

Net Zero Carbon Engagement 2021

At Home 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 it 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

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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





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.



*Text as used on Commonplace, similar yet not identical text use on in the Youth Survey and all workshops

Key Takeaways: Overall Thoughts

• In the main people are supportive of the changes with 63% positive about the vision for home, 28% neutral, and 9% negative.





Base: 759

Key Takeaways: Concerns or Worries

- One of the key concerns or worries people have in relation to the visions, whether a
 young person or part of the general public, 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 the 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).



Key Takeaways: Solutions

- One of the key solutions people have in relation to the visions, whether a young person or part of the general public, is financial support whether 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.



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 report brings together the findings of the adult and youth research and engagement around the visions for how homes will change.



Methodology



FIELDWORK PERIOD

Tuesday 29th June 2021 – Wednesday 15th September 2021



876 TOTAL RESPONSES TO THE IN OUR NEIGHBOURHOODS VISION

- 323 responses via Youth survey hosted on Snap Surveys
- 12 responses from Youth workshops/questionnaire
- 202 responses via General Population engagement on Commonplace
- 235 responses from General Population workshops



- 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.



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Commonplace Findings



Demographics. How old are you? Demographics. Where do you live?

Base: 202

26%

202 people responded to some or all of the 'At Home' section on Commonplace

- As not every individual who engaged with the Commonplace questions answered all the sections it is important to understand the make up of the sample per section to fully interrogate the data. Who we are as individuals impacts our responses.
- Just over three in five (61%) of respondents to the home section were between 35 to 74 years old. Yet, it is important to note 26% did not answer the demographic question regarding age. Furthermore few youth (under 25s) took part in this survey as a specific survey was designed for them on Snap.
- 27% were Liverpool based, 17% Wirral, 16% Sefton, 6% St Helens based, 3% Halton, and only 1% Knowsley based.
 Again 26% did not answer this question, so of these anonymous respondents no demographics were collected.



Respondent Age Profile





Just under three in five (59%), of those who responded to some or all of the home section, own their home and 12% rent.

Base: 202

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Of the various energy saving measures presented, just under 3 in 4 (74%) of respondents already have double glazing and almost 3 in 5 (59%) have roof insulation.

Only 14% state that their property was EPC C or above.



What energy saving aspects does your home have in place?



METROMAYOR LIVERPOOL CITY REGION Q13: What energy saving aspects does your home have in place?

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Base: 202

9 in 10 (90%) heat their homes with mains gas, and just under 3 in 4 (74%) use gas to heat their hot water.







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83% 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.





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

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





Q11: What do you have for cooking at home?

72% of those who responded to the home section agree we need to reduce carbon emissions.



This rises to 96% when we exclude those who did not answer the question (base: 152).





Demographics. To what extent do you agree or disagree that we need to reduce our carbon emissions?

However, only half (50%) of those who responded to the home section 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).





Demographics. How much knowledge do you feel you have about the actions needed to reduce carbon emissions?

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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.





74%, of those that responded to the question (base=189), felt positive about the overarching statement for future homes on seeing it for the first time.



Base: 189 (excluding Not answered n=13)



Q1. How positive or negative do you feel about the above statement for the future of our homes?

This drops slightly (-5%) after seeing all the visions related to home, with 69% of those that responded to the question (base=192), feeling positive about the overarching statement for our homes.



Base: 192 (excluding Not answered n=10)



Q6. Overall, how positive or negative do you feel about all these visions and changes for homes in 2040?



• **How energy is generated:** Millions of homes will produce energy and sell the electricity generated on their roofs by solar panels to the grid, replacing fossil fuel power stations.



1 in 10 (10%) of those that responded to the question (base=194), felt that the vision for how energy would be created in the future would not improve their life.

86% noted at least one improvement, with 80% picking that their life would improve generally as it would be better for the environment, 47% feeling they may save money on bills, and 32% may see advantages making money selling electricity.







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The most significant frequently cited barrier pertained to cost (65%).



65% **Affordability/Cost** of the changes

20% Practicalities (including permission & installation barriers)

13% **Reliability & efficiency of energy**

8%



Understanding of how to maintain and any costs associated (including security concerns and lifespan of product concerns)

"Who will fund the installation of the required infrastructure? Most households would be unlikely to have the cash to invest themselves. Also, even if they did, with people moving house frequently, would they want to commit to the required investment?" - 35-44, Sefton

"Maintenance costs, older roof structures not designed for the weight, loss of historic aesthetic on roofs" - 25-34, Liverpool

"Maintenance of solar panels would possibly be expensive. Is there also an additional fire risk from having solar panels/ a means of electrical generation on roof. I think also that the benefit will disproportionately be for homeowners. How will lowerincome families, who rent, benefit and what about people who live in apartments or flats?"

- Unknown

Base: 117 (excluding n/a answers n=4)

Other reasons:

- Potentially increase in wealth inequality (7%)
- Barriers from landlords/freeholder (6%)
- Negative impact on the environment from production of panels (3%)
- Persuading people to change (3%)
- Damage to property / ruining aesthetics (3%)
- Ouestions over if it would actually make a difference (3%)
- Disproportionate benefits for homeowners vs non. Homeowners (3%)
- No or diminishing return on investment (3%)
- Degree of government support for solar micro generation/solar panel installation (3%)
- Vague promises with no action/slow progress (3%)
- Capacity of the grid (2%)
- Understanding what happens when house sold or people move (2%)
- Losing ownership of roof to electricity companies (2%)
- New build regulations (2%)

(14 Other Codes with 1% response rate included in Notes on PowerPoint)



Q2. Briefly, what concerns or barriers do you have about this change in energy generation?

27

Over half (55%) of the solutions noted regarded financial support.

Base: 105

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of respondents stated some sort of financial support (e.g. government subsidies, grants, loans, local funds, bonds etc) or in general making it cheaper (e.g. local production, and Authority lead bulk purchase) would help.

55%

13%

felt having **more communications** in general, including a publicly published clear and simple plan, guidance and advice explaining the process and reasoning (including information on financial implications), and convincing arguments to change, would be helpful.

9%

of respondents thought changes in building **regulations/planning policy** that require fitting energy generation technology (e.g. charging points on every estate, turbines fitted to mains water pipes) may be useful.

7% suggested exploring other power sources and solutions.

Other reasons:

"Financial help to people irrespective of whether they are on benefits or not. We have the working poor

or one salary homes in the region, who are not eligible for benefits but may be living on the breadline

or in debt, so cannot afford energy-saving measures."

- 45-54, St Helens

"More information and communication.

How do we start this change over. I've

iust bought a home and don't know

where to start."

- 35-44, Sefton

"A condition of planning permission for new

homes/flats should require energy efficiency

standards, including power generation costs to

the environment e.g. making mandatory heat

pump provision for houses, solar panels on

flats and houses. House roof to have a

predominant east-west orientation to facilitate

the efficiency of solar panels."

- 70-74, Wirral

"Ensure that over reliance on solar

- Approved and tested installers (5%) Technological advances / investment
- (4%)
- Plan for all homes not just new ones / including flexibility to update old building (4%)
- Legislation e.g. around potential issues, maintenance, property sale, around bill payer benefitting and not the landlord (3%)
- Government led (3%)

Q2. Briefly, what would help overcome these barriers or concerns?

- Tax rises/Carbon tax (2%)
- More discussion and less vagueness (2%)
- Training for traditional workers adapting / general skills training (2%)
- Common sense / realistic approach (2%)
- Realising climate change is not man made / to not do changes (2%)

(8 Other Codes with 1% response rate *included in Notes on PowerPoint*)



















- **Heating:** Homes will be heated by air/ground source heat pumps or district heat networks.
- **Cooking:** All hobs and ovens will cook using electricity. They don't pollute, unlike gas boilers, hobs and ovens.



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13% of those that responded to the question (base=188), felt that the visions related to heating and cooking in the future would not improve their life.

84% noted at least one improvement, with 82% picking that their life would improve generally as it would be better for the environment, and 30% noting potential financial savings on bills.

Base:188 (excluding `not answered' n=14)





METROMAYOR LIVERPOOL CITY REGION Q3. How will these visions about heating and cooking improve your life?

The most significant frequently cited barrier also pertained to cost (58%).

Base: 108 (excluding n/a answers n=8)





Q3: Briefly, what concerns or barriers, if any, do you have to these changes in heating and cooking?

55% of respondents suggested providing financial support as a necessary solution to help achieve these visions.

Base: 88 (excluding n/a answers n=2)



55% Financial help (e.g. subsidies, incentives, bulk buying initiative)



16%



More education and information (e.g. on methods, and around convincing arguments to change, and how to be more sensible with energy consumption)

11%



Consideration for different types of property and practicalities (e.g. alternative heating methods for different properties)



10% More skilled local labour and lists of trusted traders.

10% Detailed plans, info and comms.

"Alternative heating methods for different properties, and a reduction in costs and intrusion." - **Unknown**

> "If these domestic changes were backed up by major industrial ones, do you seriously believe that the majority of gas pollution comes from gas ovens? - Unknown

Other reasons:

- Better technology and continued improvements (7%)
- Consideration of Hydrogen (6%)
- Seeing the tech in use (3%)
- More regulation and improved Building regs (e.g. to ensure higher levels of insulation) & new estates built of a certain size built to passive house standards (3%)
- Reasonable timescales/patience (3%)
- Domestic changes backed up by changes in other areas (e.g. major industrial change, and a ban on air travel, stopping of chasing constant economic growth) (2%)
- Allowing contingency source/s for when network down (2%)
- Discussion (2%)

(7 Other Codes with 1% response rate included in Notes on PowerPoint)





Q3: Briefly, what would help overcome these barriers or concerns?

Insulation, Zero Carbon Homes and Improved Energy

- **Insulation:** The temperature of our homes is more comfortable with improved insulation and double or tripleglazed windows keeping us warmer in winter. Furthermore, in summer we will be kept cooler as insulation and blinds keep the heat out, meaning air conditioning is not needed as summers get warmer.
- **Zero carbon homes:** All new homes and businesses will be built to be zero carbon from the start and built using wood rather than bricks to lock in carbon emissions for decades.
- **Improved Energy Performance:** Existing homes will increase to a minimum Energy Performance Certificate rating of C.



12% of those that responded to the question (base=193), felt that the visions related to insulation, Zero Carbon Homes and improved Energy Performance in the future would not improve their life.

83% noted at least one improvement, with 73% picking that their life would improve generally as it would be better for the environment, and 3 in 5 (60%) noting positives of their house/home being warmer in the winter.

Base:193 (excluding 'not answered' n=9)





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Once again, the affordability of the visions (52%) was the most frequently cited barrier.

"I have an 1800s

house. No cavity

walls. Insulation

goes where?"

- 45-54, Halton





52% Affordability

19% Older houses harder to retrofit

11%

Concerns over the use of wood (e.g. durability of wood as a building materials and potential negative consequences (e.g. fires), and sourcing good quality wood sustainably)

7%

Not enough skilled tradespeople to deliver required changes

7% Concerns about retrofitting causing building defects (e.g. damp, loss of character) "We have mains underfloor heating, floor and loft insulation as our 1930s home has no cavity walls, which helps to warm the house during winter, but under these plans unclear if there would be a conflict of interest? Disagree with the statement about blinds helping to cool homes. The planet is heating up, what are blinds going to do?" - 35-44, Wirral

" - Lack of qualified installers. -

Wooden homes tend to be flimsy, less

well built and don't last as long as

properly built brick houses. - UK does

not produce enough wood to supply

current demand, let alone increased

demand from new wooden houses. -

Cost. - Roque installers."

- 35-44, Wirral

Base: 102 (excluding n/a answers n=11)

Other reasons:

- Changes will happen too slowly and not be strong enough (6%)
- Knowledge (including around terminology, misinformation)/lack of acceptance of climate change (6%)
- Push back and reluctance from the building industry and developers (5%)
- Disruption caused by changes (including noise and time) (5%)
- Plans not considering both keeping warm when needed, and keeping cooler when needed (5%)
- Tenure mix a problem/barrier to making changes (4%)
- EPC targets are too low (3%)
- People like old homes, worry climate will be used as an excuse to demolish older buildings, which can be adapted (3%)

(19 Other Codes with 1-2% response rate included in Notes on PowerPoint)



The top solution again related to financial support (39%).



39% Financial support (e.g. subsidies, low-cost scheme, grants, loan scheme)

21%

Deliver **educational and informational campaigns** e.g. to explain reason why changes are necessary and what will/has happened

X

7%

Rethink building materials (e.g. produce new bricks in a more environmentally friendly way/ reuse bricks/ use recycled fabric for material/ rekindle traditional building materials (e.g. sheep's wool)

7%



Provide solutions tailored to individual properties and people's circumstances (e.g. older properties) A local loan scheme which is paid back through energy savings. for example, a pot of money exists for the Merseyside area for those that purchase energy from the Merseyside ESCO. A landlord takes the loan from the pot on agreement that the tenant pays the loan back through energy savings. - **35-44, Liverpool**

As well as rolling out schemes with the latest technology, look at heritage trades and crafts and how the use of traditional materials can help e.g. use of sheep's wool insulation, less use of cement and more use of lime, high quality hardwood windows instead of UPVC, linseed paints. - 35-44, Sefton

Base: 88 (excluding n/a answers n=2)

Other reasons:

- Change building/planning regulations and landlord licensing to enforce changes (including reducing use of non recyclable construction waste) (6%)
- Launch a trusted installer scheme so increase consumer confidence / regulated trades (4%)
- Ensure required equipment and installation are low cost (4%)
- Ensure that there is an independent body which checks standards (4%)
- Transform existing buildings rather than demolish and replace (4%)
- Incentivise landlords to make the changes (4%)
- Plans (4%)

27 Other Codes with 1-2% response rate included in Notes on PowerPoint)

Every building is different. Construction methods differ. The environmental stresses on each building differ. I want to be sure that I can choose the right thing for my building in my location, not be shoehorned into the latest environmental fad. Householders need good information to make informed choices. That is even more important than grants to make it happen. - Unknown



Q4: Briefly, what would help overcome these barriers or concerns?



- **Smart homes:** Smart technology will help manage appliances, so they are used at the cheapest time when there is more energy in the national grid than is needed.
- **Energy labels:** Manufacturers will need to make appliances and other goods to meet higher energy standards, so only A-rated products are sold, and bills will be cheaper.



11%* of those that responded to the question (base=199), felt that the visions related to Smart Homes and Energy Labels were negative or would not improve their life.

83% noted at least one improvement, with 74% picking that their life would improve generally as it would be better for the environment, 57% noting they would likely use less electricity, and half (50%) highlighting the potential financial positives of saving money on bills.





METROMAYOR LIVERPOOL CITY REGION Q5: How will these changes improve your life? *Note: this percentage does not reflect the graph as some who gave a negative other also selected an improvement. ~

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The cost and affordability of products, installation, and running of devices was the most frequently cited barrier (28%). But there were also concerns regarding privacy and obsolescence of technology.



28% Cost and affordability of products, installation, and running

5.

17%

Concerns about privacy and security of smart tech (e.g. hackers/private companies spying)

11% Resident education and skill with new technology

10%



Worries about tech **depending on other systems and technology/ incompatibility** with other systems (e.g. it has to connect to the internet)

10%

23

Throwaway/obsolescence culture undermines benefits of smart tech. (e.g. devices being rendered obsolete due to software updates, and the idea of throwing away perfectly good products that still work to replace with 'greener' ones)

Danger with smart homes is data harvesting, the network running the home will have to be safeguarded with respect to what is extracted from it. (When the family are out? what their routines are? What programmes they watch? and therefore political or societal beliefs). - 25-34, Liverpool

> Most tech companies only support for 8-10 years max. If everything is replaced every 8-10 years that's a lot of ewaste.

- Unknown

Base: 81 (excluding n/a answers n=3)

Other reasons:

- Reluctance to use smart technology (7%)
- Concerns over whether the power supply will be adequate (7%)
- Manufacturers won't design/retailers won't sell more energy efficient products if they don't have to / concerns over speed of product availability (6%)
- Practical and safety concerns of using appliances at night or when not at home (e.g. elderly being forced to use the laundry room in the middle of the night, people not using devices at other times when the grid isn't overloaded, fire risk) (6%)
- Smart tech won't make much of a contribution to reducing carbon vs. other measures (5%)
- Difficult to use (4%)
- Too much effort to switch/understanding psychology and human behaviour (4%)

(12 Other Codes with 1-2% response rate included in Notes on PowerPoint)



Support financially (29%) was suggested as a solution to some of the barriers, however a quarter (25%) also felt education and communication was important



29% Support financially (e.g. funding, subsidies, grants, free internet for all, reduce VAT on purchase)

25%



Education/information campaigns/communication with citizens (e.g. where to recycle appliances, and how other households used this technology, and workshops on

new tech)

9%



Single industry standard and enforced regulations for devices/products, including implement a kite mark/quality assured scheme for smart products)

Green finance to cover costs. Single industry standard and protocol for use including strong encryption to boost security at the moment there are too many products on the market - Tado/Hive/Smarthome. Needs a kitemark. - 45-54, Warrington, but works in the Liverpool City Region

Education - through TV, school, work placed seminars etc. Making it easy to do and understand. - 45-54, St Helens

Better security on smart devices. Routine inclusion of dumb or manual control so things keep working when the manufacturers stop patching and updating software.Ability to function off the network. - Unknown

Base: 88 (excluding n/a answers n=2)

Other reasons:

- Increase longevity of products to address throwaway culture (e.g. routine inclusion of dumb or manual control so things keep working when manufacturers stop patching and updating software) (5%)
- Make products easier to repair (5%)
- Strengthen encryption to boost security/strict regulation regarding data usage with heavy fines and criminal proceedings for non compliance (5%)
- Provide smart devices and systems that are simpler to use (5%)
- Implement a local energy storage solution (5%)
- Only allow the sale of A-rated appliances (4%)
- Implement measures to increase energy supply flexibility (e.g. Construct more large generators to improve energy supply) (4%)
- Review energy taxation to switch burden to manufacturers, e.g. add tax to lower performing appliances before sale to increase their cost relative to better performing appliances. (4%)
- Evidence of support from local and national government to spearhead/drive changes (4%)
 (19 Other Codes with 2% response rate included in





Notes on PowerPoint)

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Other Ideas and Thoughts



At the end of the survey respondents to the Commonplace survey were asked if they had any other thoughts or visions about how our future homes could look. A number of suggestions related to planning.



Improvements and Changes in Thinking Regarding Planning and Development

- More thought into the development of neighbourhoods and the introduction of trees/greenery to screen pollution and have a cooling effect.
- New build need to be zero carbon now
- Fully interpreted smart homes
- All homes (new and retrofitted) MCS certified renewable technologies fitted
- Better built homes to keep heat in and keep damp away
- More eco-homes
- More versatile living spaces
- House orientation should be thought about too
- Window sizes and positions critical should be thought about too
- Each roof should have Solar tiles
- New homes will increasingly be pre-fabricated with inbuilt insulation
- Regeneration projects to replace properties that don't meet EPC C
- New builds needing to be at least SAP86
- Homes built to Passiv Haus standards
- External blinds
- Every home has to have a dishwasher to save water (like have in Switzerland)

- Planning needs to ensure density so that supports local heat networks, public transport etc.
- All new buildings should have either private green outdoor space or communal, with space to grow food, flowers as a community
- Cut down on concrete usage
- Only along gravel driveways for water drainage

- Improved infrastructure for alternative forms of travel
- Electric charging points for vehicles
- Easily accessible and secure storage for bikes
- Make public transport publicly owned so money directly goes back into improving the network and introducing free at the point of use for some people

Consider mitigations for other issues e.g. flooding

- Build homes differently to prevent flooding (e.g. on stilts)
- Very focused on energy but need to consider other sources or carbon too e.g. water use
- No more plastics



Other thoughts included incorporating different forms of energy and community level changes.



Plant more greenery

- More thought into the development of neighbourhoods and the introduction of trees/greenery to screen pollution and have a cooling effect.
- Install living roofs

Improved infrastructure for alternative forms of energy

- Need to make a leap forward in efficient power generation and storage
- More investment into hydrogen
- Explore tidal, lagoons, wave power and tidal flows
- Each local community should have small geothermal, hydroelectric etc ways to provide electric power ran by the council.
- More investment into bio diesel
- More investment into bio ethanol
- There will need to be major infrastructure works not just too properties but to the general supply network
- Harness rain water
- Harness wind power

Local focus

• A website where I could see all companies and goods made locally would be a great idea as it would save the planet and support local business /reduced need to travel to buy essentials • Mortgages to help cover the costs

Community level changes

- Don't leave it up to individual homes. Try and achieve it on neighbourhood/communal basis. (e.g.) If 100 houses are getting solar at the same time from the same supplier in the same area, its easier to get people on board.
- Shared hot water systems
- Community Wealth project to provide maintenance services monitored by a public body

Other

- Various options and support not punishment
- Mortgages to help cover the costs of green changes
- Few cars
- · Need tougher and tougher restrictions on the carbon makers
- More renting
- Council buildings should have solar panels
- Move away from consumerism
- Reduction in chemicals in daily use within homes and gardens.
- The future of the home looks smart but we manual applications too in order to stop a mountain of e-waste
- Plant based diets





General Population Workshop Findings







By 2040, the way we heat our homes will have changed. New homes will be built to higher efficiency standards and homes that are already built will see changes made to them, for example through better insulation and the installation of triple-glazed windows. This means that less energy will be wasted, e.g. by heat escaping. New devices and appliances we use at home will also be more energy efficient too. For example, it will take less electricity to run your fridge or charge your mobile than it does in 2021 and devices will also have smart modes to reduce the amount of power they consume when they're not being used.

Gas boilers will be a thing of the past, as will gas cookers. If you own a car, it's likely it will be powered by electricity, so rather than going to the petrol station to fill it up, you'd plug it in overnight instead, or perhaps give it a boost while it's parked at the supermarket.



33% of those asked about the homes vision in the adult workshops were positive about the vision, although the majority (**53%**) were neutral about it.*



Base: 235



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*The vision shown also included a little on diets and food which has been moved to the neighbourhood report.

100



General environmental improvements were cited as the main benefit of the vision for home in 2040.



Positives and Benefits

- Better protection and preservation of the environment.
- **Cleaner air** as a result of fewer emissions. This would lead to **better health outcomes** and reductions in rates of pulmonary conditions like asthma and COPD.
- **Cheaper bills**. There would be fewer bills to pay (e.g. no gas bills) and a reduction in overall levels of energy use which would mean lower bills, in theory.
- Those that took part in the Food Growers' Network focus group particularly commended that **the vision** was long term.
- Participants saw **potential employment benefits** too. The need to implement many of these measures in homes would create jobs and give people opportunities to develop new skills.





However, concerns were raised relating to money, fairness and people's levels of knowledge and willingness to change behaviour.



Concerns or Worries

- Financial concerns or "Money, money, money".
 - Cost of having to make the necessary alterations to homes
 - Fear that bills will continue to rise, regardless of what measures they take to reduce energy consumption.
 - Changes won't be sustainable once they have been made.
 - Lack of government investment to realise the vision.
- Fairness issues
 - Support will be targeted at those who are old or unemployed and people who work will have to pay the full cost for new boilers, insulation etc.

Knowledge barriers

• Lack of understanding on part of population that acting quickly is critical.

- Technological barriers
 - Having to learn how to use increasingly sophisticated technology is a barrier for older people.
 - In the Maximum Edge groups, the common trend was for over 35s to express concern at the pace at which technology was advancing.

Behavioural barriers

- People generally don't like change. If they're used to cooking with gas, they won't want to change to electricity.
- Perception among some people that climate is a niche interest, e.g. they don't identify with activists or the stereotype of someone who is climate-obsessed.

There were clear differences in the sentiments expressed in the different focus groups. At the Food Growers' Network workshop, the feeling was that change was not happening quickly enough. However, in the Maximum Edge workshops, which comprised citizens who were less engaged in matters relating to the environment, participants expressed more practical, day-to-day concerns.







Financial Support

- Incentives to help people make the required changes.
- Funding to retrofit properties.
- Provide long-term funding to give certainty.
- Enable community organisations to play their role in delivering change by making procurement processes easier.
- Invest in paid staff (e.g. for allotments) rather than rely on volunteers.

- Other
 - Don't just see big business as a problem. Big corporations employ talented people and they should be engaged in the search for solutions.
 - Engage the community on an ongoing basis, as part of the transition.



Education and knowledge

- Need to address why changes are needed not just what needs to change. People don't understand the reasons certain changes are necessary.
- Invest in skills, especially for young people, so that they can take advantage of new employment opportunities.
- Education in schools and outside of schools.
- Broaden knowledge of new technologies, e.g. what are ground source heat pumps?



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Youth Engagement Findings





What our homes could be like in 2040...

- The way we heat our homes will have changed. For example, we will use electricity made from renewable energy instead of gas.
- Homes that are already built will see changes made to them, through better insulation and the installation of triple-glazed windows. This means that less energy will be wasted, for example by heat escaping.
- New technology and appliances we use at home will use less energy. For example, it will take less electricity to run your fridge or charge your mobile than it does in 2021 and electric items will also have smart modes to reduce the amount of power they consume when they're not being used.





76% of those that responded to the youth survey are somewhat or very happy with the vision presented regarding homes in 2040.



Base: 323



Only 12 people were asked about the Home vision in the workshops, all of whom were positive about the vision, yet they still had questions or concerns.



Positives and Benefits

- Better for health
- Greener
- Reduced harm on the environment
- Particularly like:
 - Switch to sustainable energy
 - Triple glazing
 - End to gas boilers



Concerns or Worries

Scepticism

- That government can deliver
- That the time frame is too short

• Financial concerns

- Prices of electricity will increase
- The cost of changes to individuals e.g. replacing whole heating system

Negative impacts

- Job loses
- Next generation missing out on benefits previous generations have had
- Companies profiting over the public
- **Practicalities** of such a big increase in electricity consumption.
- People not having the education or knowledge to make the changes required
- Not tackling cramped living conditions



Similar concerns or worries are seen in the survey, with the 11 who were unhappy, having worries about the potential negative impact of the suggested changes.

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- 11 respondents were unhappy with the proposed visions for homes in 2040. With the 3 biggest reasons being;
 - Worried about financial costs to themselves and others (n=5)
 - Worried about the impact these changes will have on their future choices in life (n=5)
 - And, worried the changes won't be enough (n=4)
- It is important to note these are not the same 11 who disagree that action is needed to reduce carbon emissions. In fact only 1 of the 11 slightly or strongly disagreed that action is needed to reduce carbon emissions.
- Addressing the worries or concerns people have could help people move towards the changes needed to reduce carbon. In this case addressing what the impact on life choices may or may not be, and being upfront about the financial cost of changes needed on people's personal finances.



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Even a third (33%) of those who were happy (or in between) about the vision, in the survey, have some concerns or worries, particularly around finance and negative impacts.

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 Of the 312 who noted being somewhat or very happy, or neither happy nor unhappy, with the homes vision, 33% (n=102) still have concerns or worries about how homes could be in the future.

- 53% of those with concerns or worries are worried about the **financial cost** to themselves or others of the changes needed.
- Just under 3 in 10 (29%) are worried about the impact of these changes on their **future life choices.**
- And, 27% are worried the **changes won't be** enough.

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Q4b. Do you have any concerns or worries about the way we have described how homes could be in the future? Q4c. What are your concerns or worries?

Base: 102

In the workshops participants were asked if they could think of any solutions to these concerns or worries, with a few suggestions being put forward such as financial support, improved communications, changes in planning, and a huge increase in renewable energy.



Financial Support

- In one workshop it was suggested that the government could play a big part in footing the bill for changes, although someone else questioned the feasibility of this.
- Grants to incentivise changes

Ramped up, improved messaging and communication

- Less talk more action
- Mandatory environmental and politics lessons in school
- Raising awareness of people's personal contribution to the issues
- Using role models to get communications out
- Emphasising the benefits of changes (e.g. cost benefits in switching form gas to electric)
- Signs in parks and similar environmental places



Changes in development and planning regulations

- New homes should be built to high efficiency levels
- There should be a rule of more trees than buildings on a development
- More trees and plants in gardens



- There should be a huge increase in renewable energy to alleviate pressure on electricity demand, considering particularly tidal and solar.
- Other
 - Make sure global billionaires pay taxes, with the money used to pay for tackling climate change
 - Increase community action projects to care for green spaces (e.g. Sefton Park Meadows)
 - Ban bonfire night



