



Net Zero Carbon Engagement 2021

Topline Report

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Notes

- This report covers the Commonplace Engagement with the general LCR population, Snap Survey Youth engagement, and draws in the findings from workshops/questionnaires conducted by Community Suppliers and the LCRCA. Throughout the report, the following key has been used to distinguish between the different methodologies.



**Snap Survey &
Commonplace Engagement
run by the LCRCA**



**Workshop engagement run
by the LCRCA or Community
Suppliers**

- The Commonplace response included confirmed, pending, and anonymous respondents, however there is no way to tell how many anonymous respondents are unique and no demographic data is available for them. However, the data has been cleansed of any duplicate comments.
- The general workshop data also includes 21 youth respondents (under 16) which were collated into a report and could not be unpicked. It is felt however that this shouldn't have much of an impact on the data.
- 13 respondents over the age of 25 took part in the youth survey run by the LCRCA. They were given the option to leave to take part in the general public survey on Commonplace yet some chose to stay. These individuals are included in the youth data, as their presence was deemed to have little impact on the results. However, notes are made where relevant to their presence and any impact on the data.
- Throughout the report the terminology 'base: xx' and 'n=xx' have been used. The 'base' refers to the people asked a particular question. Due to routing in the survey some questions were only asked to relevant individuals e.g. those already driving. 'n=xx' on the other hand refers to the amount of people who gave a specific response.
- Due to rounding and multiple choice questions some graph percentages may not add to 100%. Similarly, where overall agreement or happiness has been shown, the percentage may not equal the exact sum of the percentages shown separately. For example, somewhat agree may be 56% and very much agree may be 21%, but the joint percentage may be 76% because this is calculated from the actual number of responses instead of just adding 56% to 21%, therefore showing a more accurate percentage.

Project Team

Environment

Rachel Waggett, Principal Environmental Officer

Sean Maher, Environment Officer

Research & Engagement

Morag Haddow, Research Project Lead

Phillip Prescott, Engagement Project Lead

Ya Ching Darnell, Engagement Co-ordinator

Chris Murphy, Engagement Officer

Reports

- **Net Zero Carbon – Topline Report**
- **Net Zero Carbon – At Home**
- **Net Zero Carbon – Transport and Travel**
- **Net Zero Carbon – In Our Neighbourhoods**
- **Net Zero Carbon – In the Workplace**
- **Net Zero Carbon – Youth Report**

Background

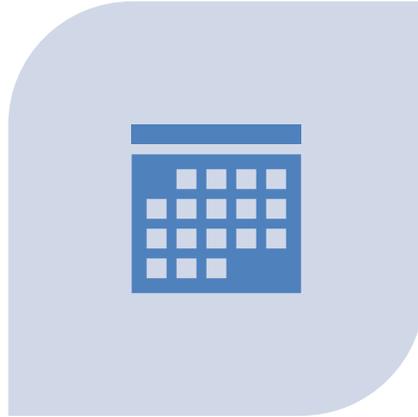
In 2019, the Metro Mayor and the Combined Authority declared a climate emergency. They set a very challenging target for the Liverpool City Region to become net zero carbon by 2040, 10 years before the UK's deadline to be net zero carbon.

In order to help develop a plan of action it was felt important to undertake research to engage the public in how they felt about the visions for 2040, what benefits they felt these changes may bring to their life, and any concerns or worries they had or foresee having.

Understanding the current perception of the changes needed and any concerns or worries can be used to help the policy leads design policy and work schemes to bring the public on the journey to Net Zero.

This top line report presents some top line findings from the multiple strands of engagement (Youth Snap Survey, General Commonplace survey, and workshops run but the LCRC or Community Suppliers). For more detailed results see the individual reports for the different topic areas, Home, Neighbourhoods, Travel, and Work.

Methodology

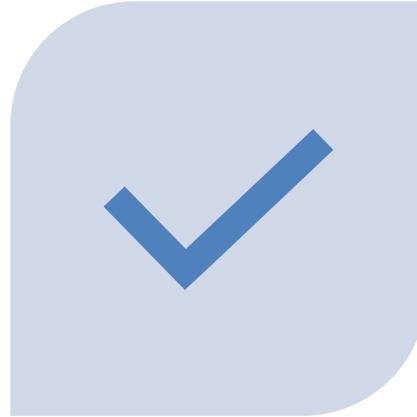


FIELDWORK PERIOD

Tuesday 29th June 2021

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Wednesday 15th September 2021



1,217 TOTAL RESPONSES

- 323 responses via Youth survey hosted on Snap Surveys
- 96 responses from Youth workshops/questionnaire
- 482 responses via General Population engagement on Commonplace
- 316 responses from General Population workshops



METHODS AND RECRUITMENT

- Self completion surveys. One designed for a general public audience and hosted on Commonplace. The other designed for a youth audience and hosted on Snap Surveys. Both were advertised through contacts, social media, internal LCRCA communications, and press releases.
- Workshops facilitated by the LCRCA and workshops/questionnaires run by Community Suppliers that the LCRCA commissioned.

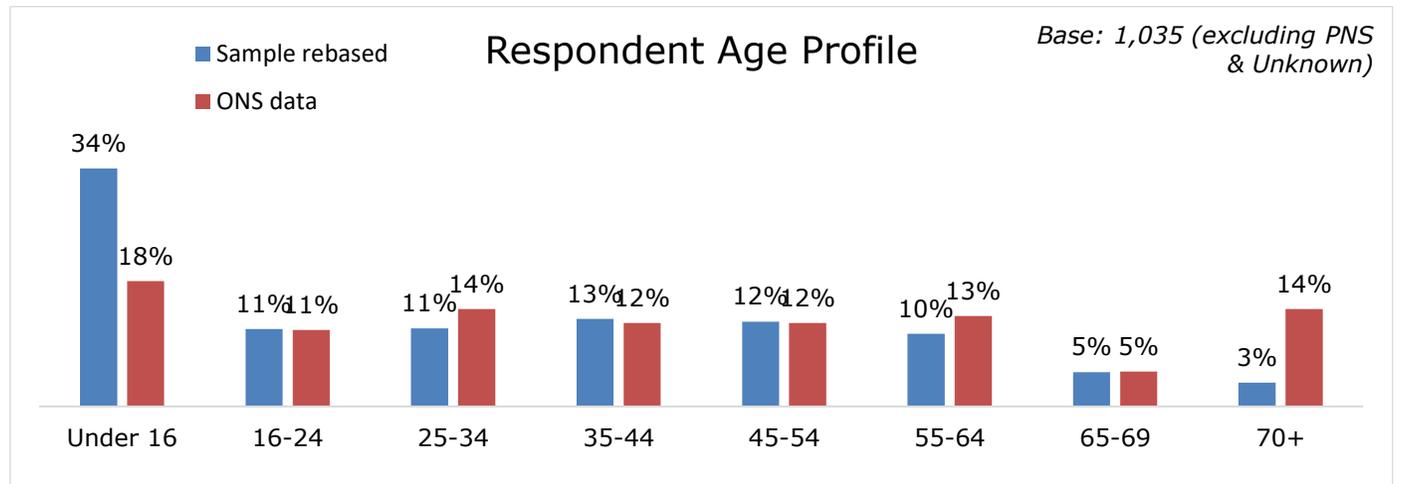
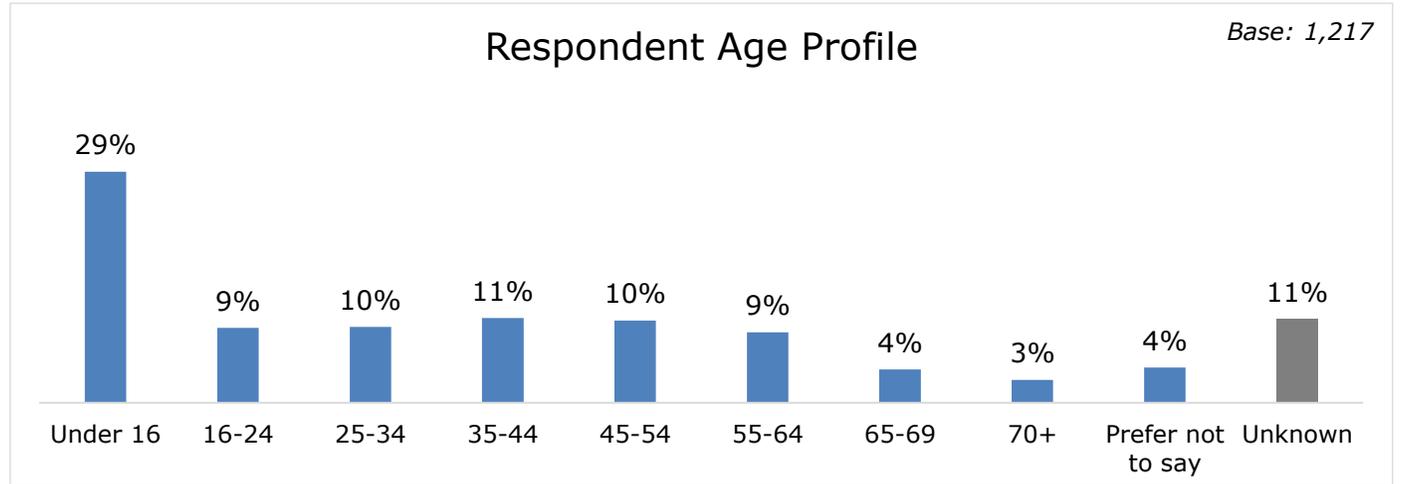


Respondent Profile (Sample)

Sample (All Engagement) 1/3



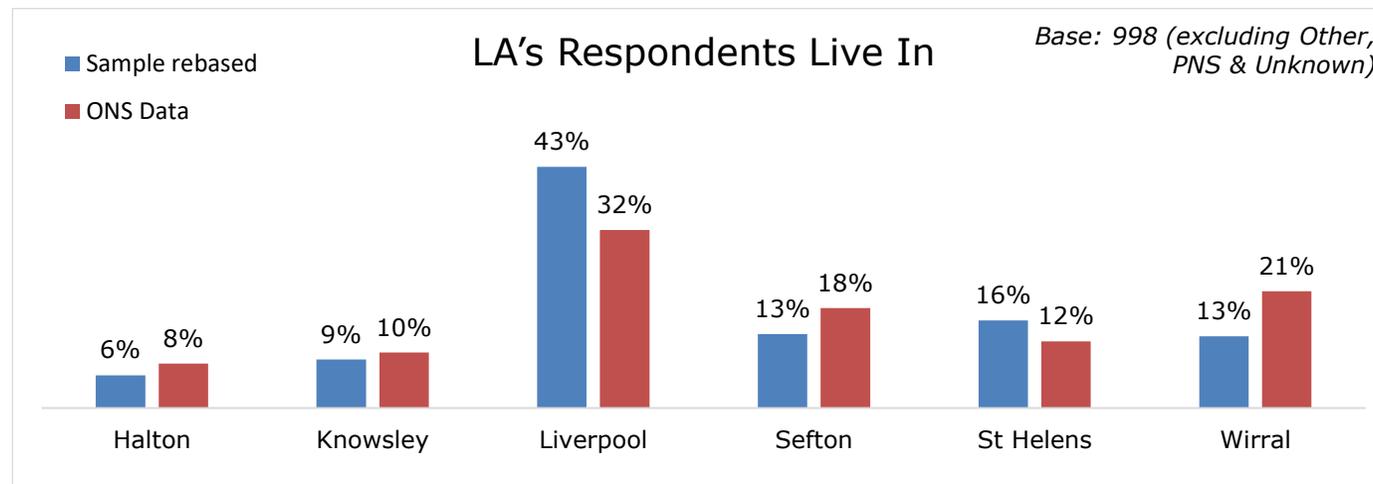
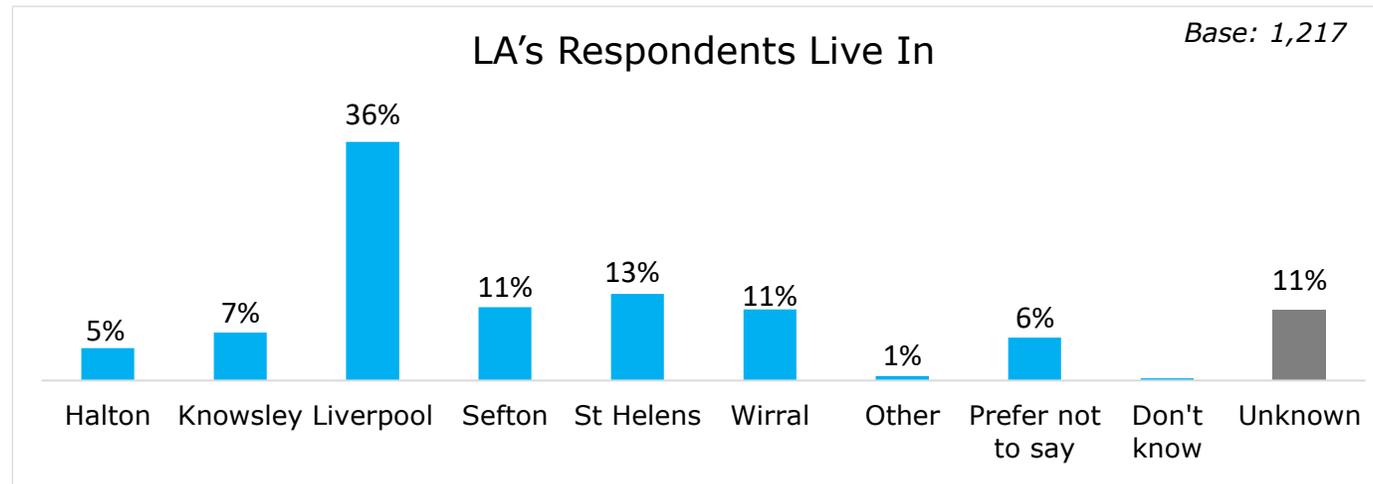
- **1,217 people responded** across the engagement pieces.
- Just under 3 in 10 (29%) were under 16 years of age.
- When the sample is rebased to exclude the unknown and prefer not to say options, we can see that **the under 16 presence is greater than compared with the available ONS data** for the Liverpool City Region by +16% (34%). However, it is noticeable that there is a **relatively low representation of the older age groups** with the 70+ presence -11% (3%) compared to the ONS data.
- The high presence of youth voice was intended as in 2040 these individuals will be adults in their 30s. It was felt important to include engagement designed specifically for younger residents for this reason to hear their aspirations and concerns about the changes that will be needed for the LCR to reach Net Zero by 2040.



Sample (All Engagement) 2/3



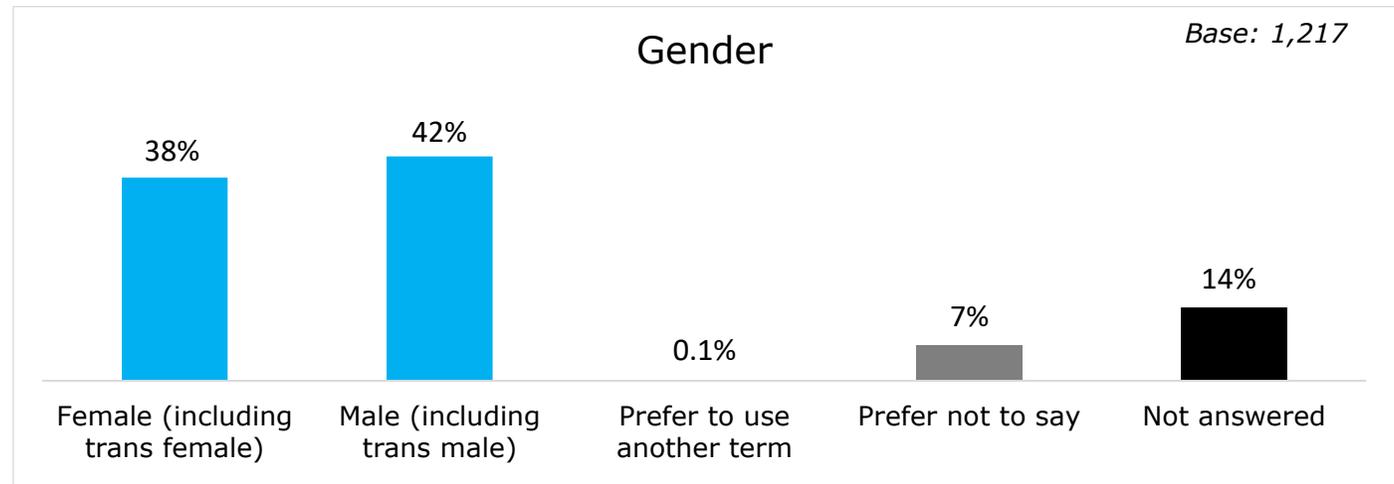
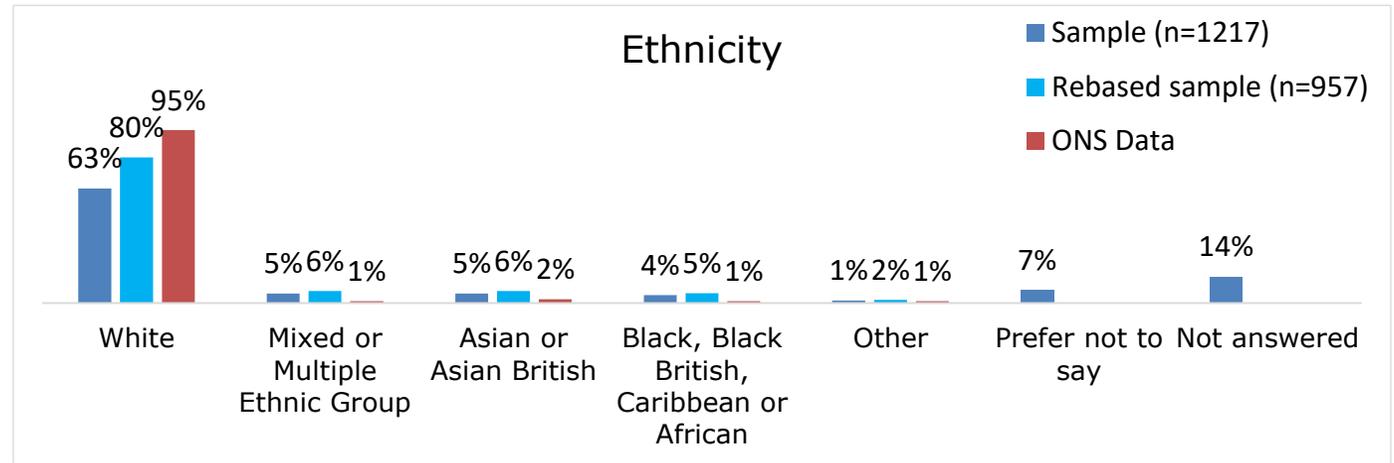
- Before rebasing, 36% of respondents were residents of Liverpool, 13% from St Helens, 11% from Sefton, 10% from Wirral, 7% Knowsley, and 5% Halton. However 18% of people did not disclose their location.
- Rebasing to exclude 'Other', 'Prefer not to say' and those who did not answer the question, and then comparing to the ONS data, across all engagement there was coverage of all six local authorities that comprise the Liverpool City Region, although with a **significantly higher level of engagement with Liverpool residents (43% compared to 32%), and a slightly lower representation with Wirral and Sefton residents (-9% and -5% respectively).**



Sample (All Engagement) 3/3



- **63%** of the sample **were of White ethnicity backgrounds**, however **16% were of mixed, Asian or Asian British, Black, Black British, Caribbean or African, or Other ethnicity**. And, 21% chose not to say or did not answer.
- Although the engagement questions asked about the respondents' ethnicity, the high levels who preferred not to give an answer means that it is difficult to establish the extent to which this is representative. It is also noted that the current most recent data for comparison is the 2011 Census, which may be out of date.
- **More males (42%) than females (38%) took part**. However, 1 in 5 (20%) chose not to disclose.



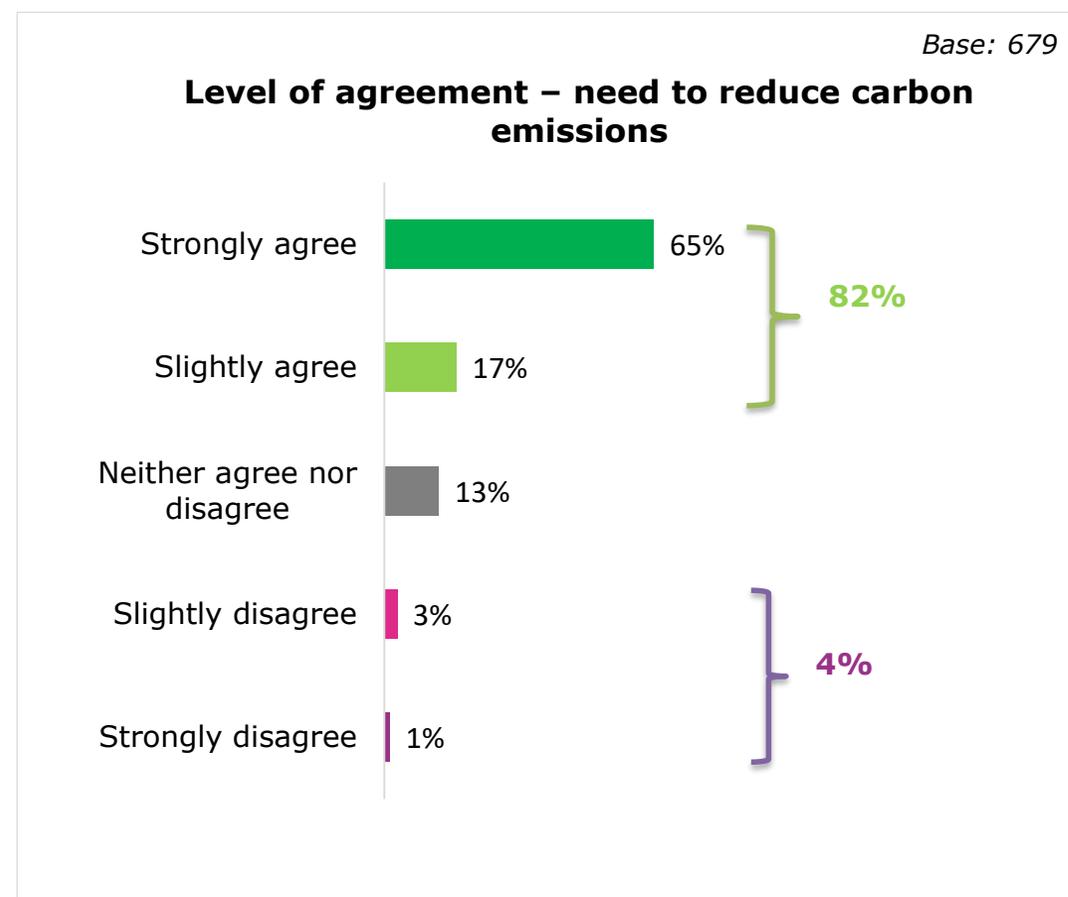
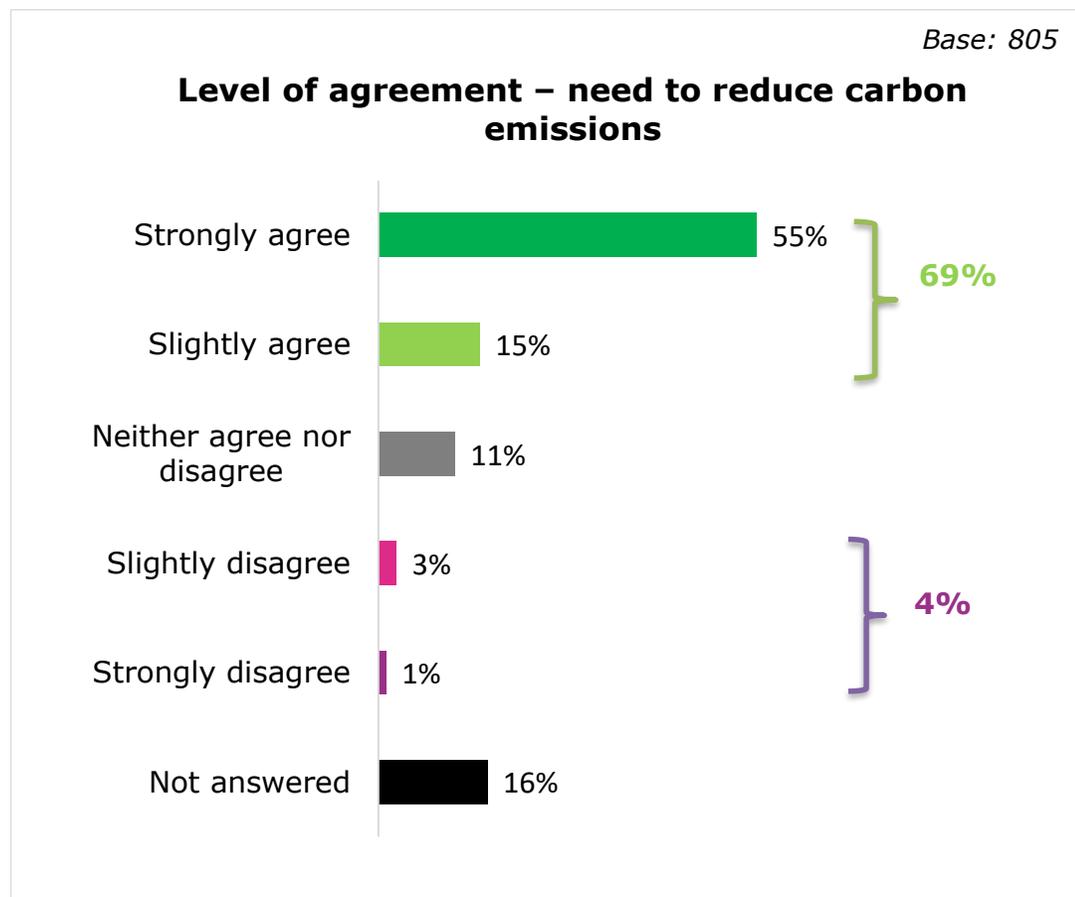


Overarching beliefs and knowledge

Just under 7 in 10 (69%) of respondents to the surveys (Youth and Commonplace) agree to some degree we need to reduce carbon emissions*.



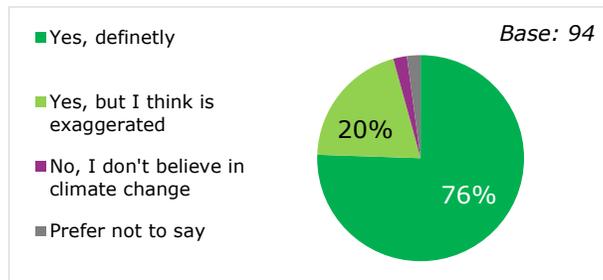
This rises to 82% when we exclude those who did not answer the question.



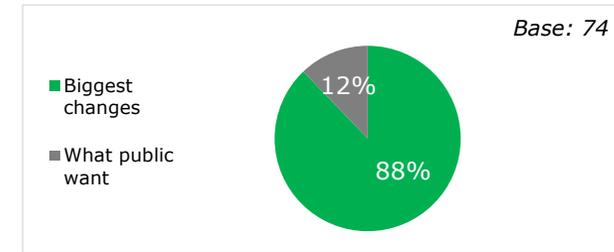


Where collected within the youth workshops and the partner organisation questionnaire, **opinion was high that Climate change is real (76%)** and that **the biggest changes in the fastest time are needed (88%)**.

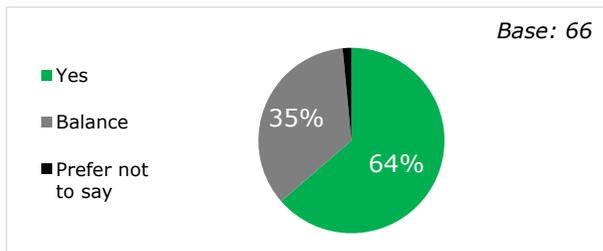
76% of those asked (base=94), felt Climate Change was definitely real, only 2% didn't believe in it. Yet, **1 in 5 (20%)** thought it was real but exaggerated.



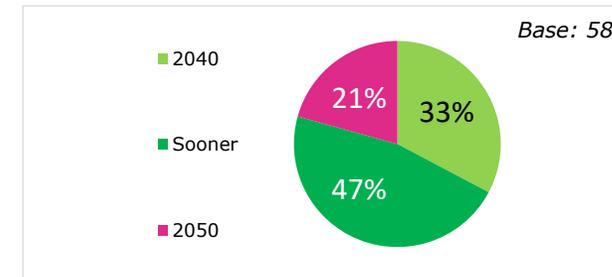
88% of those asked (base=74) felt we should follow the data to make the biggest changes in the fastest amount of time, over making the changes the public want, but 12% felt we should do what the public wants.



64% of those asked (base=66) felt we should do everything possible to meet carbon net zero by 2040, however much it changes our lives. Yet, **35% felt there needs to be a balance** between the environment, costs, and other things, with a further 2% preferring not to answer.



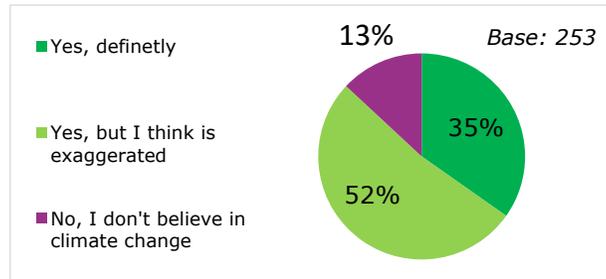
And, **of those asked if the 2040 target was correct (base=58), opinion was split** with 47% feeling it should be sooner, 33% agreeing it is fine, and 21% thinking it should be aligned to the National Government 2050 target.



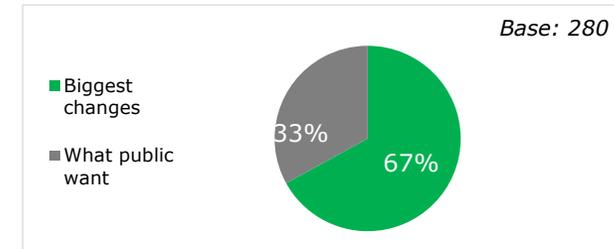


Similarly, where collected within the general population workshops, opinion was **high that Climate change is real (87%)**. And, **67% believe that change is needed in the fastest time**.

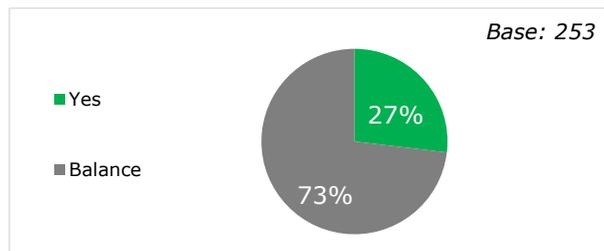
87% of those asked (base=253), felt Climate Change was real, but 13% didn't believe in it. Yet, more than half (52%) thought it was real but exaggerated (+32% compared to the youth workshop findings)



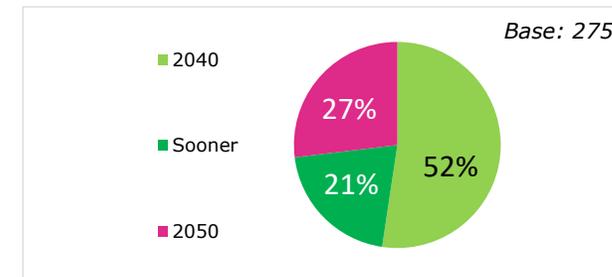
Just over 2 in 3 (67%) of those asked (base=280) felt we should follow the data to make the biggest changes in the fastest amount of time, over making the changes the public want, but a third (33%) felt we should do what the public wants (+20% compared to the youth workshop findings).



27% of those asked (base=253) felt we should do everything possible to meet carbon net zero by 2040, however much it changes our lives. Yet, in sharp contrast to participants in youth workshops (+38%), 73% felt there needs to be a balance between the environment, costs, and other things, with a further 2% preferring not to answer.



And, of those asked if the 2040 target was correct (base=275), 52% felt it was correct (+19% compared to the youth workshop findings), 21% felt it should be sooner (-21% compared to the youth findings), and 27% think it should be aligned to the National Government's 2050 target.





In the Commonplace engagement respondents were asked why they felt we needed, or didn't need, to reduce carbon emissions.

For those that disagree (n=9*) they mainly felt that there is **not enough evidence to suggest this is a crisis** we need to respond to, and that the **actions will not have the impact intended**.

The emergency is not real

"Climate change is the Earth's natural cycle. It is not man made."
- 45-54, Sefton

"The changes are being externally imposed with **no scientific justification.**"
- 55-59, Halton

"It is based on a SCAM THERE IS NO CLIMATE EMERGENCY AND THE PLANET IS NOT RUNNING OUT OF RESOURCES IT'S ALL LIES."
- 55-59, Sefton

There are other things that need addressing

"Omg, just look around at the moment with all that is happening in world."
- 60-64, Liverpool

Our actions won't really have an impact

"Because **without the other larger countries included then this is just a pointless exercise.**"
- Unknown, Liverpool

"the average volcano spews out more carbon dioxide....!"
- 70-74, Sefton

"**You are looking at the wrong problem.** People drive larger cars that use more fuel, this is because of **targeted advertisement and the ridiculous use of car finance** (a terrible financial decision). While there is a push for **public transport the cost is prohibitive when compared to trains or busses for long journeys.** Electric cars are not a long term solution either because the **batteries utilise metals mined only in China and are non-recyclable.** Construction uses materials such as concrete, environmentally unfriendly (not reusable or recyclable), cladding, steel, instead of brick (clay) and other environmentally less damaging materials that are reusable. **Wind turbines are non recyclable,** often utilise diesel motors to start up, and break down within a decade requiring expensive repair work. **They also create miles wide "dead zones" when in the sea** where wildlife cannot live. It would be far more sensible to invest in geothermal research for energy and ways of filtering out carbon from the atmosphere, though methane is far more dangerous."
- 25-34, Wirral



For those that agree (n=338) they do so because of their **strong belief that the crisis is real** with some **citing events they have seen around the world or evidence they have read, seen, or listened to.**

"There is clearly a climate crisis and we need to change."
- 35-44, St Helens

"All current specialist advice indicates such."
- 60-64, Sefton

"Awareness from various campaigns and news articles; as well as my job in the construction industry."
- 45-54, Liverpool

"The planet is literally dying because of global warming. The hot summers, cold winters and crazy floods are all because of our emissions."
- 25-34, Knowsley

"I'm well informed of the science, threats and opportunities."
- 35-44, Outside LCR but works here

"Because I am aware of the scientific modelling of impacts of different rising temperature scenarios."
- 45-54 Knowsley

"I am an environmental activist."
- 70-74, Wirral

"Because I believe the science and what I see with my own eyes."
- 65-69, Sefton

"I understand the impact of climate change and am interested in living more sustainably."
- 25-34, Sefton

"its clear some action is required to slow and hopefully eventually reverse climate change. I want to ensure the future for my son."
- 45-54, Liverpool

"Because I am an environmental scientist and have studied and campaigned about climate change for 40 years. The public, local and national government have been far too slow to spread the message of the potential impact of both the climate and biodiversity crises."
- 70-74, Liverpool

"By reducing our carbon emissions we make a positive change to current lifestyles - healthier through reduced pollution, access to green space etc. Wealthier because of better health, green jobs etc. Climate change is affecting us now. ...overheating, flash floods etc. We need to constraint climate change as much as possible. Climate change disproportionately affects those on low incomes or least able to adapt. E.g. households who can't afford house insurance are more affected by flooding occurrences. people with underlying health conditions are more affected by heat and pollution."
- 45-54, Wirral

"I believe this is fact and it's taking too long for people to face up to. It will need a very coordinated effort to achieve this."
- 35-44, Liverpool

"With the changing climate and extreme weather damage in the UK, floods in Germany, large scale wild fires across the globe, the argument that we need to reduce carbon dioxide and methane in the atmosphere is made. I am very dubious of your assumption that we have until 2040. It seems like a comfortable lie that allows us to put off radical action."
- 70-74, Liverpool

"Global warming and the poor outlook for the future has led myself and my wife to decide to not have children. We need to do something for those children who have been born and will have to suffer the consequences."
- 35-44, Wirral

The emergency is real and there is evidence



Why did you answer the way you did above?



There is also a feeling of responsibility to the future, and some frustration that governments, organisations, and people say 'green' things but don't follow through with the required actions.

"Green House gas emissions are mainly related to the general modern way of life such as consuming too much of meat and animal products, wasting food, transporting it, using non renewable energy (coal, oil), over relying on transport, but also overconsumption of other resources such as water or land. **We need to rethink our consumption patterns from food to clothing, from petrol cars to water usage.**"
- 35-44, Liverpool

"We are living in precarious times that will only get worse if there is continued inactivity from governments."
- 45-54, Liverpool

"Carbon reduction is everyone's business - **every individual and organisation has a part to play from government down to citizens.**"
- 35-44, Sefton

"Pollution is killing people 40,000 in U.K. each year and at least 1,000 in Merseyside. Pollution from vessels is a huge issue and **as the Port is growing we will have larger vessels with more pollution.** Larger vessels require more HGVs to carry goods to and from the Port. Our community is suffering and nobody is doing anything about it. **Please help.**"
- 60-64, Sefton

"what is being asked to cut CO2 emissions and reach net zero is to **daunting a task for a western economic society to accomplish.**"
- 55-59, Wirral

"We are facing a climate crisis and **only significant measures from those who contribute most to carbon emissions (large companies, city centres etc.) will prevent permanent climate change.**"
- 25-34, Wirral

"we all need to reduce our carbon emissions but **the infrastructure needs to be in place for us to do our bit.** i.e. having just got an electric car & found the lack of charging points very frustrating."
- 45-54, Sefton

"Something requires changing at present but **I am a bit concerned that greed and money is at the forefront of everything and difficult to change.** Also it's looking quite obvious that the climate is changing dramatically and it's maybe already too late to reverse the damage already caused."
- 60-64, St Helens

"We can't go on breathing the air as it is. **I don't drive and walk as much as I can, some areas aren't very nice to walk through.** I often go to Waterloo and Crosby by walking through Rimrose Valley to visit family, friends and go shopping. **I would need to take 2 or 3 buses to replace my 15 to 20 minute walk.**"
- 60-64, Sefton

"**Need to improve public transport** for a have a truly green city."
- 55-59, Knowsley

"I live on a 4 lane main road and **all my neighbours have cut down their trees.**"
- 65-69, Wirral

"We are a **wasteful society** and our planet can't sustain this."
- 45-54, Unknown

Words are not enough, action and infrastructure are needed



For those that are on the fence (neither agreeing nor disagreeing) (n=8*) there is a feeling of needing to be convinced that changes won't cause worse issues, and that it's worthwhile.

Who are 'we' what about big business and individuals who have large carbon footprints?

*"Depends on what is meant by we. **Big businesses need to do more but the individual should not have to shoulder the bulk of the financial burden like the proposals want them to.**"*
- 25-34, Liverpool

*"I have the good fortune to know a well known **actress that flies to LAX airport once every month not including connecting flights or the Luxury SUV cars picking her up.** Her individual carbon footprint for one flight one way is 450 litres of aviation fuel which on just one journey is **greater than my total annual carbon footprint.** You need to look beyond your nose and recognise somebody not an exception or a one off using 5400 ltrs of carbon fuel per year not including all the other massive excesses does focus the mind. My eyes are open question is why are yours shut!"*
- Unknown

Will the actions result in negative consequences?

*"In order to agree that we do need to reduce carbon emissions, I'd need to be convinced that **the cure isn't worse than the cause.**"*
- 35-44, Wirral

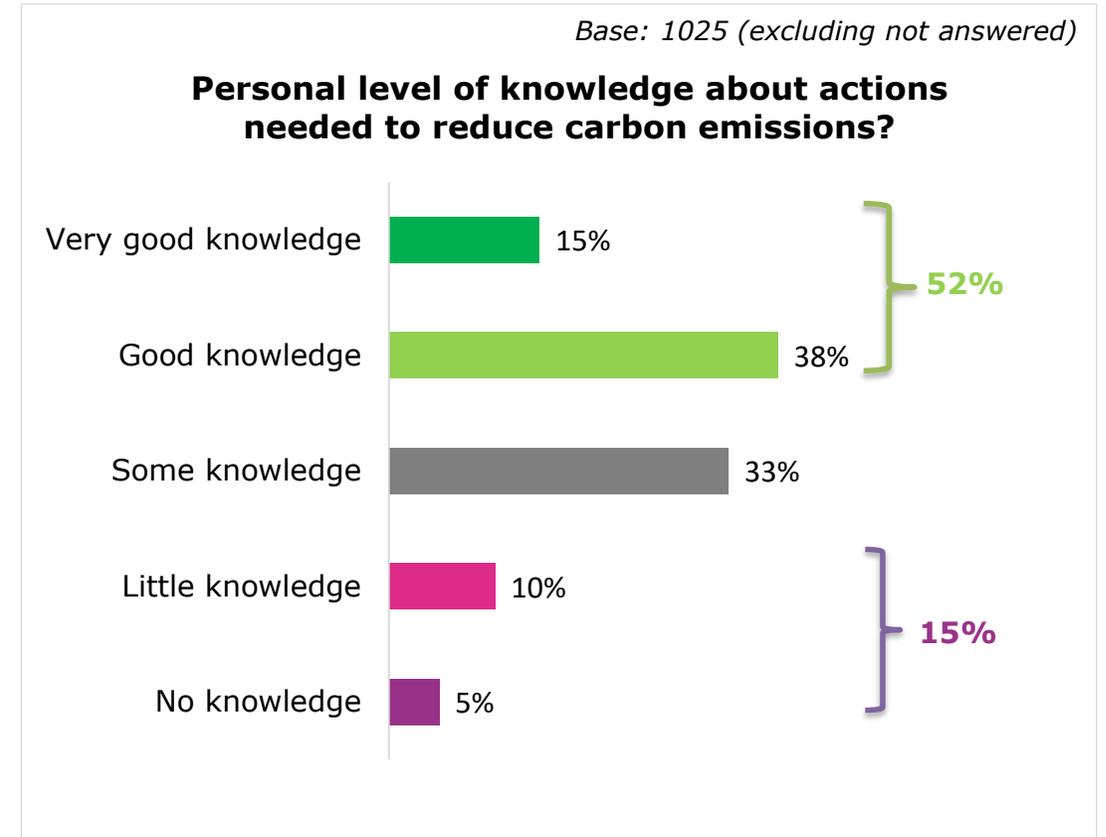
Why do we need more action?

"By banning the sale of petrol and diesel by 2030, I feel this will reduce pollution without further input."
- 35-44, Liverpool

Yet, despite overall quite high agreement action is needed, only 46% of all respondents asked, feel they have good or very good knowledge about the actions needed to reduce carbon emissions.



This rises to 52% when we exclude those who did not answer the question.





Visions

Participants were shown or read a summary of all or some of the visions for how different areas of our lives could look in 2040 to reach Net Zero Carbon. The next section shows the results of how people feel about these different areas and what concerns they may have.



Despite overall quite high agreement action is needed, **rates of positivity about the visions put forward are quite low.**

48% for workplaces, 53% for neighbourhoods, and 56% for transport and travel. The visions around our homes has the highest positivity rating at 63%.



Base: 759

63%

POSITIVE ABOUT
THE VISIONS FOR
OUR HOMES



Base: 864

56%

POSITIVE ABOUT
THE VISIONS FOR
TRANSPORT AND
TRAVEL



Base: 792

53%

POSITIVE ABOUT
THE VISIONS FOR
OUR
NEIGHBOURHOODS



Base: 729

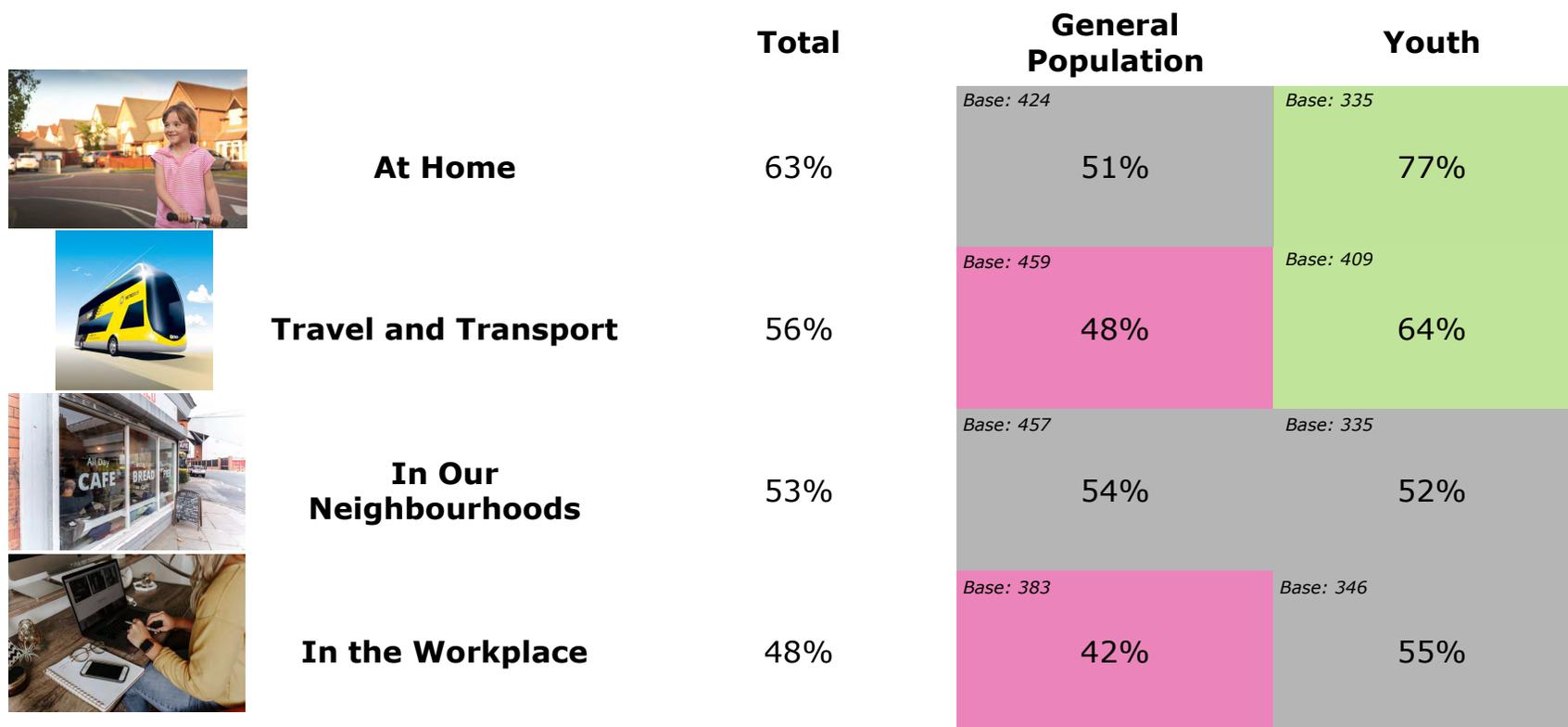
48%

POSITIVE ABOUT
THE VISIONS FOR
WORKPLACES



Although the youth results tended to be more positive than the wider population results by +6 to +16%.

However, those in the youth engagement were slightly less (-2%) positive about the neighbourhood visions.*





Net Zero Carbon – At Home

*Our homes are a huge contributor to carbon emissions, primarily through energy and heating consumption. Technological advancements mean home appliances will become more energy efficient, and the way we warm our homes will change. New homes will be built to higher efficiency standards, whilst existing properties will also need to be adapted to comply with new regulations.**



In the main across all engagement people are positive or happy about the visions for our homes, with 63% positive.

Only 9% were negative, and 28% neutral. However, feelings of uncertainty or negativity around the visions could be a barrier to reaching Net Zero Carbon.

Base: 759



63%

POSITIVE



28%

NEUTRAL



9%

NEGATIVE



One of the **key concerns or worries** people have in relation to the visions for our homes, whether a young person or part of the general population, is the **financial cost** of these changes and who is to bare this cost.



Other concerns raised in the research relate to **security/privacy concerns** over new technology, **scepticism that the changes are enough** or will make any difference beyond disrupting lives. **Practical concerns** around how to make these changes on **different housing stock**, whether there is enough of a **skilled workforce**, **what will happen to the obsolete technology**, and **if the grid will be able to cope** with the changes.



For those in the **youth survey** there is also a concern about what **impact these changes will have on their future choices** (e.g. of where to live).



One of the **key solutions** people have in relation to these concerns, whether a young person or part of the general population, is **financial support**, be that grants, loans, or other schemes and approaches.



Other solutions raised in the research relate to **communication and education** so people are aware of their options and understand the changes being suggested. Also, consideration could be given to **tailored approaches for different homes** instead of a 'one size fits all' approach. And lastly, a **change in building regulations** may be required to make changes easier, and so new homes are built with the required changes now.



Net Zero Carbon – Transport and Travel

Whilst emissions have gradually reduced in other areas, transport has largely remained the same in recent years. So, a shift is needed as to how we get around, primarily moving away from private and fossil fuel vehicles.

Cycling and walking infrastructure will be upgraded and linked to an integrated public transport network of clean transport modes.

For those who continue to drive, clean air zones will be introduced to encourage people to use public transport or active travel options (e.g. walking) instead.

Electrical charging infrastructure will be expanded in the community and at home.



Only 56% of people across all the engagement strands are positive about the visions for transport and travel.

Although, 28% are on the fence and neutral. Yet, 16% felt negatively about the vision which could be a potential barrier to reaching Net Zero Carbon.

Base: 864



56%

POSITIVE



28%

NEUTRAL



16%

NEGATIVE



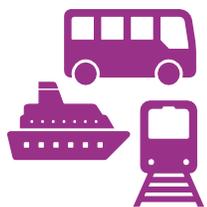
A number of concerns and barriers were put forward in relation to the visions around our transport and travel.



In relation to **electric cars**, there are **concerns about the cost** (upfront and ongoing costs) being prohibitive for many, and **practical concerns around charging such vehicles** (e.g. the coverage of the charging network, being able to charge at home, and having set hours to charge). Some felt there would be **increased inequality** as those unable to afford such an option would be left to pay increasing costs for petrol and diesel on their current cars, or be forced out of owning a private vehicle.



In addition, there were also concerns around the **mileage range** of these vehicles, and potential knock on **negative consequences of the production of such vehicles**, and their waste once used, and where the electricity to charge these will come from.



Turning to other forms of transport, there are concerns as many currently feel the **public transport and active travel networks are poor and insufficient**. There are areas of the City Region not currently part of the public network, and where there is coverage some consider it insufficient for the times people require, and ticket options are considered disjointed across providers and expensive.

Other concerns or worries raised included the **impact of the changes on elderly or disabled** travellers and **general safety** of public transport and active travel.



Additionally, many feel that the **behavioural and aspirational nature of private transport** (e.g. the convenience of cars) could be a barrier to these visions, along with seemingly **contradictory (non-green) decisions** being made (e.g. the building of new roads).



Improving the coverage and frequency of public transport and active travel, and integrating it more (including the **ticket system**), alongside **bring costs of tickets down**, are seen as key solutions to some of the barriers raised.



In addition, **improving the charging network** for electric vehicles, including finding solutions for practical issues for people charging outside their homes, and offering **financial support** to help people afford to switch are solutions to some of the other barriers raised around travel and transport.

Furthermore, **consulting** particularly with elderly and disabled individuals could help overcome some barriers. **Improving planning** to consider multiple modes of transport options, **investing in renewable energy** sources to improve the electric grid and find other solutions to electric cars, generally **reducing car use, scrapping seemingly contradictory projects** (e.g. the building of new roads), **nationalising transport**, and offering **education and training** (e.g. cycle training, and general knowledge about options and changes), are all further potential solutions to help combat some for the potential barriers around reaching Net Zero Carbon in relation to travel.



Net Zero Carbon – In Our Neighbourhoods

The pandemic has highlighted more than ever before the importance of our green spaces. Not only are they crucial to our mental and physical health, they also help capture carbon emitted into the atmosphere and improve air quality. Enhancing our green spaces will similarly improve biodiversity, which is important to sustain and improve our ecosystem.

Food will also be grown and sold locally, reducing the need for produce to travel long distances. Our diet will change, as we eat less meat and move towards more plant-based foods, which crucially many of us could grow at home.



Only 53% of people across all the engagement strands are positive about the visions for our neighbourhoods.

Although, 32% are on the fence and neutral, 15% felt negatively about the vision which again could be a potential barrier to reaching Net Zero Carbon.

Base: 792



53%

POSITIVE



32%

NEUTRAL



15%

NEGATIVE



A number of concerns and barriers were put forward in relation to the visions around our neighbourhoods, including lack of **space to grow food**, potential **price increases**, cost implications, potential **increases in inequality**, **knowledge** and education gaps, and potential **behavioural barriers** such as not wanting to change diets or grow food, certain **supermarket practices**, and a tendency towards **convenience**.



In the Commonplace engagement 28% of the responses were from people in Sefton. One of the biggest concerns put forward in the Commonplace engagement was around **contradictory behaviour and decisions from decision makers**. For example, talk of going green whilst the Rimrose Valley road project still goes ahead. This potentially is an issue that needs to be publicly addressed as the contradiction could be a barrier to bringing people on board for the journey to Net Zero.

For those in the **youth survey** there is also a concern about what **impact these changes will have on their future choices** (e.g. of what they will be able to eat).



Solutions put forward including:



- **Legislation** to stop certain practices in supermarkets
- **Education** around growing food
- General **communication and messaging**
- **Protecting** and **increasing green spaces**
- Creating **more land for growing food**
- **Researching all options for energy** including potential positives and negative impacts
- **Finance** to support changes



Net Zero Carbon – In the Workplace

By 2040, many more office workers will work from home for at least part of the week, reducing their need to travel, benefitting their family lives. Local businesses will thrive as they are more accessible to people. Every home is connected to fast digital networks which help to connect people and services, reducing the need to work at an office. Certain jobs, e.g. those in heavily polluting industries, will either no longer exist in the same way or will be done differently to how they're done today. There will be new types of jobs linked to the greener way we will all be living and there will be retraining allowing people to take advantage of these new opportunities.



Under half (48%) of people across all the engagement strands are positive about the visions for in the workplace.

1 in 5 (20%) felt negatively about the vision which could be a potential barrier to reaching Net Zero Carbon. Although 32% are neutral so could potential be swayed to more positive feelings.

Base: 729



48%

POSITIVE



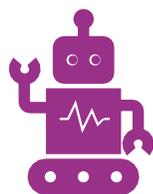
32%

NEUTRAL



20%

NEGATIVE



A number of concerns and barriers were put forward in relation to the vision including concerns that the changes will have **negative impacts**, such as, **increased mental health issues** for people working from home, **inequality** with **older workers potentially being left out** of training and those who are **digitally excluded missing out** on opportunities. **Job losses** in general as organisations close or through **automation** and **off shoring**, and business districts and heavy office locations' local economies collapsing with fewer customers to support them.

It was also felt there are **practical considerations** that could be barriers, such as people having the **space to work from home** or being able to afford an increase in domestic energy use, or **employers' opinions** on the matter.



The **cost of retraining** may also be a barrier to individuals or organisations, particularly smaller ones; and there are tight timescales to retrain those required.

For those in the **youth research** there are also worries over **what skills they need to learn** and **if the jobs they are working towards will even be around** in the future.



Investing in training was seen as key alongside **clear communications** on the new opportunities, who needs retraining, when and in what so that people, young and old, can make informed decisions about their lives.

Other potential solutions include **supporting employers to make the shift** and seeing the advantages of doing so, and helping to create a balance between employer and employee needs, to mitigate some of the potential negatives of a shift to working from home.



Furthermore, **investment in improved telephone and internet coverage** is needed, and **continued investment in renewable technology and green industries** so the jobs are available.

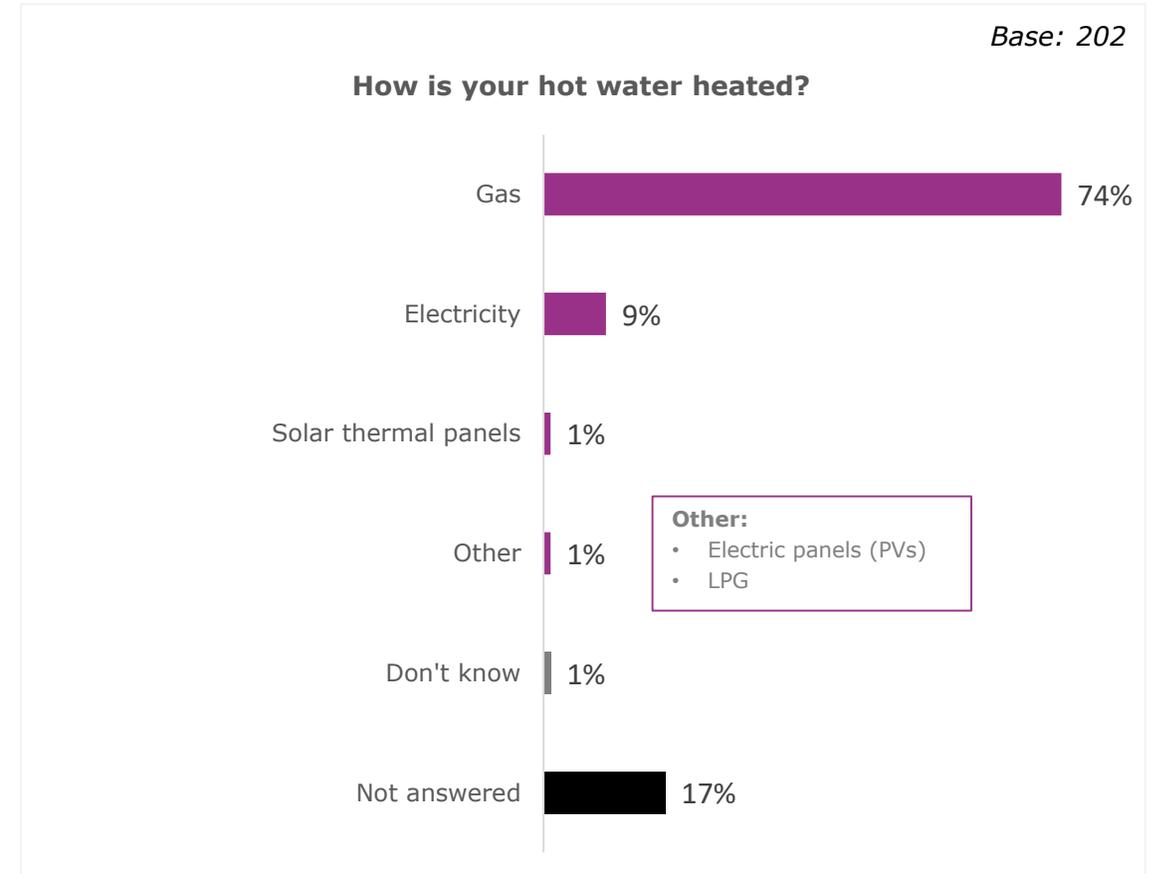
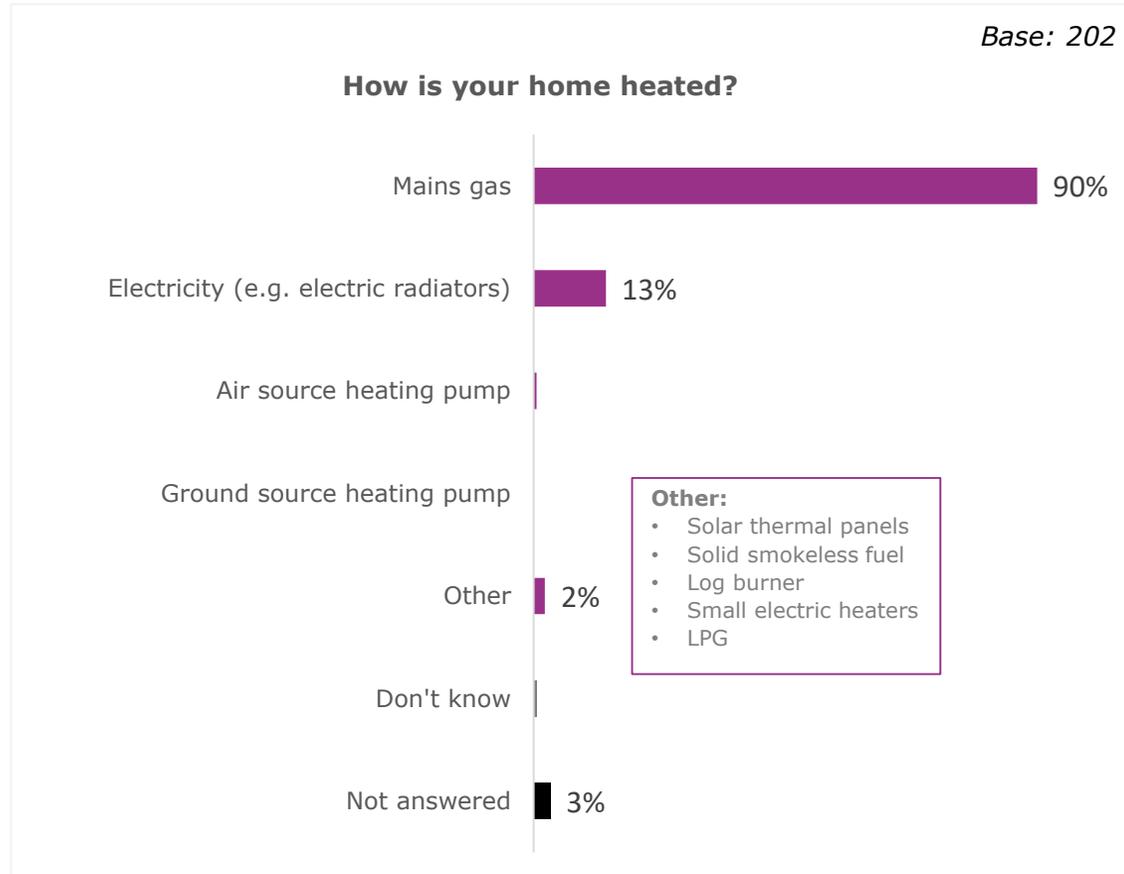
Lastly, looking into **local hubs** for working may help those who do not have the space or want to work from home.



Additional Statistics To Consider



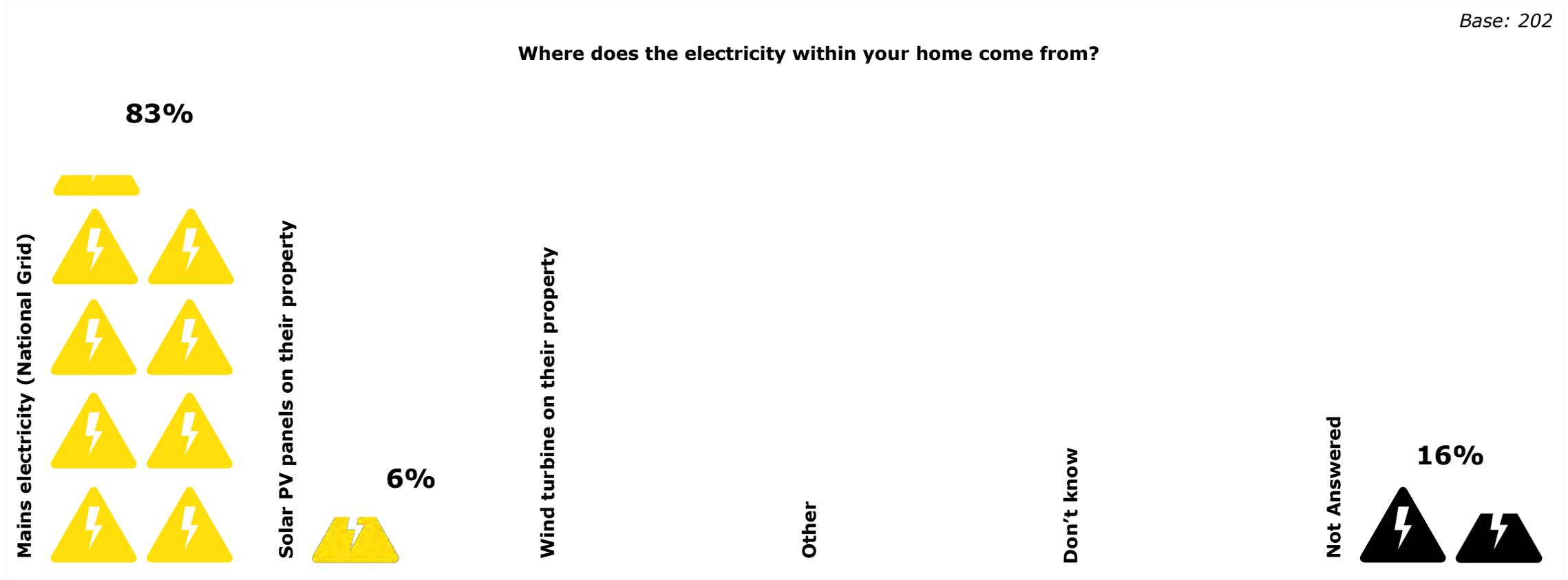
9 in 10 (90%) of the Commonplace 'Home' sample currently heat their homes with mains gas, and just under 3 in 4 (74%) use gas to heat their hot water.





83% of the Commonplace 'Home' respondents get their electricity from mains electricity (the national grid), only 6% get their electricity all or in part from solar panels on their property.

It is important to note however that some of those who get their electricity from the grid do so from providers who guarantee renewable energy sources.



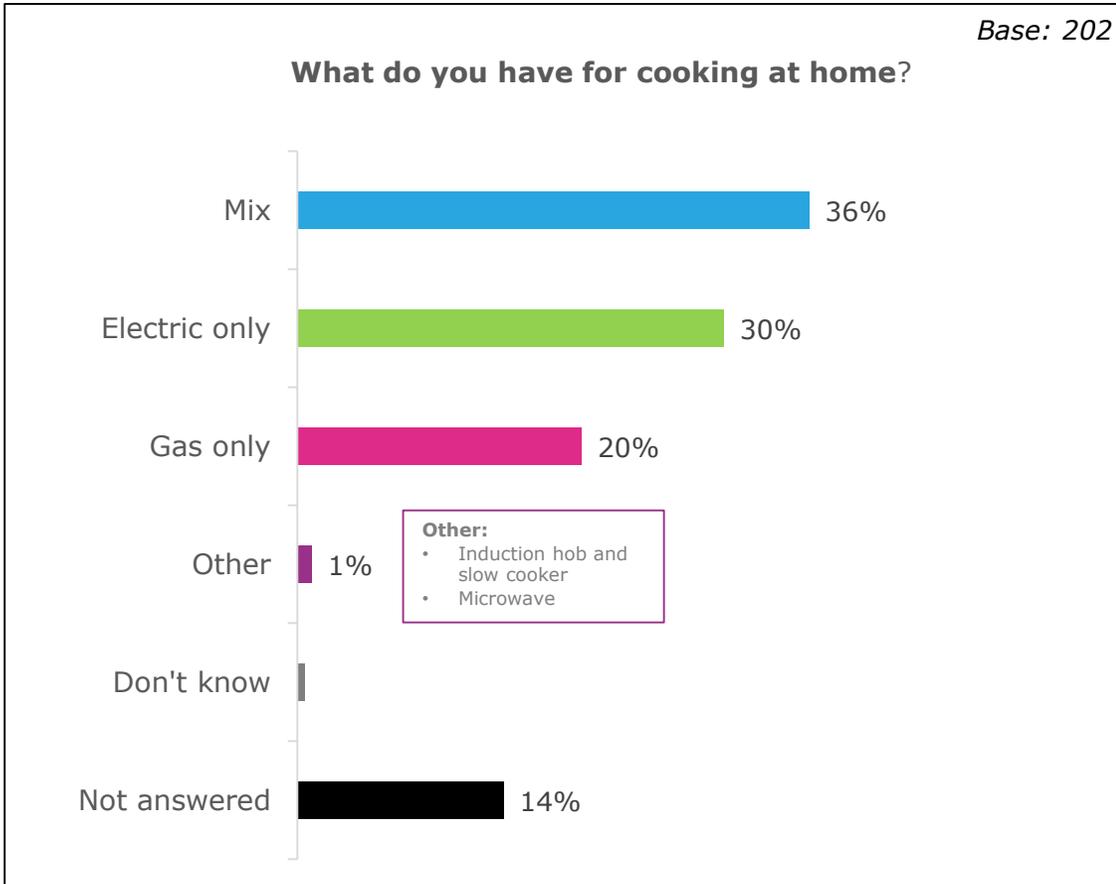


For cooking purposes, just under 2 in 5 (20%) of Commonplace 'Home' respondents only use gas compared to 3 in 10 (30%) who only use electric.

36% use a mixture of gas and electric for cooking.

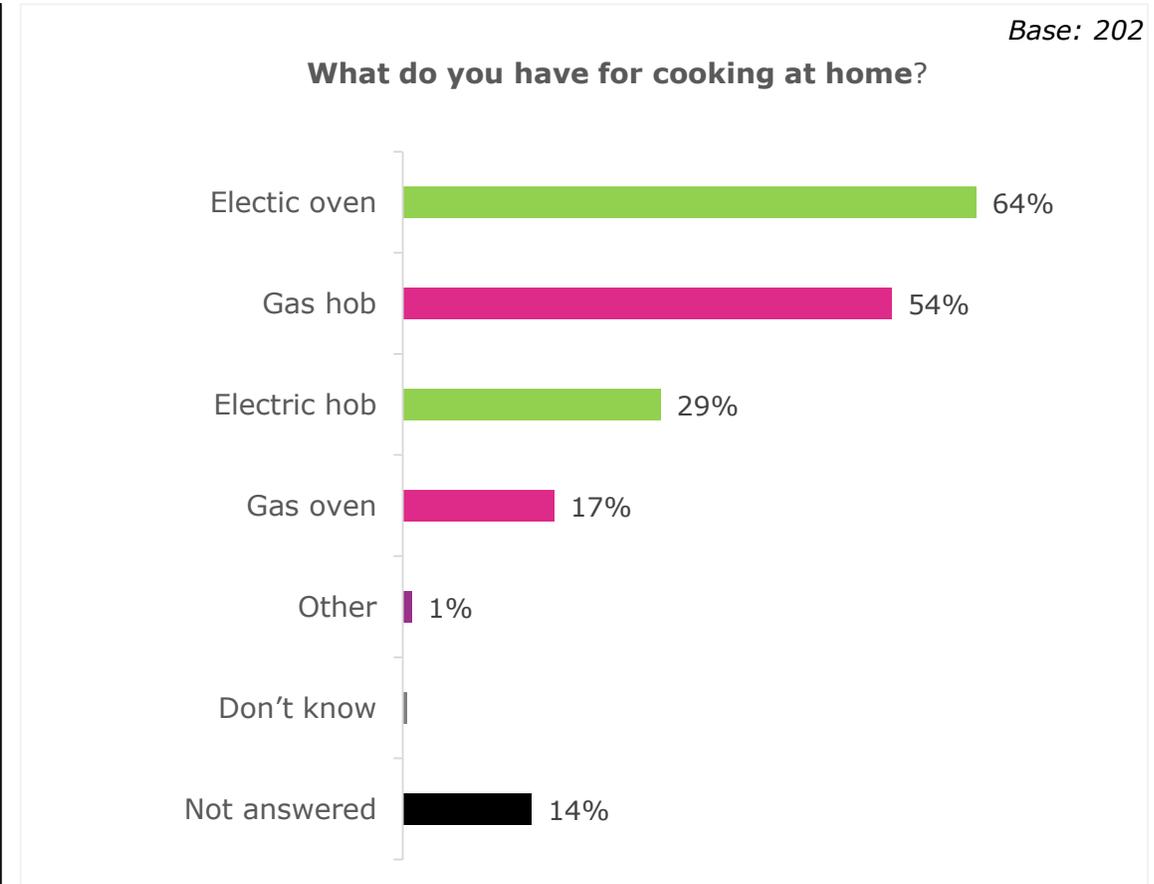
Base: 202

What do you have for cooking at home?



Base: 202

What do you have for cooking at home?

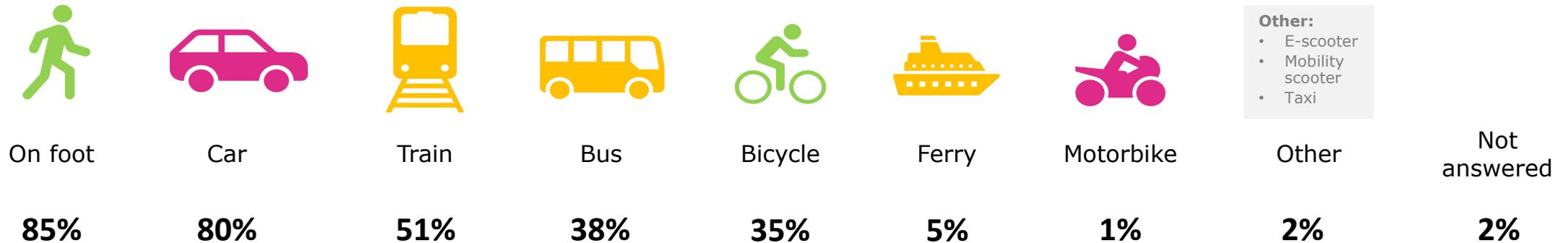




86% of those who responded to the travel section of *Commonplace*, had travelled by active travel modes (bike or on foot) in the last 4 weeks.

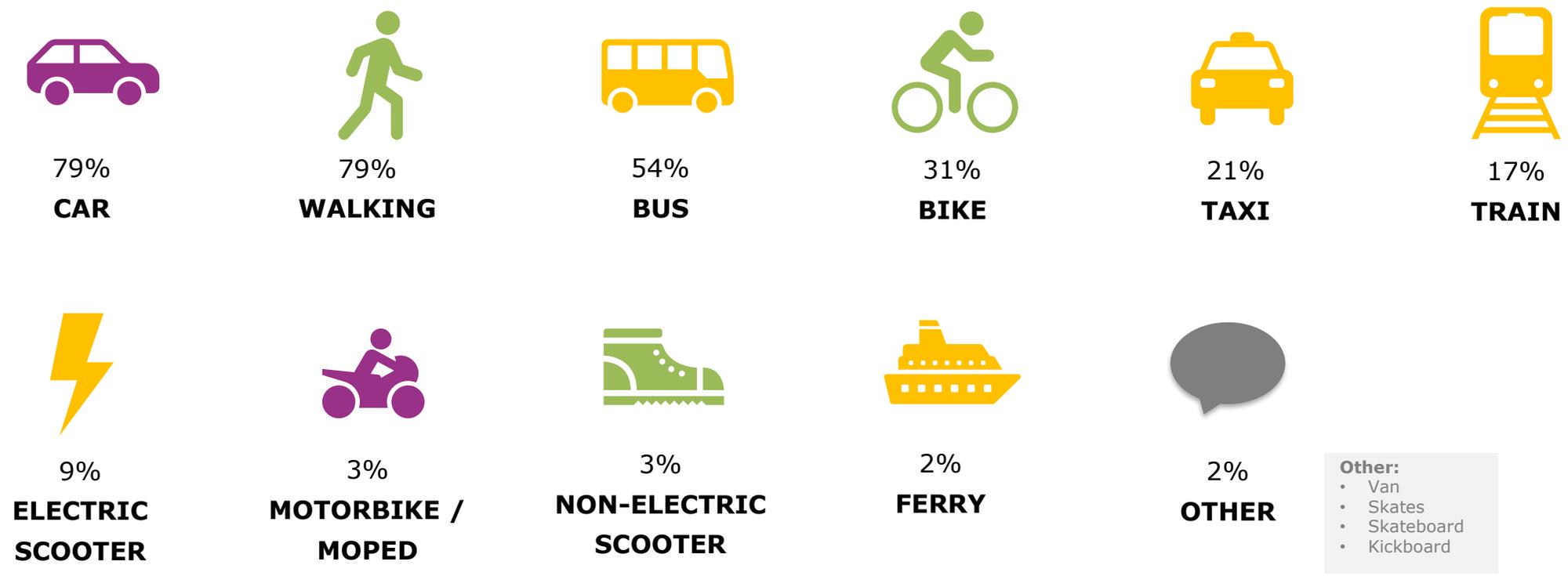
4 in 5 (80%) had used a car and/or motorbike, and 63% had used a form of public transport.

Base: 241





This is similar to the youth survey where 79% had travelled by car and 79% had walked in the past 2 weeks.

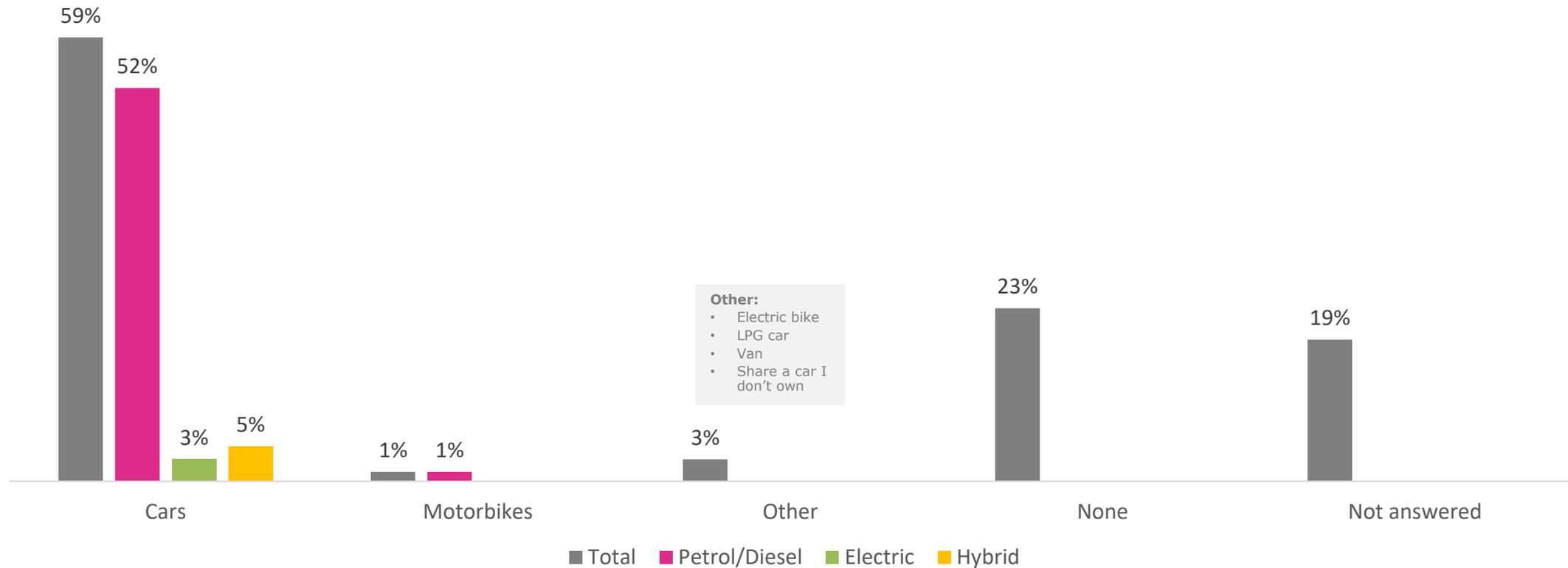


Base: 323

Of those who responded to the travel section of Commonplace, just under 3 in 5 (59%) own a car or motorbike with majority being petrol or diesel cars/motorbikes.

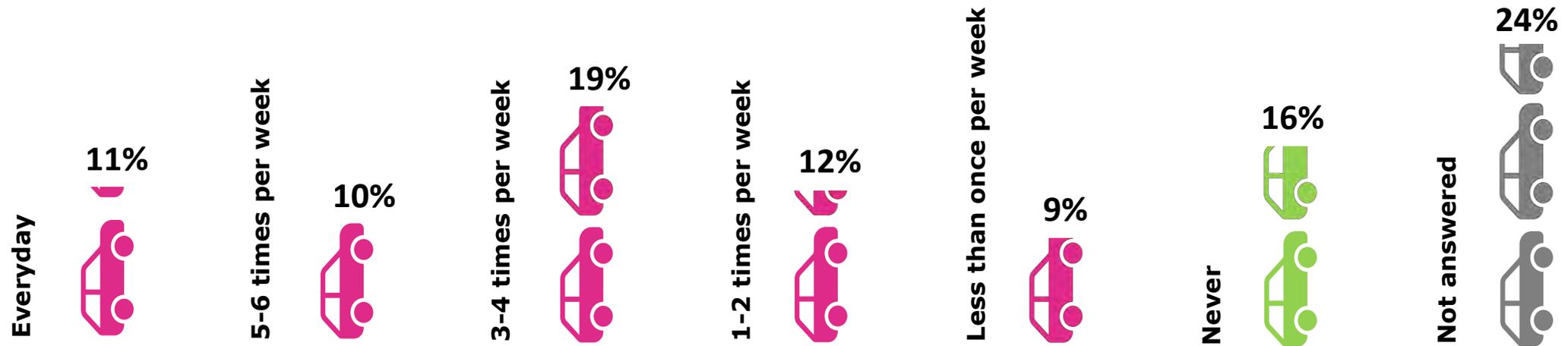
Base: 241

Car or Motorbike Ownership



Just over 1 in 10 (11%), of those who responded to the travel section of Commonplace, report to drive their car or motorbike everyday. Although 16% report to never driving.

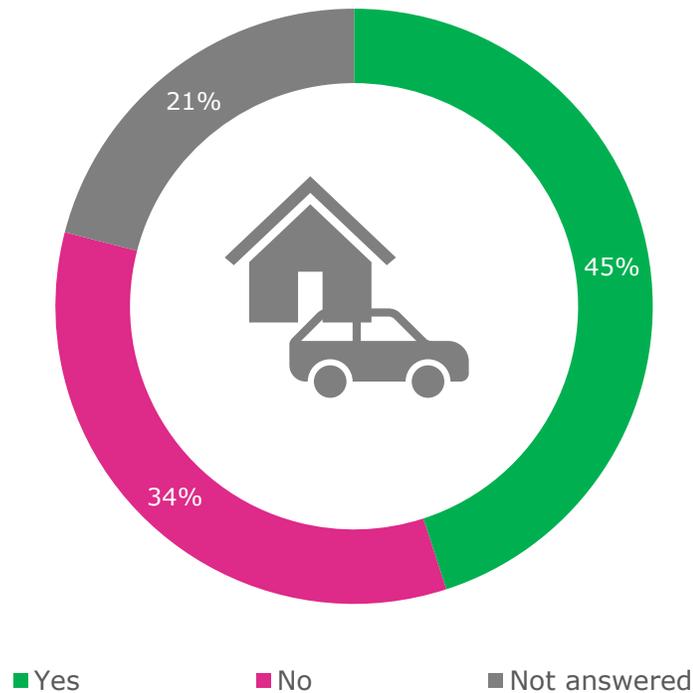
Base: 241



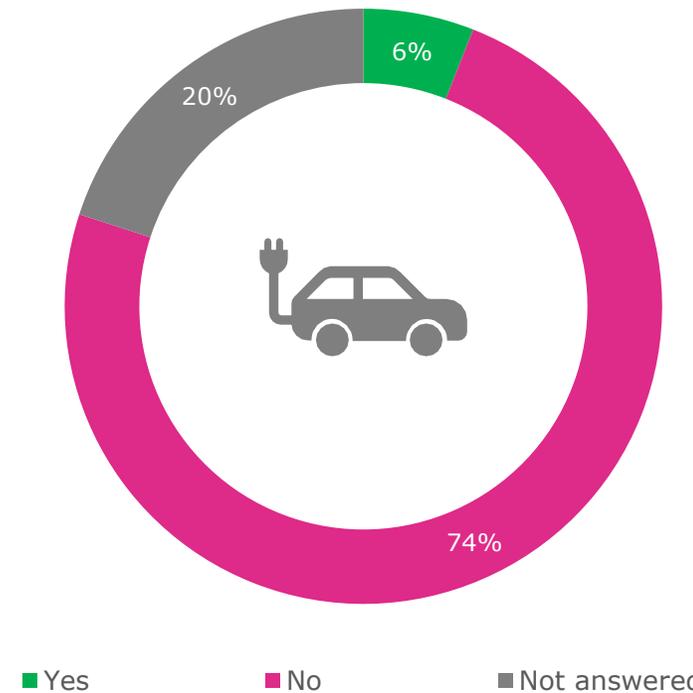
45% of the Commonplace 'travel' sample have allocated parking where they live. And, just 6% report to live in a property with an electric charging point they can use.

Base: 241

Do you live in a property with allocated parking?

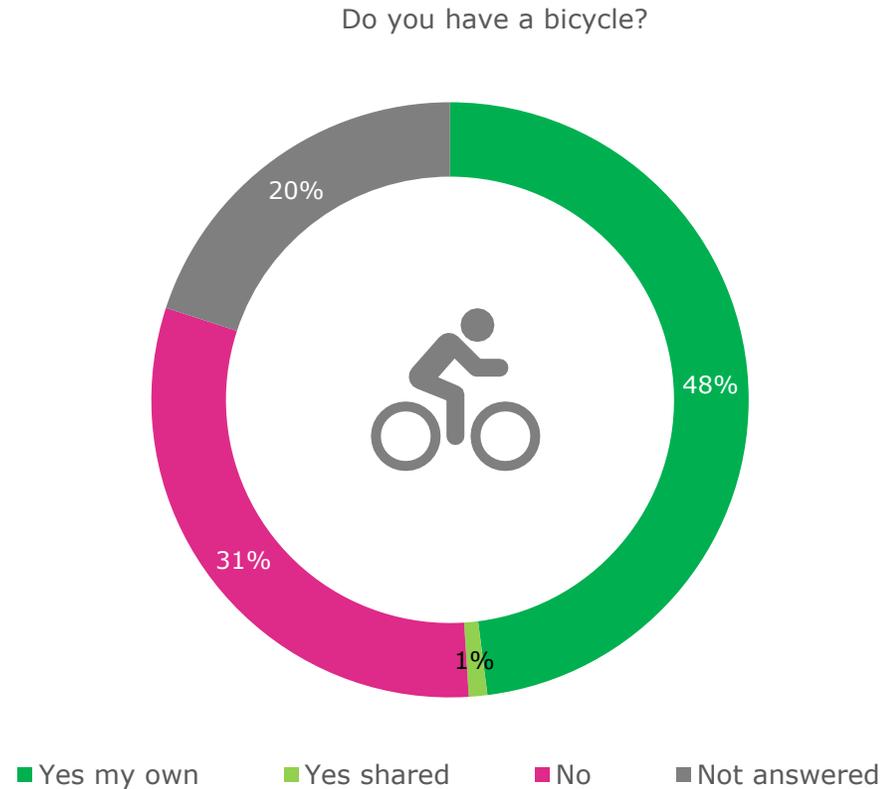


Do you live in a property with an electric charging point that you can use?



And, just under half (49%) of the Commonplace travel sample have a bicycle they own or share.

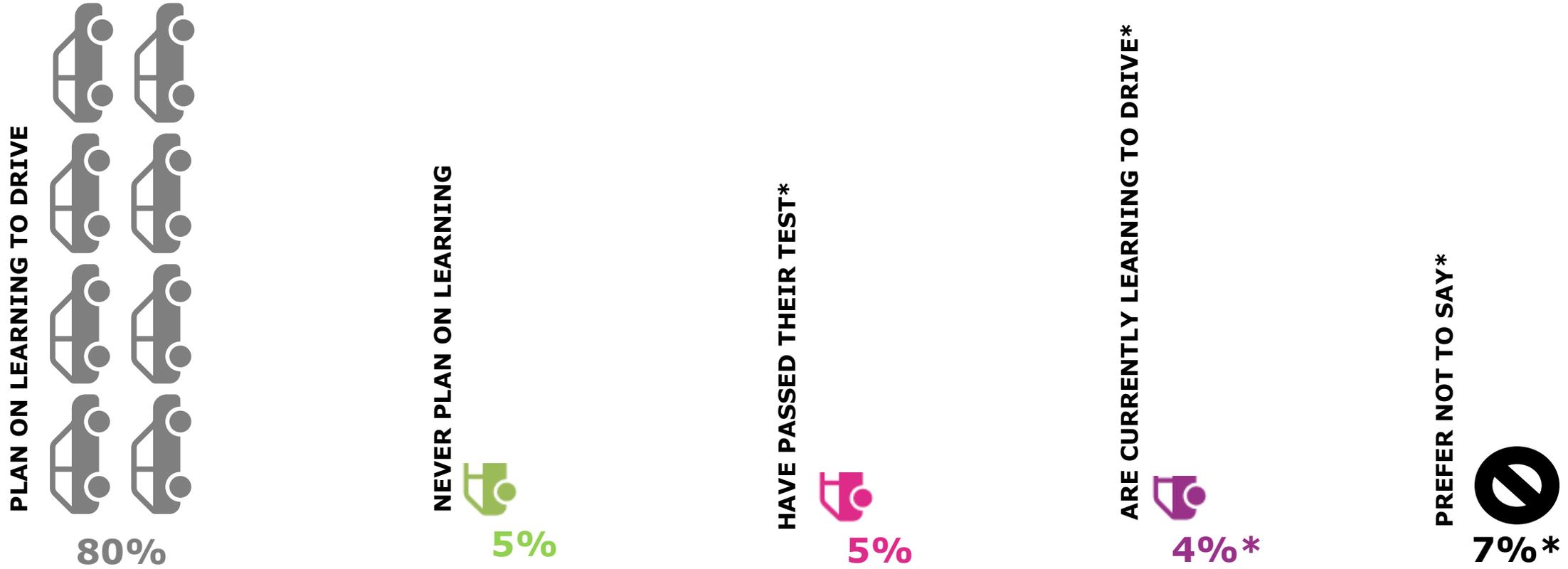
Base: 241





In the youth survey, **87%** of those not already driving or learning to drive (base: 295), stated they plan on learning to drive in the future.

Base: 323



Youth: Q8. Are you currently learning to drive a car?
**Note: 2 individuals under 17 who had reported to have passed, and 11 who reported to be currently learning have been recoded to 'prefer not to say'.*



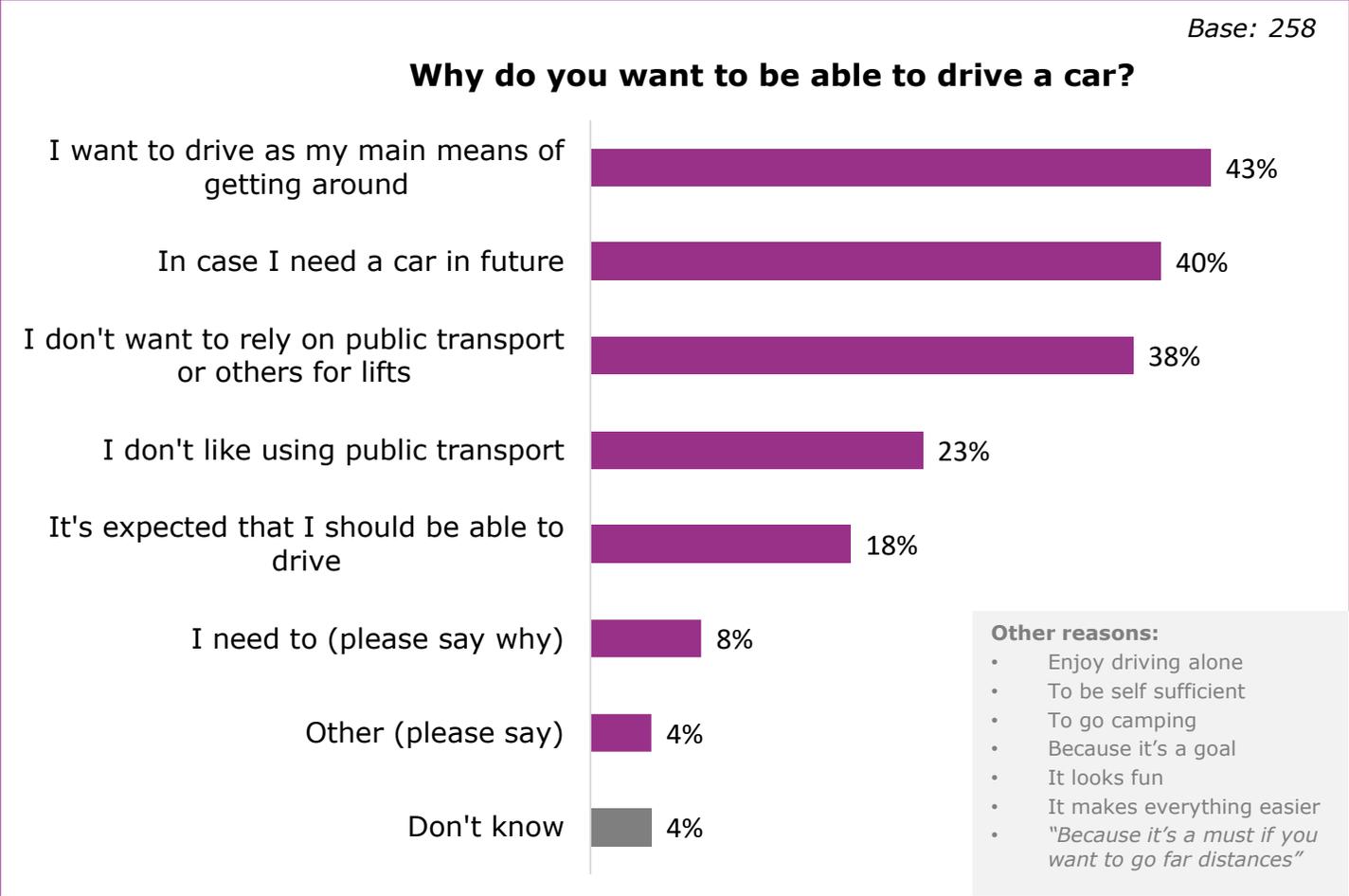
43% of those who stated they plan on learning to drive in the youth survey, want to do so, so driving can be their main means of getting around.

- Of the 258 who plan on learning to drive in the future the 3 biggest reasons are:
 - That they want to drive as their main means of getting around (43%, n=112)
 - They want to learn in case they need a car in the future (40%, n=103)
 - They don't want to rely on public transport (38%, n=98)
- For those that report a 'need to drive' reasons given including carer responsibilities, lack of suitable public transport routes, possible emergencies, medical reasons, increased job opportunities, and because they want to.

"My mother is housebound and cannot go out alone, not even to the shops. I am her carer and I plan to be able to drive her around for medical needs." – Liverpool, 14-15yr old, Female

"Because I have £20,000 in my bank account to buy a car for my 17th birthday off my grandparents." – St Helens, 12-13yr old, Female

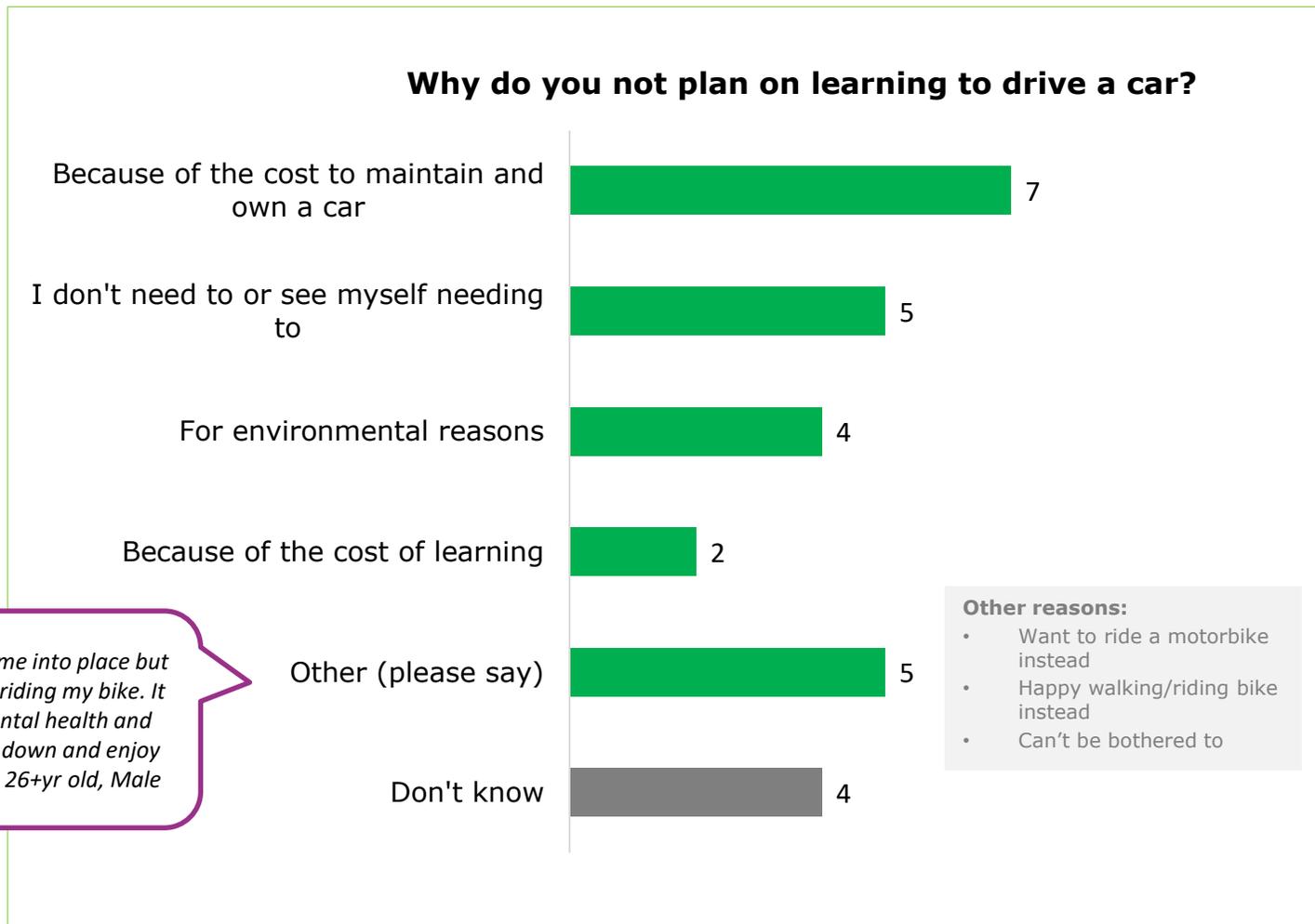
"To increase my "work" area in the future so the range of where I can get a job." – Knowsley, 14-15yr old, Male





For the 16 who don't plan on driving, the main reasons are cost of maintenance and not seeing a need to drive.

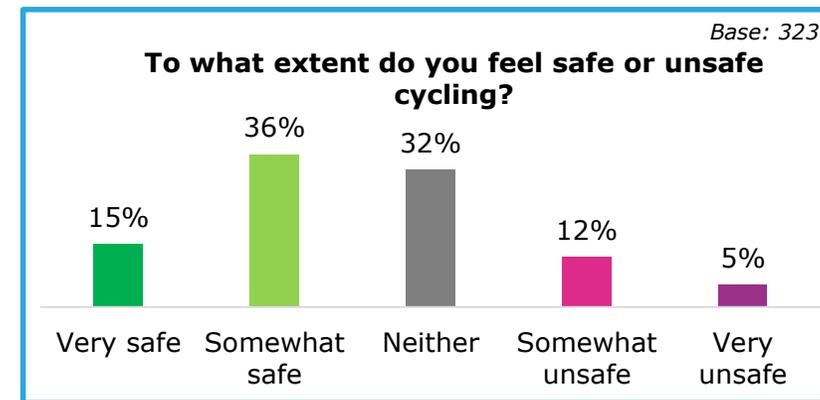
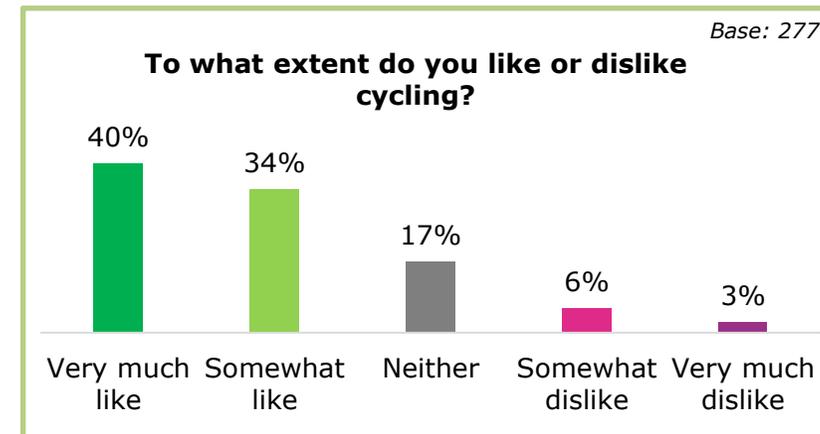
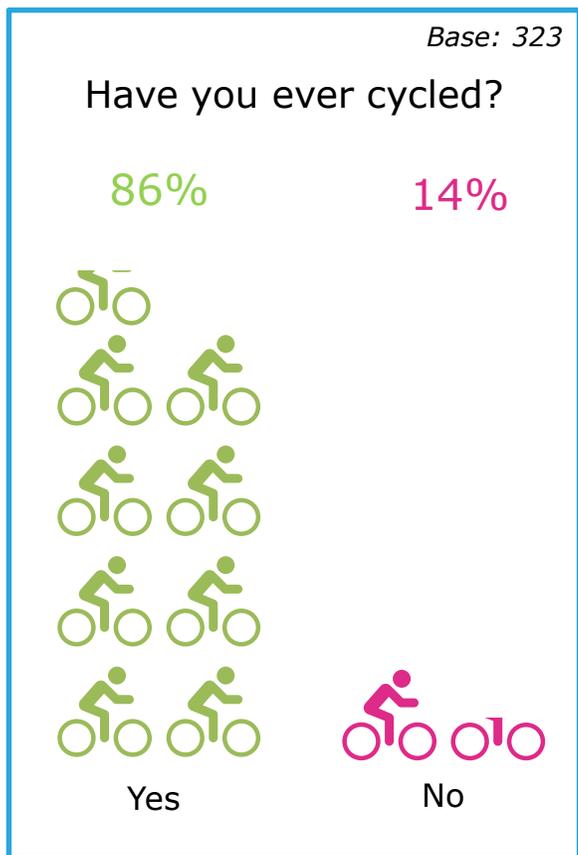
- Of the 16 who don't plan on learning to drive in the future the 2 biggest reasons are:
 - Because of the cost to maintain and own a car (n=7)
 - And, they don't need to or see themselves needing to (n=5)





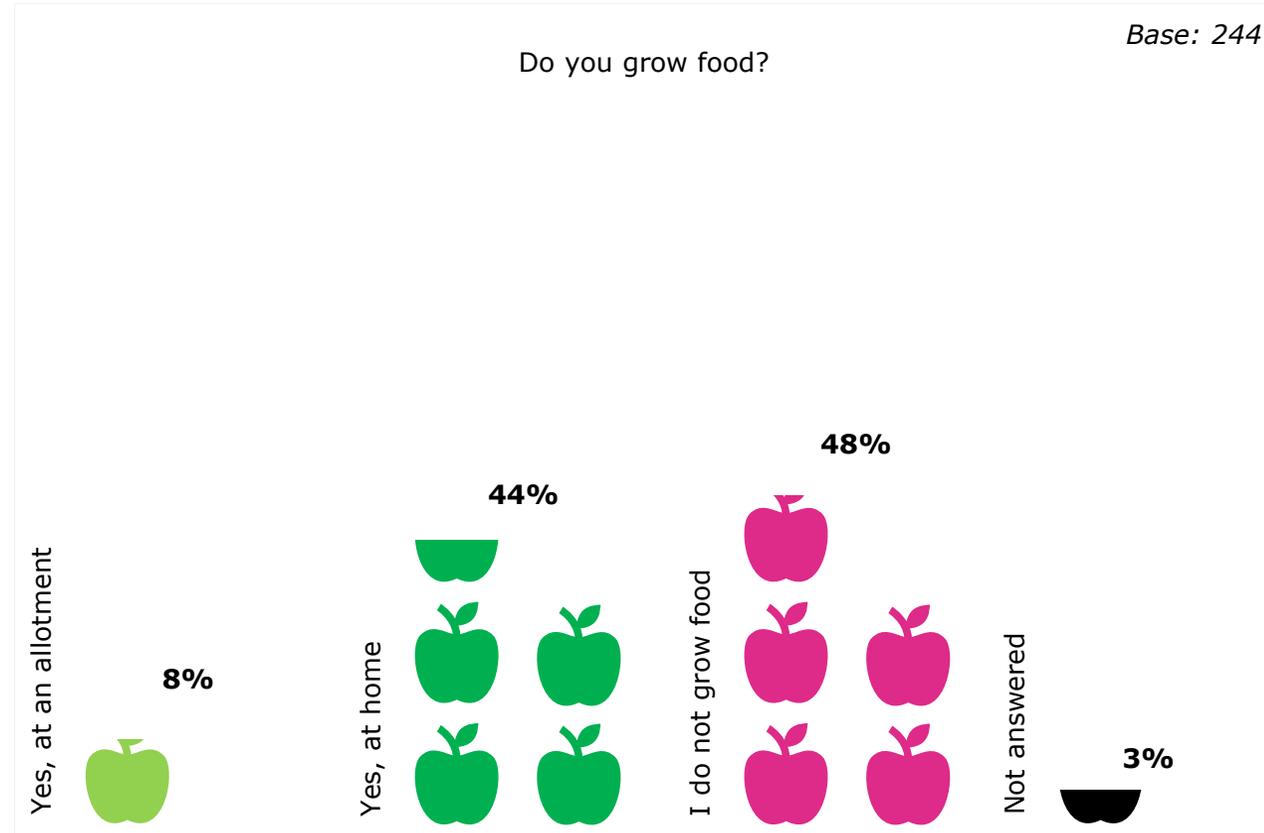
86% who responded to the youth survey have cycled at some point in their life. Of those (base: 277), 3 in 4 (75%) like cycling.

Of all the respondents, only 15% feel very safe cycling. This raises only slightly 16% (base: 277) for those who have cycled at some point.





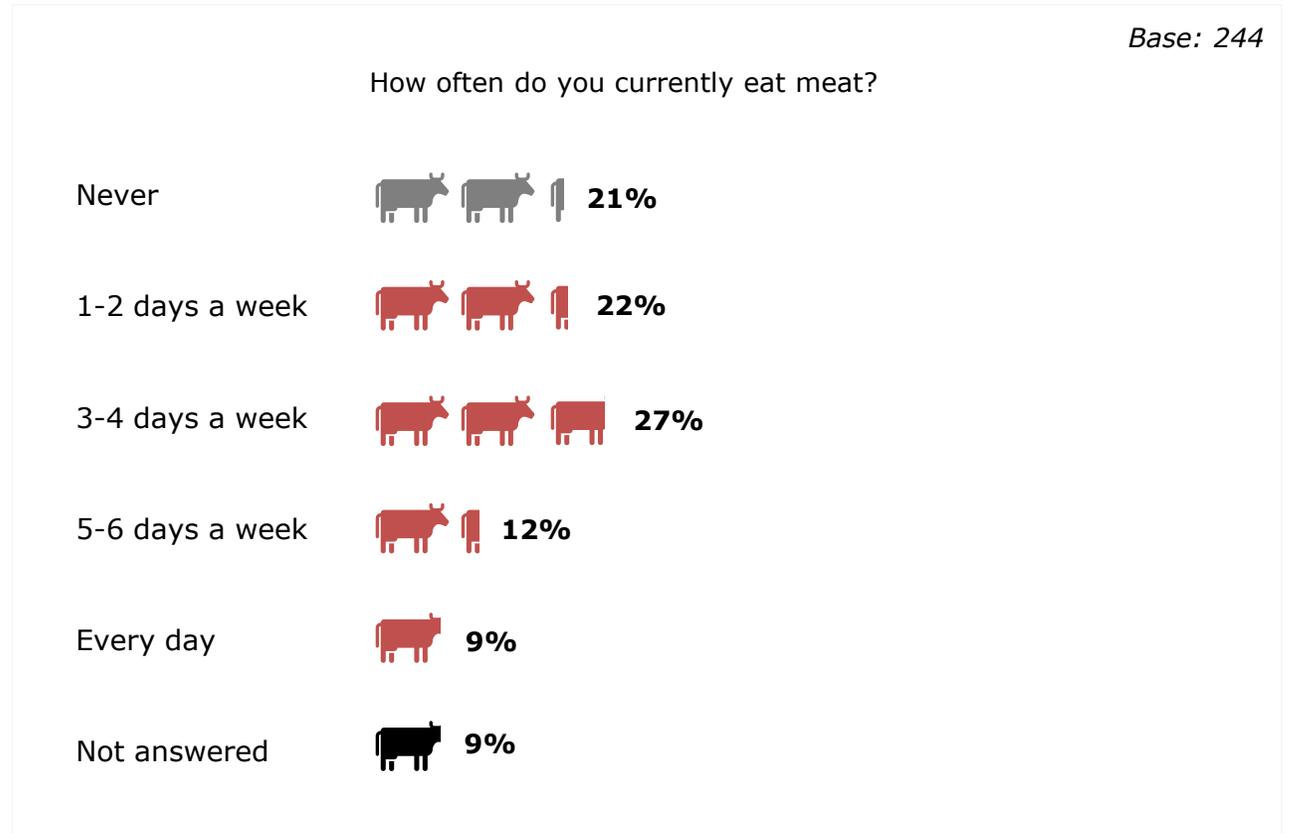
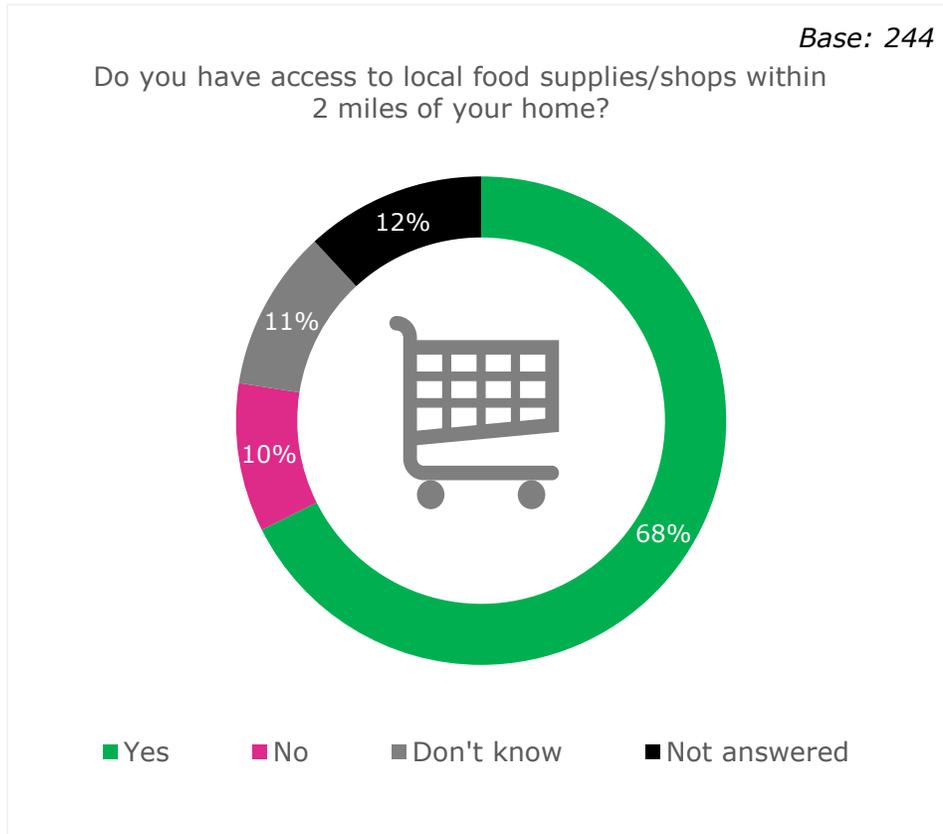
Of those who responded to the Neighbourhood section of Commonplace, just under half (49%) currently grow their own food in some capacity.





68% of the neighbourhood respondents on Commonplace have access to local food supplies or shops within 2 miles of their home, and 70% eat meat.

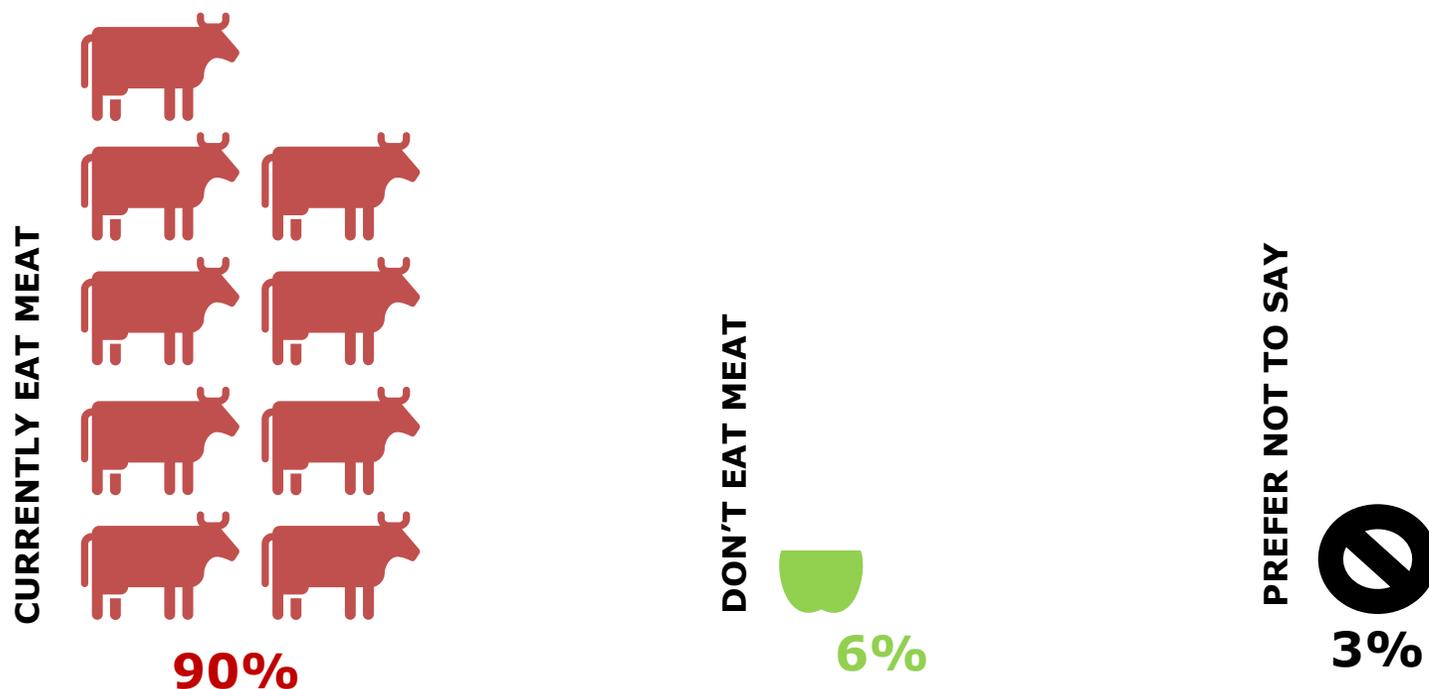
Although, only 9% report as eating meat daily.



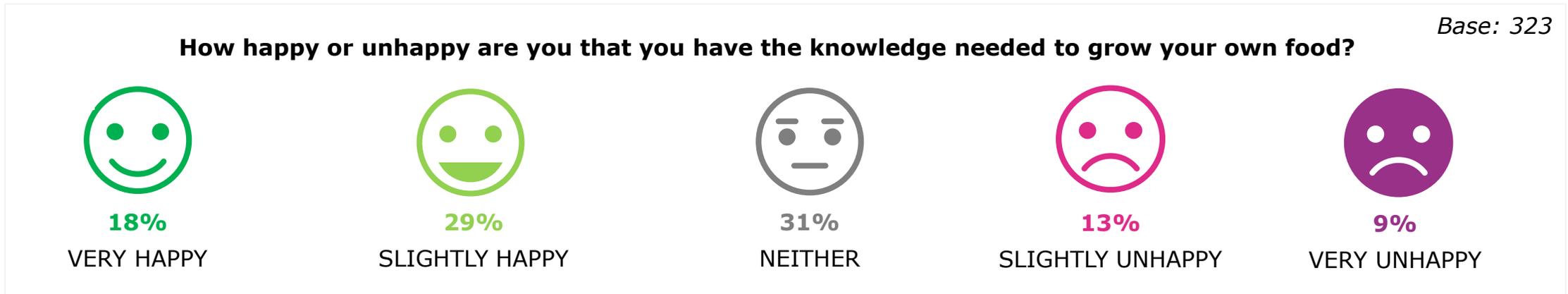
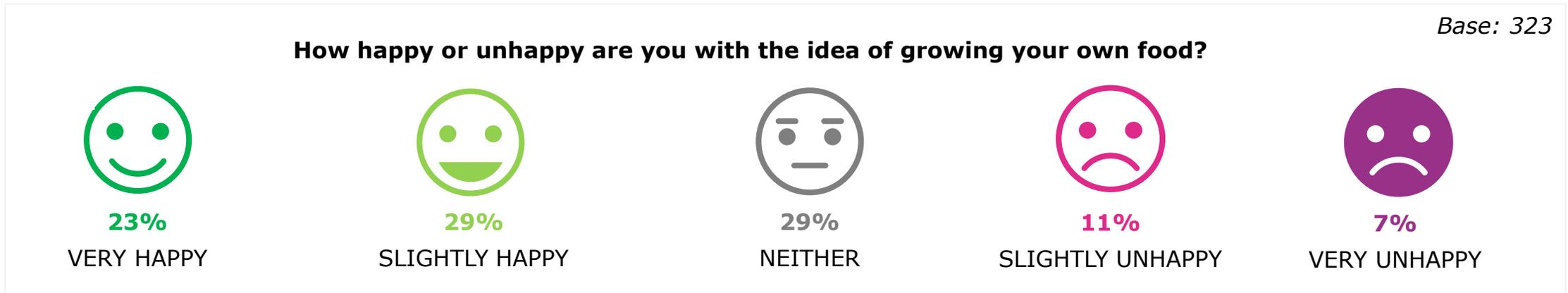


+20% more report to eating meat in the youth survey (90%).

Base: 323



53% of the youth survey respondents are happy with the idea of growing their own food in the future. With 48% feeling happy they have the knowledge to grow their own food.





Only 34% of the youth survey respondents currently grow any food. And, only 34% think they will have the space to grow their own food in the future.





Conclusions & Recommendations

Bringing all the findings together there are some key takeaways which stand out....



- 1. In the main people feel action is needed, however they are uncertain about what to do.** The engagement and research allowed space for people to ask questions (these are grouped by theme in the appendix). It would be our recommendation to run a programme of communications responding to these. This could be aided via the Commonplace platform if deemed suitable.
- 2. Feelings of positivity to the visions could be higher.** The 9% to 20% negative feeling, depending on the vision, could be a potential barrier to reaching Net Zero Carbon. Taking time to read through the research and understand the concerns and barriers people raised could help to consider work streams, policies, and next steps to help improve the visions and support people to view these more positively.
- 3. Finance could be quite a large potential barrier to many.** Throughout all sections, some more than others, the financial implications of these changes are listed as barriers quite often. On their own some of the costs are expensive but all together that is even more expensive or prohibitive to people. Prioritisation of what may make the biggest difference may be useful alongside investigating financial support solutions or ways to decrease the cost of these changes. Also communicating the cost of changes and supplying information to help people make an informed decision may be useful.



- 4. Seemingly contradictory decision making could harm the success of Net Zero Carbon.** This came out particularly in the Commonplace engagement where a number of people raised concerns and upset at plans such as the expansion of the airport and planned road through Rimrose Valley. People are aware of the environmental impact of these decisions, and question why on the one hand the LCRCA and others talk of being green and ask people to make big changes in their life, whilst on the other hand, in their eyes, destroying their greenspaces and encouraging more polluting travel. This fuels a sense of general mistrust in authority which was also evident in some of the responses both in the surveys and workshops. If Net Zero is to be a success we need to convince people that the journey is the correct one and be honest with them to bring them on the journey. There are obviously sensitive overlapping politics and prioritise to consider but if this is not addressed it could be a big stumbling block for the success of Net Zero Carbon.
- 5. Knowledge is key.** In a number of areas there was also calls for more education and communication, for example around specific topics such as how to grow food or cycle safety information, but also more generally about the plans and what options people have. People seem to want to do something but it is not always clear what, when, and how. This particularly came out in the youth survey where a concern that came up again and again was about what impact this would have on their future life choices (e.g. where to live, what to eat, what to do as a job). The more information we can provide in an easily accessible manner, possibly even with a support function to allow more questions to be asked could help people to make informed decisions about what to do, when and how.



6. Human behaviour could be a barrier. As a society we have become quite comfortable and used to convenience. This makes sense as evolutionary we look to conserve energy. Yet, a number of these changes challenge some of this convenience we have become accustomed to and therefore work may be needed to shift behaviours, including business and organisational behaviours. The first step would be pulling out where these behavioural barriers may be, such as around transport and a preference for personal cars (see the youth survey results around the large number who plan on driving in the future), and again prioritisation may be needed to work out which barriers being changed could have the most impact, or may ricochet and cause other barriers to change to.

7. We need to be careful of rushing into changes that could potentially be worse for the environment. Some concerns were raised about potential negative impacts of the changes suggested. For example, people have heard that the production of electric cars, particularly the batteries, can be quite harmful. People also had questions over what type of hydrogen we had planned as some can be worse than others (Blue vs Green vs Grey). Additionally, turbines in the sea were noted to create dead zones. Whilst many understand the need to act and quickly, caution may be needed to make sure we don't inadvertently make things worse or swap one bad for another. Where we do research, or already know the answers to questions, we could look into sharing these responses to help alleviate concerns and worries related to this.



8. A 'one size fits all approach' may not be the right approach. We are a city region of 1.6million people all with different hopes and dreams, likes and dislikes, struggles, and day to day lives. What may work for a middle class 9-5 office worker with a semi detached new build home with driveway and sizeable garden, may not work for a shift worker in a warehouse position, or a family living in a flat with no outside space, or someone struggling to put any food on the table let alone a fair trade, locally grown, organic chicken. As we strive to be a Fairer and Greener city region we need to be careful of inadvertently causing increased inequality by not considering some of the knock on impacts of the changes we put forward. Spending time to go through this research should help, but we would recommend keeping the lines of communication open, having ongoing engagement with an array of people to avoid any blind spots we may have. A finding that came up in the travel section from a session conducted with asylum seekers highlights this quite well, they discussed how they felt the changes could lead to humanitarian disasters because if there are less air and sea travel, which is key for those escaping tyranny and war, people will be trapped in those countries. Whilst this is an extreme example it highlights quite well a blind spot that without speaking to a certain stakeholder group we may never have thought of.

Appendices

1. Youth Engagement Samples	66
2. General Population Engagement Samples	72
3. Youth Agreement Action Needed and Knowledge Levels	79
4. General Population Agreement Action Needed and Knowledge Levels	85
5. Questions or topics people would like to know more about	89

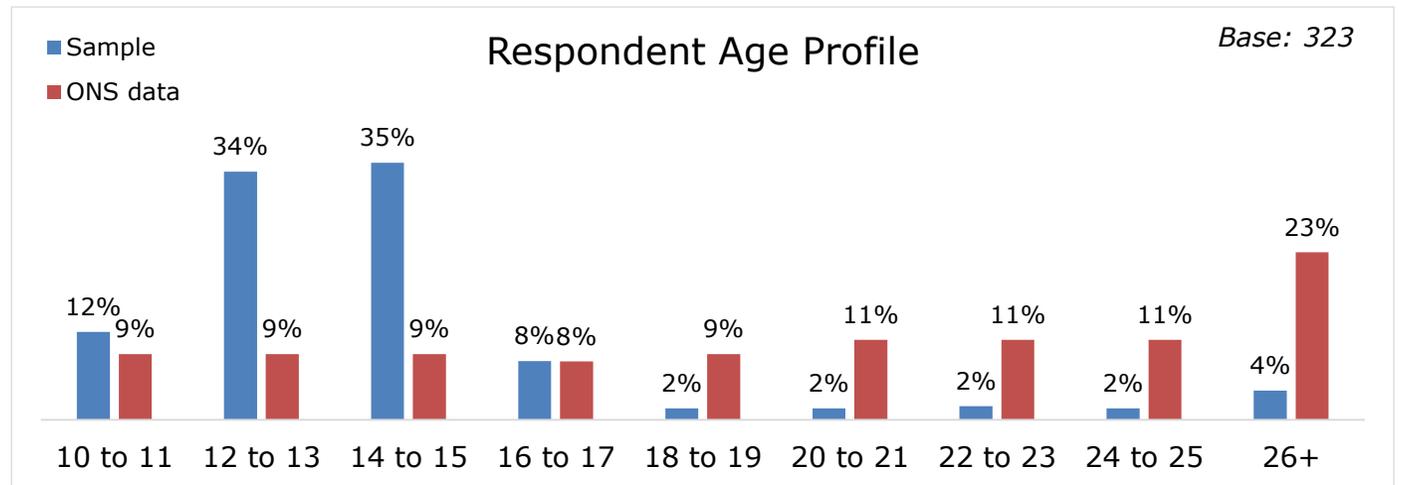
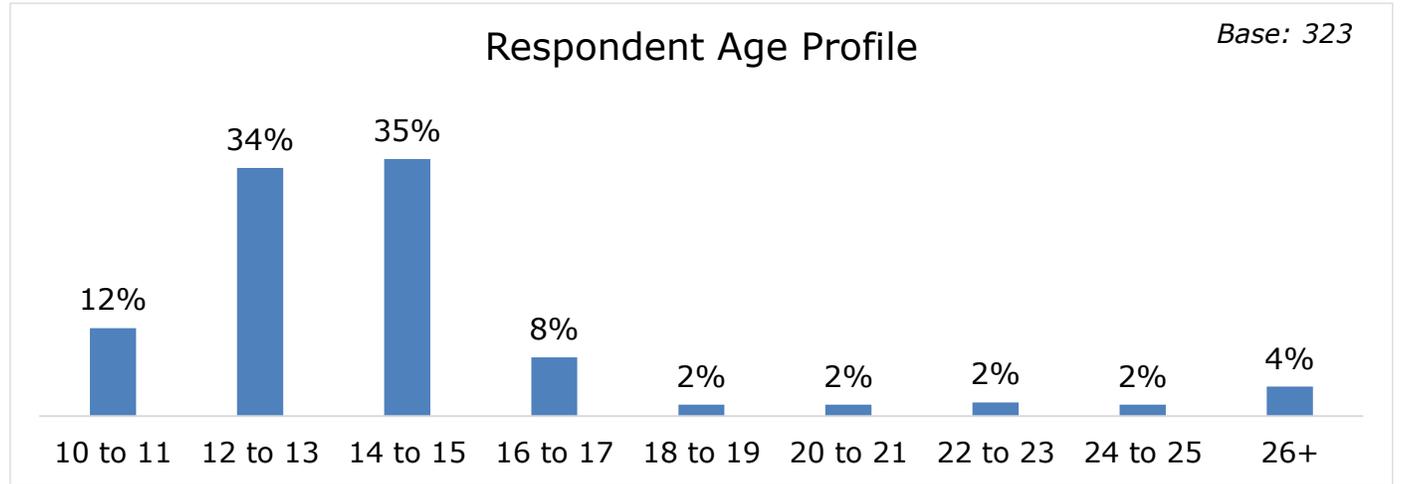


Appendix 1: Youth Engagement Samples

Survey Respondents 1/3



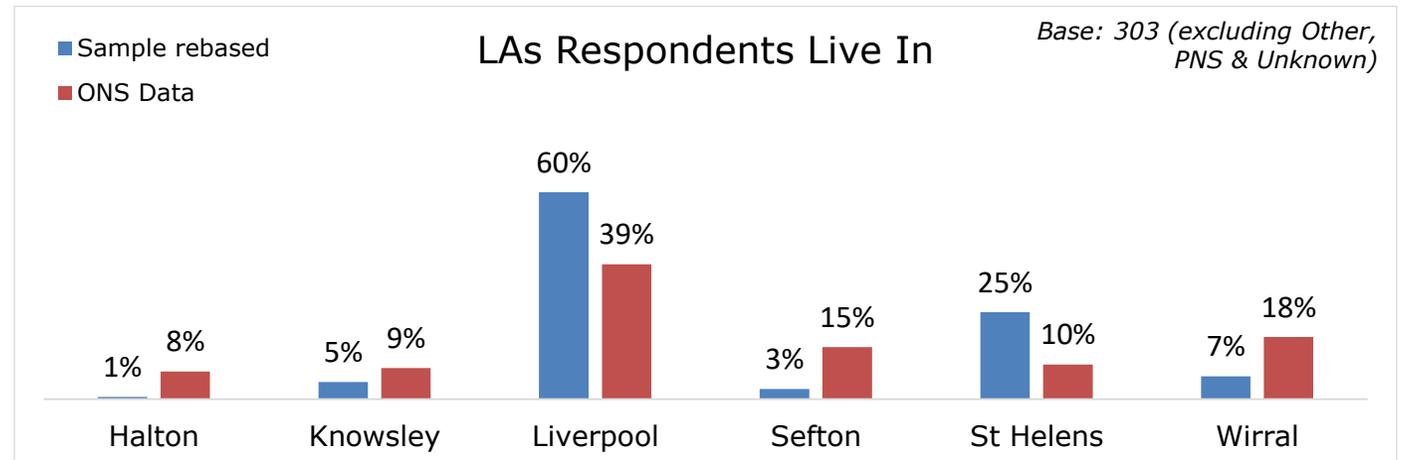
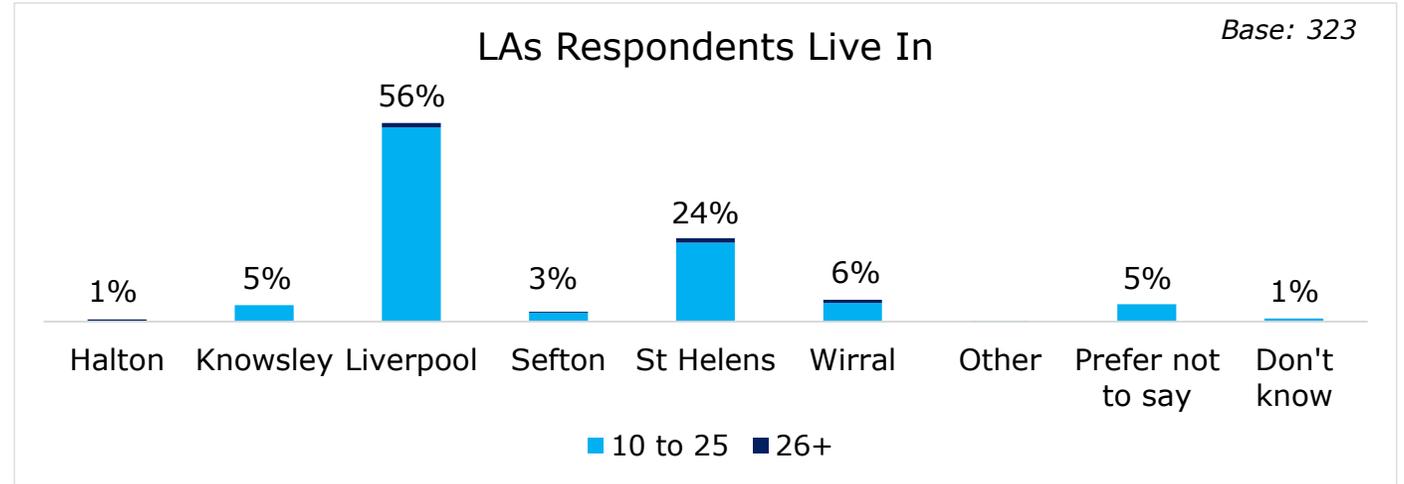
- **323 people responded** to the youth survey on Net Zero Carbon.
- Understanding the make up of the sample is important to fully interrogate the data. Who we are as individuals impacts our responses.
- **81% of the sample were under 16** years of age, with the majority (69%) aged between 12 and 15. In 2040 these individuals will be adults in their 30s. It was felt important to include a survey designed for younger residents for this reason to hear their aspirations and concerns about the changes that will be needed for the LCR to reach Net Zero by 2040.



Survey Respondents 2/3



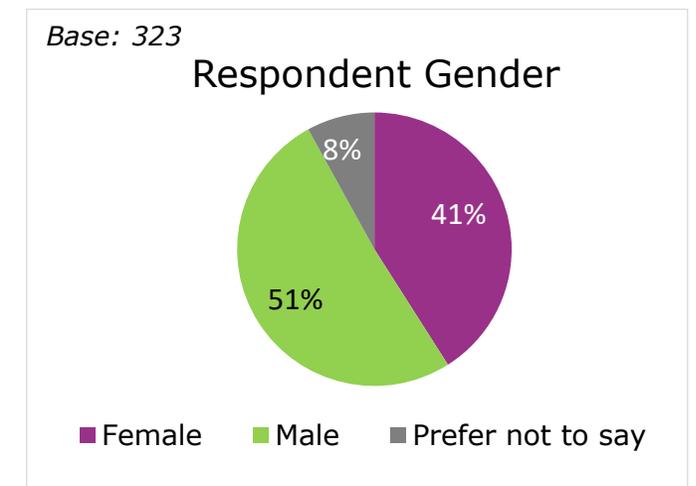
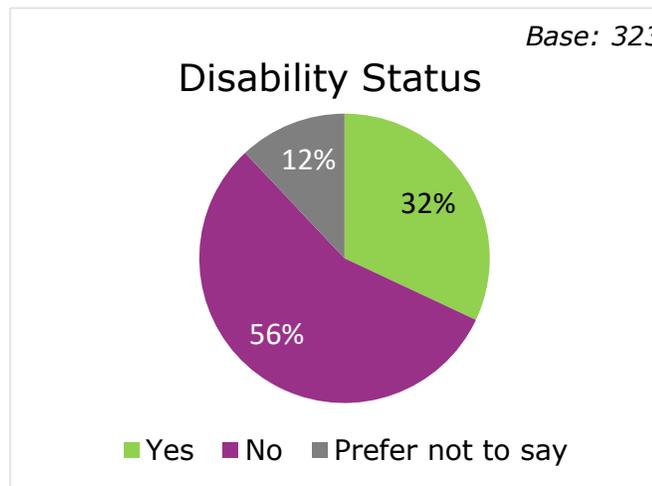
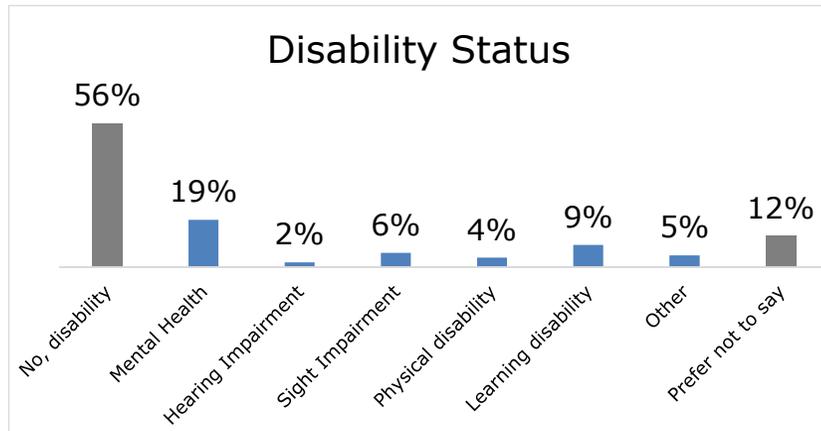
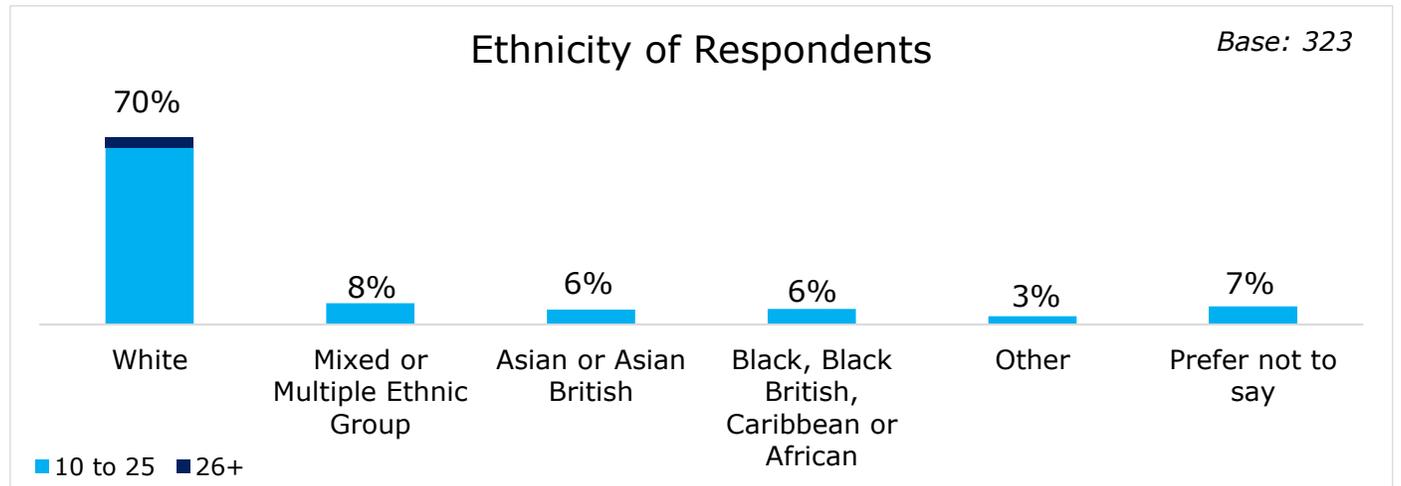
- Before rebasing we can see the majority of respondents to the youth survey were either residents of Liverpool (56%) or St Helens (24%). 6% of respondents live on the Wirral, 5% in Knowsley, 3% in Sefton, and 1% in Halton. 5% chose not to say. 5% chose not to say.
- Comparing the data to national data, the youth survey was dominated by responses from those in Liverpool (60%) and St Helens (25%), with relatively low levels of response from elsewhere. It should be noted that Liverpool represents 39% of the total proportions of young people in the Liverpool City Region.



Survey Respondents 3/3



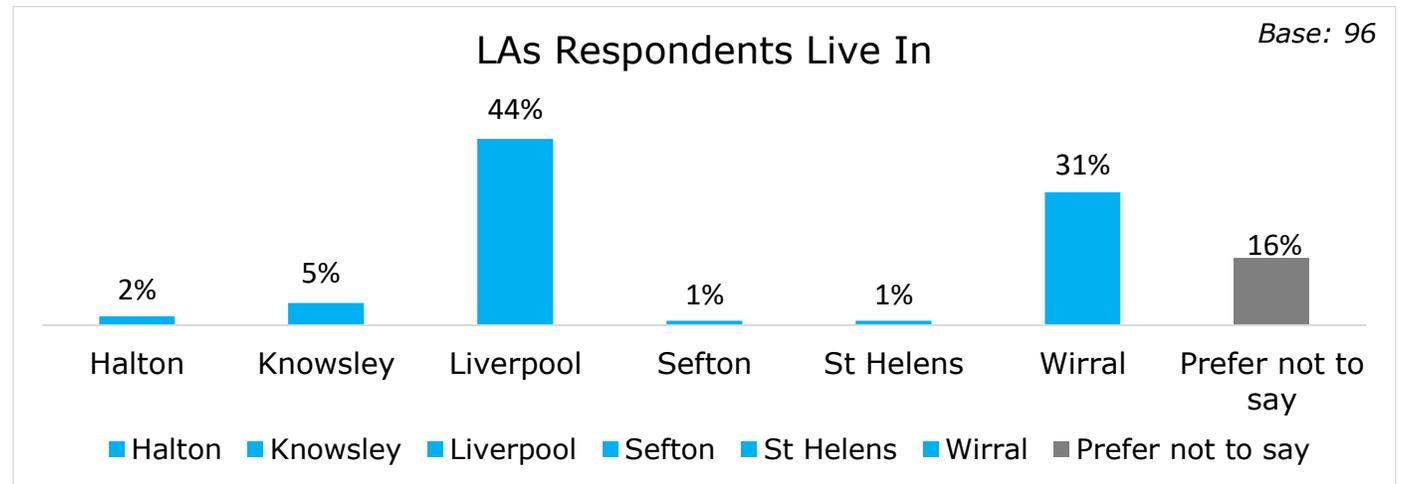
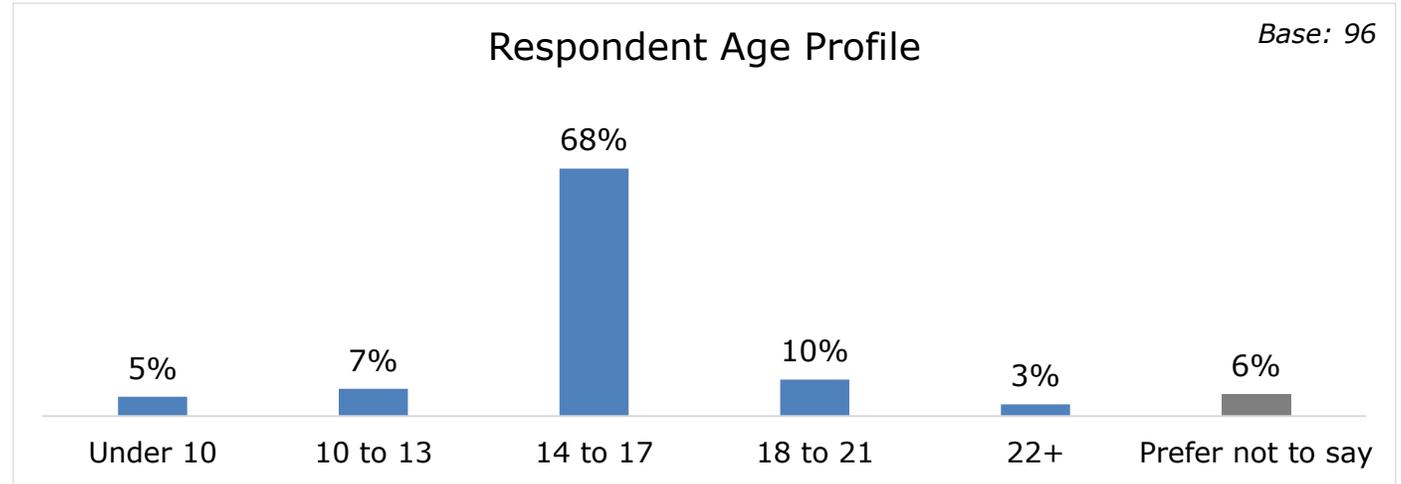
- 70% of responses of youth survey respondents were of White ethnicities, **yet 23% of the sample were from Black, Asian or other minority ethnic groups.**
- More males (51%) than females (41%) responded to the survey, although 8% chose not to disclose their gender and this may include females.
- Just under a third (32%) of the sample noted having a disability. 56% reported to have no disability and 12% chose not to disclose.





Workshop/Questionnaire Respondents 1/2

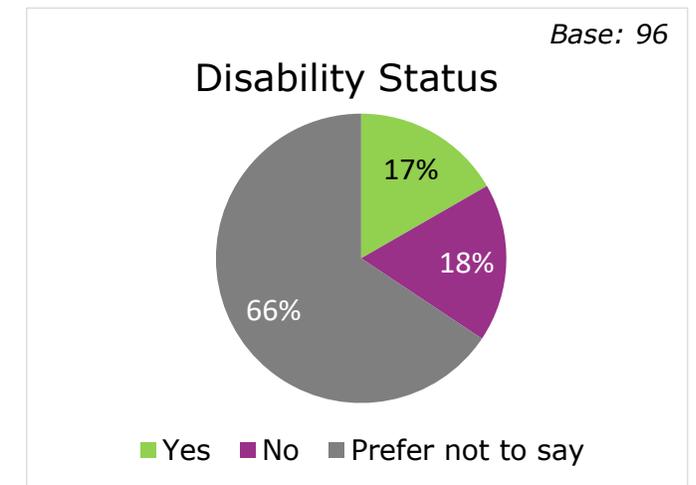
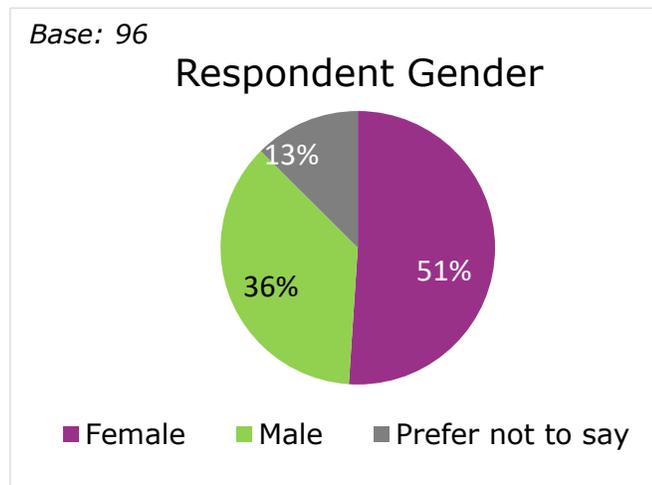
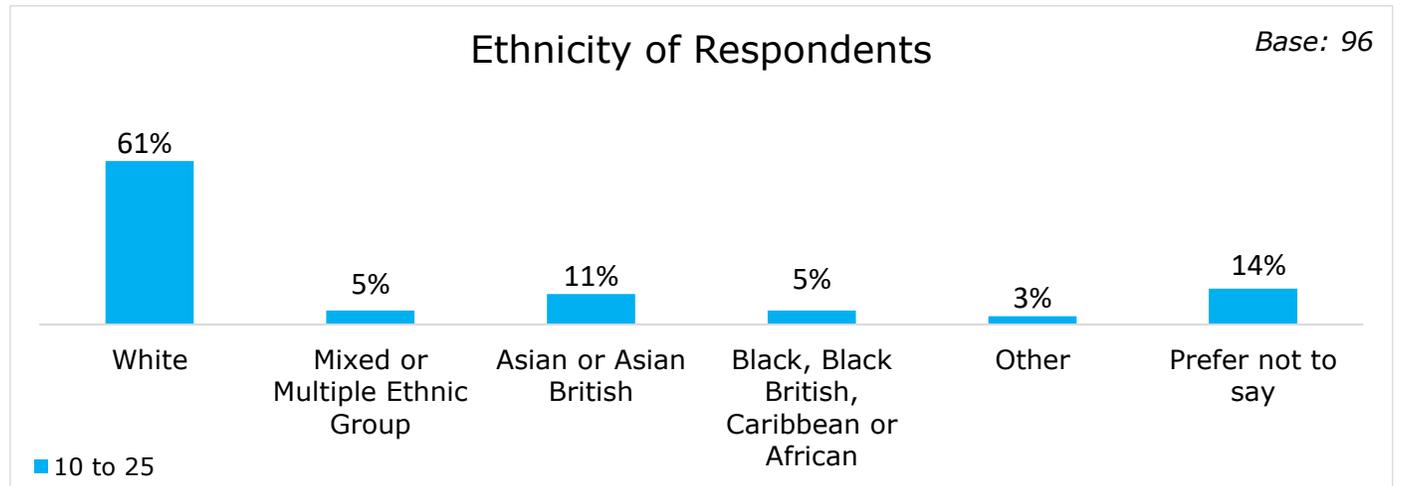
- In addition to the youth survey run by the Combined Authority, **95 people were engaged with via workshops with partner organisations and a questionnaire hosted via a partner organisation.**
- 68% of the participants were aged 14-17.
- Once again the majority of respondents were either residents of Liverpool (44%), but there was a better response from Wirral with 31% being from there.



Workshop/Questionnaire Respondents 2/2



- 61% of the workshop/questionnaire participants were from those of White ethnicity backgrounds, **yet 25% were from Black, Asian or other minority ethnic groups.**
- In contrast to the online survey hosted by the CA, in this workshop/questionnaire engagement more females (51%) to males (36%) took part. However, 13% chose not to disclose their gender and this may include males.
- The data regarding disability status was unclear with 17% noted a disability, 18% not noting a disability, and 66% undisclosed.

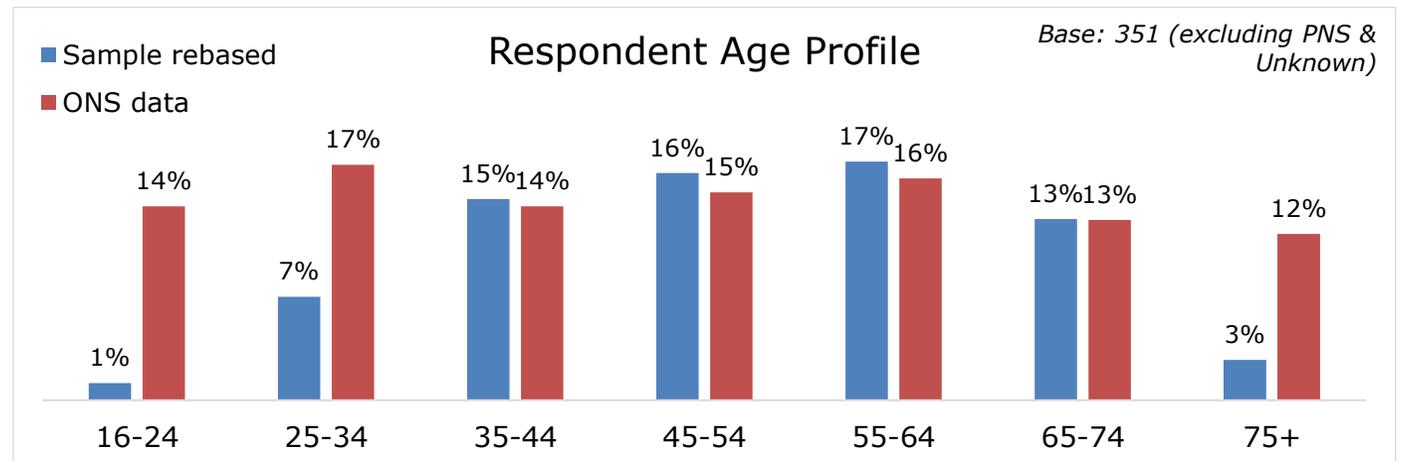
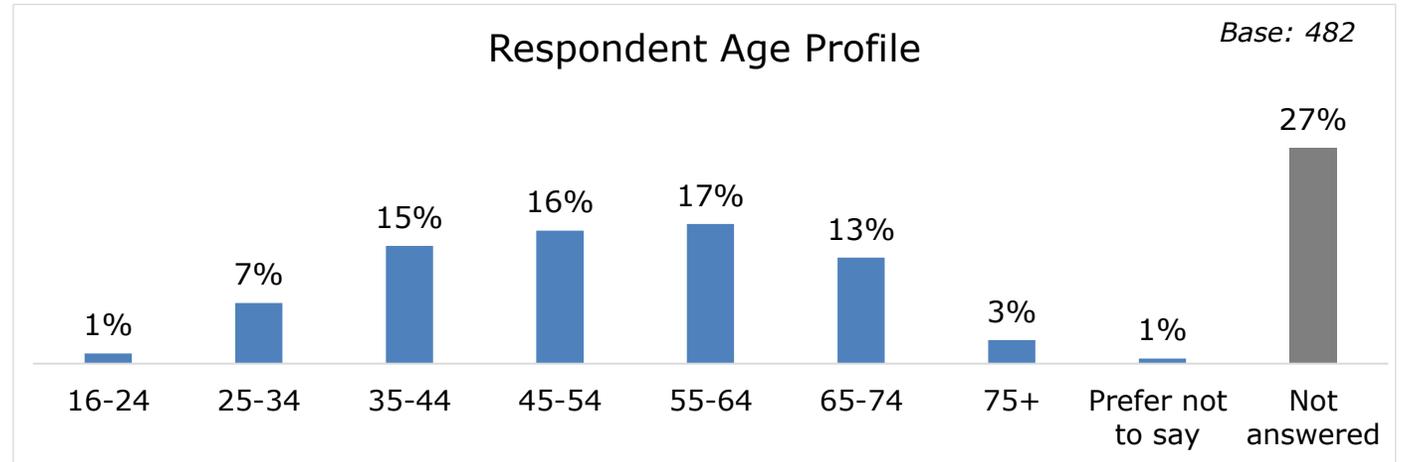


Appendix 2: General Population Engagement Samples

Survey Respondents 1/4



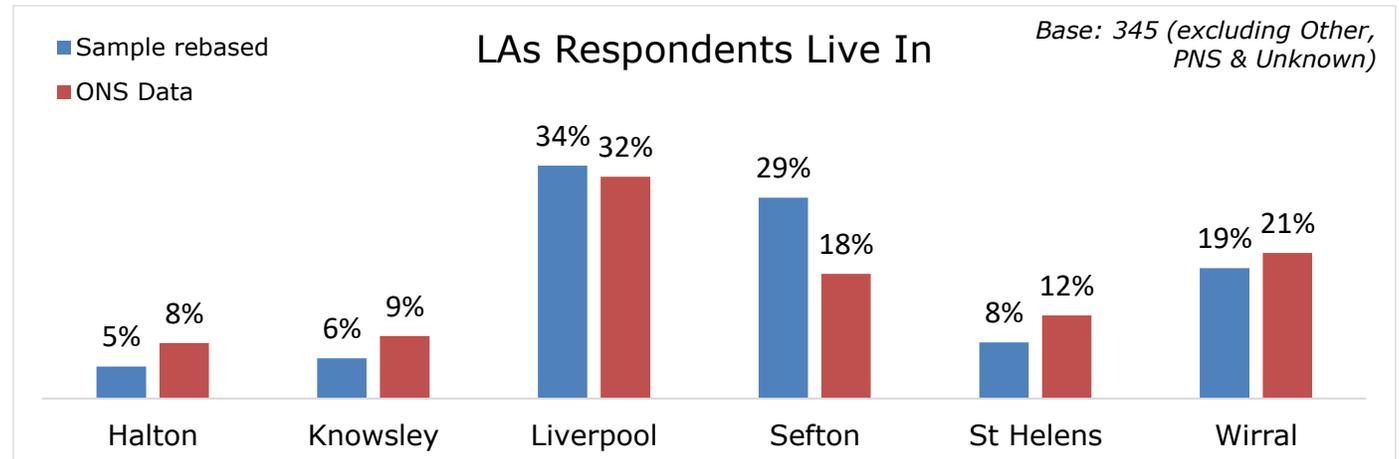
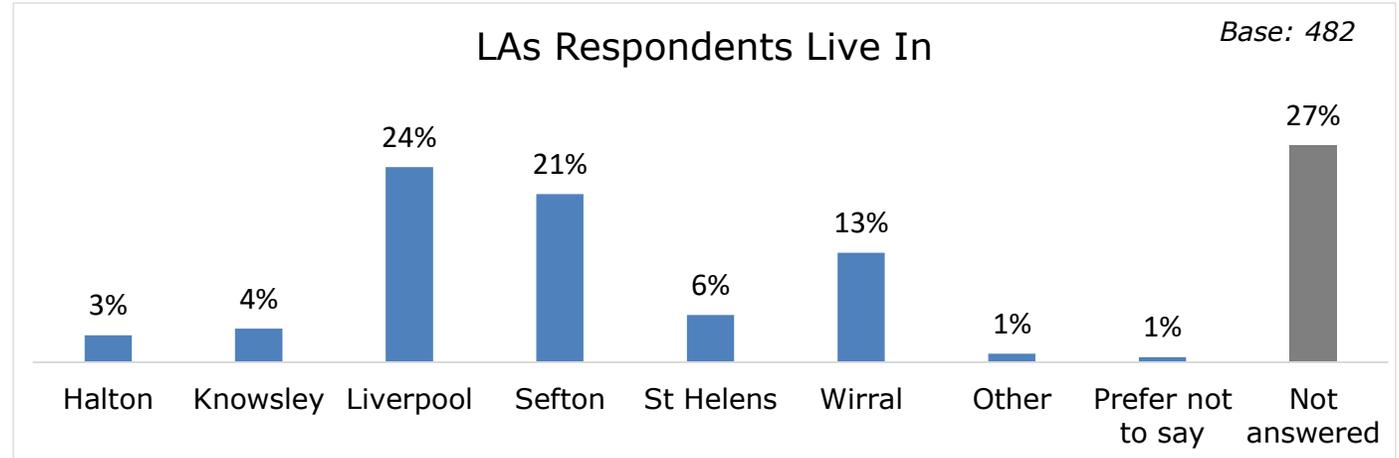
- **482 confirmed or pending people responded** to the Commonplace engagement on Net Zero Carbon. Anonymous respondents have also been included in reporting but there is no way of knowing how many unique individual people make up the anonymous responses and no demographic data was collected for them.
- Understanding the make up of the sample is important to fully interrogate the data. Who we are as individuals impacts our responses.
- **57% of the sample were aged 16-64, with 16% aged 65+.** However 27% did not supply their age demographic and 1% chose prefer not to say.
- When compared to national data the survey showed a lower level of inclusion of those in both younger and older age bands (for example, just 11% being aged 16 to 34, whereas this represents 31% of the adult population), but has a strong representation of those age 35 to 65. However, it should be noted that the youth proportion has been picked up in the youth focus engagement.



Survey Respondents 2/4



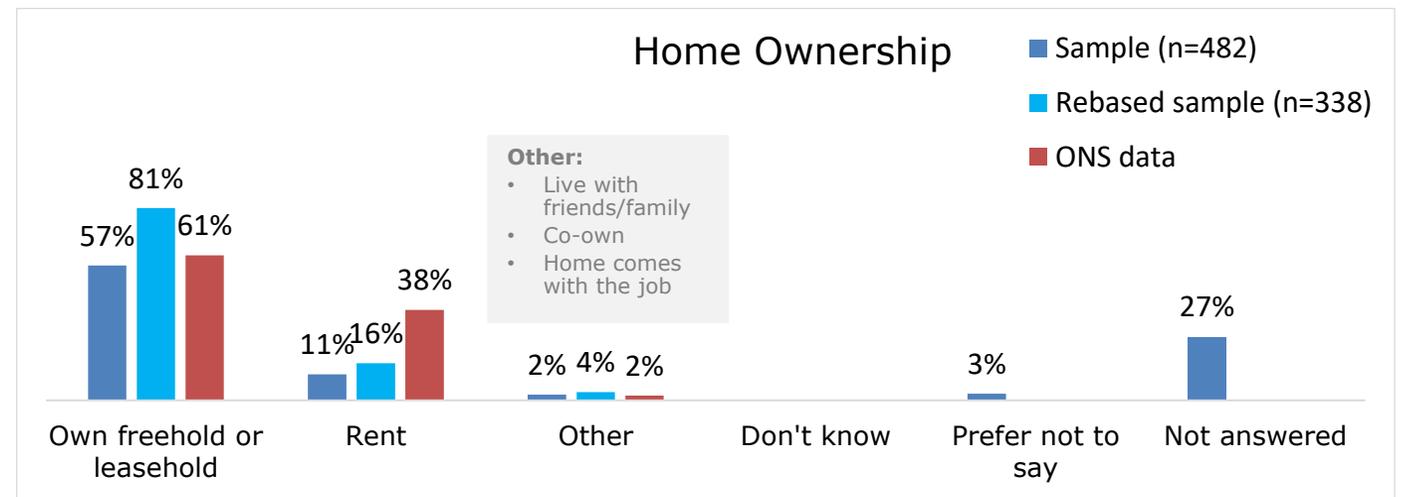
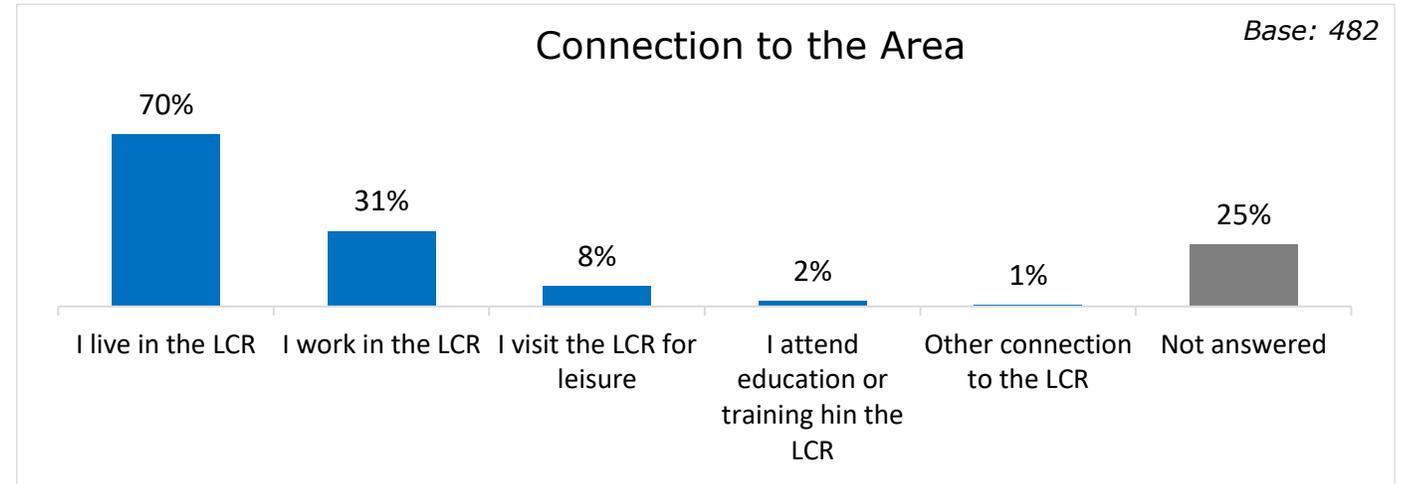
- Before rebasing, the majority of Commonplace respondents were either residents of Liverpool (24%) or Sefton (21%). 13% of respondents live on the Wirral, 6% in St Helens, 4% in Knowsley, and 3% in Halton. 1% chose not to say, and 27% did not answer the demographics.
- Once rebased (to remove 'other', 'prefer not to say' and 'no answer') and compared to ONS data we can see the survey attracted responses from all parts of the Liverpool City Region. There were a significantly higher level of responses from Sefton (29% of all responses, compared to 18% of the total adult population they represent), and response levels were slightly lower in Halton (-3%), Knowsley (-3%), St Helens (-4%), and Wirral (-2%).



Survey Respondents 3/4



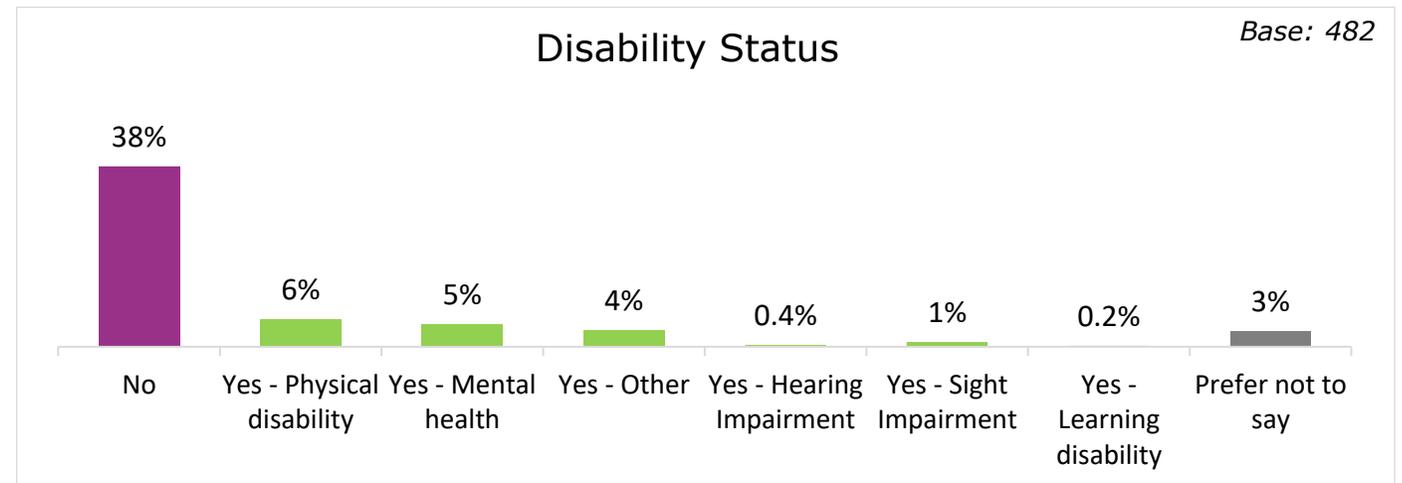
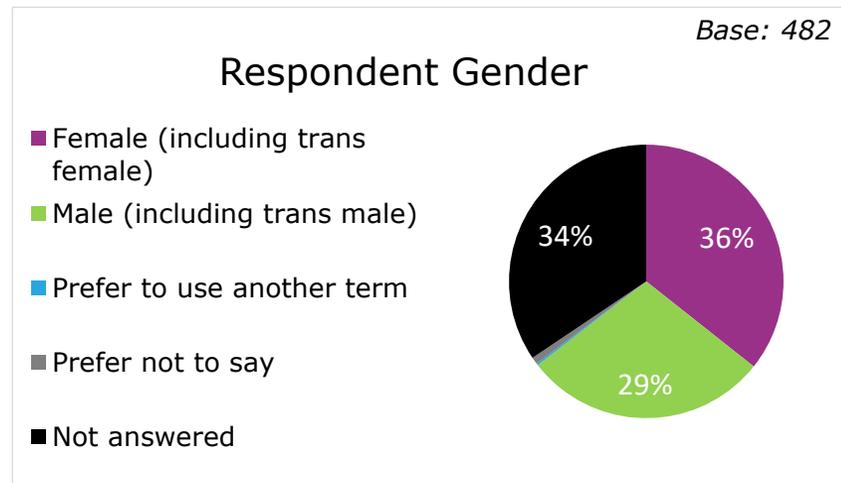
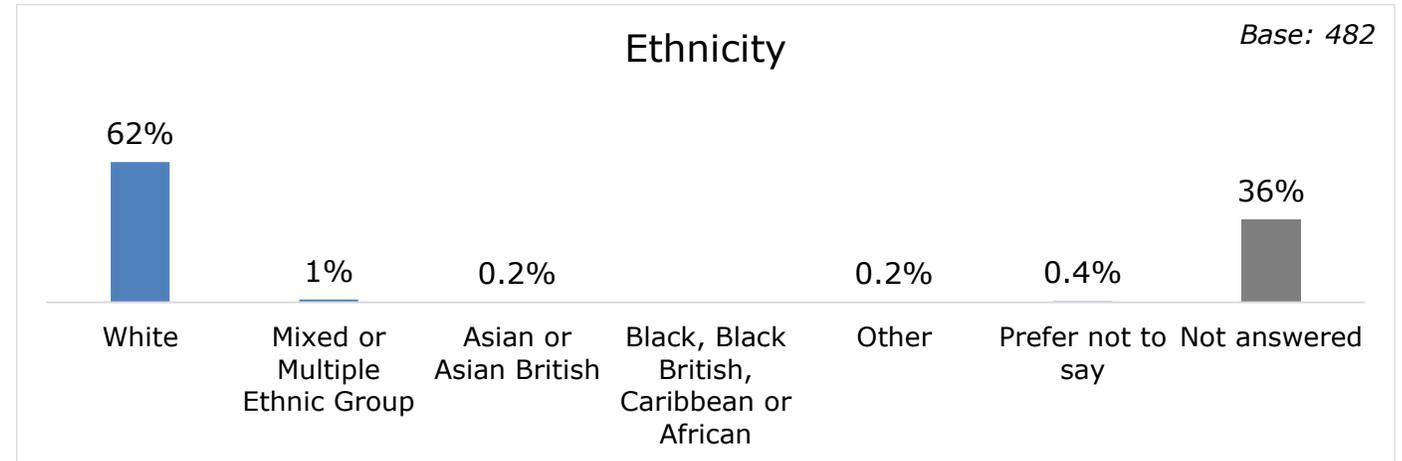
- **7 in 10 (70%) of Commonplace respondents live in the LCR**, but for those that don't they state other connections such as work, education, or leisure reasons. One in four (25%) did not answer this question.
- **57% own their home freehold or leasehold, and 11% rent.** This is important to consider as some of the visions relate to homes and there are different practicalities around feasibility of making changes that are impacted by tenure of homes. 27% did not answer this question.
- Rebasing and contrasting these results to the ONS 2011 Census data, this shows that a majority of survey respondents (81%) owned their own house compared to 61% in the census. Although given the growth in the city region economy since 2011, the levels of home ownership may have increased with only 16% of the sample renting their house this suggests there may be some bias here.



Survey Respondents 4/4



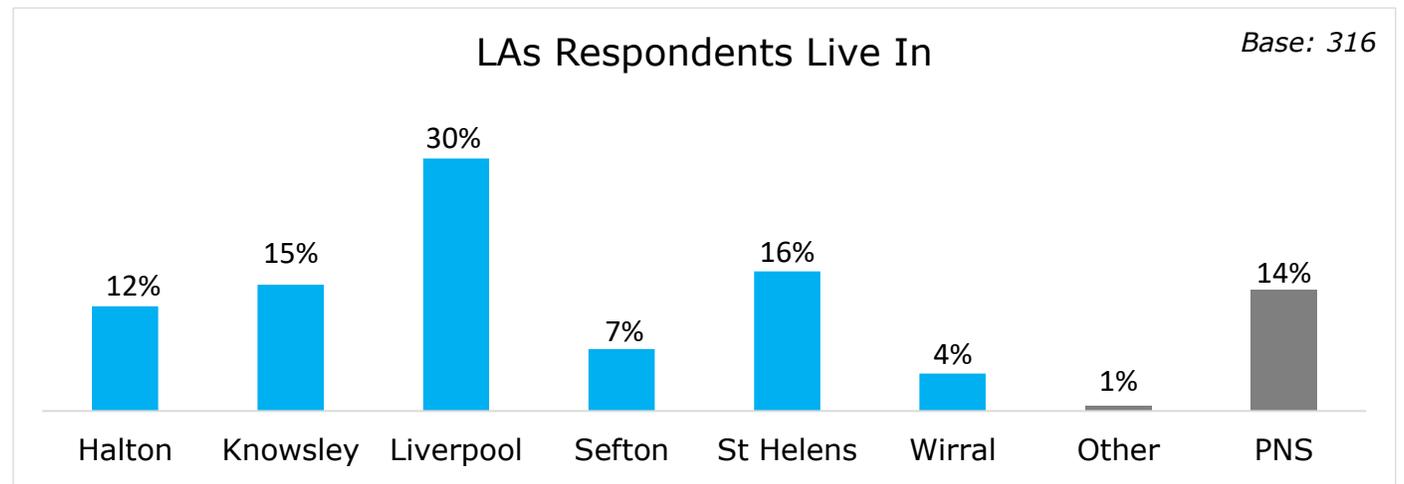
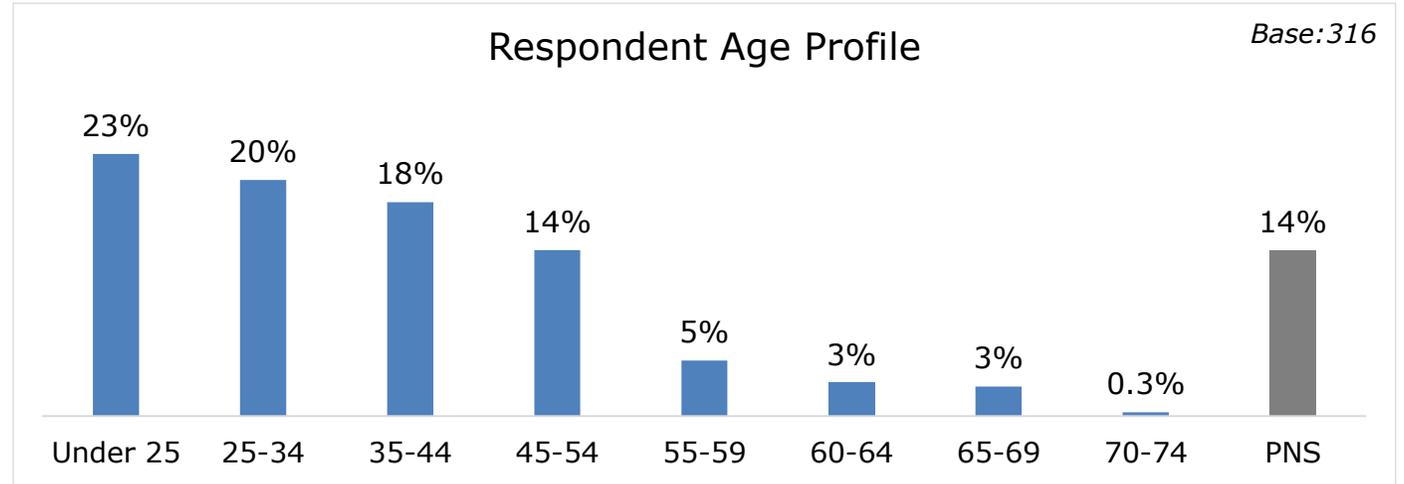
- **62% of responses to Commonplace were from respondents of White ethnicities, only 2% of the sample were from Black, Asian or other minority ethnic groups.** However, 36% did not answer the question and 0.4% preferred not to say.
- More females (36%) than males (29%) responded to the survey, although 34% did not answer the question.
- As the question was multiple choice we are not able to work out how many people responded or not to the disability question and therefore are unable to calculate how many had a disability, however for those that reported the results are shown, with 38% reporting no disability.





Workshop Respondents 1/2

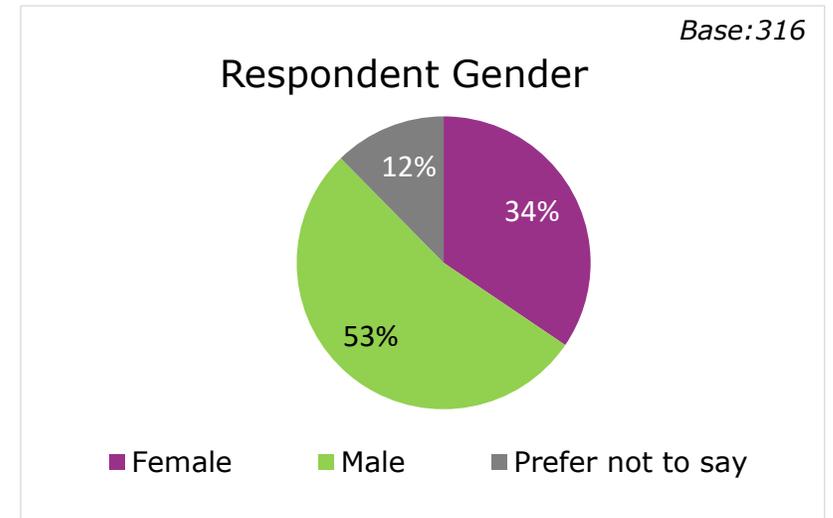
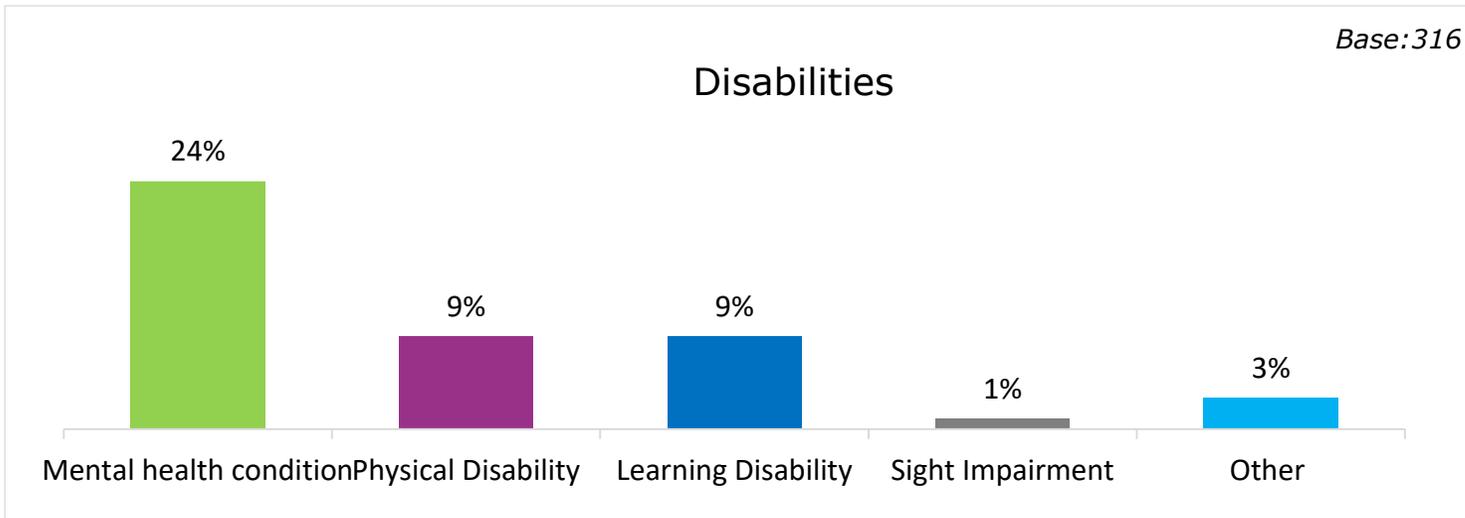
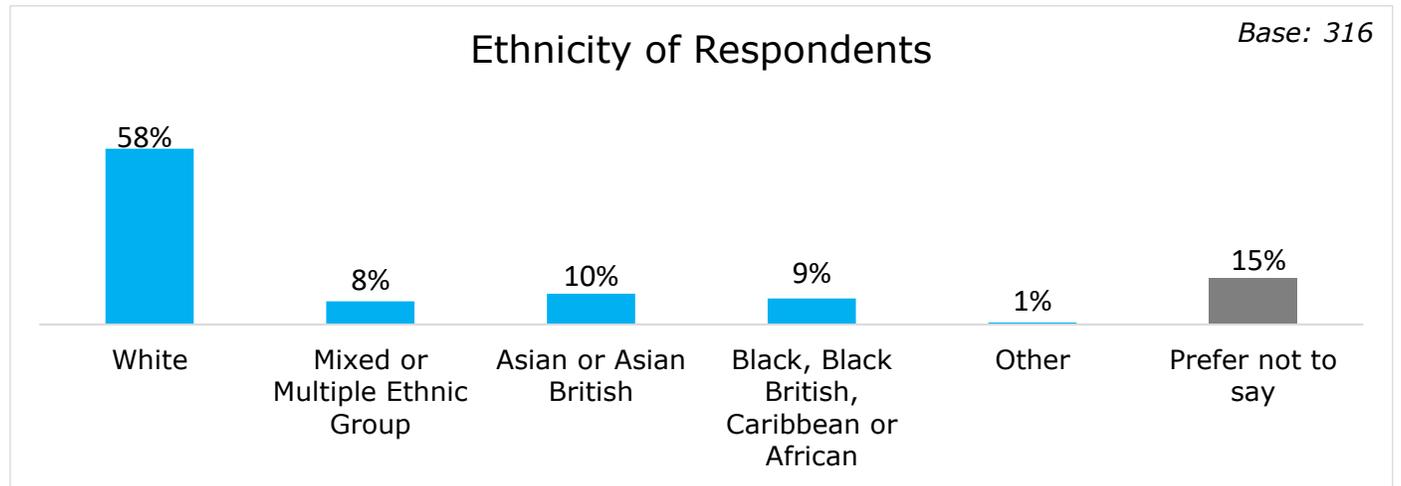
- In addition to the Commonplace survey run by the Combined Authority, **316 people were engaged with via workshops facilitated either by the Combined Authority or by community suppliers that we commissioned.**
- 23% of the participants were under 25 and 8% were under 18. Their feedback has not been included in the youth report as it was collected as part of a broader programme of community engagement.
- Once again the majority of respondents were residents of Liverpool (30%). However, community suppliers were commissioned to help address demographic gaps so levels of participation from individuals resident in Halton, Knowsley and St Helens are higher than in the Commonplace survey.



Workshop Respondents 2/3



- 58% of the workshop participants were from those of White ethnicity backgrounds, **yet 27% were from Black, Asian or other minority ethnic groups.**
- 53% of participants were male and 35% were female.
- 24% of participants stated that they had a mental health condition, 9% a learning disability, 9% a physical disability and 3% disclosed that they had another form of disability.



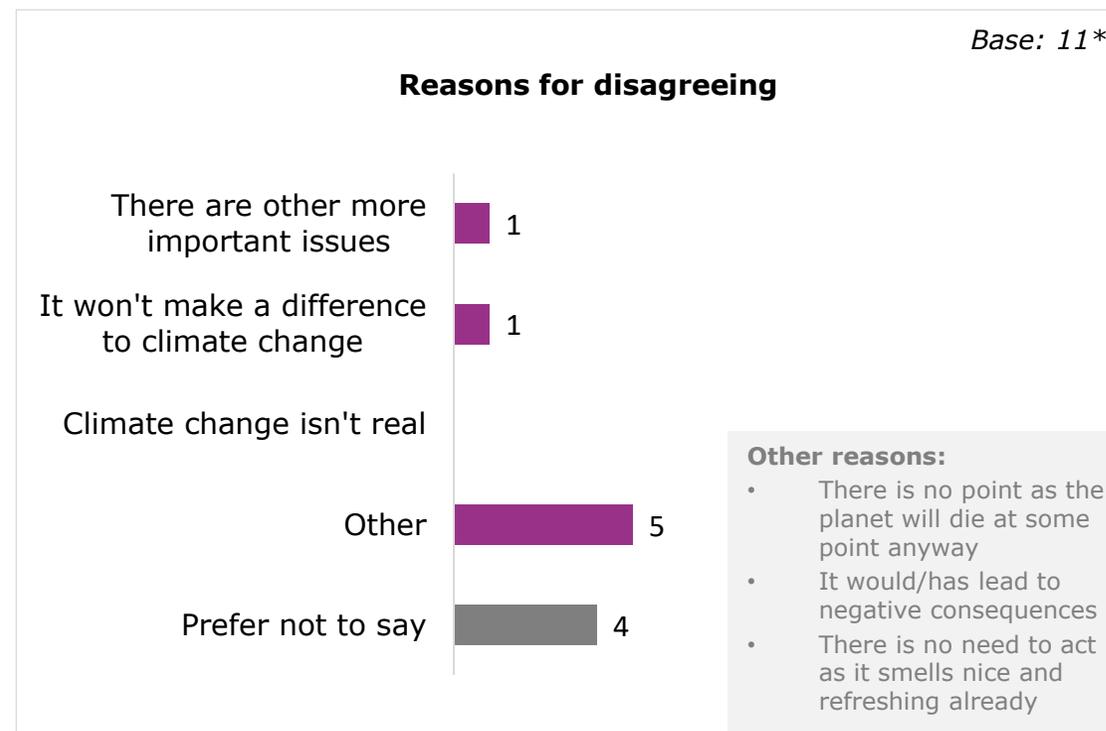
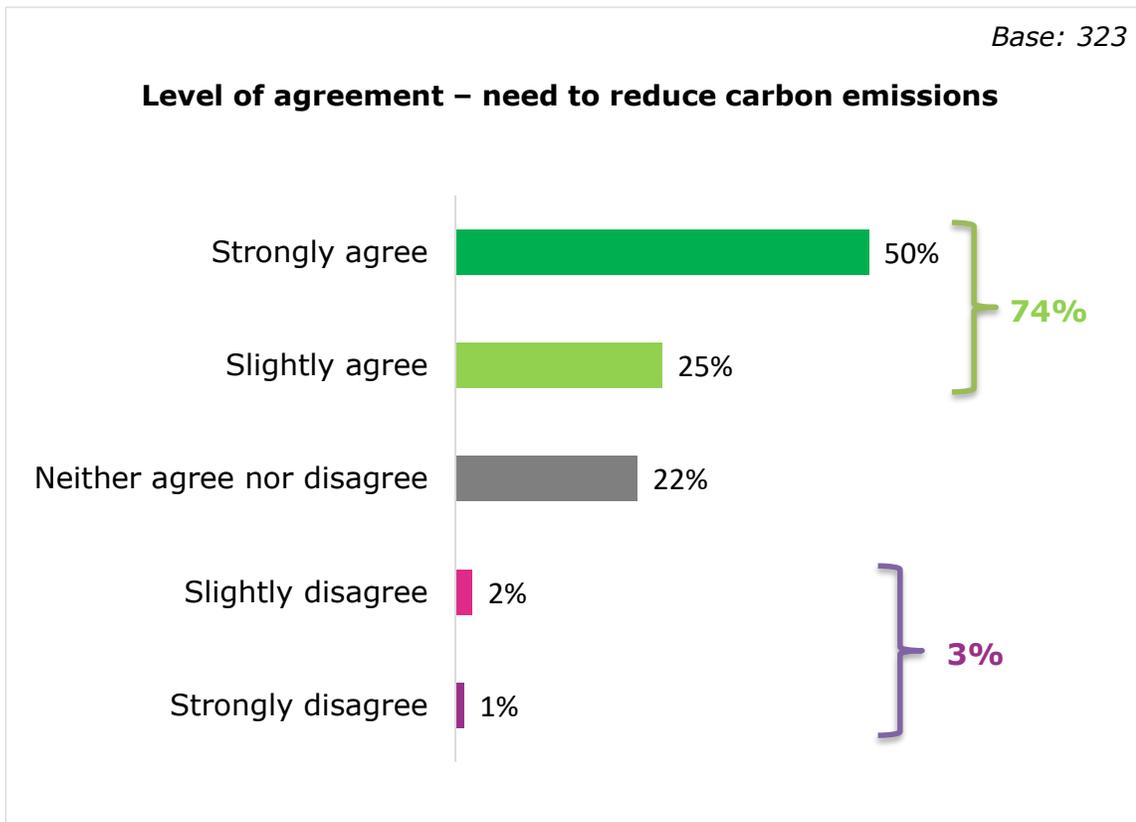
Appendix 3: Youth Agreement Action Needed and Knowledge Levels



Just under three quarters (74%) of the youth survey respondents strongly or slightly agreed we need to reduce carbon emissions before they saw the visions for 2040.

When asked at the beginning of the LCRCA youth survey 74% agree, either strongly or slightly that we need to reduce our carbon emissions.

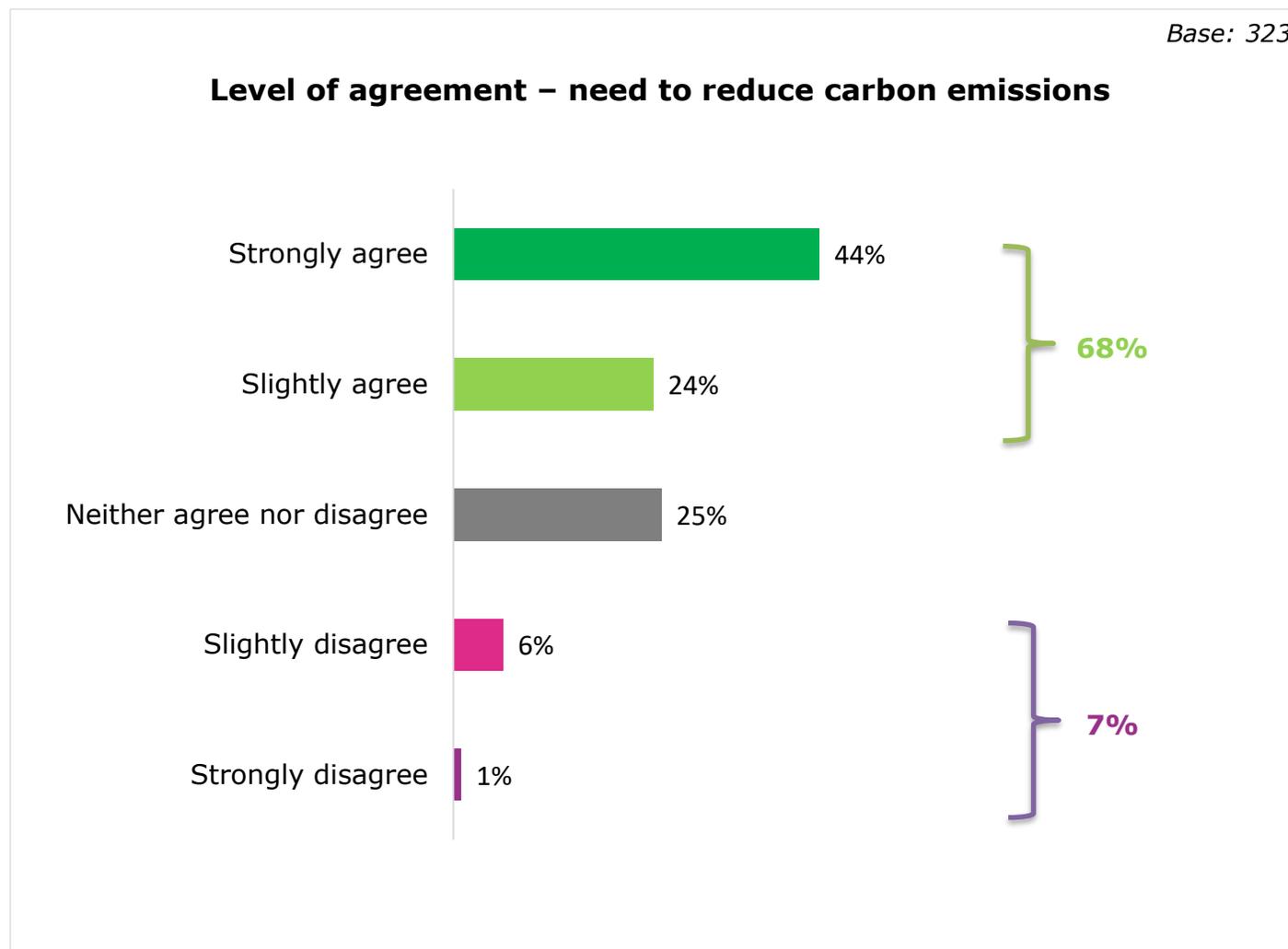
For the 3% (n=11) who disagree, strongly or slightly that carbon emissions need to be reduced, 1 feels there are other more important issues, 1 doesn't feel reducing emissions will make a difference and 5 disagree for other reasons including feeling that there are negative consequences of acting, there is no point to acting, or they don't feel there is a need to act.





However, for survey respondents, agreement levels dropped by 6% on seeing the visions for 2040.

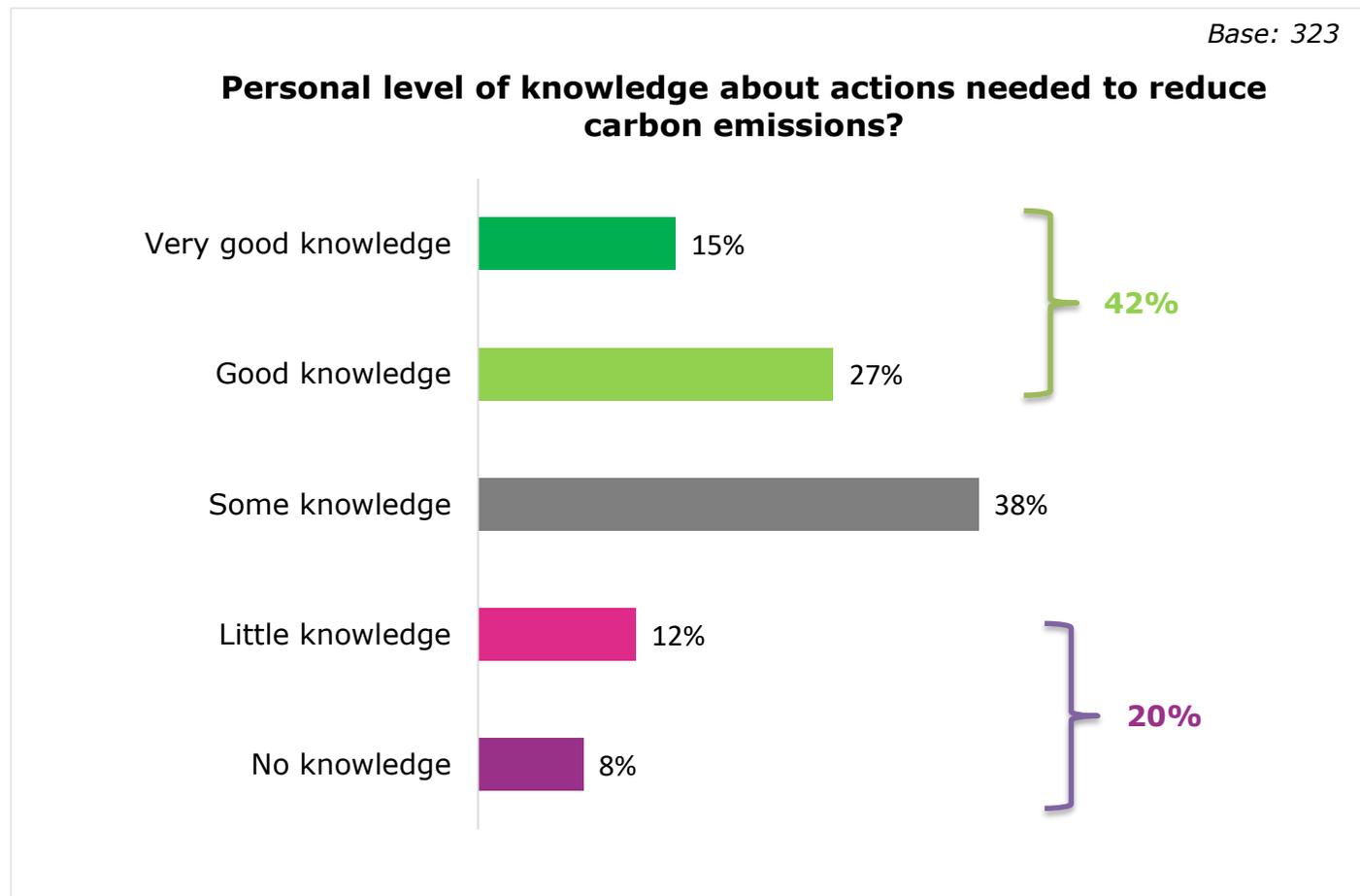
- Agreement levels are crucial to track as people's opinion may help or hinder the success of a Net Zero Carbon plan as it may inform their willingness or not to make changes.
- By the end of the survey 25% of the sample were on the fence, neither being swayed to agreement or disagreement that we need to reduce or carbon emissions.
- Furthermore, at the end of the survey agreement levels decreased by 6% (to 68%) when respondents were re-asked to what extent they agreed or disagreed that we need to reduce our carbon emissions. And, **disagreement increased slightly to 7% strongly or slightly disagreeing** we need to reduce carbon emissions.
- Of those who previously agreed (slightly or strongly), 7 of the 240 people switched to slightly or strongly disagreeing and 36 dipped to neither agreeing nor disagree.
- On the other hand, 7 of those who previously disagreed slightly or strongly reduced their disagreement levels, with 1 individual switching to strongly agree.





Whilst agreement levels are still fairly high, for those that took part in the youth survey, level of knowledge is low with only 42% feeling they have very good or good knowledge about actions needed to reduce carbon emissions.

- Understanding levels of knowledge about the actions needed to reduce carbon emissions is also important because it once again may help or hinder the success of a Net Zero Carbon plan.
- **1 in 5 (20%, n=65) of the respondents to the youth survey felt they have little or no knowledge.** Of those, 15% (n=10) disagree strongly or slightly that actions need to be taken to reduce carbon emissions.
- However, of those that agree strongly that actions need to be taken (n=142) only 61% (n=87) feel they have good or very good knowledge about actions needed to reduce carbon emissions. This potentially means, that even if agreement is strong, targets may not be met if people don't know what to do.

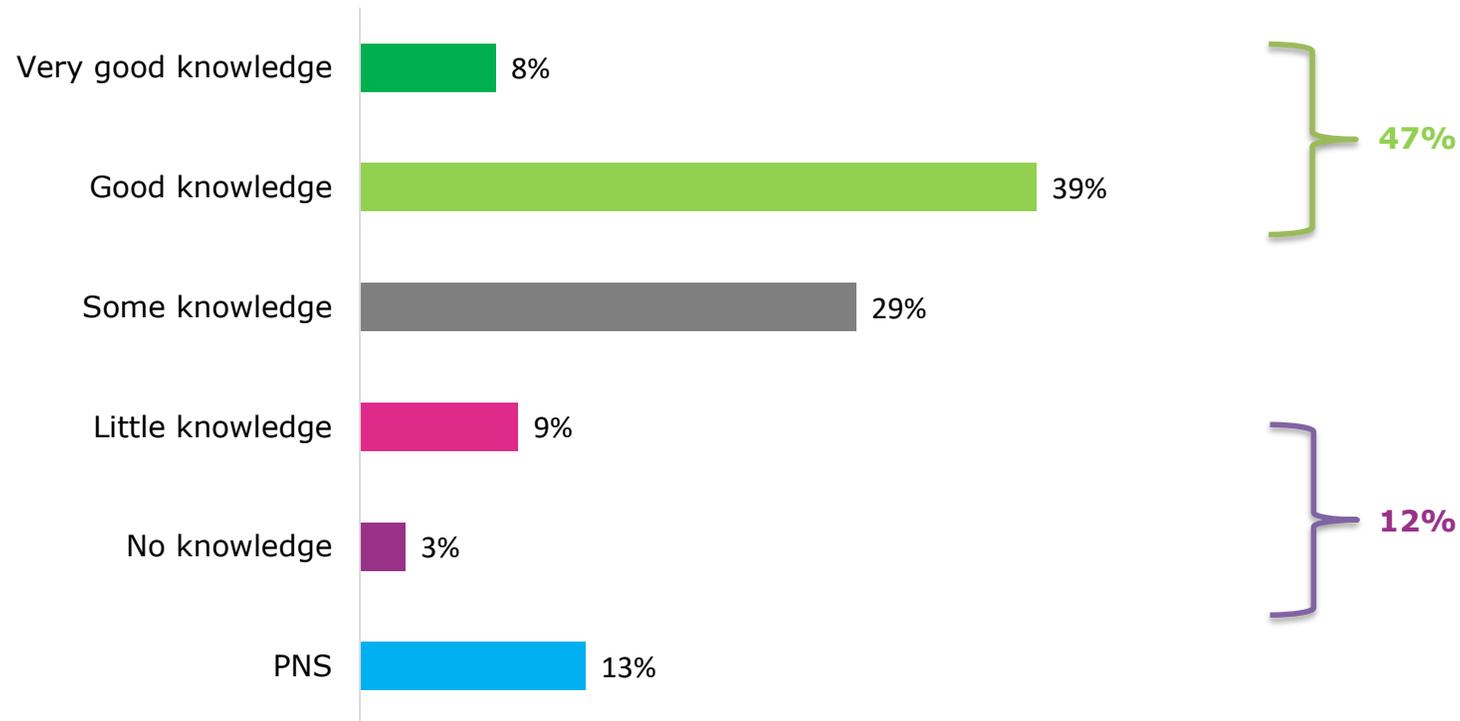




Where collected, knowledge levels were similar within the youth workshops and the partner organisation questionnaire, with 47% reporting to have very good or good knowledge.

Base: 77

Personal level of knowledge about actions needed to reduce carbon emissions?





However, those in the youth workshops noted some words of caution and factors to consider to help improve knowledge and uptake.

Some in the Wirral group when asked about knowledge spoke about how **many in their communities don't really think about climate change** as they have **other more important concerns, such as, putting food on the table and paying bills.**

→ It's a luxury, not all have, for example to be able to turn down one food option to seek out a plastic free alternative. Spending time digesting this research and working collaboratively across policies in a holistic manner may help increase the chances of addressing the barriers/concerns that block people from making changes no matter how much they believe we need to reduce carbon emissions.

Another theme that arose in the groups as **an area to consider is how the message is shared to call people to action and increase their knowledge.** One individual in the Halton workshop mentioned how they felt Climate Change was exaggerated because they kept seeing "Armageddon" like messages on social media, and reference to how "*it's been happening for years*". If it has been happening for years can't we just live with it?

Others too across the workshops felt that climate change can feel quite remote, and more education is needed as people don't know the difference between all the terminology.

Suggestions included, better relatable messaging of cold hard facts, and the financial implications if the changes aren't made.

→ In the report, we note how financial concerns arise for a number of the visions. Potentially, sharing what the financial price of not acting in comparison to how much the changes themselves will be, could help address these concerns/place the costs into context.

In the main though, as shown on the previous slide, people feel action is needed. In the Wirral group they **felt waiting benefits the current generation to the detriment of future generations.**

Opinion was in favour of action over doing what the public wants, **but** a couple noted that **public opinion needs to not be frowned down on** and that we should allow ourselves some leeway on the target. One respondent noted that a slight delay may not make too much difference in terms of carbon reduction but it could make the changes more affordable.

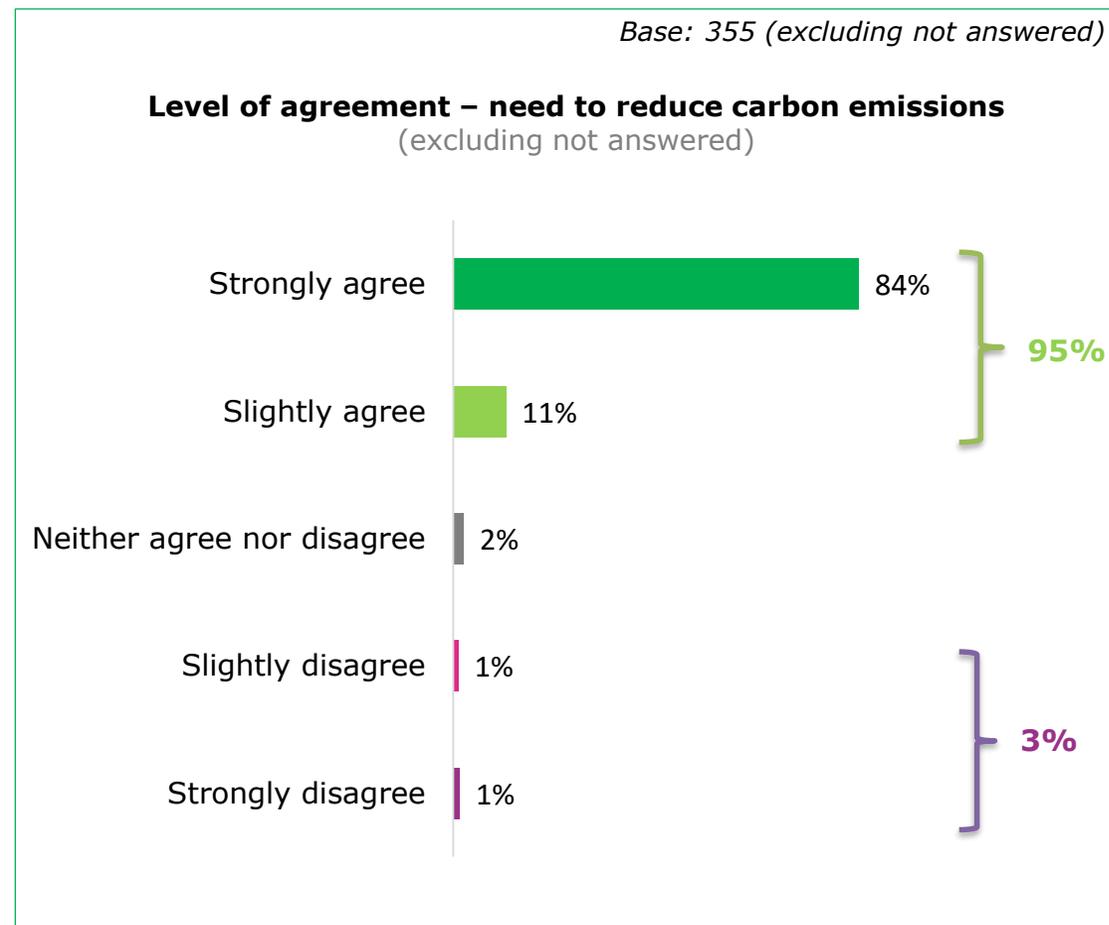
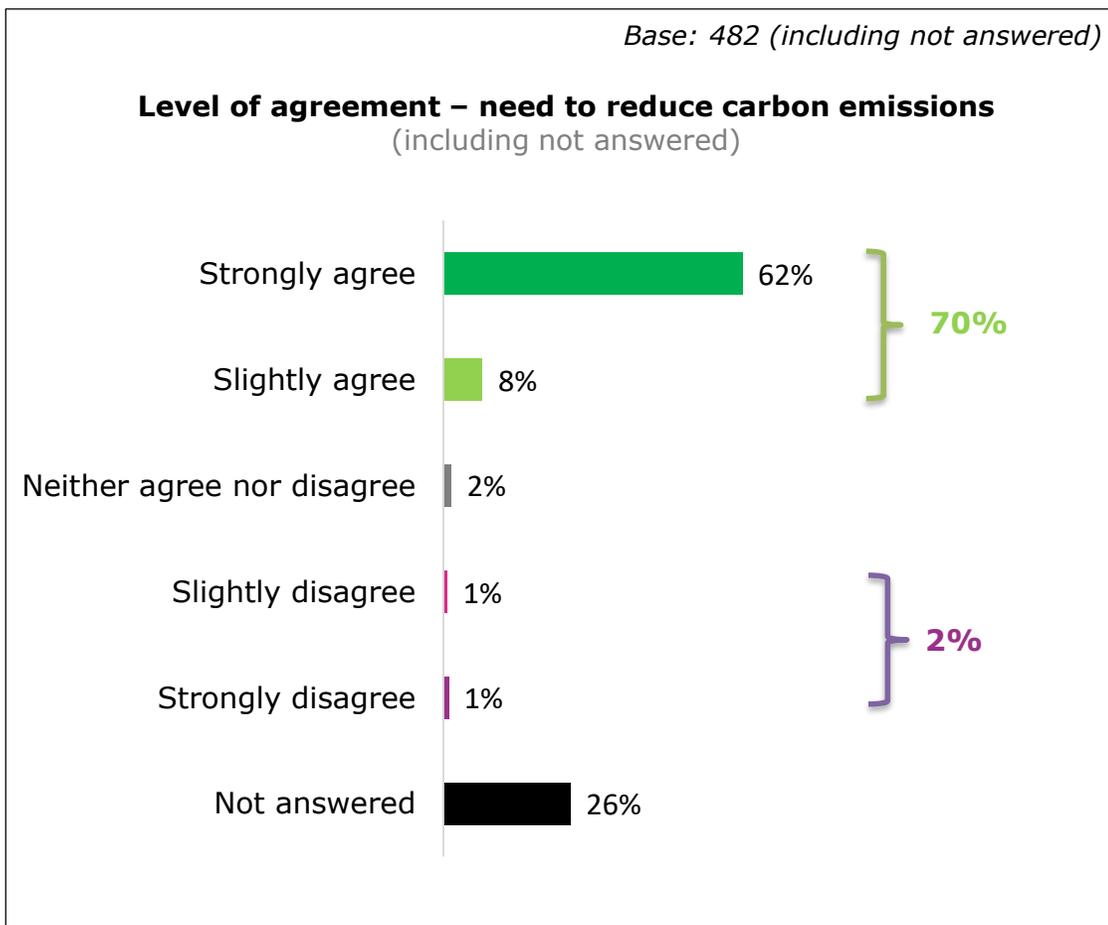
→ This series of research provides a good starting point to address some of these concerns. Keeping the public informed and answering questions in an open minded way should help to keep the momentum going and bring the public on the journey. It's important not to 'frown down' on opinions as this may deter people from making changes. In one group there was some sentiment of distrust in the government in being able to deliver change and there was a perception private company interests would be put over the publics.

Appendix 4: General Population Agreement Action Needed and Knowledge Levels



7 in 10 (70%) of those who responded to Commonplace agree we need to reduce carbon emissions.

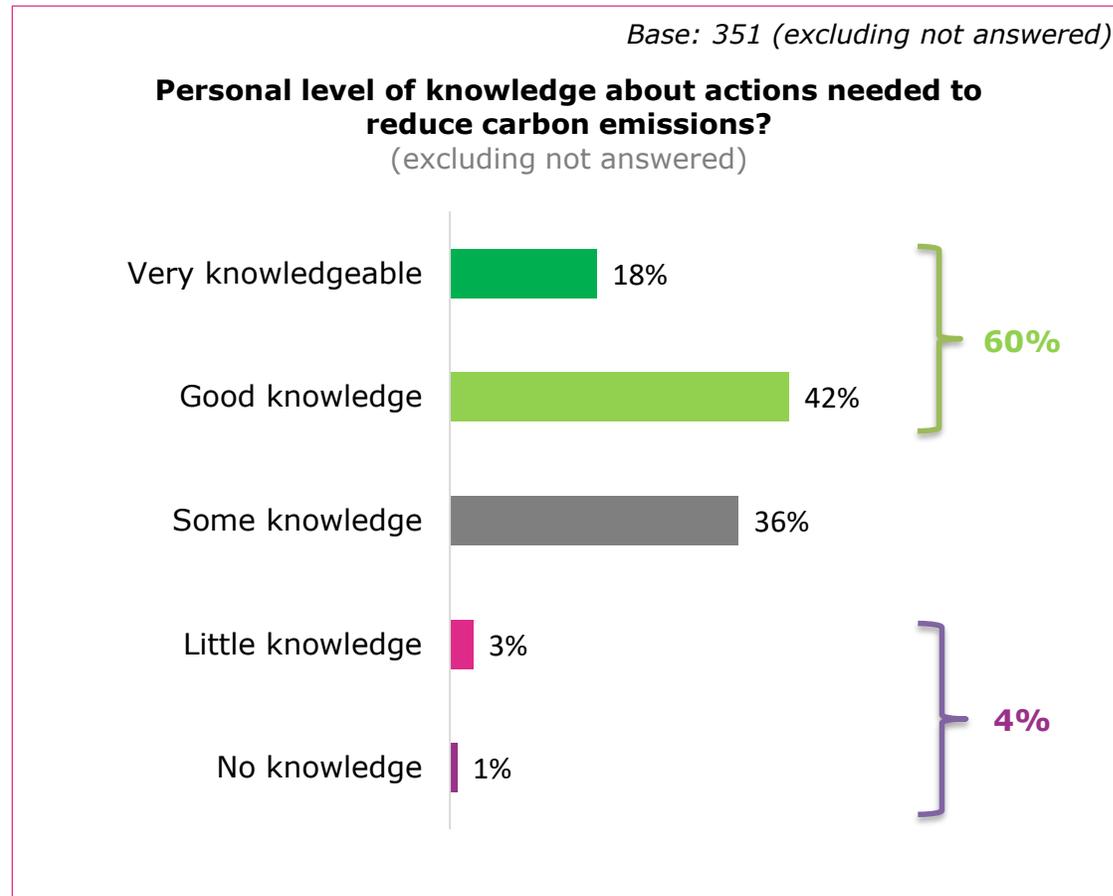
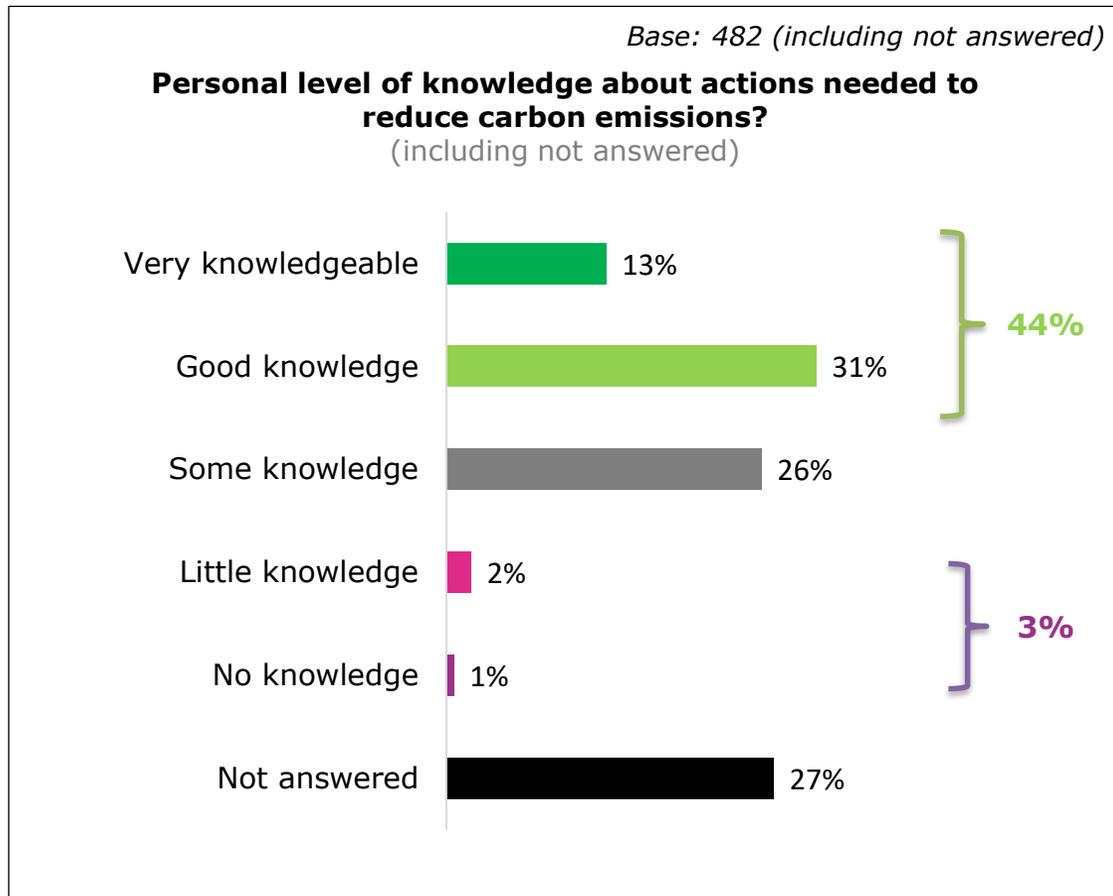
This rises to 95% when we exclude those who did not answer the question (base: 355).





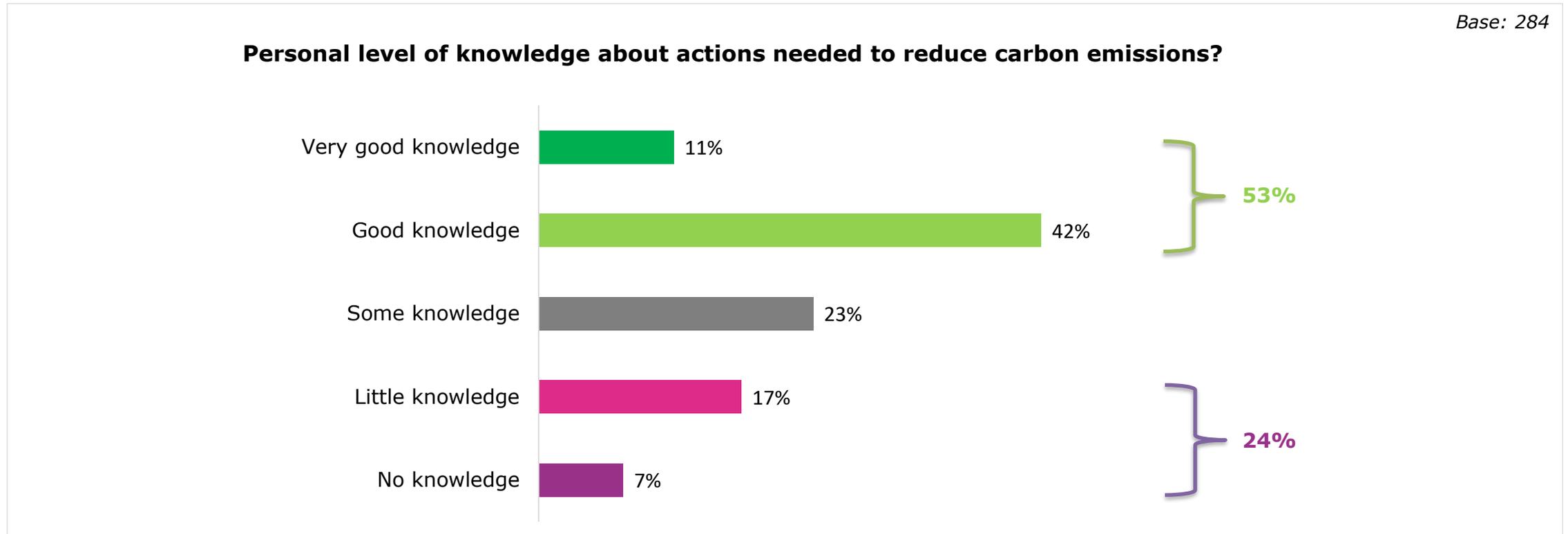
However, only half (44%) of those who responded on Commonplace feel they have good or very good knowledge of what actions are needed to reduce carbon emissions.

This rises to 67% when we exclude those who did not answer the question (base: 150).





Where collected in the general population workshops, **53% self-reported that they have very good or good knowledge about actions needed to reduce carbon emissions, with just under a quarter (24%) stating that they have little or no knowledge, +20% compared to the Commonplace sample.**



Appendix 5: Questions or topics people would like to know more about.



Are there any questions or topics you would like to know more about?

For each for the four themes on the Commonplace engagement a space was provided for respondents to raise any questions or topics they would like to know more about.

As already shown although agreement levels are fairly high that action is needed, the percentage of those who feel they have good or very good knowledge on what to do is low. The authors of this report feel it may be useful to instigate a communications campaign responding to some of these questions and topics.

The following pages list out the questions and topics grouping them in relevant areas.

Key:

N = Comes from responses to the Neighbourhood section

W = Comes from responses to the Work section

H = Comes from responses to the Home section

T = Comes from responses to the Transport section

LCR Climate Panel = Questions raised at the LCR Climate Panel event

Y = Youth survey & engagement

Further Topic Areas to Know More About 1 of 2



General

- Best practice from elsewhere (W)
- Simple, practical ways to make changes (N)
- What other countries are doing to tackle climate change in comparison to ours (H)
- Would like to know what is being done now. There may be a lot that is being done but it doesn't seem to be publicised or talked about enough (N)

Data & Information

- Related to Carbon and Climate Change in General
 - General information on the impact of carbon (H)
 - General information on the need to remove carbon (H)
 - Veracity of climate change (T)
 - Would like to know the numbers and how much we emit and need to cut (Y)
- Related to Travel
 - Cruise industry impact (T)
 - Case for hydrogen's use in buses (T)
 - The carbon impact of having heavier EVs wearing out roads at a higher rate (T)
 - Data on carbon impact of all car journeys (made available to the public) (T)
 - Data on the impact/projected impact on local transport-related political decisions on climate change. (T)
- How carbon emissions from the home compare with other areas of industry (H)
- More clarity on what energy categories mean in practice. (H)
- Opinions of councillors and MPs. (T)

Plans

- Timetable of plans, showing what the expected carbon reductions will be (T)
- The economic and equality impact evaluation of current situation to proposals (W)

Finance

- The cost implications of these changes (H)

Energy

- Tidal energy (N)
- Green renewable energy (N)
- The generation and supply crisis (electrical infrastructure) that exists in this country (T)

Technology Options

- Sensor technology e.g. lights and taps (W)
- Timer switches for heating and lighting (W)
- Electric heating systems (W)
- Heating vs Cooling (W)

Transport

- Transport in general (N)
- Active travel (N)
- Electric cars (Y)
- Incentives for car-free transport for workers (W)
- Vehicle charging (H)
- Alternatives to HGVs on the road (N)
- Reducing road traffic and pollution around and in regards to the port (N)
- Plans for the introduction of pollution monitors and the data from them being made available to the public. (T)
- Plans to expand Merseyrail to include all boroughs. (T)

Planning

- Information about planning laws (T)
- How planners make decisions (N)

Workplaces & Jobs

- Green jobs (N)
- Retrofitting workplaces to minimise heating requirements (W)
- Analysis of shared space costs compared to individual homes (W)
- Employment of disabled people (W)

Food

- Shopping locally for food (H)
- Food miles (N)

Gardening

- Community gardening (N)
- Growing food at home (N)

Further Topic Areas to Know More About 2 of 2



- Composting (N)

Coasts and Seas

- Coastal protection (N)
- Sea level rises (N)

Other

- Carbon Appraisals (N)
- Fast Fashion (T)
- Waste management (N)
- Updates on manufacturers progress on carbon reduction (H)
- Impact trees and local habitat protection have on carbon and combatting climate change (N)
- Impact of population growth (Y)

Questions 1 of 4



Terminology

- What does "net-zero" actually mean? Why is it the goal? (W)
- What is 'green industry'? (W)

Action & Plans

- What is going to change? & How will this affect our lives? (Y)
- What system wide changes can the CA make? (Y)
- Which methods and routes are the most efficient as regards carbon reduction? (N)
- What can we factor into our everyday lives that'll help the planet in the long run? (Y)
- What are the best things we can do to make a difference? (H)
- How will the things you talk about actually happen? They're great in principle but how will they manifest? (N)
- What are the time scales to achieving this? (H)
- When will transparent, specific plans, with realistic, measurable results, be drawn up and publicised as widely as possible, so that each person can feel more a part of a future predicated on reduced emissions? (N)
- What checks will exist to prevent development greed putting local good in the background? (N)
- How are the environment, wildlife, and our physical and mental health needs being considered when decisions are made? (W)
- How is the area as a whole going to accommodate the massive infrastructure change? (W)
- Why is the target 2040 after the tipping point? (W)
- How do we tackle climate change over the next 70-100 years? (N)
- Why is the Liverpool city region doing so little to reduce carbon emissions? (N)
- What are you doing TODAY about reducing carbon?
- What is our plan to fix global warming? What can we do to help? (N)
- Why does actual practice differ from great carbon visions? (N)
- When can we see the start of these things being implemented? (H)
- When were the public forums held (if they were) before these ideas were finalised? (H)
- How are you defining net zero for 2040, is it a solid or soft target? - LCR Climate Panel
- Will any of the engagement / future engagement plans look at better informing citizens on what is happening? There continues to be real gaps in awareness of what the pipeline of action is and why X is prioritised over Z (especially when long-term action is preceded with a lot of behind-the-scenes preamble, potentially misperceived as "nothing is happening"). How can we tap into these significant grassroots citizen networks to broaden accurate understanding of plans and implementation? – LCR Climate Panel

- What's the relationship between LCR / LA & NHS net zero plans? and how are they supported to be mutually supportive/maximise effectiveness and build on community energy/support? – LCR Climate Panel
- How are you planning to include the climate education and training for the LCR community? This should be one of the priorities to build a resilient community that understands the real effects of climate change and carbon pollution. SDG4 represents " Quality education" which should include parts of climate change negative impact on all domains and activities of the community. – LCR Climate Panel
- What are the results for the changes that will take place? (Y)

Data

- Why was it warm enough in Roman times to grow vineyards in Southern England and then became too cold well before the industrial revolution? (T)
- What leaders flew to the G7 conference? (Y)

Finances

- What will be sacrificed for the LCR to raise the money to implement the plans you have already made/plan to make? (W)
- Will any support be provided for people to install renewable energy sources? (W)
- Why is the grant funding (as laid out in Local Government and net zero England) per person in the Liverpool City Region so low (£12.50/person) compared to other areas e.g. Manchester (£44/person) and (Leeds £50/person)? - LCR Climate Panel
- How will it be affordable? (Y)
- How much will renewable energy cost for big companies in the futures? (Y)

Concerns

- Will the remedies to climate change be worse than the disease? Will it drive more people into poverty with higher costs? (H)

Energy

- Hydrogen
 - How close is the practical and affordable introduction of hydrogen generated power in workplaces? (W)
 - How far away is hydrogen from replacing gas? (H)
 - How are you planning to make your hydrogen? By green or polluting methods? (T)

Questions 2 of 4



- General
 - Given that renewable sources provide only a small percentage of our energy and that nuclear power is so expensive & dangerous, what can we realistically do to quit fossil fuels as soon as possible? (H)
 - How can I buy geothermal energy? (Y)
- **Carbon**
 - How long would it take to stop carbon emissions? (Y)
 - Which aspects of life produce most carbon emissions? (Y)
 - Why do other countries not put effort to reduce CO2 emissions? (Y)
 - Carbon Storage
 - How does carbon storage work? (N)
 - How is carbon locked in? What happens if or when it escapes? (T)
 - Carbon Offsetting
 - Why are we not offsetting carbon? (W)
 - Carbon Absorption
 - Why are we not investing in ways to absorb carbon? (W)
- **Transport**
 - Airport
 - How does supporting the growth and expansion of Liverpool Airport help to reduce the production of Carbon Dioxide, and other forms of pollution? (T)
 - Buses
 - Why is Arriva allowed to run their eco buses as petrol only buses whilst still advertising falsely that they are eco-buses? (T)
 - Can routes be decided by public choice rather than the bus operators? (T)
 - Cruises
 - Will the government be able to push to make cruise ships cleaner? (T)
 - Data and Information
 - How much extra traffic, carbon and nitrous oxide has been generated by reducing tunnel tolls and deleting bus lanes? (T)
 - Why is HS2 going ahead or the building of new roads? (H)

- Why would you want to build more roads? (H)
- What are you actually doing NOW to reduce GHG emissions from the public sector fleets (T)
- Electric Cars
 - Could an EV car ever become your mobile power plant? (T)
 - Where is all the electricity needed to charge the millions of electric cars going to come from? (T)
 - What is the cost to the planet of the mining of raw materials for and the production of the car batteries? (T)
 - How will electric cars/batteries be disposed of when they reach the end of their far too short life compared with that of a petrol or diesel engine? (T)
 - Will electric car infrastructure be sufficient? (T)
- Ferry
 - How can the ferry be made carbon neutral? (T)
- Freight
 - What carbon neutral plans are being made for the transport of freight? (T)
 - Are there any sensible plans for transporting freight from the expanding Port of Liverpool? (T)
- Shared Transport
 - What is car club? (T)
- Trains
 - When is the line from Liverpool Lime Street to Manchester Oxford Road via Warrington Central going to be electrified? (T)
- Waling and cycling
 - Can low-technology, low emissions solutions, such as cycling, walking and public transport, and low / zero emission zones, attract funding to shift away from personal, motorised transport modes (i.e. along the lines of the LCWIP)? – LCR Climate Panel
 - We recently tried to get some staff to move to a car park which required a 7 minute walk to reach our site. Only one member of staff volunteered to move to this site and we have struggled to get people to use this car park. This demonstrates the difficulty in convincing staff to move to walking. How do you propose to convince individuals to the benefits of walking to work over car use. – LCR Climate Panel
- General
 - How soon will these new forms of transport will be on the road? (T)
 - Will new forms of transport be spacious? (T)

Questions 3 of 4



- How does the LCR intend to end the love affair with 4 x 4's and other gas guzzling vehicles? (T)
- How to encourage people to use public transport? (N)
 - How the city region plans to reduce car usage? (Y)
- Are there going to be flying cars? (Y)

Work

- How can we reduce carbon footprints in the workplace? (W)
- Will workplaces take the steps to also be net zero? (W)
- What would be the best form of lighting in offices? (W)
- Why are large distribution centres and similar large footprint buildings not compelled to have solar panels covering their roofs? (W)
- How big businesses are planning to reach Net Zero Carbon? (Y)
- What jobs will be removed? And What impact will this have on job choice? (Y)
- Will people loss their jobs? (Y)
- Would like the impact on engineer jobs (Y)

Schools & Education

- How are councils helping schools reduce their carbon footprint? (N)
- How does the LCR councils intend to put an end to the 'school run'? (T)
- How is education changing to address these changes regarding future work? (W)
- Will schools be work from home too? (Y)
- Will schools be the same? (Y)
- How will you improve education on subject? (Y)

Food

- How can attitudes around food be changed? (N)
- How do you go about growing food? (N)
- Why do supermarkets sell so much from so far away? (N)
- What food will we be expected to eat? (Y)
- Will fast food still be the same? (Y)
- If people don't eat meat will they have enough energy? (Y)
- Will we buy seeds in the shop? (Y)

Greenery & Green Spaces

- Carbon Capturing Trees
 - Where are the CO2 capturing trees to be planted? (N)
 - And what happens while the CO2 capturing trees are growing to a size at which they will do the intended job? (N)
- Green Spaces
 - How are green belt sites and green spaces to be protected? (N)
 - Will you be working to stop the road through Rimrose valley? (N)
 - What green spaces have you agreed to sell for mass development to the detriment of those LCR residents? (W)
 - Why has it taken Covid for people to realise the importance of parks and "green spaces"? (N)
- Flowers
 - Why are their not more flower beds in Liverpool? (N)
- Wildlife
 - How will LCR increase wildlife in my local area e.g. new / improved greenspace, more urban trees, ending use of pesticides? (N)
- Other
 - Excluding safety reasons, what is he justification for local councils continually cutting grass verges? (N)
 - What are the LCR options and programmes for the land environment and nature-based solutions, where a carbon focus also delivers many other benefits. E.g. protecting our peatlands and soils, planting forests and hedgerows etc. can also slow the flow to reduce flood risk, create recreational spaces, protects wildlife, etc. – LCR Climate Panel
 - How do we target deforestation, palm oil, mining, and landfill?

Waste

- Why is close to a majority of recycling being burned for "energy reclamation" which then requires the ash to be buried in concrete (a non-environmentally friendly material) caskets in the ground? (W)
- Are there any plans to recycle food waste again? (N)
- Will recycling facilities be improved? (Y)
- How will plastics, chemicals and vehicles waste be handled? (Y)

Questions 4 of 4



Clothing

- How do the council propose to persuade people to buy second hand/swap/rent clothing? (H)

Housing

- What ways new development will accord with goals? (Y)
- Practicalities
 - How can these changes can be carried out on old terraced housing? (H)
 - Can all homes be fitted with solar power? (H)
 - How can varnished floor boards be insulated underneath without damaging them? (H)
 - How will this effect people still with solid (smokeless) fuel, who also use chimneys to ventilate their home in summer? (H)
 - If wood is going to replace bricks in building houses, what happens when wood expands and contracts? (H)
- Boilers
 - Would fully electric boiler heaters be an option? (H)
- Finance
 - Who will pay for these changes? (H)
 - Are local councils going to be given money for building carbon neutral council homes? (H)
 - Will and what finance support schemes be available? (H)
 - What happened to the fiasco Green Homes Grant? (H)
 - What incentives will they (housing developers) be given to up their game (i.e. to build in a more environmentally friendly way)? (H)
- Data & Information
 - Why are homes being focussed on when they only emit 13% of the UKs emissions? (H)
 - Is international shipping, flying, manufacturing, the relentless drive for everything to be on a screen, WIFI enabled, and made "smart" not also a concern for emissions? (H)
 - How much difference any of this will make given our tiny contribution to the problem against e.g. China? (H)
- Smart Homes
 - When you say smart, what do you mean? How is everything connected and how does that affect my privacy? What will happen to the data? (H)
- General
 - What is best to do and choose? (H)

- Retrofitting older properties with insulation, photo-voltaic, etc. What are the options and where are we heading? (H)
- How will measures to cut carbon emissions affect my life in terms of cost?(H)
- Air Conditioning
 - Would any carbon savings be lost via increased installation of air conditioning? (H)
- Domestic Heat/power
 - Has the modelling on the domestic heat/power trends looked at owned vs private rented sector, or is it the whole stock regardless at this stage? - LCR Climate panel
 - The importance of insulation and heating but also for water interests in water efficiency measures that link with heating efficiency and for sustainable drainage of driveways, roof space, etc. Is there potential to influence planning standards for new builds and retrofit for existing buildings? – LCR Climate Panel
- Solar
 - The installation of solar PV is no longer financially viable with the cost of the systems and the predicted cost back to break even now being in excess of over 30 years which is a best case scenario and does not take into account the variable efficiency rates of panels dependant on cleanliness. What will the city region do to overcome this so it is once again attractive to install solar PV systems? – LCR Climate Panel

