive Summary

The Big Leeds Climate Conversation (BLCC) saw council officers and volunteers engage with residents about the climate emergency and promote the consultation at more than 80 meetings and events across the (see Appendix A) city including community committees, Carnival, Breeze Events, Pride and Child Friendly Leeds Live. A mixed-method approach was taken that included online questionnaires, in-person conversations, focus groups and social media.

Who responded?

In total, 7,835 individuals participated in one of the two official questionnaires. Every effort was taken to ensure that every community in Leeds had the opportunity to share their views as part of the Big Leeds Climate Conversation however, as with any voluntary consultation, there is always a risk of self-selection biasing the findings. Whilst respondents to the long questionnaire were older and more likely to identify as English/Welsh/Scottish/Northern Irish/British ethnicity compared to the Leeds population as a whole, the opposite was true for those who responded to the short questionnaire. Men and young people of both primary and secondary school age were underrepresented in both samples. Respondents to the long questionnaire were also slightly more likely to be homeowners than the Leeds population as a whole.

Views on the climate emergency

Almost all residents (97.1%) agreed with the scientific consensus that the climate is changing and that the earth's warming is due to human activity (93.4%). Five out of six residents (84.9%) also agreed that they have a good knowledge about the causes

and effects of climate change, however only two out of six (36.2%) would ‘strongly agree’ with the statement.

There is considerable worry about the effects of climate change. More than nine out of ten residents agreed they are worried about wildlife loss (97.3%), biodiversity loss (96.3%), and the frequency of extreme weather events in the future (93.3%). In particular, four out of five respondents strongly agree that they are worried about the effects of climate change on future generations (82.7%).

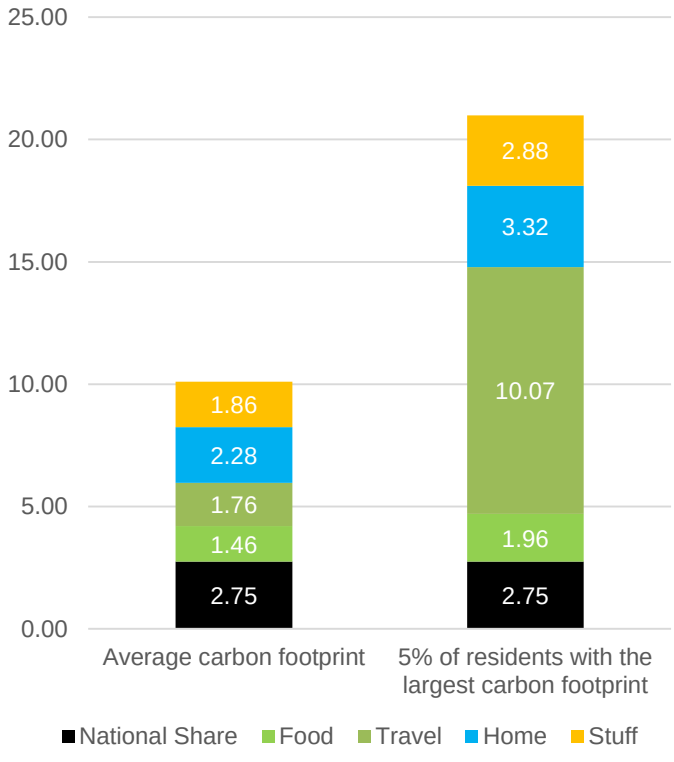
Estimated carbon footprint of residents

Leeds City Council partnered with the World Wide Fund for Nature (WWF) to better understand the average carbon footprint of residents.

Based on data from 2100+ residents, it is estimated that the median carbon footprint of Leeds residents is approximately 10.1 tonnes of carbon dioxide equivalent (CO2e) every year whilst the mean is 11.38 tonnes. Both figures are significantly lower than the WWF’s estimated 13.56 tonnes CO_2e average.

Notably, one twentieth of Leeds’ residents have a median annual carbon footprint double that of the average resident. More than 80% of this difference is related to emissions from travel. More information can be found in Appendix A.

Figure 1 (Appendix 1): Chart to show median carbon footprint breakdown of residents with an LS postcode, according to WWF data (CO_2e)



Views on individual action

On an individual level, approximately nine out of ten respondents agreed that their actions can help tackle climate change (89.5%) and believe that reducing their own impact on the environment is a personal priority (89.4%).

Most respondents (93%) to the long questionnaire said that they are willing to take one or more actions to reduce their own impact including: planting trees (53.4%), picking up online orders from a convenient location rather than choosing home delivery (33.2%), creating habitats for wildlife in their garden (33.2%), choosing energy efficient appliances (32%), considering switching to an electric or hybrid car (26.5%), eating less dairy (24.9%) and using a green/renewable energy tariff (23.9%). The council should work with partners on future behavior change campaigns to ensure that these commitments are followed through.

Respondents would like to do even more to reduce their own impact on the environment, but many say that barriers currently prevent them from doing so, including: installing solar panels (57.7%), considering switching to an electric vehicle or hybrid (44.9%), composting food waste and kitchen scraps (38.5%), working from home more often (35.2%), growing food (34%), car sharing (31.1%) and avoiding buying non-recyclable packaging (30.3%).

Almost half (48.2%) of respondents to our short questionnaire agreed that they would like to reduce their own impact on the environment but don't know where to start.

Views on citywide action

More than nine out of ten respondents to the long questionnaire agreed or strongly agreed that tackling climate change (94%) and reversing the decline of bees and

other pollinating insects (91.4%) should be a priority for Leeds. This view was also reflected in the short questionnaire, where respondents agreed that tackling climate change (94.3%), becoming a carbon neutral city (91.6%), and protecting the diversity of wildlife (95.5%) should be a priority for the city.

More than three quarters of respondents believe that tackling climate change is either more (63.5%) or much more (14.7%) important than maintaining current levels of economic growth. Additionally, almost all respondents believe that public sector organisations (96.8%) and businesses (96.7%) have a responsibility to reduce their own carbon footprint and make it easier for individuals to make more environmentally-friendly choices.

The council proposed 11 ‘big ideas’ to reduce the city’s carbon emissions and support biodiversity as part of the long questionnaire. Significantly, every proposal was supported by at least 84% of respondents (see figure 22). Beyond these, the most frequently suggested proposals were those related to transport and waste/recycling, especially suggestions for a mass transit system and household collections for food waste and glass recycling. Many residents also suggested that Leeds should do more to require developers to build ‘greener’ developments, e.g. requiring stricter energy efficiency standards, the installation of renewables, and making it harder to develop on green field sites.

Finally, a Leeds Climate Change Citizens’ Jury was assembled by the Leeds Climate Commission as part of their contribution to the Big Leeds Climate Conversation. The statistically representative jury recommended a number of significant proposals to reduce the city’s carbon emissions of their own. These recommendations can be read in full on the Commission’s website: https://www.leedsclimate.org.uk/leeds-climate-change-citizens-jury.

Figure 22: Public support of proposed big ideas

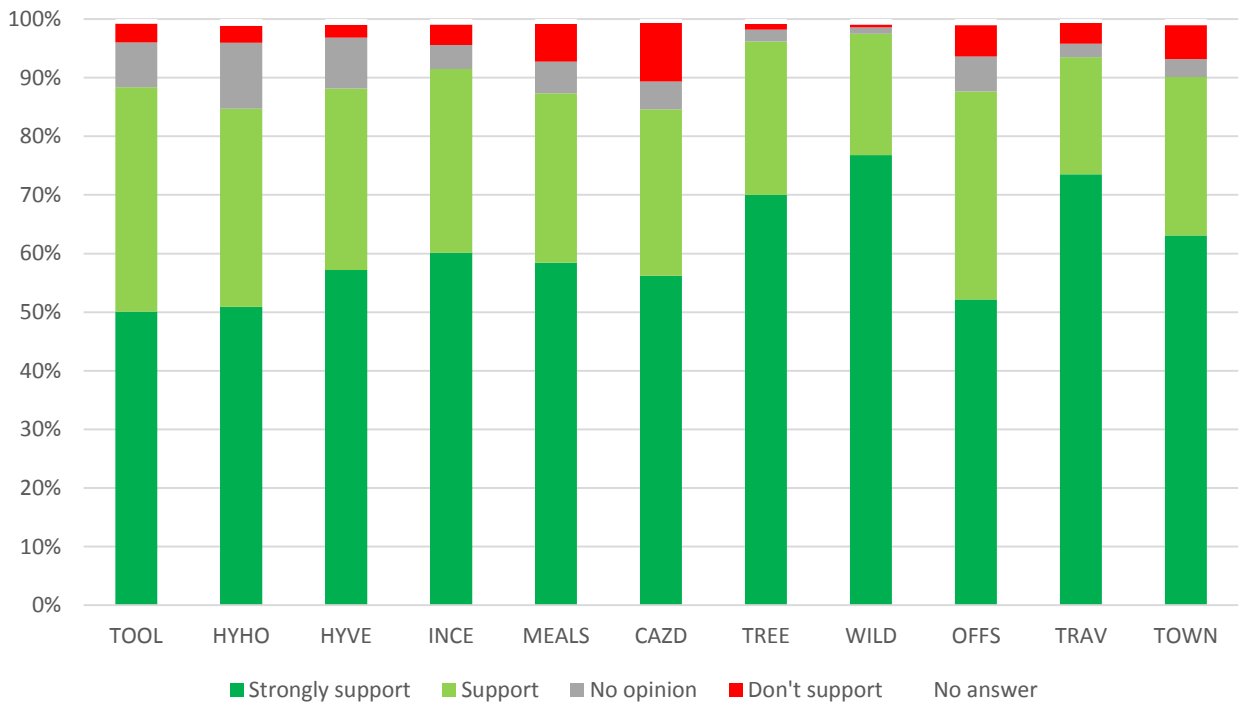


Chart key:

TOOL: Introducing tool libraries across the city.
HYHO: Using hydrogen gas to heat our homes.
HYVE: Using hydrogen gas to power larger vehicles.
INCE: Incentivising homeowners and businesses to improve the energy efficiency of their properties.
MEALS: Reducing the carbon footprint of school meals.
CAZD: Expanding the Clean Air Charging Zone to include high polluting cars and vans by 2030.
TREE: A council-backed volunteering scheme to plant millions of new trees by 2030.
WILD: Planting more wildlife-friendly species in our parks, verges and flower beds.
OFFS: A new Leeds-based carbon offsetting fund that would benefit the city.
TRAV: Investment in sustainable travel infrastructure.
TOWN: Transforming our town centres to support public transport and active travel

Big Leeds Climate Conversation

Background

Context

Leeds City Council declared a climate emergency in March 2019 with the stated ambition of working to become a net zero city by 2030.

It follows a landmark report by the United Nations Intergovernmental Panel on Climate Change (IPCC) last year that warned that the window to limit world temperatures to under 1.5 °C and avoid the worst climate change impacts will close in the next decade. In parallel to considering the climate emergency, the council has also focused on the ecological crisis that is being faced, with a loss of 70% of insects over the last thirty years across Europe.

In light of the above declaration and the ambition of the challenge, the council and Leeds Climate Commission launched a major consultation on how the city should respond to the climate emergency at a packed launch event in July.

The Big Leeds Climate Conversation aimed to raise awareness of the need to tackle climate change, find out what actions individuals would be willing to take, and explore what residents thought about a number of bold ideas to cut the city's greenhouse gas emissions.

Becoming a carbon-neutral city won't be possible without widespread support from residents, businesses and national government. Consultation and engagement with the whole of Leeds was therefore vital to ensure that the council's plans for responding to the climate emergency legitimately represent the views of the citizens that the council represents.

Methodology

Three mixed-method approaches were used by Leeds City Council to ensure that every community in Leeds had the opportunity to engage with the council and have their say.

Firstly, residents were encouraged to take part in a 15-minute online questionnaire that gathered mostly quantitative data on climate beliefs, willingness to engage in pro-environmental behaviours, and support for eleven different proposals that the council could introduce to help reduce the city's carbon footprint.

Secondly, council officers and volunteers engaged with residents and promoted the consultation at more than 80 meetings and events across the city including Leeds West Indian Carnival, Light Night, Breeze events and Child Friendly Leeds Live. Speaking to residents within communities was an approach aimed at encouraging individuals who, for a range of reasons, may not otherwise have actively engaged with the consultation. Residents at events were encouraged to take part in a shortened, 2 minute version of the questionnaire developed specifically for this purpose. Council officers also collected qualitative data from these conversations.

Thirdly, more qualitative data was collected from a variety of means. Focus groups and workshops were held to explore public support for the 'big ideas' and individual behavior change. Additionally, feedback and suggestions received via correspondence, social media, online comment threads, or verbally were logged.

Findings from all three of these approaches have been incorporated throughout this report.

Communication and engagement

Over the consultation period, the council encouraged participation in the conversation among general and targeted audiences using a range of owned, earned and paid-for communications channels. The Leeds Climate Commission also supported the recruitment of volunteers to assist with Big Leeds Climate Conversation events.

General audiences

This included a high-profile launch attended by approximately 300 stakeholders and members of the public in July, press releases and articles in local media, digital radio advertising, banners in community centres, outdoor billboards along prominent highways, digital screens in the city centre, social media content shared by the council and partners, items in a number of council and partner newsletters and a number of other channels. In addition, the council and volunteers recruited by the Leeds Climate Commission engaged with residents face to face at more than 80 public events in every corner of the city including Breeze events, Leeds Pride, Light Night, Carnival, and community committee meetings.

Finally, the Leeds Climate Commission also partnered with Leeds Digital Drinks to host a dedicated YouTube channel for the BLCC. Users were able to submit video responses to the BLCC and the channel was also used to host highlights from the Citizens Jury. Across the consultation period, this YouTube channel received more than 3,300 views (with an average viewing time of approximately 3 minutes), 15,000 impressions and 70 video uploads.

Younger people and families

The council promoted the Big Leeds Climate Conversation at a variety of events aimed at younger people and/or families including 8 Breeze events, 2 careers

networking sessions in schools, 8 university fairs and Child Friendly Live. Additionally, three workshops were held with young people (including one with the city's Youth Council) and the Leeds Climate Commission held a formal focus group with young people. Letters promoting the conversation were also shared with schools via Leeds for Learning and a presentation was delivered directly to school head teachers as part of a scheduled meeting. Finally, a promoted post was seen by more than 35,000 residents aged 13-24 on Facebook and Instagram.

Older people

To engage with older people, the council promoted the Big Leeds Climate Conversation in the Age Friendly Leeds and Leeds Older People's Forum newsletters. Additionally, three focus groups with the Leeds Citizens Panel were held; the average age of these participants was 61. Finally, a promoted post was seen by more than 12,000 residents aged 65+ on Facebook.

Business

To engage with businesses, a digital letter from the chief executive officer, Tom Riordan, was sent to 628 local business contacts asking for input. A climate emergency themed business breakfast was also hosted by the council's leader, Cllr Judith Blake alongside the chief executive officer and chief officer for sustainable energy and air quality—this was attended by 24 business representatives. Digital and social media content promoting the consultation was also shared via internal mailing lists, Leeds BID and Yorkshire Mafia. As a result of this engagement, a number of follow-up meetings have taken place to discuss opportunities for specific businesses to become more sustainable.

Members, town councils, and parish councils

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Council officers presented at 10 community committee meetings during the consultation period and met with ward councillors at a number of smaller meetings. Additionally, emails promoting the consultation were sent to all members. In addition to engaging with ward councillors, council officers also engaged with parish and town councils as part of the consultation. Invites to specific workshops were sent to every parish or town council clerk and chair. These workshops included a summary of the climate conversation and ideas for what role parish or town councils can play in responding to the climate emergency.

Faith groups

As part of the Big Leeds Climate Conversation, the Leeds Climate Commission facilitated a formal focus group with 16 participants from a variety of faith groups at St Matthias' Church in Burley to gather qualitative data and better understand this perspective. Participants discussed what the climate emergency meant to them and how the city should respond.

Sample

The target population for the Big Leeds Climate Conversation was residents and businesses in Leeds. A large 'sample' of the population was targeted to capture a snapshot of the views of the wider population.

In total, 7,835 individuals participated in one of the two official questionnaires. The views of hundreds more residents shared via a number of less formal channels have also been captured and included as part of this consultation; however it was not possible to objectively capture identity data for this sample.

Whilst the sample was mostly self-selecting (a common attribute of any voluntary consultation) it is hoped that its demonstrable size and diversity will mitigate sample bias to some extent.

Analysis and reporting

As a snapshot of views has been obtained, data has not been weighted to derive a representative sample. Therefore, when interpreting the findings throughout this report, the results should be seen as indicative of a snapshot of the wider population and any identified sub-groups, rather than representative.

Within the main body of the report, where percentages do not sum to 100 per cent, this is due to rounding. Similarly, percentages shown in charts and tables may indicate a ±1% difference to the commentary and again will be due to rounding. Finally, charts presenting data on individual actions (figures 15 to 21) and support for 'big ideas' (figures 22 and 23) do not sum to 100 per cent due to the small percentage of non-responses being presented as part of these charts.

Findings

Who responded?

In summary, the different approaches taken captured significantly different samples. However, respondents who identified as female were overrepresented in both.

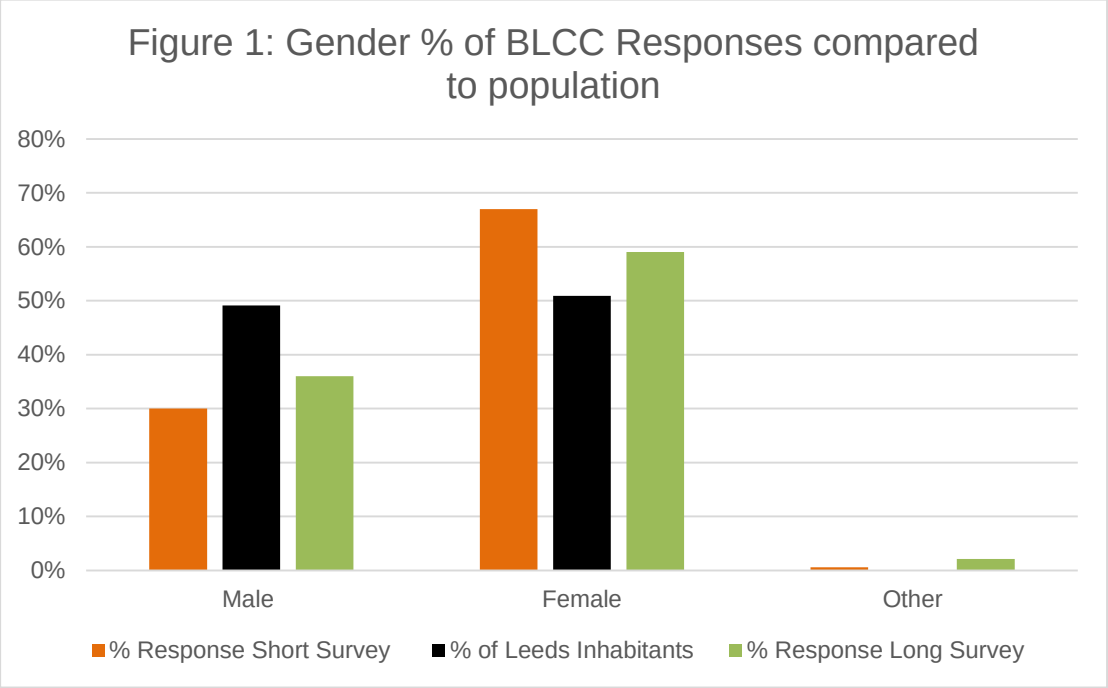
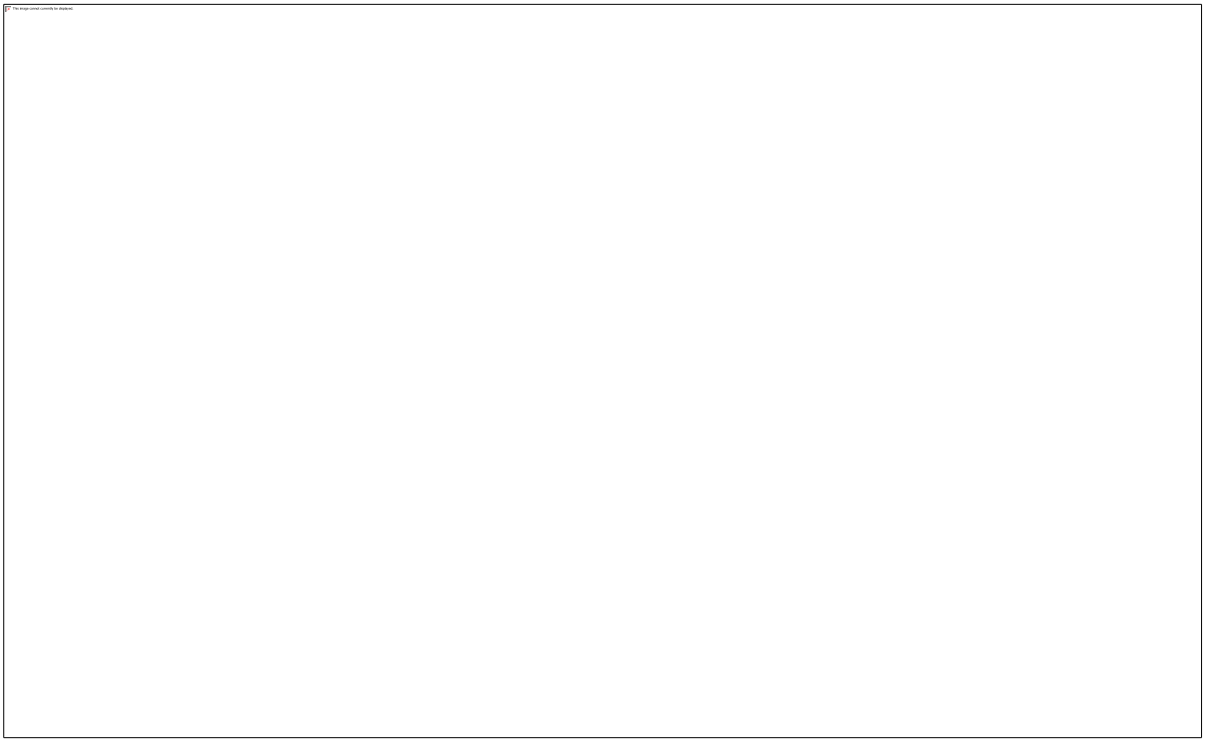


Figure 2:



Respondents to the long questionnaire were older and more likely to identify as English/Welsh/Scottish/Northern Irish/British ethnicity compared to the Leeds population as a whole. In contrast, respondents to the short questionnaire were slightly younger and less likely to identify as English/Welsh/Scottish/Northern Irish/British ethnicity compared to the Leeds population.

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Figure 3: Ethnicity % of BLCC respondents compared to Leeds population (minority ethnicities)

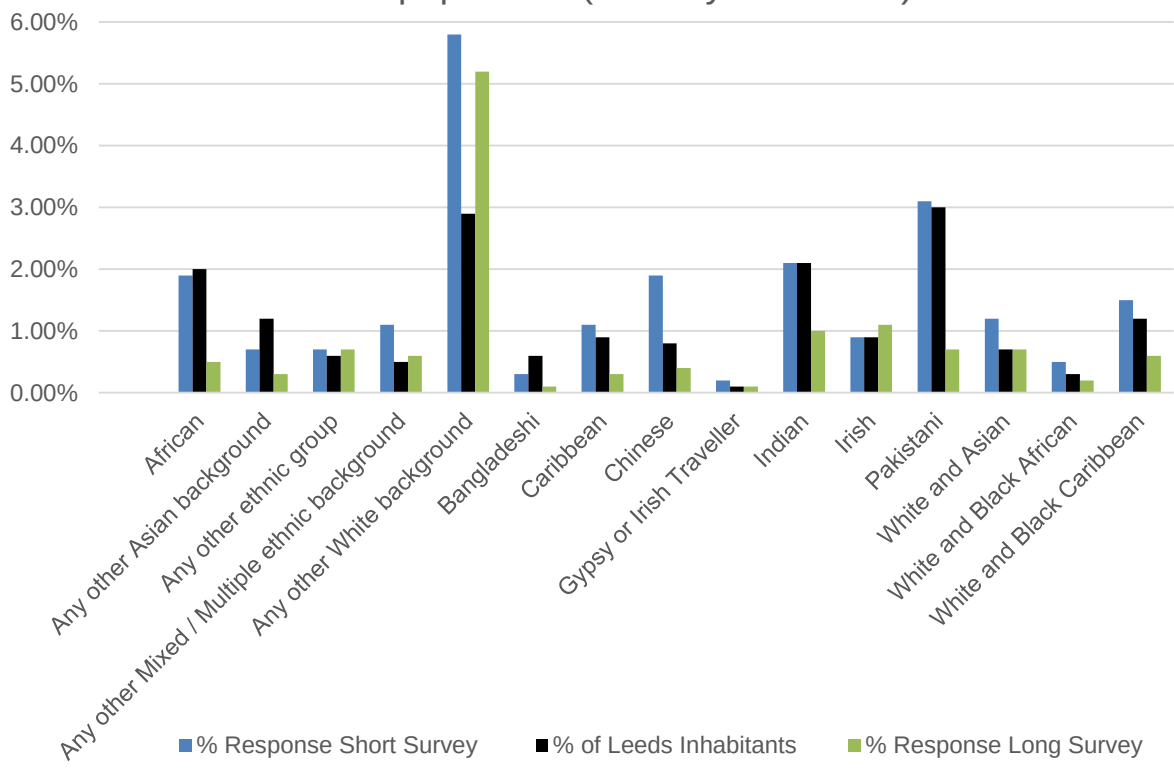
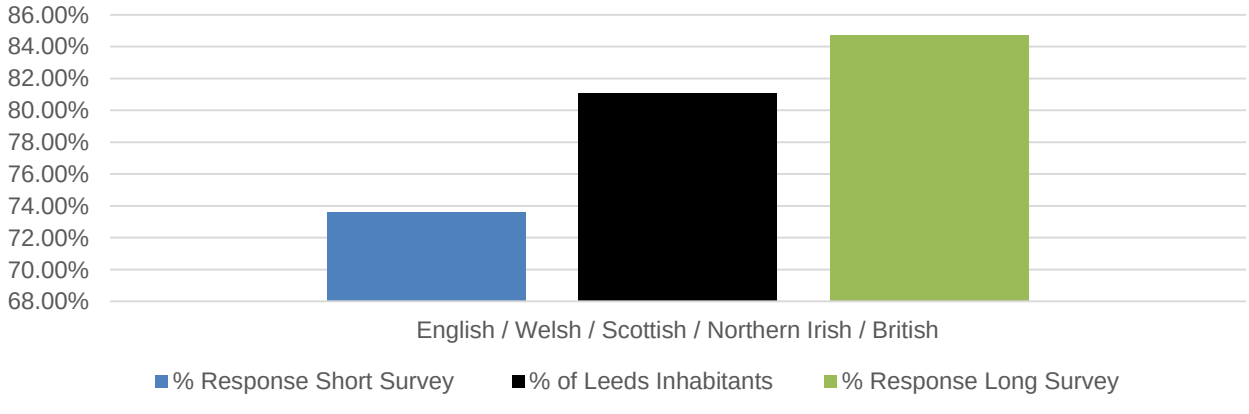
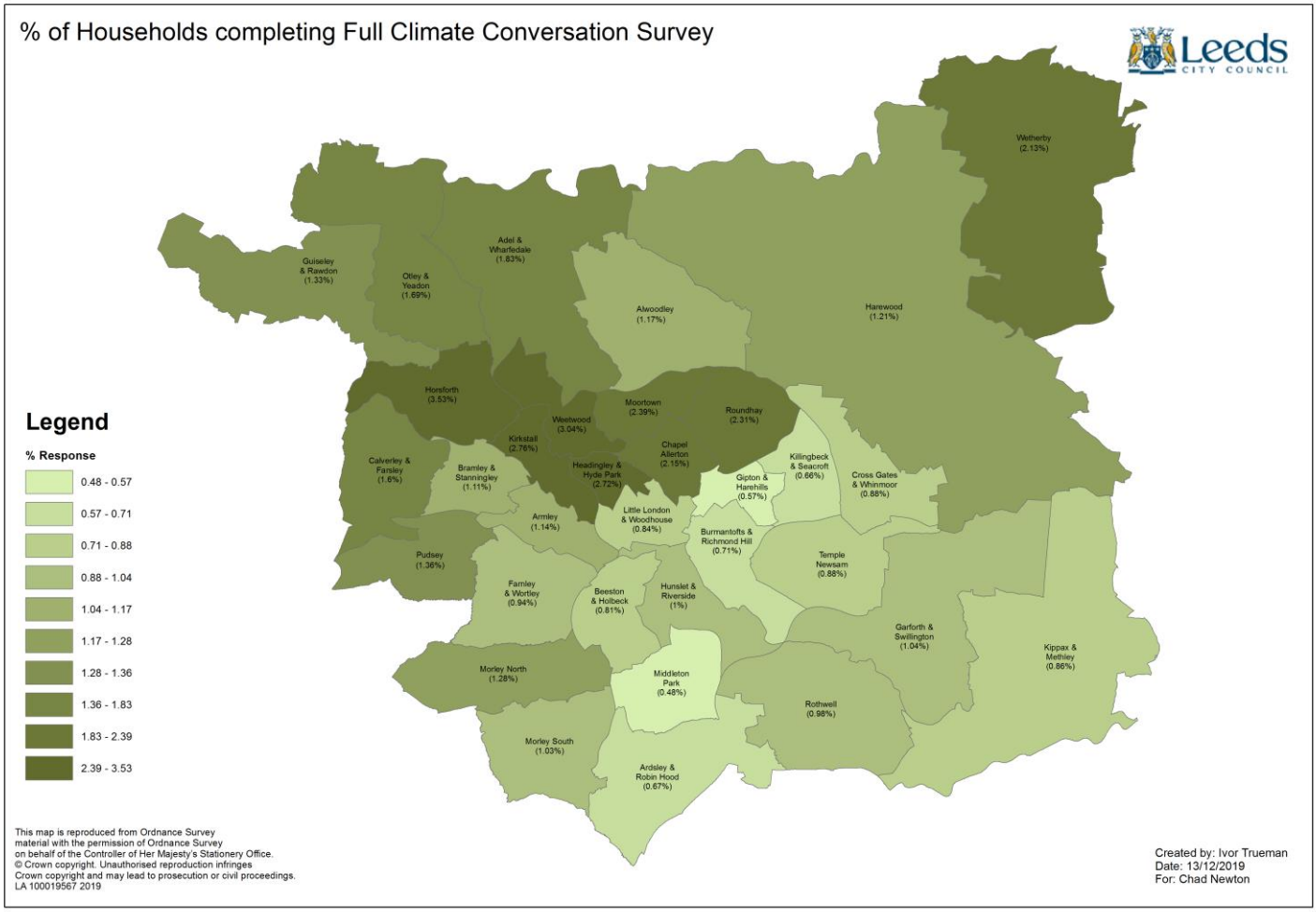


Figure 4: Ethnicity % of BLCC respondents compared to Leeds population (English/Welsh/Scottish/Northern Irish/ British)



18-24 year old respondents were overrepresented in the short questionnaire sample compared to the Leeds population but underrepresented in the sample of the long questionnaire. Young people of both primary and secondary school age were underrepresented in both questionnaire samples.

Figure 5:



To understand where respondents were from, all participants were asked for their full postcode. 9% of respondents did not provide a valid postcode and 12% provided a

postcode outside of Leeds. The remaining postcodes were then run through a Geographical Information System which assigned which ward each of the valid postcodes fell into. The above map visualizes the spread of completed long questionnaire responses and have been colour coded to show ward response rate.

A map is not yet available for short questionnaire responses, however the table below shows short questionnaire respondents by community committee area and the response rate accordingly. The table omits those who provided a postcode outside of Leeds (14%) or who did not provide a postcode (11%):

	Inner East	Inner North East	Inner North West	Inner South	Inner West	Outer East	Outer West	Outer South	Outer North East	Outer North West
Responses	52	72	175	107	75	84	116	81	27	73
% of responses received	5	6	15	9	6	7	10	7	2	6
Response rate (%)	0.14	0.22	0.34	0.28	0.22	0.21	0.35	0.2	0.1	0.17

As part of the long questionnaire, respondents were also asked whether they owned or mortgaged their home to filter particular questions. Whilst approximately 61% of households are owner-occupied in Leeds as a whole, approximately 68.5% of respondents to the long questionnaire were in home ownership. The views of respondents from more affluent socioeconomic backgrounds are therefore likely to be slightly overrepresented in the findings of the long questionnaire.

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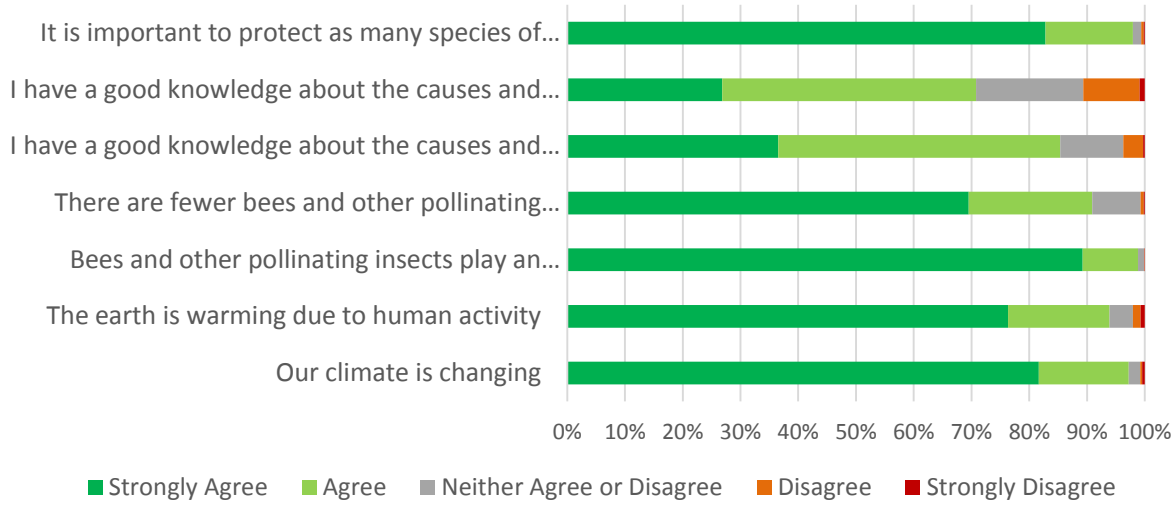
Views on the climate emergency

In the first section of the online questionnaire, residents were asked whether they agreed with some basic statements about climate change. These questions were included to better understand the level of knowledge, awareness and concern about climate change held by residents.

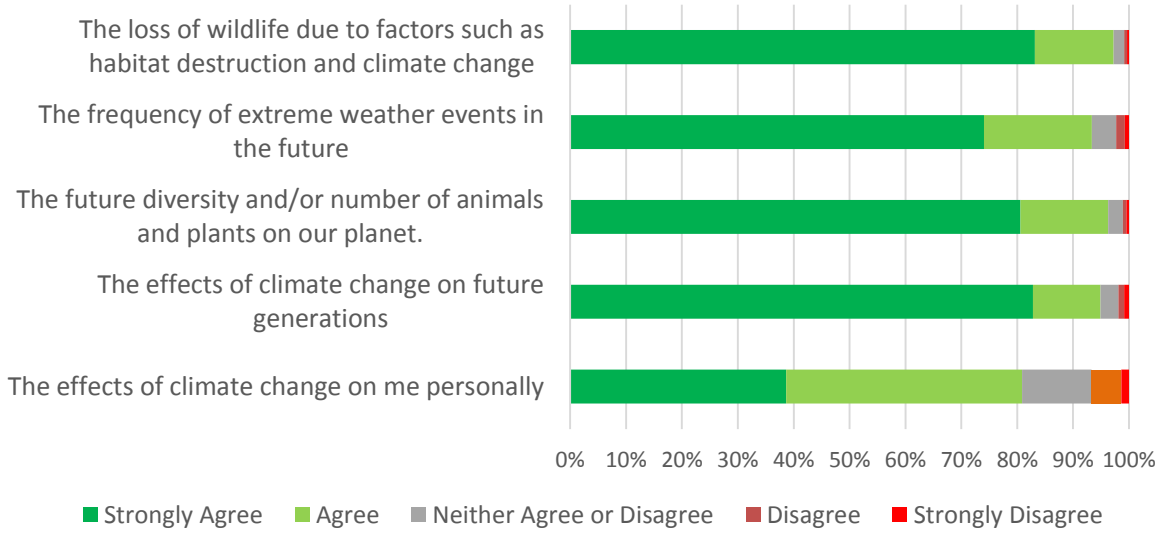
Figure 7: Knowledge, awareness and concern about climate change



Almost all residents who took part in the long survey (94.8%) agree with the scientific consensus that the climate is changing and that the earth is warming due to human activity (93.4%). Only a very small minority (2.0%) of residents do not believe that the earth is warming due to human activity or that the climate is changing at all (0.8%). This balance was also reflected in conversations with residents at events and on Facebook comments, with only a small minority of residents disbelieving the scientific consensus of anthropogenic climate change. Generally, these residents did not agree that the planet was warming and cited recent weather events such as cold spells.

Five out of six residents (84.9%) agree that they have a good knowledge about the causes and effects of climate change however only two out of six (36.3%) would 'strongly agree' with the statement. Fewer respondents agree (70.3%) that they have a good knowledge about the causes and effects of insect decline and only 26.7% would strongly agree. It is important to note that these two questions are not objective and are subject to the respondent's own interpretation of "a good knowledge".

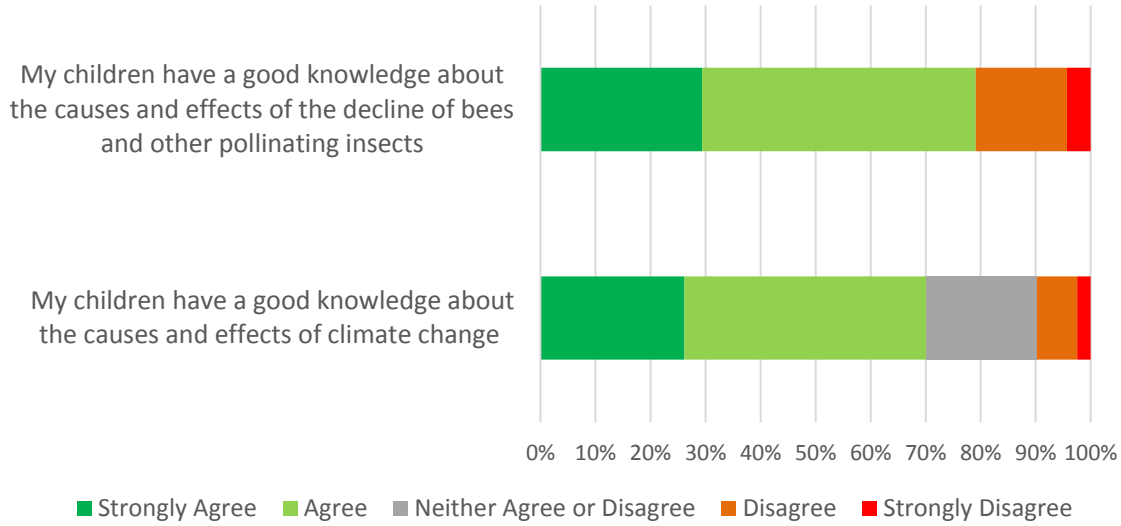
Figure 8: I am worried about...



When asked about their concerns, nine out of ten residents agreed that they are worried about wildlife loss (96.6%), biodiversity loss (95.9%), the effects of climate change on future generations (94.6%), and the frequency of extreme weather events in the future (92.8%). Four out of five (82.5%) respondents strongly agree that they are worried about the effects of climate change on future generations, more than twice as many as strongly agree that they are worried about the effects on them personally (38.5%).

Nationally, multiple recent surveys have found that approximately 4 out of 5 citizens are concerned about climate change. For example, the BEIS Public Attitudes Tracker found that approximately 80% of citizens in March 2019 were “very concerned” or “fairly concerned” about “current climate change”, whilst approximately 85% of citizens were “concerned about climate change” in August 2019 according to an Ipsos MORI poll.

Figure 9



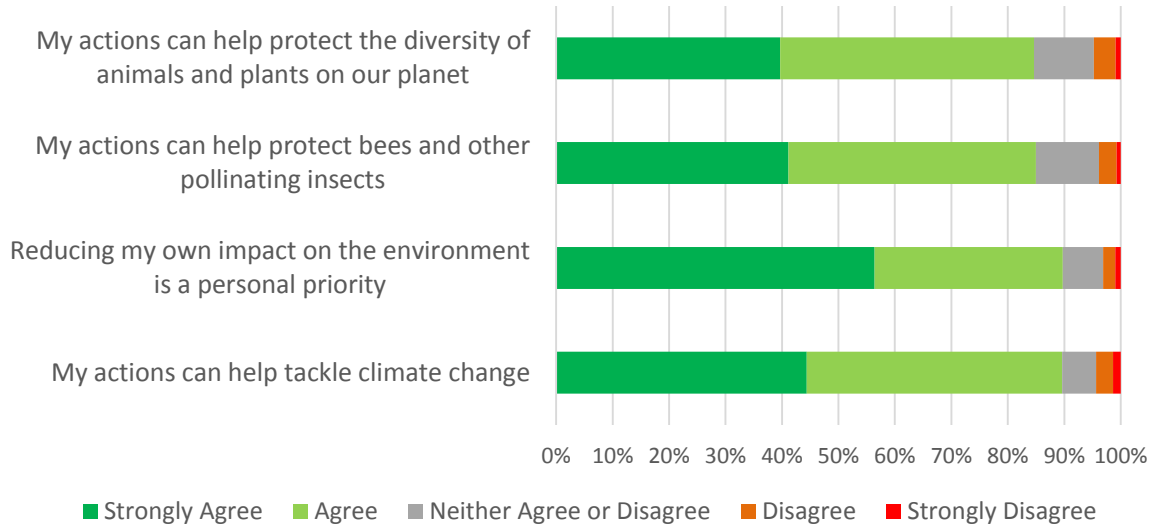
Respondents that identified as parents, guardians or carers were then asked two additional questions that explored whether they believed their child/ren had a good knowledge of climate change and insect decline. Whilst the majority responded affirmatively to both questions, relatively few respondents would strongly agree that their children have a good knowledge about the causes and effects of insect decline (20.8%) or climate change (26%).

Views on individual action

Next, the long questionnaire asked respondents to share their views on whether they felt that they could make a difference and whether they would take action to reduce their own carbon footprint. To set the context for this section, the questionnaire briefly explained the concept of carbon footprints:

> *"According to the WWF… the average person in the UK is directly or indirectly responsible for about 13.5 tonnes of greenhouse gases, which cause and worsen climate change.*
>
> *"The emissions you're responsible for (your carbon footprint) are made up of the energy you use personally for electricity and travel, plus the energy that's required to produce your food and everything else that you buy.*
>
> *"Your carbon footprint might be higher or lower than average depending on the way you live. It's easy to calculate your own emissions using an online carbon footprint calculator—we've included a link to an easy and quick one at the end of this questionnaire.*
>
> *"We can reduce our own carbon footprint and that of our family by taking simple actions. Our actions can also help protect wildlife and support bees and other pollinating insects.*
>
> *"By working together as a city, we can make a massive difference."*

Figure 10



Nine out of ten respondents agreed that their actions can help tackle climate change (89.5%) and that reducing their own impact on the environment is a personal priority (89.4%). Respondents were slightly less confident about whether their own actions could help protect bees and other pollinating insects (84.6%) or the diversity of animals and plants on our planet (84.2%).

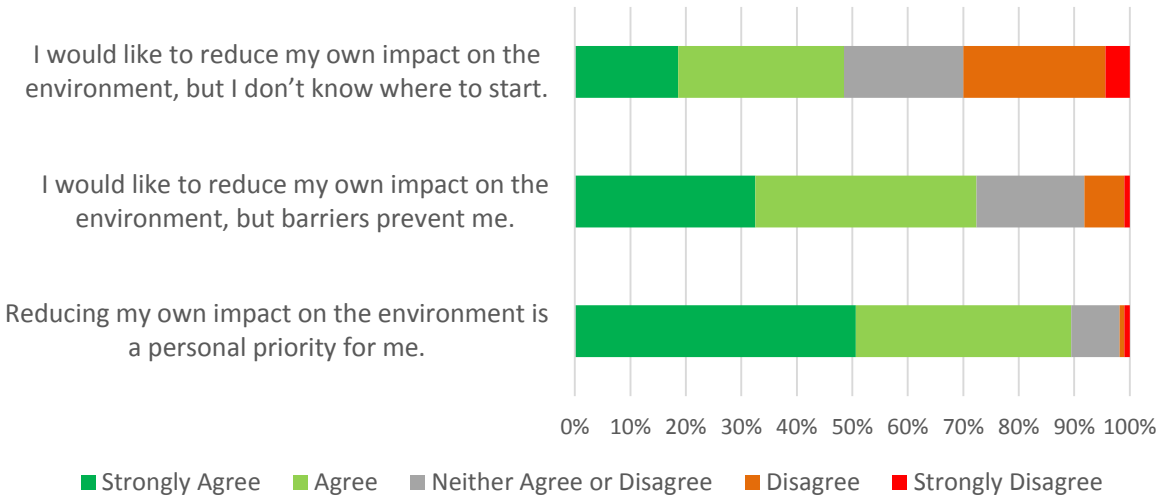
Respondents were then asked to rate whether they would be willing to make simple pro-environmental behaviour changes across five broad themes inspired by the WWF carbon footprint calculator: food, travel, home, stuff and biodiversity. Across all themes, 93% of respondents said that they would make one or more pro-environmental behaviour changes.

In addition to stating whether they would be willing to change their behaviour or not, respondents could also indicate whether they were doing so already and whether they would change their behaviour but are prevented by barriers of some kind. Combined,

this data provides an interesting and useful insight that could be used to inform and prioritise future policy and behaviour change campaigns. However, we should also be mindful of the effect of social desirability bias—the tendency of respondents to answer questions in a manner that will be viewed favourably, rather than answer honestly.

Short survey responses

Figure 11: Views on individual action (short survey)



Of the 1,156 that responded to the short questionnaire, approximately nine out of ten respondents (88.8%) agree that reducing their own impact on the environment is a personal priority, although only 50.3% would agree strongly. However, approximately half (48.2%) agreed that they would like to reduce their own impact on the environment but don't know where to start. Additionally, 71.9% of respondents agreed with the statement that "I would like to reduce my own impact on the environment, but barriers prevent me".

It would be helpful to conduct future research on specific behavior changes to better understand the barriers preventing residents. Doing so would help inform from future behavior change campaigns. When asked if they would be willing to participate as part of the long questionnaire, almost half (45.5%) said that they would be happy to participate in future research and behavioural initiatives. Additionally, 40.6% of respondents wanted to receive information about becoming a ‘climate champion’ and volunteering their time to help reduce the city’s carbon footprint.

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Views on citywide action

More than nine out of ten respondents to the long questionnaire agreed or strongly agreed that tackling climate change (94%) and reversing the decline of bees and other pollinating insects (93.9%) should be a priority for Leeds.

Similar numbers of respondents to the short questionnaire agreed that tackling climate change (93.1%), becoming a carbon neutral city (91.7%), and protecting the diversity of wildlife (95.6%) should be a priority for the city.

Figure 12: "Businesses have a responsibility to reduce their own carbon footprint and make it easier for individuals to make environmentally-friendly choices."

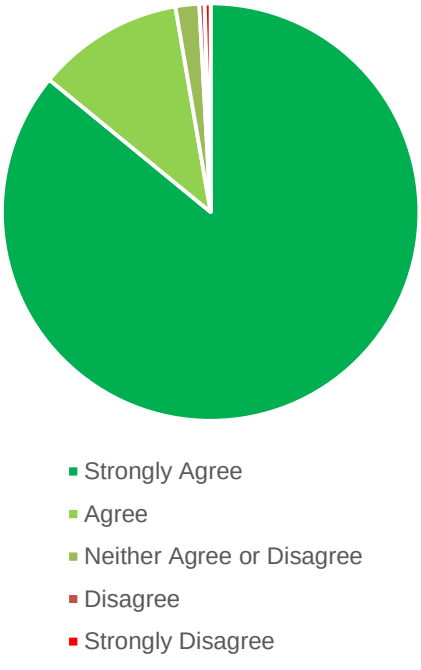
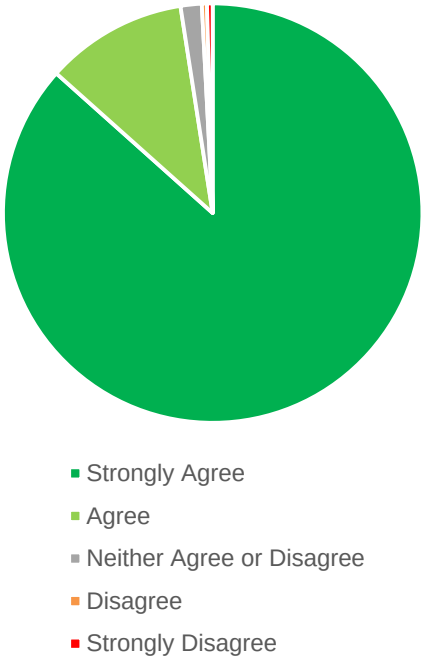


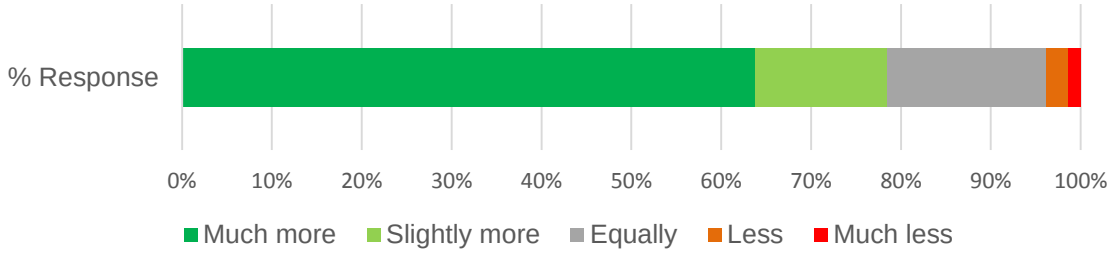
Figure 13: Public sector organisations have a responsibility to reduce their own carbon footprint and make it easier for individuals to make environmentally-friendly choices."



As shown in the charts above, almost all respondents of the long survey believe that public sector organisations (96.7%) and businesses (96.7%) have a responsibility to reduce their own carbon footprint and make it easier for individuals to make more environmentally-friendly choices.

Similarly, 91.5% of respondents to the short questionnaire agreed (and 56.1% strongly agreed) with the statement that “organisations should make it easier for me to make more environmentally friendly choices”.

Figure 14: Do you believe that tackling climate change is more, less, or equally as important as maintaining current levels of economic growth?



When asked whether tackling climate change was more, less, or equally important as maintaining current levels of economic growth, more than three-quarters of residents answered either ‘slightly more’ (14.7%) or ‘much more’ (63.5%).

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The 11 most popular pro-environmental behaviour changes:

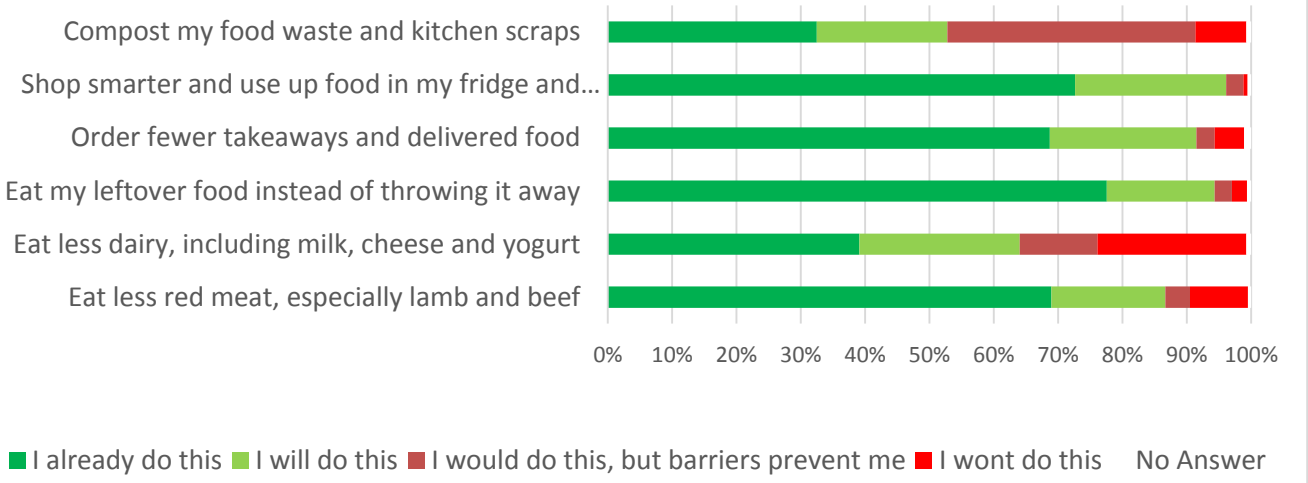
1. Plant trees elsewhere as part of a council-backed volunteering scheme (53.4%)
2. Save water by installing low-flow fittings to my taps and showers (38%)
3. Pick up online orders from a convenient location rather than getting them delivered to my house (33.2%)
4. Create habitats for insects and other wildlife by adding a bird box, habitat pile or insect homes to my garden (32.2%)
5. Choose energy efficient models when replacing my appliances (32%)
6. Grow bee and pollinator friendly plants (such as wildflowers) in my garden (28.6%)
7. Consider switching to an electric or hybrid car (26.5%)
8. Eat less dairy, including milk, cheese and yogurt (24.9%)
9. Mow their lawn with a higher blade (24.4%)
10. Use a green or renewable energy tariff (23.9%)
11. Grow herbs on their balcony, windowsill or garden (23.8%)

Food

Before rating which behaviors they would be willing to change, respondents were given the following context:

> *"The food we eat and buy is responsible for a large share of our carbon footprint. By shopping and eating smarter you could save money, improve your health and help tackle climate change.*
>
> *"Diets containing lots of beef, lamb or dairy have the worst impact on the environment and are also associated with higher risks of cardiovascular disease, stroke and certain types of cancer.*
>
> *"Just as important as the food we buy and eat is the food that we buy and don't eat. If global food waste was a country, it would emit more greenhouse gases than any country in the world — except for China and the United States."*

Figure 15: I am willing to...



In summary, the long questionnaire found that:

- A majority of respondents indicated that they already do four out of six of these behaviours. Only ‘eat less dairy’ and ‘compost my waste food and kitchen scraps’ were already done by a minority.
- A significant number of respondents (approximately between 15% and 25%) said that they would be willing to do each of these suggested actions.
- Almost a quarter of respondents (23.1%) said that they would not eat less dairy—the most unpopular action by far. Nationally, this behavioural change was identified as even more unpopular within the BEIS Public Attitudes Tracker (Wave 29, March 2019) where only 14% of participants said they would be willing to do this.

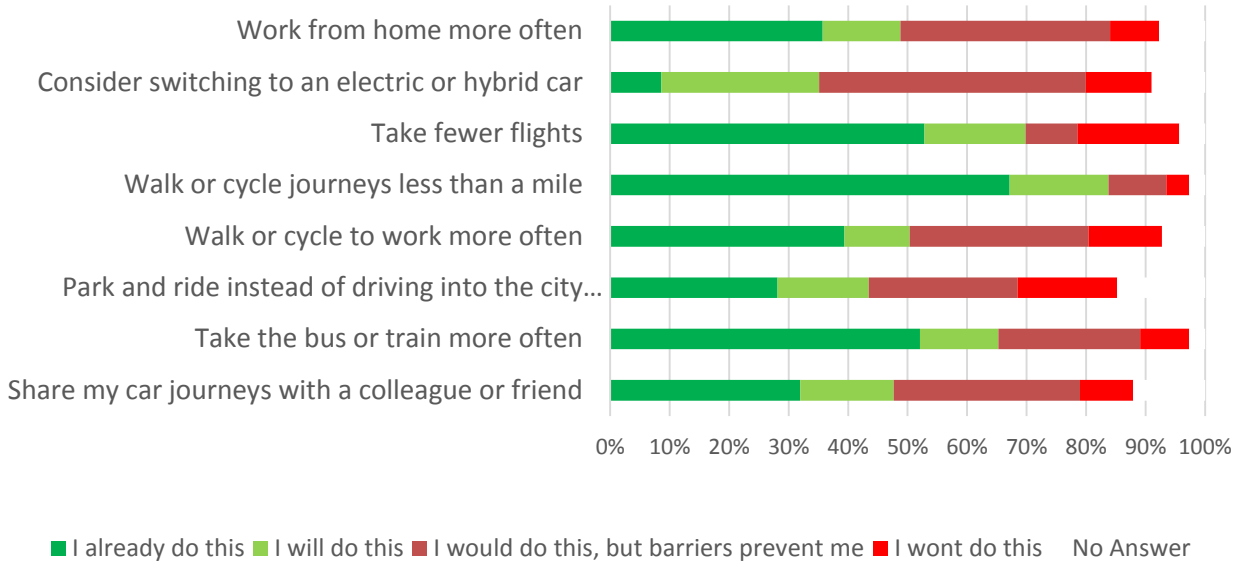
- Almost two out of five respondents (38.5%) said that they would be willing to compost their waste food and kitchen scraps but barriers currently prevent them.

Travel

Before rating which behaviors they would be willing to change, respondents were given the following context:

> *"How we choose to get around represents another major share of our carbon footprint. The more that we fly and drive, the greater our emissions.*
>
> *"By walking more, flying less, or using public transport, you could save money and help tackle climate change.*
>
> *"If you do need to use a car then you could still reduce your daily emissions by choosing to car share or using park and ride. Alternatively, you could even consider switching to a hybrid or electric vehicle.*

Figure 16: I am willing to...



In summary, the long questionnaire found that:

- Unlike the food section, a majority of respondents were not already doing most of these behaviours. The exceptions to this were that a majority of respondents are taking the bus or train more often, walking or cycling journeys less than a mile, and taking fewer flights.

- Approximately 10-15% of those surveyed said that they will do each of the suggested behaviours—significantly fewer than the actions for other themes. The exception to this is that more than a quarter (26.5%) of respondents say that they would consider switching to an electric or hybrid car. However, it should be noted that the wording "consider" did not explicitly commit respondents to actually switch to a low emission vehicle. This may explain the difference between our survey and a similar question in the recent BEIS Public

Attitudes Tracker (Wave 29, March 2019) which found that only 5% of participants said that they would drive an electric or hybrid car.

- Whilst relatively few respondents are willing to act now a significant number of respondents would be willing to make changes but feel that barriers currently prevent them. For example, almost a third (31.3%) of respondents would share car journeys with a colleague or friend, more than a third (35.2%) of respondents would work from home more often and almost half of respondents would consider switching to an electric or hybrid car (44.9%)

- More than two-thirds of respondents (67.1%) say that they already walk or cycle journeys less than a mile.

- Respondents were most unwilling to take fewer flights, however this still represented a relatively low percentage of respondents (17.1%).

Home

Before rating which behaviors they would be willing to change, respondents were given the following context:

> *"The energy used in UK homes accounts for approximately one in five of our emissions. Every time we switch on a plug at home, we use energy partly generated by burning fossil fuels such as oil and gas.*
>
> *"As energy prices continue to rise you could save a lot of money, make your home more comfortable, and shrink your carbon footprint by taking simple actions to make your home more energy efficient."*

The suggested behaviours for this theme were split into two sets: one set with actions suitable for most residents and another set with actions more suitable for those who own or mortgage their home. This second set was only shown to those respondents who indicated that they owned or mortgaged their home.

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Figure 17: I am willing to...

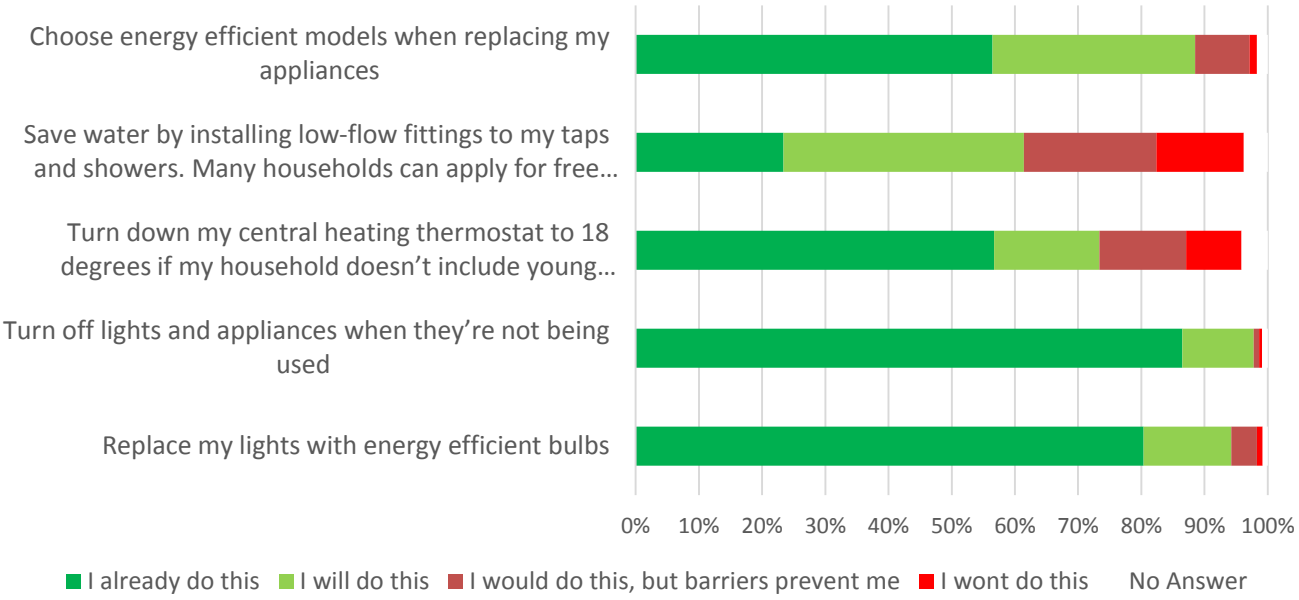
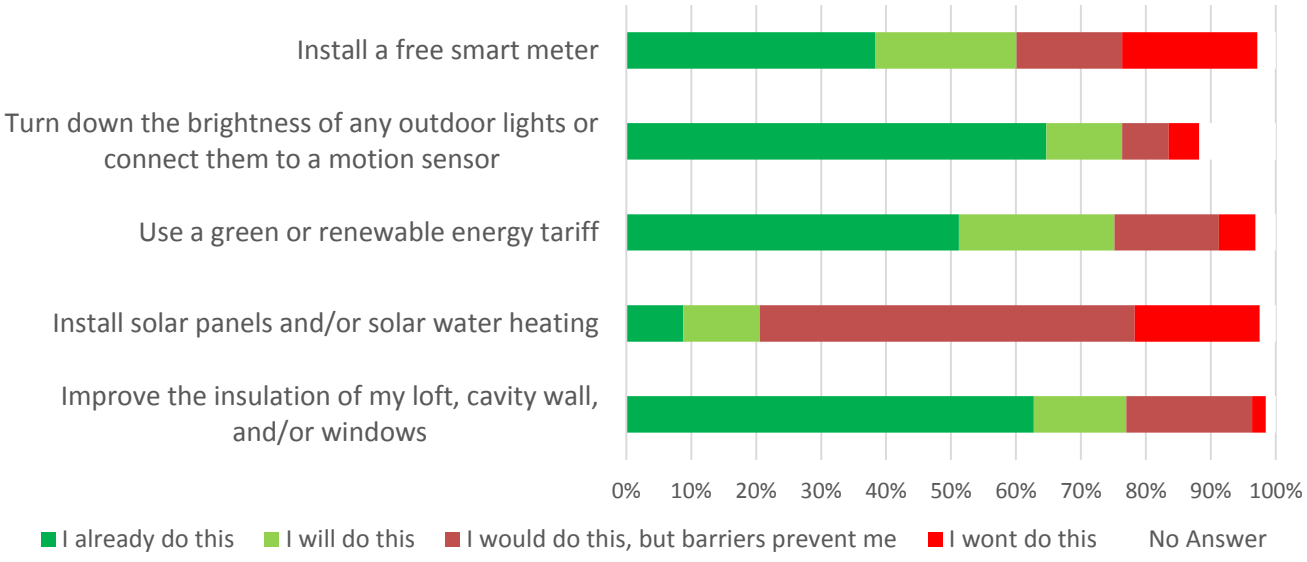


Figure 18: I am willing to...



In summary, the long questionnaire found that:

- A majority of respondents already do most of the ‘actions’ in this theme. The exceptions to this are installing solar panels/solar water heating (8.8%) and saving water by installing low-flow fittings to showers and taps (23.4%).

- Respondents are most willing to: use a green or renewable tariff (23.9%), install a free smart meter (21.8%) and save water by installing low-flow fittings to showers and taps (38%). Additionally, 32% of respondents are willing to choose energy efficient models when replacing appliances—on top of the 56.5% who already do so. This response is significantly higher than that identified in the BEIS Public Attitudes Tracker (Wave 29, March 2019) where approximately 40% of participants said they would think about the energy efficiency of products and appliances when making a purchase.

- More than half of respondents say that they would like to install solar panels or a solar water heater but barriers prevent them (57.7%). Approximately one in five respondents say that barriers prevent them from installing low-flow fittings (20.9%) and improving the insulation of their home (19.4%).

- Very few respondents say that they wouldn’t do the actions in this theme, with the exception of installing solar panels (19.2%) and installing a free smart meter (20.8%) which one in five respondents say they won’t do.

Stuff

Before rating which behaviors they would be willing to change, respondents were given the following context:

> *"Many of us buy things that we don't really need and treat the stuff we own as disposable. We often don't think about the massive amount of resources and energy required to make those items.*
>
> *"For example, the fashion industry consumes more energy than aviation and shipping industries combined.*
>
> *"We can save money and help reduce our impact on the environment by buying fewer disposable items, reusing and repairing things where possible, and recycling stuff that we're finished with."*

Figure 19: I am willing to...

In summary, the long questionnaire found that:

- A majority of respondents say that they are already doing most of these suggested behaviours. The behaviours that only a minority are currently doing are picking up online orders from a convenient location (32.9%) and avoiding buying products with non-recyclable packaging (41.4%).
- Almost nine in ten respondents said that already they carry and use a reusable cup, bag, and/or water bottle (89.6%). However, the wording of the question means that it is not possible to break this finding down into the different items.
- There is a lot of willingness to change many of the suggested behaviours. Around a third of respondents said that they will now pick up online orders from

a convenient location (33.2%). Around one in five respondents said that they will now avoid buying products with non-recyclable packaging (23.1%), buy second-hand clothes, items or furniture more often (21.2%), repair and not replace items more often (21%) and buy stuff from a local shop rather than getting it delivered (19.8%).

- Almost a third (30.3%) of respondents say that they would like to avoid buying products with non-recyclable package but that barriers prevent them.
- Approximately one in five respondents say that they won't buy second-hand clothes, items or furniture more often (19.5%). There also appears to be some resistance to changing online delivery habitats, with 14.1% saying that they wouldn't be willing to pick up online orders from a convenient location and 10.7% saying that they wouldn't buy stuff from a local shop rather than getting it delivered.

Biodiversity

Before rating which behaviors they would be willing to change, respondents were given the following context:

> *"If you like wildlife and have a garden then there is a lot that you can do to help protect animals and pollinating insects such as bees. Up to 80% of pollinating insects found in cities are found in our gardens.*
>
> *"By letting nature be nature and letting plants grow you will promote all kinds of wildlife, create a healthier and more vibrant garden, and make your home more resilient to flooding.*
>
> *"Even if you don't have a garden then you can still make a real difference. Growing your own food or herbs on your balcony or window ledge can help you save money and you will taste the difference too."*

The suggested behaviours for this theme were split into two sets: one set with actions suitable for most residents and another set with actions suitable only for those with a garden. This second set was only shown to those respondents who indicated that they had one.

Figure 20: I am willing to...

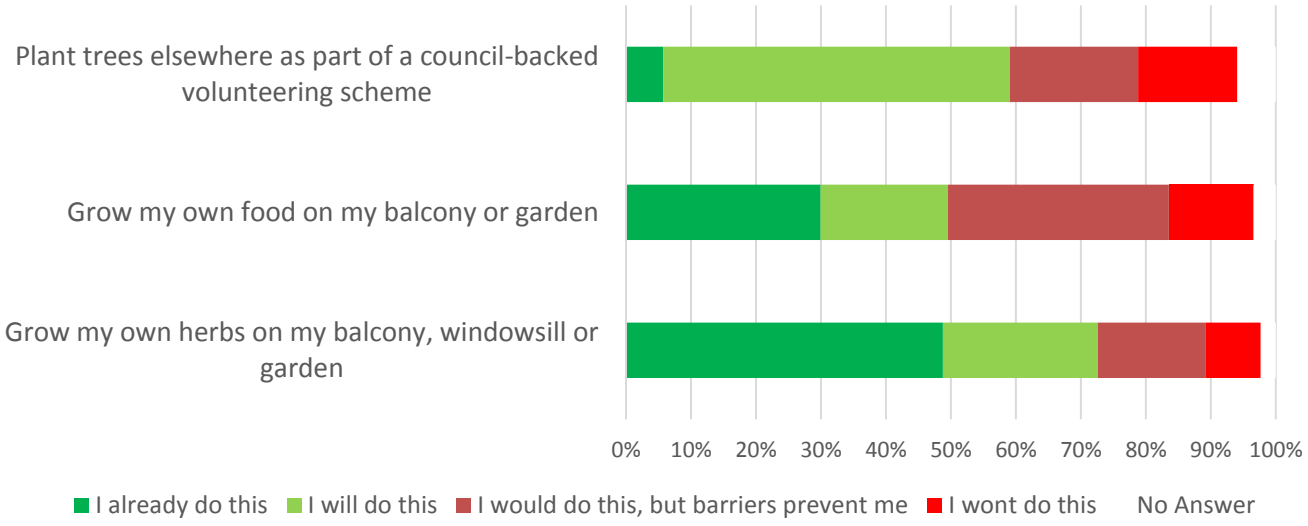
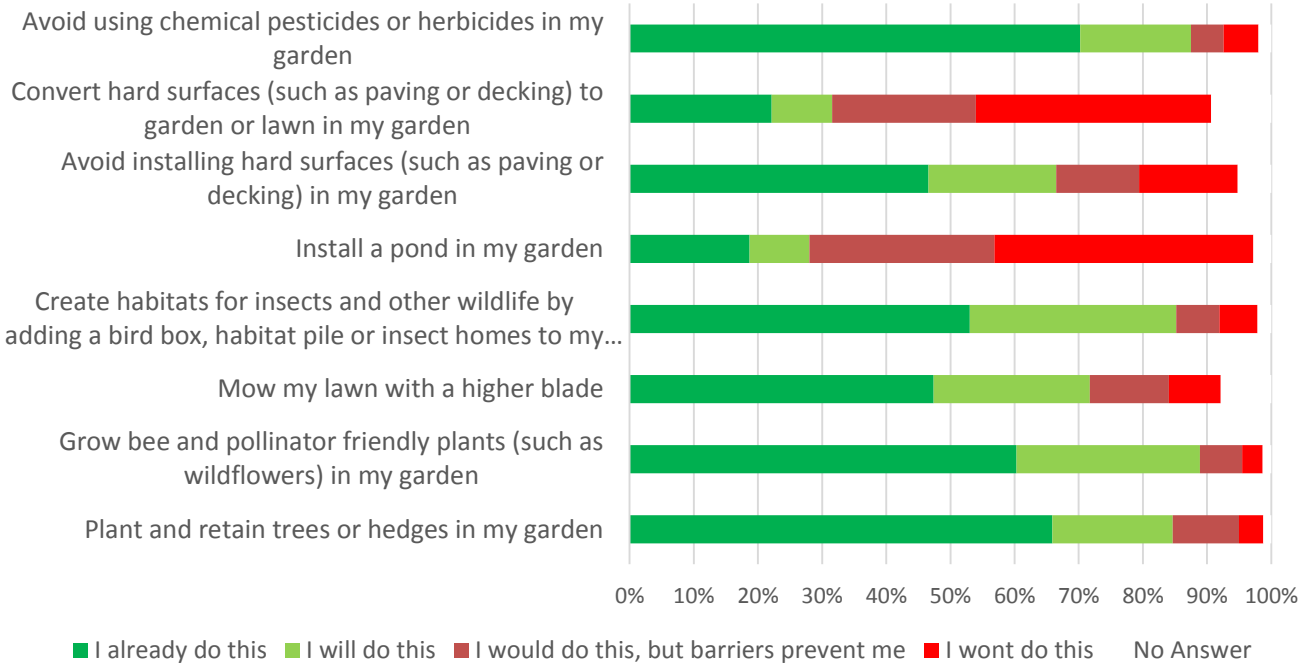


Figure 21: I am willing to...



In summary, the long questionnaire found that:

- A majority of respondents say they are already growing herbs on their balcony, windowsill or garden (48.7%). Approximately a third of respondents are already growing their own food (29.9%).
- A majority of respondents with gardens say they are already avoiding the use of chemical pesticides or herbicides (70.2%), creating habitats for wildlife (53%), growing bee and pollinator friendly plants (60.3%), and planting or retaining hedges (65.9%).
- Respondents were quite willing to make many of the suggested behavior changes. More than half of respondents (53.4%) said that they would plant trees as part of a council backed volunteering scheme.
- Approximately a third of respondents said that they will create habitats for insects and other wildlife by adding a bird box, habitat pile or insect homes to my garden (32.3%). Approximately a quarter of respondents will grow bee and pollinator friendly plants such as wildflowers (28.6%) and grow herbs on their balcony, windowsill or garden (23.8%).
- More than a quarter of respondents said that they would install a pond in their garden (28.8%) or grow their own food on their balcony or garden (34%) but barriers currently prevent them.
- There was significant unwillingness by some respondents to install a pond in their garden (40.3%) or to convert hard surfaces (such as paving or decking) into garden or lawn (36.7%).

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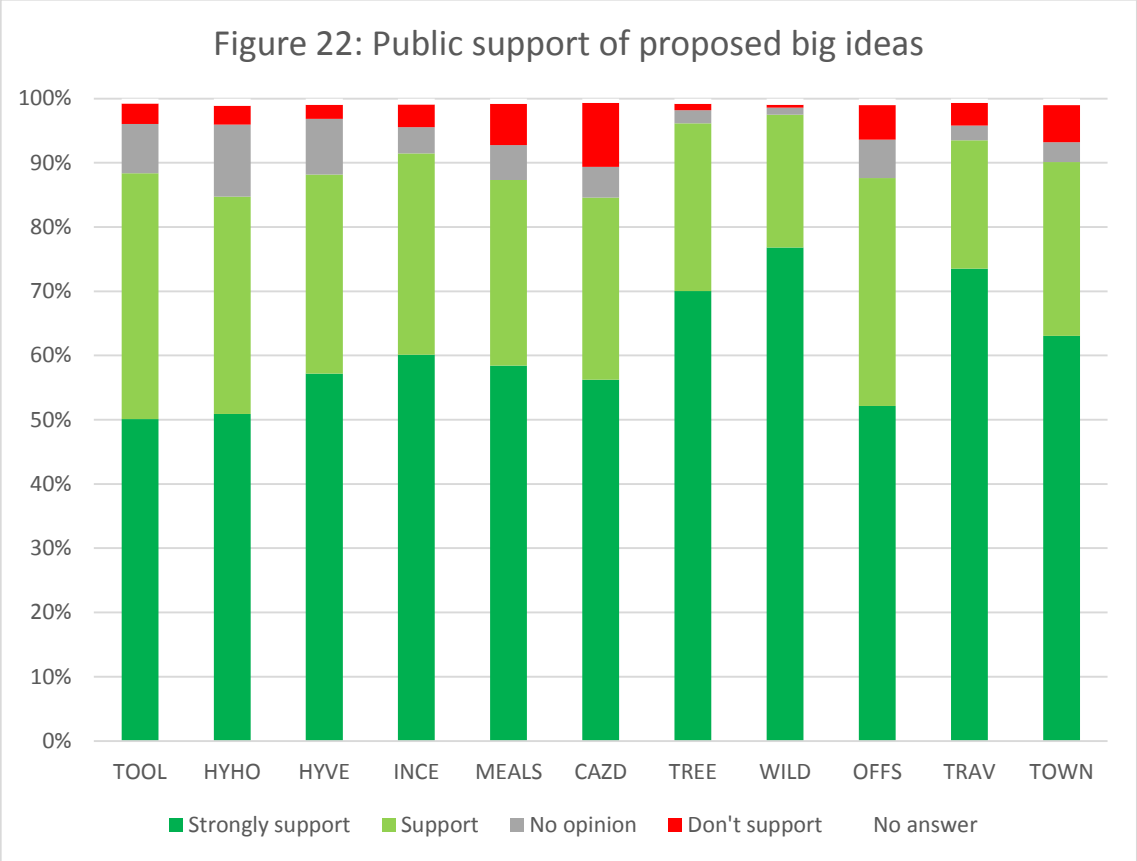
The 10 most popular pro-environmental behavior changes that respondents would make, but say that barriers prevent them:

1. Installing solar panels (57.7%)
2. Consider switching to an electric vehicle or hybrid (44.9%)
3. Composting food waste and kitchen scraps (38.5%)
4. Working from home more often (35.2%)
5. Growing food on a balcony or garden (34%)
6. Sharing car journeys with a colleague or friend (31.1%)
7. Avoiding buying non-recyclable packaging (30.3%)
8. Walk or cycle to work more often (30.1%)
9. Install a pond in my garden (28.8%)
10. Park and Ride instead of driving into the city centre (25%)

Views on the proposed big ideas

Residents were also asked to indicate their support for eleven different proposals ('big ideas') that the council could explore to help reduce Leeds' carbon footprint. There was widespread support for each of these proposals. Notably, every proposal was supported by at least 84% of respondents.



The 11'big ideas' proposed were as follows:

Key	Proposal

TOOL	**Introducing tool libraries across the city** We could make a range of DIY tools, decorating equipment and other infrequently used household items available to borrow from local council libraries and council community hubs. As well as reducing the carbon footprint associated with purchasing these rarely used items, tool libraries could also save residents money and promote the use of community spaces.
HYHO	**Using hydrogen gas to heat our homes** Hydrogen gas could be used to power central heating systems in our homes. It could be distributed using the same gas pipes as the current network and would be just as safe. However, unlike the gas currently used to heat our homes, burning hydrogen gas would not emit greenhouse gases or air pollution.
HYVE	**Using hydrogen gas to power larger vehicles** Hydrogen technology could be ideal for powering larger vehicles that make regular journeys (such as buses, HGVs, or trains) because their tanks can be refilled as quickly and as easily as a petrol or diesel vehicle. However, unlike diesel or petrol engines, hydrogen fuel cells don't emit greenhouse gases or air pollution: they only emit water vapour. Hydrogen-powered buses are already being used in many cities around the world.
INCE	**Incentivising homeowners and businesses to improve the energy efficiency of their properties**

	The government is carrying out research into how council tax and/or business rate changes could be used to encourage homeowners and businesses to improve the energy efficiency of their properties. Would you support this proposal?
MEALS	**Reducing the carbon footprint of school meals** The food we buy and eat makes up a large portion of our carbon footprint. Beef, lamb, and dairy products have a significantly larger environmental impact than other foods. We could help reduce the city's carbon footprint—and support a healthy balanced diet—by reviewing our menus and serving these foods less in schools.
CAZD	**Expanding the Clean Air Charging Zone to include high polluting cars and vans by 2030** When it goes live in 2020, the Clean Air Charging Zone will tackle air pollution and help protect the health of everyone in Leeds by charging the worst polluting HGVs, buses, coaches, taxi and private hire vehicles driving within its boundary. In the future, we could improve the health and emissions benefits of the zone by expanding it to include more vehicles.
TREE	**A council-backed volunteering scheme to plant millions of new trees by 2030** We could organise and support a new volunteering scheme that would work in partnership with the city's schools, communities, and organisations to plant

	millions of new trees in and around Leeds. The scheme could offset some of the city's emissions and provide a new home for wildlife and pollinating insects.
WILD	**Planting more wildlife-friendly species in our parks, verges and flower beds** We could choose to plant more species that better support wildlife and pollinating insects in our parks, verges and flower beds. As well as helping animals and insects, this could help beautify the council's parks, verges and flower beds.
OFFS	**A new Leeds-based carbon offsetting fund that would benefit the city** We could set up an innovative scheme that would allow public and private sector organisations in Leeds to complement their carbon reduction efforts by offsetting their emissions. Unlike existing carbon offsetting schemes, we would ensure that the investment benefits residents in Leeds. For example, the fund could be used to plant new greenery, help residents invest in renewable energy, and improve the energy efficiency of Leeds buildings.
TRAV	**Investment in sustainable travel infrastructure** We could invest in more schemes to encourage people to travel by public transport and make it easier to cycle or walk in the city. Schemes such as cycle superhighways, more pedestrianisation, park and ride facilities, bus priority measures and healthier green streets, to provide a real alternative to the car.
TOWN	**Transforming our town centres to support public transport and active travel**

	We're already transforming the city centre to make it easier to walk or cycle and to improve the speed and reliability of buses. Over the next few years, we have ambitious plans to close to private cars and improve cycle and walkways on: the Headrow, City Square, New Briggate, Vicar Lane, Cookridge Street and Neville Street. We could transform our town centres next to further support public transport and active travel.

By some margin, the most popular proposals were those that would improve public transport infrastructure and services or would help to 'green' the city by planting more wildlife-friendly species in our parks, verges and flower beds. Similarly, many focus group participants saw these issues as a "priority" for the city and these proposals were frequently mentioned at engagement events and focus groups. *"There are plenty of places to plant trees, just get on with it"* was a comment made at one focus group. In focus groups, participants noted that improving secure cycle storage should be considered when improving sustainable travel infrastructure.

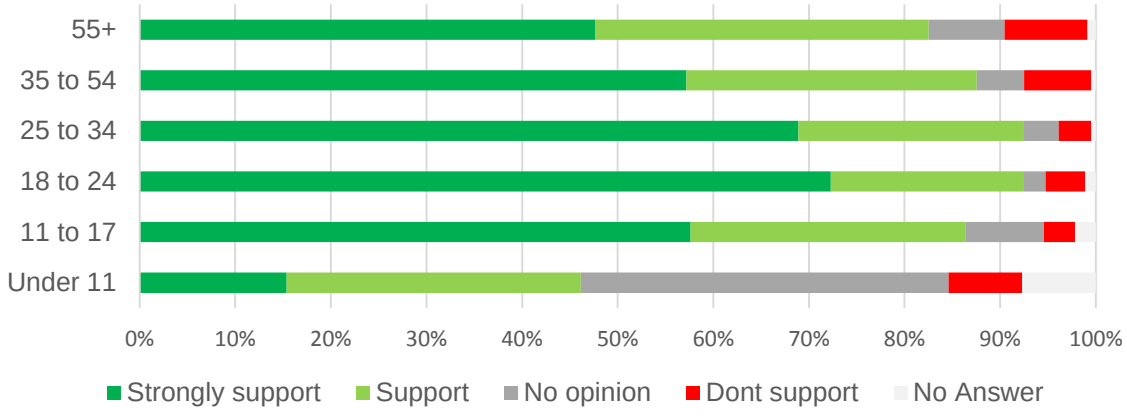
Even respondents who disagreed that the earth is warming due to human activity or that the climate is changing widely supported proposals for the council to plant more wildlife-friendly species in our parks, verges and flower beds (82.7%) and a council backed volunteering scheme to plant millions of new trees by 2030 (71.2%).

The proposal to introduce a carbon offsetting fund in which funds are used to implement low-carbon schemes locally was reasonably popular with 87.6**%** support, although in focus groups some participants expressed skepticism about the legitimacy of offsetting emissions. Other focus group participants commented that they would not currently know how to offset their emissions or which existing schemes to trust so supported the idea of a council-backed scheme.

The proposal to introduce tool libraries was widely supported by residents and was seen as something that could encourage more people to use libraries and be a more secure and accessible alternative to storing equipment domestically or in allotment sheds. However, when asked whether introducing tool libraries should be a priority, the opinion of focus group participants was divided: some believed that it was a 'quick win' for the city whilst others believed that they would rather see other proposals first. A plurality of respondents who disagreed that the earth is warming due to human activity or that the climate is changing supported the tool libraries proposal (36.5%).

Whilst still widely supported, the proposal to support the use of hydrogen gas to heat homes was one of the least popular 'big ideas', particularly among older respondents. Focus group participants had some concerns about the safety of using hydrogen gas (several referenced the 1937 Hindenberg disaster) and many felt that they did not fully understand the pros and cons of the proposal. A plurality of respondents who disagreed that the earth is warming due to human activity or that the climate is changing supported proposals to use hydrogen gas to heat homes (40.4%) and to power larger vehicles (46.2%).

Figure 23: Support by age group for reducing the carbon footprint of school meals



Reducing the carbon footprint of school meals was widely supported by residents (87.3% agree or strongly agree). As can be seen in Figure 23, older residents were less likely to support the proposal than younger adults and young people of secondary age. Some older focus group participants felt that the council should instead focus on educating young people about healthy and sustainable food choices rather than restricting food choices. Others wondered whether parents would support the proposal and recalled the backlash of previous top-down changes to make school dinners more nutritious. However, when we asked 88 young people as part of a workshop whether they would object to their school having a “meat free” day to reduce their carbon footprint, 84 out of 88 young people said that they would not.

Expanding the CAZ to include high polluting cars and vans by 2030 was supported by 84.6% of respondents. This is significantly greater support than the 62% of residents who replied to our statutory CAZ consultation year that “the council should consider charging non-compliant private vehicles and vans” by 2030. However, focus group participants stressed that, whilst they supported the proposal in principle, the council would first need to ensure that bus users, small businesses, and lower income households would not be negatively impacted financially. Whilst only a very small minority of responses were negative towards the expansion of the CAZ, it is significant that more respondents indicated that they would not support this proposal compared to the other big ideas.

Finally, the proposal to incentivise building owners to improve the energy efficiency of properties through council tax or business rates was widely supported (91.5%) by respondents. This proposal was even supported by a plurality of respondents (40.4%) who disagree that the climate is changing or that the earth is warming due to human activity.

Other proposals

Throughout the Big Leeds Climate Conversation we have also recorded suggestions of other proposals that residents believe would help Leeds become a carbon-neutral city. Qualitative data was recorded as part of the online questionnaire, engagement events, online comment threads, replies on social media and other sources.

Beyond the 'big ideas', the most frequently suggested ideas were proposals related to public transport and waste/recycling, especially suggestions for a mass transit system and household collections for food waste and glass recycling. These are evident in Figures 24 and 25 below.

Many residents also suggested that Leeds should do more to require landlords to improve the energy efficiency of existing buildings and to require developers to build 'greener' developments, e.g. requiring stricter energy efficiency standards, the installation of renewables, and making it harder to develop on green field sites.

Other suggestions frequently made include:

- Enforcement against engine idling;
- Introducing measures to reduce demand for flights, e.g. a 'frequent flyer levy'
- More electric vehicle charge points;
- Banning the worst polluting vehicles from driving within the city centre, as opposed to charging them for driving within the incoming Clean Air Charging Zone;
- A moratorium on new road building;
- New climate emergency resources for schools and businesses;
- An educational communications campaign to raise awareness of the climate emergency and what residents can do;

- Council-wide divestment from fossil fuels;
- Allowing communities to manage existing spaces of land;

Figure 24:

Word cloud showing the 50 most popular nouns used in written responses to the question:

“Is there anything else that you think the city should be doing to help reduce greenhouse gas emissions and support wildlife?”

Figure 25:

Word cloud showing the 50 most popular nouns used in written responses to the question:

“Is there anything else that you think Leeds City Council should be doing to help reduce greenhouse gas emissions and support wildlife?”

Other proposals made by young people

At workshops with young people led by the Voice, Influence and Change Team, attendees made a number of suggestions for what schools could do to respond to the climate emergency. Suggestions from young people included:

- Reducing the carbon footprint of food served and sold
- Cooking classes to teach people how to cook lower carbon meals.
- Solar panels on school roofs
- More promotion of sports as a zero carbon activity and more outdoor gyms
- Not using single-use plastic cutlery
- Fencing off areas of land to let trees and plants grow wild
- Legalisation of electric scooters.

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Other proposals made by the Leeds Climate Change Citizen's Jury

A Leeds Climate Change Citizens' Jury was assembled by the Leeds Climate Commission as part of their contribution to the Big Leeds Climate Conversation. The statistically representative jury recommended a number of significant proposals to reduce the city's carbon emissions including proposals covering transport, housing, communications, recycling and funding. These recommendations can be read in full on the Commission's website: https://www.leedsclimate.org.uk/leeds-climate-change-citizens-jury.

Appendix A: Consultation activity log

July

1. Big Leeds Climate Conversation launch event (16th)
2. Breeze Middleton (29th)
3. Breeze Temple Newsam (31st)

August

4. Breeze Temple Newsam (1st)
5. Breeze Rothwell (2nd)
6. Leeds Pride (4th)
7. Breeze Armley (05th)
8. Breeze Beeston (07th)
9. Child Friendly Leeds Live (7th)
10. Breeze Morley (08th)
11. Breeze Farnley (09th)
12. Breeze Garforth (13th)
13. Meanwood Olympics (14th)
14. Breeze Farsley (15th)

15. Bramley Festival (18th)
16. Breeze Pudsey (20th)
17. Lotherton (21st)
18. Temple Newsam (22nd)
19. Black Music Festival (25th)
20. West Indian Carnival (26th)
21. Hunslet Community Event (30th)
22. Harehills Festival (31st)

September

23. Inner North East Community Committee (2nd)
24. Inner South Community Committee (4th)
25. Leeds City College Big Welcome (12th)
26. TARA Panel (13th)
27. Outer West Community Committee (16th)
28. Outer North West Community Committee (23rd)
29. Outer South Community Committee (23rd)
30. Outer North East Community Committee (23rd)

31. Third Sector Partnership (23rd)
32. White Rose Shopping Centre (24th)
33. Leeds City Council Staff Benefits Workshop (24th)
34. John Charles Leisure Centre (25th)
35. Inner West Community Committee (25th)
36. Inner East Community Committee (25th)
37. Asda, Pudsey (26th)
38. Inner North West Community Committee (26th)
39. St George's Community Hub (27th)
40. Leeds University Union (20th)
41. Car Free Day Headingley (22nd)
42. Car Free Day Beeston (22nd)
43. Car Free Day Otley (22nd)

October

44. Outer East Community Committee (1st)
45. Leeds College of Building (1st)
46. Leeds College of Building (2nd)

47. Co-Op Academy Careers Day (2nd)
48. Leeds Trinity (4th)
49. Dixons Unity Academy (5th)
50. Leeds Beckett University (7th)
51. Leeds Beckett University (8th)
52. TARA Panel (10th)
53. Head Teacher Briefing (10th)
54. Light Night (10th)
55. Corn Exchange (14th)
56. Winmoor Forum (14th)
57. Kirkgate Market (15th)
58. Carr Manor Community School (15th)
59. Kirkgate Market (17th)
60. Leeds Youth Council Workshop (19th)
61. Registered Providers Housing Management Partnership Forum (22nd)
62. Inner East Climate Conversation workshop (23rd)
63. Temple Newsam Communities Together Forum (24th)

64. Leeds Bus Station (24th)
65. Leeds By Example Business Breakfast (30th)

November

66. Number Two Tavern (6th)
67. Business Breakfast (6th)
68. Third Sector Leeds Goes Local (11th)
69. Parish Council Workshop (12th)
70. Parish Council Workshop (14th)
71. Manston and Swarcliffe Forum (14th)
72. TARA Panel (15th)
73. Parish Council Workshop (18th)
74. Leeds Citizens Panel Focus Group (19th)
75. Leeds Citizens Panel Focus Group (20th)
76. Highfields, Westdales and Standales Community Forum (20th)
77. Strategic Housing Partnership (20th)
78. Private sector landlords conference (20th)
79. Leeds Climate Commission Faith Focus Group (20th)

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80. Leeds Citizens Panel Focus Group (21st)

81. Leeds Beckett University Housing Fair (25th)

82. Farsley Christmas Light Switch On (27th)

83. Bramley and Stanningley Forum (28th)

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Appendix B: Estimated carbon footprint of residents

To complement the Big Leeds Climate Conversation, Leeds City Council partnered with the World Wide Fund for Nature (WWF) to better understand the average carbon footprint of residents and inform our plan to become a carbon neutral city.

As part of this partnership, Leeds City Council received anonymous, district level data identifying the estimated carbon footprint of more than 2000 residents. This data provide a useful insight into of how emissions differ between residents and in different parts of the city.

The WWF carbon footprint calculator was created with the Stockholm Environment Institute at the University of York and the University of Leeds. More information about the tool's methodology can be found at: https://footprint.wwf.org.uk/#/methodology.

The tool estimates an individual's emissions across five sections:

- **Food.** This section covers emissions related to diet, food waste and buying habits.
- **Travel.** This section covers personal and public transport usage for leisure and work, and all flights.
- **Stuff.** This section covers the purchases of consumable items.
- **Home.** This section covers energy type and usage in the house and the presence of energy-saving measures,
- **Government/National share.** The UK's carbon footprint includes the government's consumption – that covers spend on roads and construction, education, defence, health and other expenses involved in running the country. This impact is shared by the 64 million residents of the UK. No questions are asked about this section.

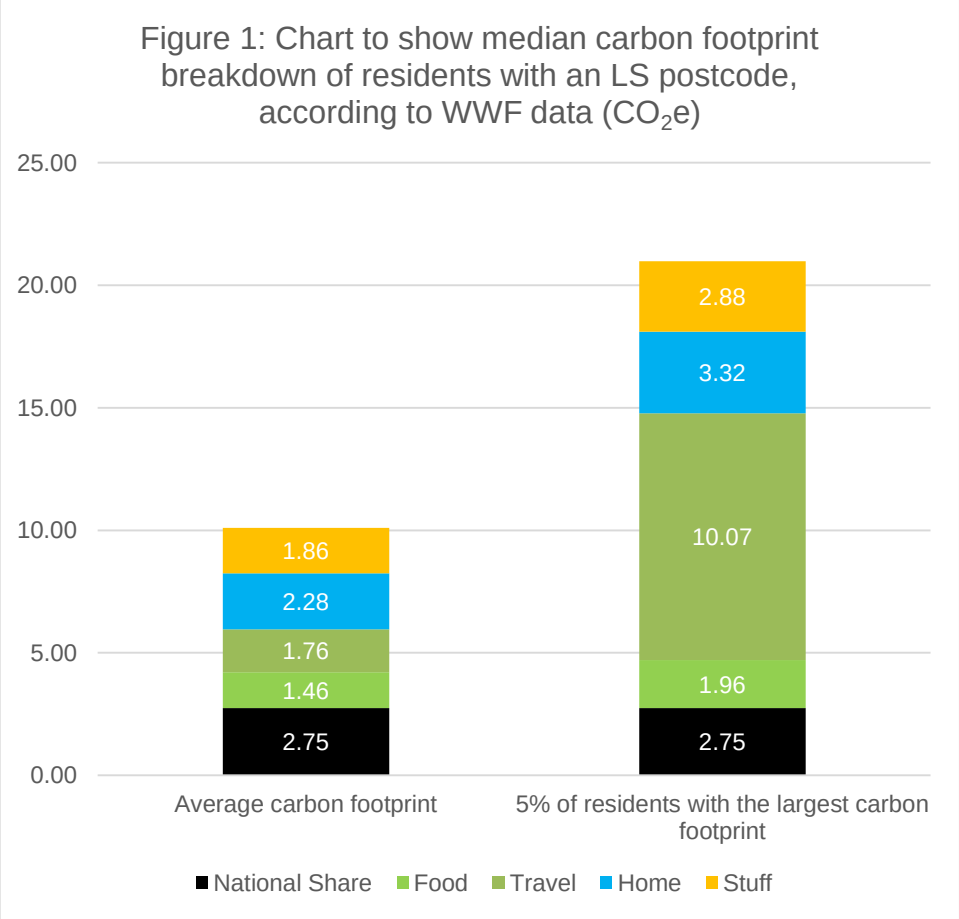


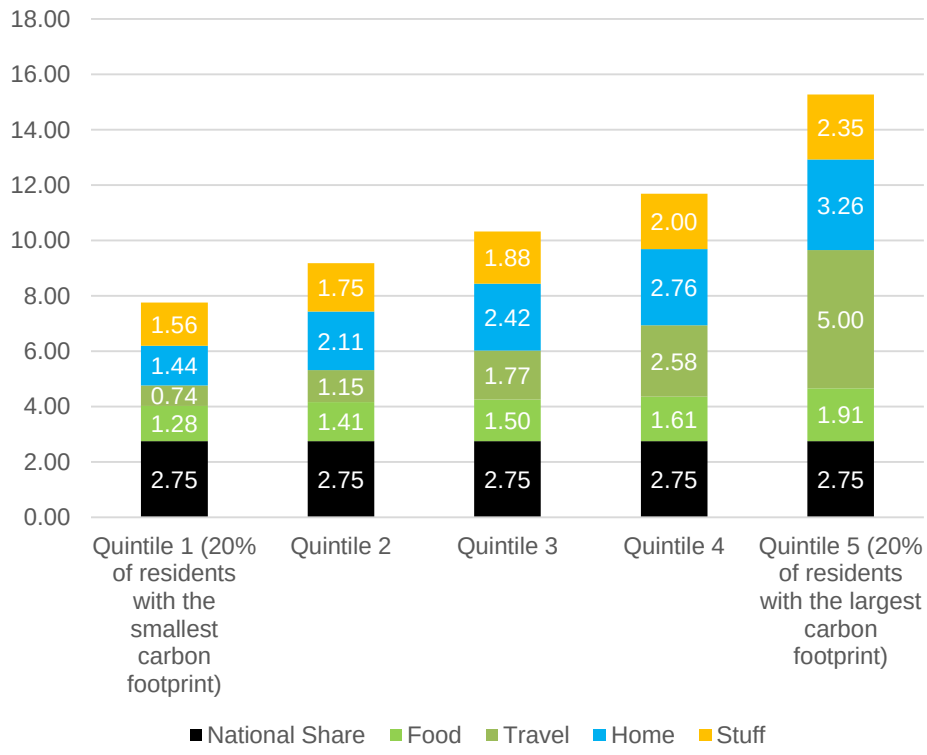
Figure 1 shows that the median carbon footprint of Leeds residents is approximately 10.10 tonnes of carbon dioxide equivalent (CO_2e) every year; the mean is 11.38 tonnes. Both figures are significantly lower than the WWF's estimated 13.56 tonnes CO_2e average. Further analysis will be required to better understand this difference however there are two explanations that likely play a role. Firstly, urban residents typically have smaller carbon footprints than those in rural areas for a number of reasons. Secondly, self-selection bias may also have an effect.

One twentieth of Leeds residents have a median annual carbon footprint of 20.99 tonnes of CO_2e. This is more than double the carbon footprint of the average resident.

Notably, more than 80% of the difference (8.31% of CO_2e) is a result of emissions related to travel.

Figure 2 shows in more detail how the median carbon footprint of the fifth of residents with the smallest carbon footprint (quintile 1) differs from the fifth of residents with the largest (quintile 5). Between quintiles 1 and 5, only emissions related to the travel and home sections grow by more than 1 tonne of CO_2e.

Figure 2: Chart to show median carbon footprint breakdown of residents with an LS postcode, according to WWF data (CO_2e)



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Finally, figure 3 shows the median carbon footprint breakdown of every postcode district beginning with “LS”. Broadly speaking, the average carbon footprint of residents in the outer areas of the city is higher than those in the inner-city.

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Figure 3: Chart to show median carbon footprint breakdown of residents in LS postcodes, according to WWF data