Climate Action Plan Simulator Engagement Report



#LdnOnt ClimateAction

London CANADA

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Note to Reader

This supporting document (Climate Action Plan Simulator Engagement Report) was developed to summarize the design and implementation of, and insight gained from a proprietary engagement tool created and administered by Ethelo, a Canadian consulting company based in British Columbia. The engagement tool, hereafter referred to as the Climate Action Plan Simulator (CAPS), was created by Ethelo and customized through consultation with City staff. The purpose of the CAPS was to present alternatives and collect information directly from Londoners on which greenhouse gas (GHG) emissions actions would be most supported by the community. This supporting document (prepared by Ethelo) summarizes the levels of support for emission reduction alternatives and additional information that was gained through survey questions included in CAPS. The findings described in this supporting document are included and synthesized along with information and input gained from other engagement efforts in the supporting document titled “Learning from People”.

Ethelo was selected as a consultant to assist with engagement on the Climate Emergency Action Plan (CEAP) due to their experience working in other Canadian municipalities, particularly on climate change mitigation and adaptation planning projects. Furthermore, the CAPS developed by Ethelo was a novel engagement tool that, alongside concerted efforts to advertise and drive Londoners to the tool, proved to be effective at capturing the attention of users and provided a new way for Londoners to engage. As the following supporting document indicates, much was learned about Londoners and their collective willingness to address climate change. The insight gained through engagement efforts like the one described in this supporting document was evaluated alongside all other engagement input to inform the creation of the CEAP.



London Climate Action Plan Simulator

ETHELO

Overview

Based on community member's input, Ethelo was able to identify key elements of an ambitious Climate Action Plan that meets the community's **1 million tonne** reduction target and is widely supported by a broad cross section of community members.



1,104,800 tonnes of greenhouse gas could be reduced within this set of options

Extremely Popular. The distribution of support shows how happy people are with the plan overall.

Difficulty score of 4 out of 10. This plan is considered achievable overall.

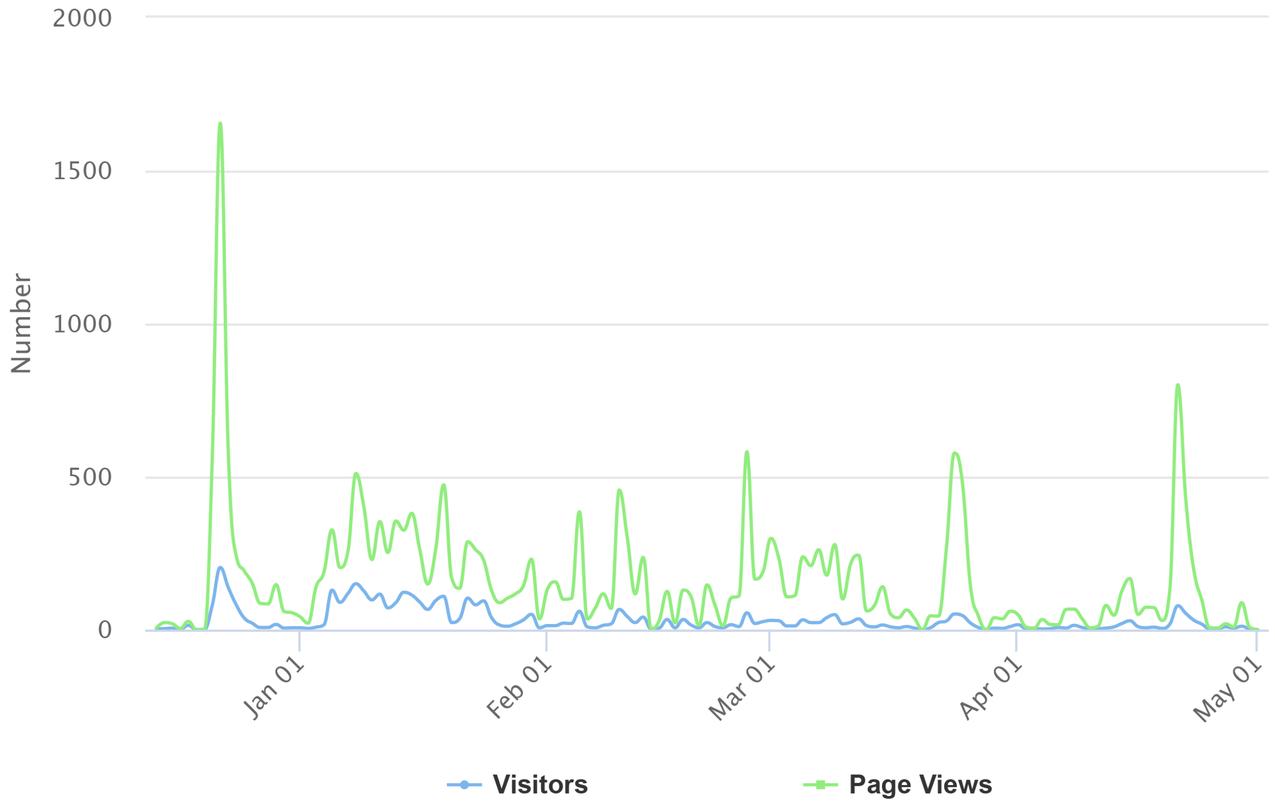
1,263 community members voted in the public engagement process.

Participation

- Visitors: **12,190**
- Total Participants: **1,263**
- Page Views: **22,468**
- Average Visit Length: **14 minutes**

Facebook Ad Manager Statistics - Overall

- Total people reached: 106,057
- Link clicks: 2,617



Voting Overview

The Ethelo platform took all participant input into account and identified projects that have the broadest community support.

Option	Support
Green Bin Utilization: 50% of households = 7K tonnes GHG	77%
Personal Automobiles: 50% of vehicles are EVs = 520K tonnes GHG	76%
Single Family Home: Solar Hot Water Heaters: 50% = 60K tonnes GHG	75%
Carpooling: 50% local car trips eliminated through increased carpooling and working from home = 50K tonnes GHG	74%
Industrial, Commercial and Institutional - Energy Efficient Upgrades: 50% = 260K tonnes GHG	72%

Option	Support
Low/Zero Emission Freight Transportation: 50% 260K tonnes GHG	72%
Apartment and Condo Buildings - Solar Hot Water Heaters: 50% = 4K tonnes GHG	72%
Walkability in New Development: 50% = 7K tonnes GHG	70%
Commercial, Institutional and Industrial Buildings - Net-Zero Energy New Buildings: 75% = 24K tonnes GHG Increase	69%
Single Family Homes - Net-Zero Energy New Buildings: 75% = 24K tonnes GHG Increase	69%

****Support** is a measure of the average value of the votes, where the value of a totally opposing vote is a 0 and a totally supportive votes is 100.

Voting Overview

The Ethelo platform took all participant input into account and identified projects that have the broadest community support.

Option	Support
Improved Bus Service: 50% Ridership Increase = 33K tonnes GHG Increase	69%
Townhouses: 50% Home Energy Retrofits = 17K tonnes GHG	68%
Net New Zero Townhouses: 50% = 6K tonnes GHG Increase	67%
Cycling Infrastructure: 250% = 11K tonnes GHG	65%
Single Family Homes: 25% Home Energy Retrofits= 50k tonnes GHG	65%

Option	Support
Townhouses - New Hot Water Heaters: 25% = 6K tonnes GHG	64%
Bus Electrification: 75% = 17K tonnes GHG	63%
New High-Rise Residential Buildings: 50% = 1.2 tonnes GHG Increase	62%
Apartment and Condo Building - Energy Efficiency Upgrades: 0% = 0K tonnes GHG	42%

**Support is a measure of the average value of the votes, where the value of a totally opposing vote is a 0 and a totally supportive votes is 100.

Participant Recruitment



Ad Performance

The ads that ran in support of this public engagement campaign could be measured in a variety of ways in terms of their effectiveness. For example In terms of awareness raising the video “building retrofits” related video had the most views and the longest views but in terms of cost per click it didn’t perform as well as other ads, in fact it had the most expensive cost per click.

There are a variety of factors that change the effectiveness of the ads that are run, including the targeting, timing and other factors beyond your control. Not all of these ads were run at the same time or for the same length of time and some were intended to reach “micro-targeted” audiences or sub communities.

Facebook Ads







Ad Performance

Also it's worth noting that ads on mobile were the most effective especially on instagram but they had the lowest “conversion” rates in terms of the traffic from those ads that resulted in participation on the platform.

The “conversion rate” on the platform itself was low. Close to 10% overall. Anecdotally we did hear some participants express a lack of trust in the process and/or past processes. Over 120,000 people visited the public engagement web page over the course of the time the engagement was open.

Often people need to see an ad a few times before they click on it or participate. On average each of these ads was seen between 2 and 3 times and likely many of the participants saw multiple different ads before getting involved. The biggest number of participants was at the beginning and the end of the engagement and there were spikes of participation every time an ad was published.

Newspaper ads



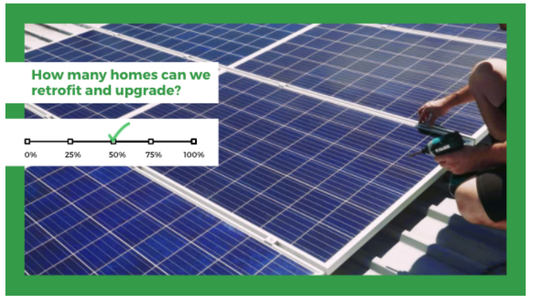
Ad Performance

The micro-targeting ads for the most part did their job of filling gaps in terms of location, age and gender.

Video ads







Emails to community groups seemed to be a major contributor to the traffic on the website overall.

Prizes being offered drove an increase in participation at the end of the process as well as the urgency of ‘running out of time’ ads.

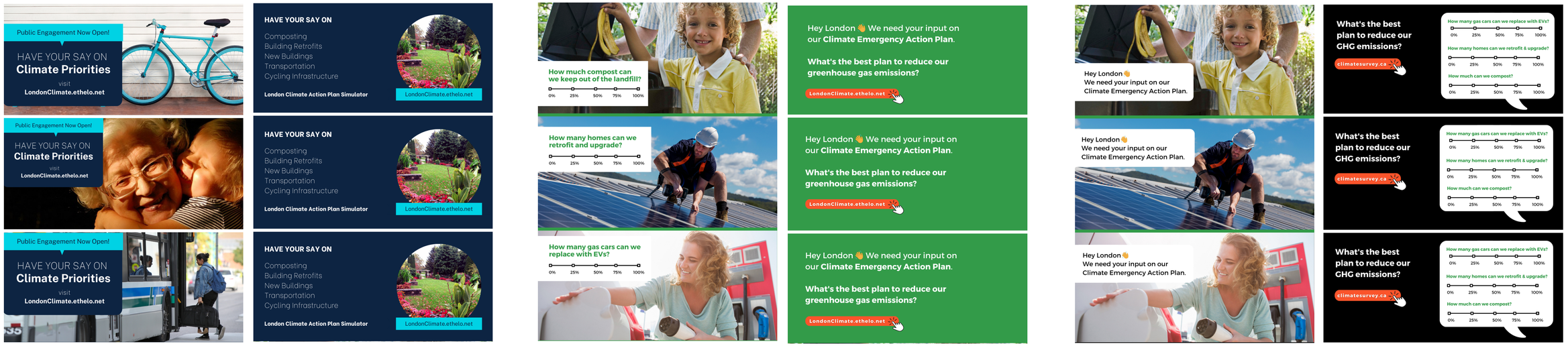
Organic posts on Reddit were an effective approach to reach community members.

It is unclear what effect posters had on engagement levels overall.

Ad Performance

Mail outs were an effective approach to reach community members in neighbourhoods that were underrepresented in the process. A noticeable spike in participation correlated with the date that the postcards were delivered.

Mailouts



Overall the ad campaign accomplished its goals as a whole. Video ads out performed static ads. Mobile was the most cost effective, delivering a shorter mobile optimized version of future engagements would likely increase conversions. Instagram followed by Facebook did best and were far more effective than Youtube and Twitter, although Youtube did generate some results with the climate solutions video. Both concern based and solutions based ads performed well. Ads featuring pictures of people performed best.

Links Clicked

Facebook/instagram combined

Ads sorted by total number of clicks, descending

- Cycling #1: 907 clicks, unique clicks 636
- Composting: 622 clicks, unique clicks 447
- Mom and baby: 407 clicks, unique clicks 330

Facebook alone

- Video climate solutions: 227 clicks, unique clicks 215
- Kid on bus: 186 clicks, unique clicks 177
- Grandmother: 88 clicks, unique clicks 87
- Video climate worries: 64 clicks, unique clicks 62
- Closing ad: 59 clicks, unique clicks 58
- Prizes: 33 clicks, unique clicks 33
- Building retrofits: 24 clicks, unique clicks 23

Costs

Lowest cost per click

- Composting (mobile)
- Cycling (mobile)
- Mom & Baby
- Prizes
- Closing

Videos

Awareness - videos watch time

- “Buildings retrofits” was played the longest but oddly, had the lowest click through rate - 2,745 watched 100% - 10,400 total views
- Hey London - Climate Solutions - 2nd longest - 673 (1.4%) watched 100% - 48,986 total views
- Climate worries - 3rd longest -125 (1.2%) watched 100%- 10,382 total views

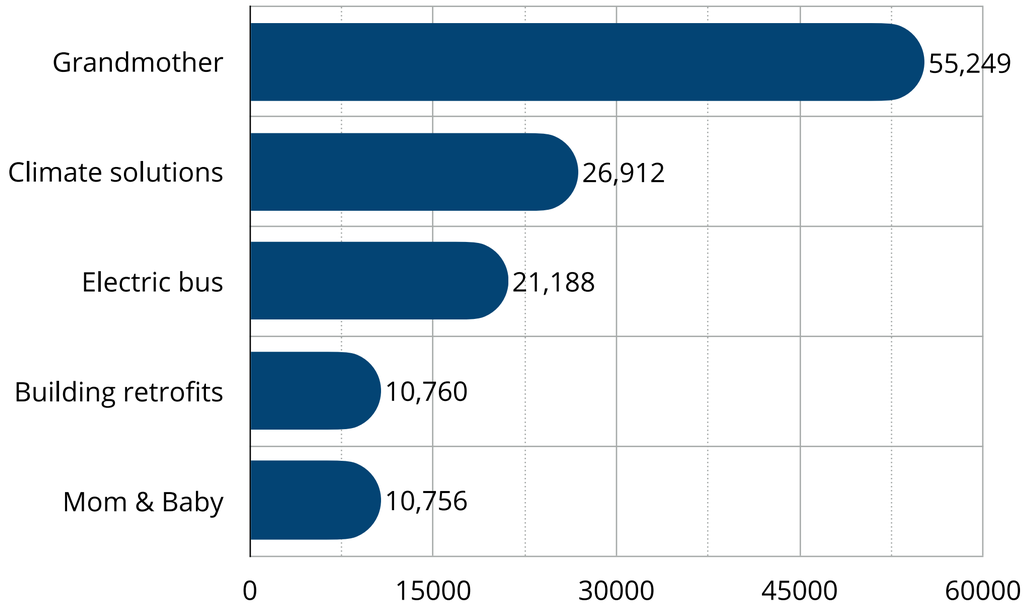
Thru plays (Minimum 15 seconds played)

- Climate solutions: 3134
- Climate worries: 780

Ad Reach and Impressions

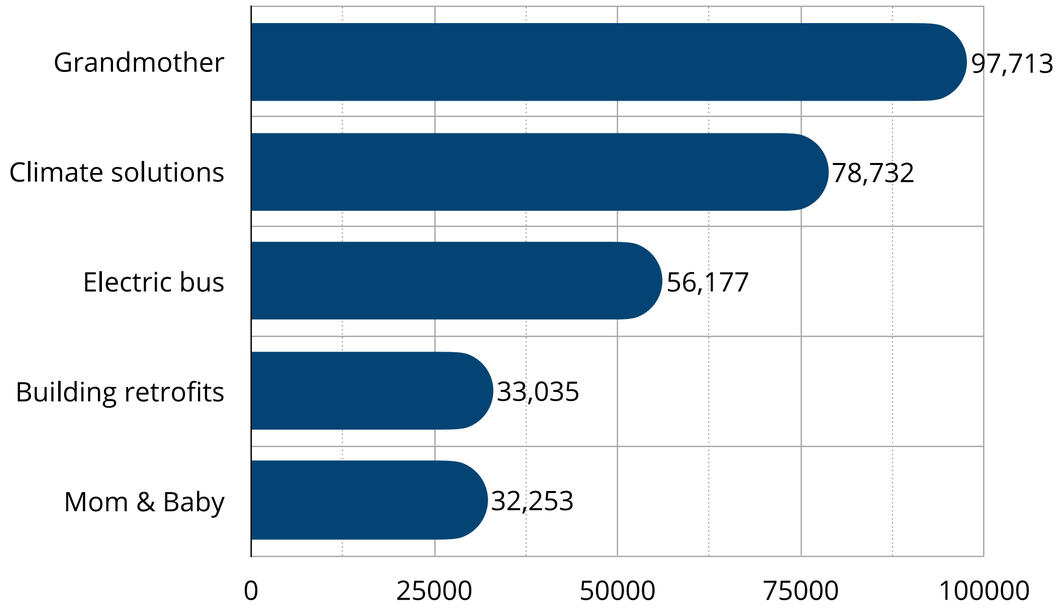
Total Reach

The total number of people that saw these ads



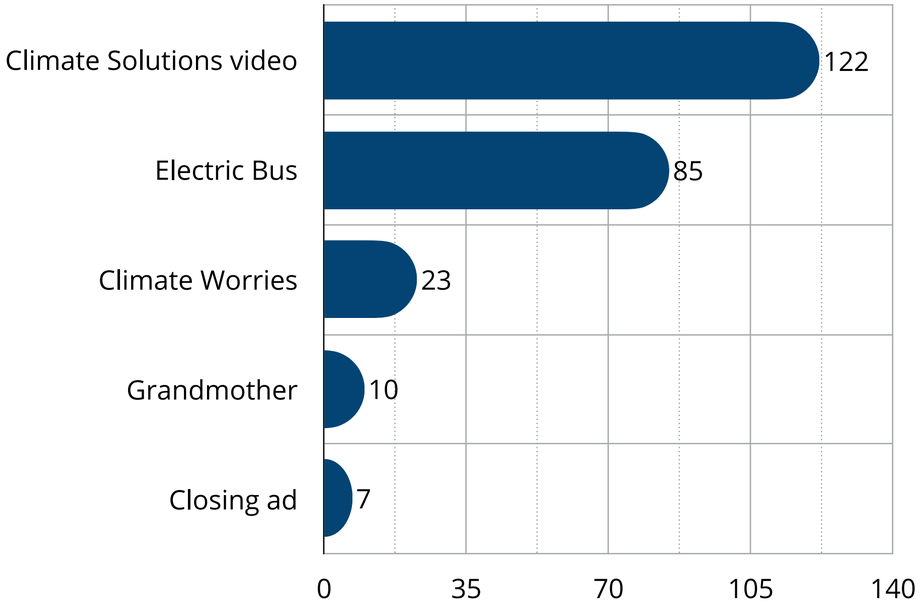
Total impressions

The total number of times the ads were visible on someone's screen



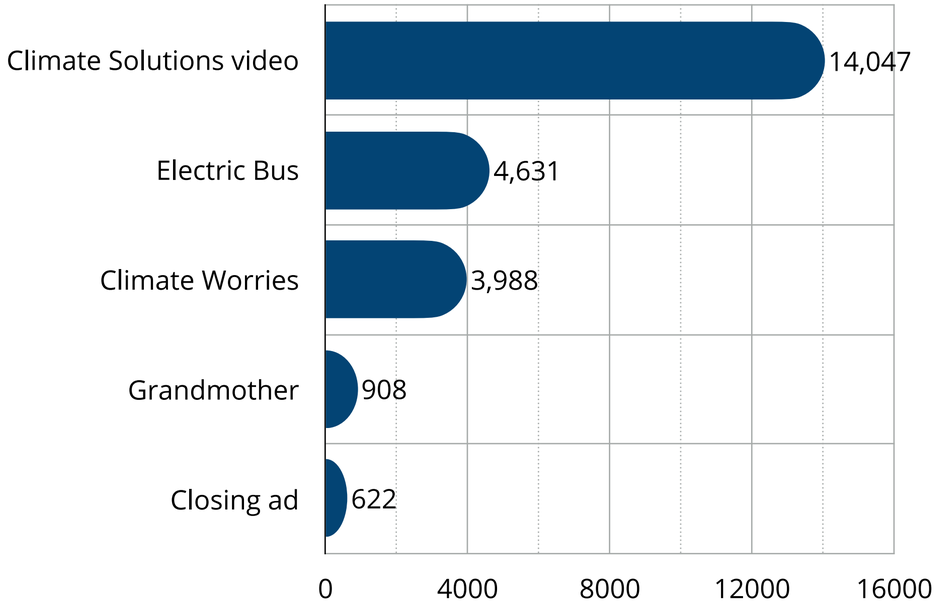
Engagement

Most comments



Engagements

Engagements include likes, comments, and shares.



Engagement

Reactions

	Total	Like	Love	Care	Funny	Wow	Sad	Angry
Electric Buses	142	62%	12%		22%	1%	<1%	1%
Climate Solutions video	118	38%	4%		37%			14%
Climate Worries video	24	54%		5%	25%			

Comments

Relevant Comments

A sampling of critical, helpful and suggestive comments, as well as misconceptions and insights.

“I mean, we have the federal carbon tax now, so shouldn't that cover it along with the gas tax? I can't really afford to fight climate change much more, is that an option?” [Reddit]

“IMHO, if you're paying a hydro bill, you're paying more than your fair share to address climate change. Since the province's shut down of coal plants and 'investment' in wind power, hydro bills have increased exponentially as a result. Add in the Fed's money grab on gasoline and natural gas, I think I'm doing more than my part. The municipal government needs to concentrate on getting the best value-for-money out of its services for it's tax payers, not finding new and exciting ways to make life in the city more expensive.” [Reddit]

“In London we bring things before the council for no less than a dozen times. Each of those times the plan will get dismantled till there is nothing left but a barely functional skeleton of an idea left. Then after about a decade it will get pushed through at the very last minute. Then after it is finally implemented have a bunch of people screaming about how it failed and it doesn't serve the purpose it set out to do so it should be walked back.” [Reddit]

Comments

“Maybe they should stop widening roads and making a city for cars as a first step. I am stunned we even have to think about that.” [Mom & Baby]

> *I'm stunned we have to even think about it, too: it's obvious that they SHOULD be widened in order to allow more efficient flow of traffic. Get rid of congestion and unnecessary pollution by letting cars get around BETTER, not making it harder and more dangerous. It's ridiculous to see so much effort put into infrastructure that supports a tiny percentage of the population, while the vast majority - i.e. drivers of vehicles - constantly get demonized. [Mom & Baby]*

“Turn off lights at city hall stop the waste lighting the trees at Victoria park” [Mom & Baby]

> *“City hall lights yes, leave the trees lit up” [Mom & Baby]*

“The City of London only pretends to want input. There was plenty of input about the mess they ended up making downtown by destroying it. They ignored input by those who knew their changes to bus routes would do harm and inconvenience to riders. Face it - in London if you don't own a car and aren't "the right sort" even if you are 100% correct you won't be listened to. I used to believe but unfortunately the results recently have made me a cynic.” [Climate solutions video]

“I'd also like to see what we can do for the disabled community in London.” [Climate solutions video]

So I want to mention that when you bring up West 5 in your building retrofits section. When they had their facebook group it was shut down because too many people were arguing that the houses were not affordable with a basic income. London has a bit of a housing crisis, and that %8 more in costs is a big thing when houses avenge around half a million in London. I hope when making new green buildings that London takes this into account. Not only that but it defeats the purpose of making a "Green" living space, if you're going to bulldoze over a forest and contribute to urban sprawl. [Climate solutions video]

Comments

stop sending so many city trucks and cars with single occupants. when 5nworkers show up with four vehicles to do one job why not put them all in one vehicle the cabs are doubles for A reason. try shutting off the trucks when sitting there no need to keep them all running waste of fuel and just adds to are carbon out put. have a members of city staff in all levels use the bus service. [Climate solutions video]

Electrify us!! Change all City Vehicles to electric (preferably Tesla because they make the best product), support electric vehicle charging stations. Provide subsidies with the Province and Feds to get tax breaks on Solar Panels for our homes. Look at establishing the rules for a robotaxi network. Set up wind and solar farms and use Tesla Megapacks to store the energy. Have a look at the Boring Company for mass transit and fast transit around the city, alleviating our dreadful city streets which are responsible for a terrible waste in fuel and maintenance. Support any business that uses decentralized working, work from home etc. Provide tax breaks and remove ANY bylaws that impede the transition to reducing energy usage. I could write a thesis on this topic, and we continue to drag our feet. Cheers [Climate solutions video]

You may want to do some more research into whether you have the power grid to support this, Norway recently had stop people from charging cars on cold mornings when people were using electric heat due to the overwhelming of its power grid, which was not up to this amount of usage [Climate solutions video]

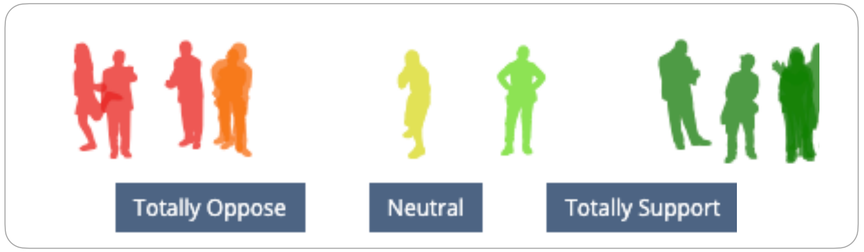
For starters quit cutting down trees to build more houses, you're taking away the very things that help with our ecosystem and carbon dioxide, too many trees have been destroyed in the past five yrs.in London , Oxford extension for example, and now meadowlily is being targeted, it's a disgrace now to see this, then go further on to Komoka, [Climate solutions video]

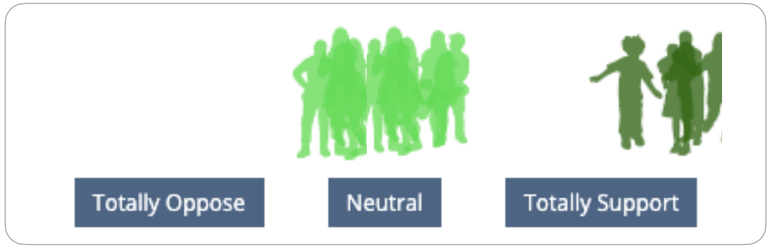
Voting Results



Overview

What makes a good plan?





The two pictures above represent levels of support* and conflict** for two potential plans. In each picture, colours are used to reflect the overall sentiment of each respondent, with red representing “unhappiness”, and dark green representing “happiness”. The plan on the right is a better plan than the one on the left. Why? Because the people on the right are roughly equally happy. They will be united in moving forward together, which increases the chance of success.The plan on the left is divisive and polarizing, with winners and losers. This means a higher chance of conflict and resistance to moving forward. Fairness is very important in group decisions and for society in general. The plan on the right distributes happiness in a fair way, which is critical to social cohesion and the democratic legitimacy.

Ethelo has outlined each of the following options after optimizing for the highest levels of community support, and the lowest levels of conflict, thereby minimizing polarization and creating wide-spread community buy-in.

*Support is the average value of all participant votes where 0 represents a totally opposing vote, and 100 represents a totally supportive vote.
**Conflict is a measure of the level of disagreement in a group. Higher conflict scores represent higher likelihood of internal resistance and failure.

Waste Diversion

How many households do you think will be making full use of “Green Bin” curbside organic waste collection?

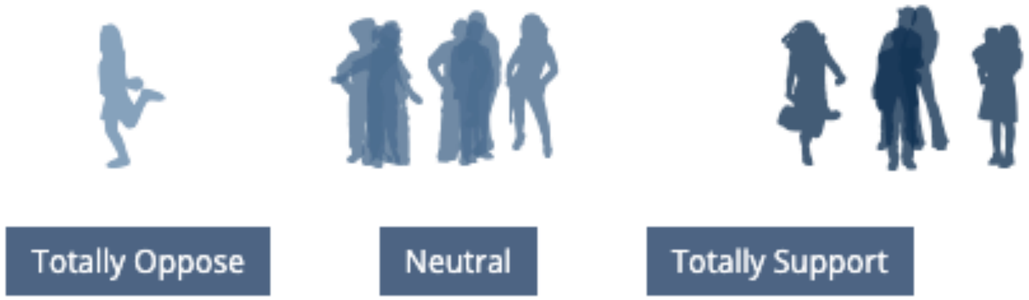
- Recommended Target: **50%**
- GHG Reduction: **7K tonnes GHG by 2030**

Overall Support*: **77%**

Low — High

Overall Conflict**: **4%**

High — Low



Personal Automobiles

How many gas vehicles do you think will be replaced with electric vehicles in the next 10 years?

- Recommended Target: **50%**
- GHG Reduction: **520K tonnes GHG by 2030**

Overall Support*: **76%**

Low — High

Overall Conflict**: **5%**

High — Low



Single Family Home: New Hot Water Heaters

How many single-family homes do you think could be retrofitted

- Recommended Target: **50%**
- GHG Reduction: **60K tonnes GHG by 2030**

Overall Support*: **75%**

Low — High

Overall Conflict**: **5%**

High — Low



Carpooling

How many local car trips do you think we can eliminate through increased carpooling and working from home over the next ten years?

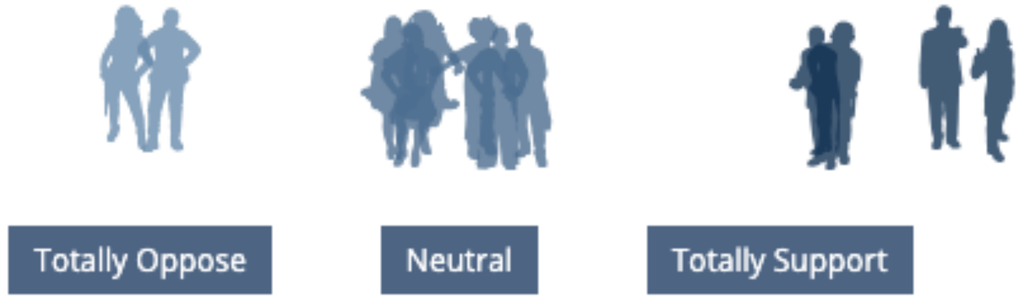
- Recommended Target: **50%**
- GHG Reduction: **50K tonnes GHG by 2030**

Overall Support*: **74%**



Overall Conflict**: **5%**





Industrial, Commercial and Institutional - Energy Efficiency Upgrades

What percentage of emissions do you think we can and should attempt to cut in the next 10 years from the commercial buildings, institutional buildings, and industrial operations in London?

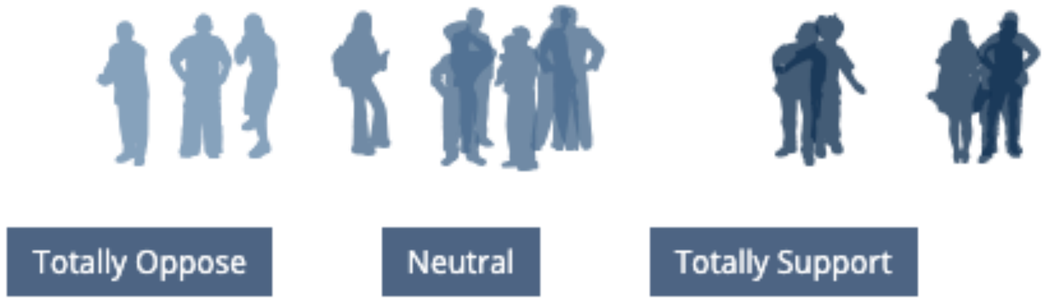
- Recommended Target: **50%**
- GHG Reduction: **260K tonnes GHG by 2030**

Overall Support*: **72%**

Low — High

Overall Conflict**: **5%**

High — Low



Freight Transport

What percent of freight transport GHG emissions do you feel could be decreased over the next ten years?

- Recommended Target: **50%**
- GHG Reduction: **150K tonnes GHG by 2030**

Overall Support*: **72%**

Low — High

Overall Conflict**: **6%**

High — Low



Apartment and Condo Buildings - Hot Water Heaters

How many hot water heaters (measured by units) in apartment and condo buildings do you think we could change?

- Recommended Target: **50%**
- GHG Reduction: **4K tonnes GHG by 2030**

Overall Support*: **72%**

Low — High

Overall Conflict**: **6%**

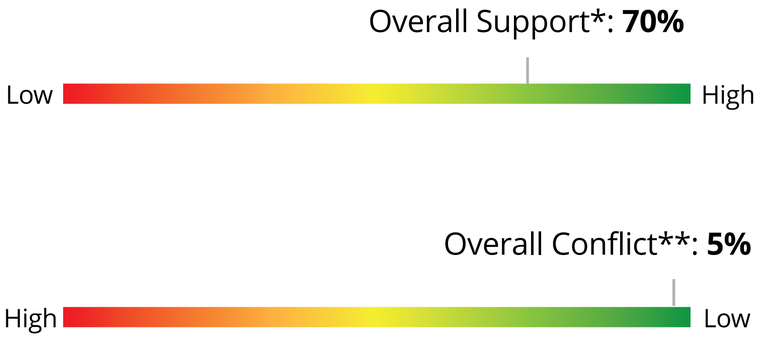
High — Low

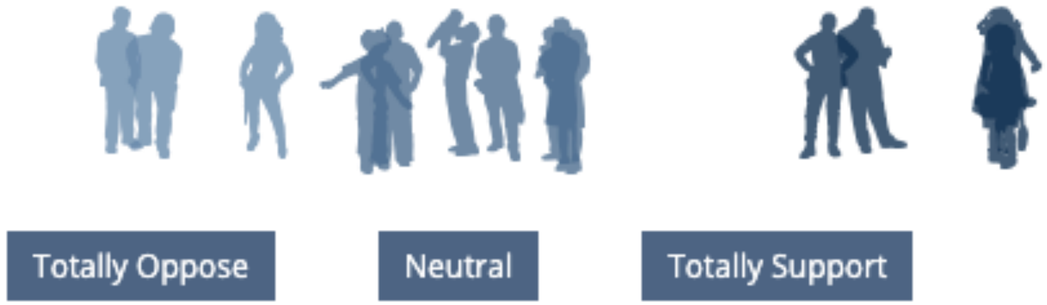


Walkable Communities

How much do you think we can increase the number of trips made by walking in London through developing walkable communities?

- Recommended Target: **50%**
- GHG Reduction: **7K tonnes GHG by 2030**





Commercial, Institutional and Industrial Buildings - Net-Zero Energy New Buildings

What percentage of emissions do you think we can and should attempt to cut in the next 10 years from the commercial buildings, institutional buildings, and industrial operations in London?

- Recommended Target: **75%**
- GHG Reduction: **24K tonnes GHG Increase**

Overall Support*: **69%**

Low — High

Overall Conflict**: **7%**

High — Low



Single Family Homes - Net Zero Energy New Homes

How many new houses do you think we can build to be net-zero houses over the next 10 years?

- Recommended Target: **50%**
- GHG Reduction: **33K tonnes GHG by 2030**

Overall Support*: **69%**

Low — High

Overall Conflict**: **6%**

High — Low



Improved Bus Service

How much do you think we will be able to increase ridership on London Transit in the next ten years through improved bus service?

- Recommended Target: **50%**
- GHG Reduction: **17K tonnes GHG by 2030**

Overall Support*: **68%**

Low — High

Overall Conflict**: **6%**

High — Low



Townhouses - Heating Systems

How many townhouses do you think the residents of London can and should plan to retrofit?

- Recommended Target: **25%**
- GHG Reduction: **10K tonnes GHG by 2030**

Overall Support*: **68%**

Low — High

Overall Conflict**: **10%**

High — Low



New Net Zero Townhomes

How many new townhomes do you think we can build to be net-zero houses over the next 10 years?

- Recommended Target: **50%**
- GHG Reduction: **6K tonnes GHG Increase**

Overall Support*: **67%**

Low — High

Overall Conflict**: **6%**

High — Low



Cycling Infrastructure

How much do you think we can increase the number of bicycle trips made in London through improved cycling infrastructure (e.g., separated cycle tracks, “Quiet Street” routes, off-street multi-use trails) and supportive amenities & programs over the next ten years?

- Recommended Target: **250%**
- GHG Reduction: **11K tonnes GHG by 2030**

Overall Support*: **65%**

Low — High

Overall Conflict**: **11%**

High — Low



Single Family Homes - New Heating Systems

How many single-family homes do you think could be retrofitted with energy efficiency upgrades in the next ten years?

- Recommended Target: **25%**
- GHG Reduction: **50K tonnes GHG by 2030**

Overall Support*: **65%**

Low — High

Overall Conflict**: **9%**

High — Low



Townhouses - New Hot Water Heaters

How many townhouses do you think the residents of London can and should plan to retrofit?

- Recommended Target: **25%**
- GHG Reduction: **6K tonnes GHG by 2030**

Overall Support*: **64%**

Low — High

Overall Conflict**: **10%**

High — Low



Bus Electrification

How many of our existing buses should we change over to electric in the next ten years?

- Recommended Target: **75%**
- GHG Reduction: **17K tonnes GHG by 2030**

Overall Support*: **63%**

Low — High

Overall Conflict**: **7%**

High — Low



New High-Rise Residential Buildings

In the next ten years, home many new high-rise residential buildings do you think can and should be built to be net-zero energy?

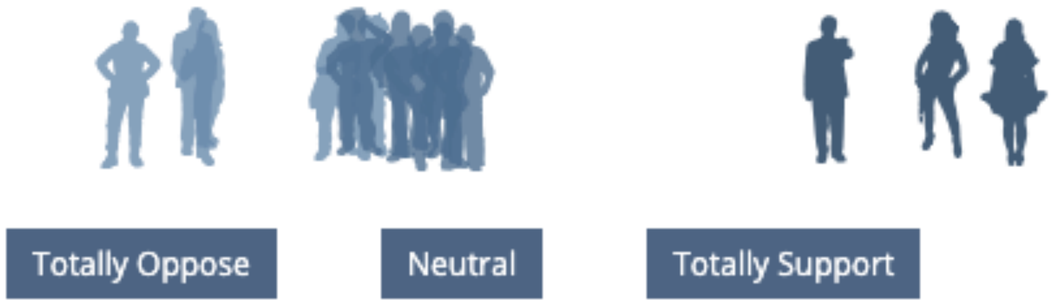
- Recommended Target: **50%**
- GHG Reduction: **1.2K tonnes GHG Increase**

Overall Support*: **62%**

Low — High

Overall Conflict**: **6%**

High — Low



Apartment and Condo Buildings - Energy Efficiency Upgrades

How many apartment and condo building units do you think we could retrofit?

- Recommended Target: **0%**
- GHG Reduction: **0K tonnes GHG by 2030**

Overall Support*: **42%**

Low — High

Overall Conflict**: **10%**

High — Low

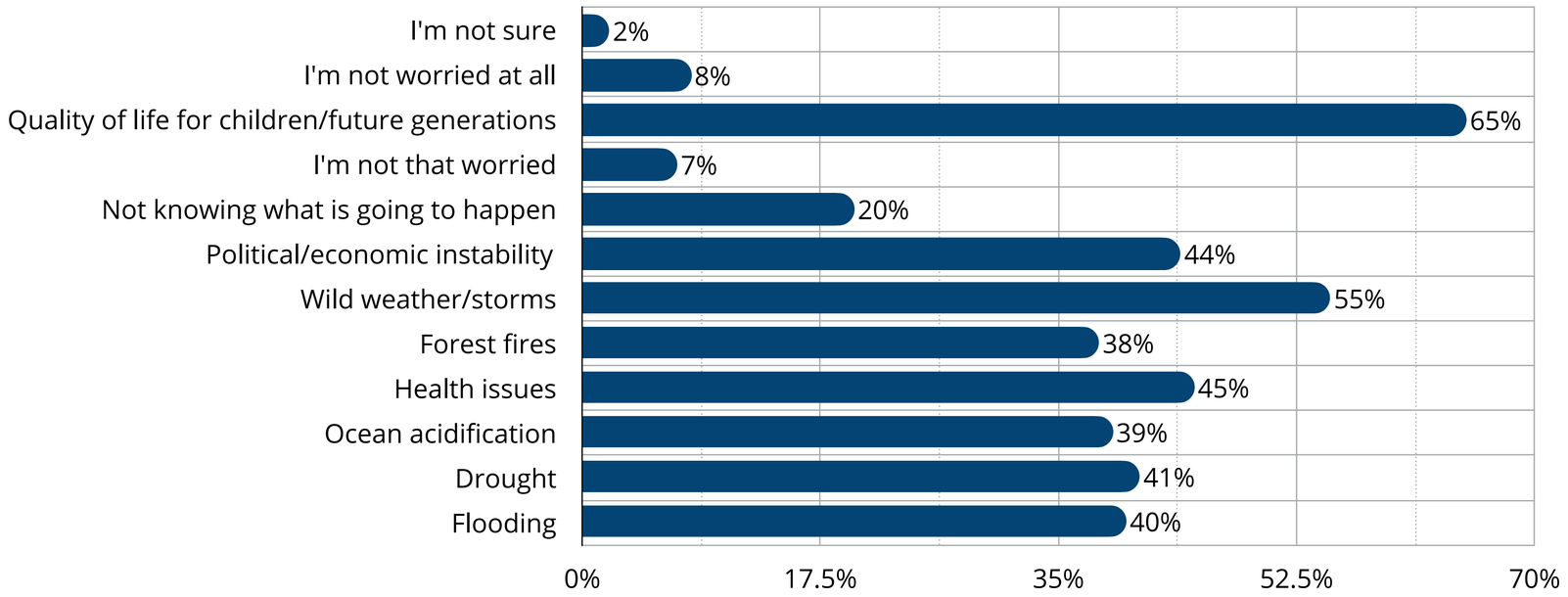


Survey Overview



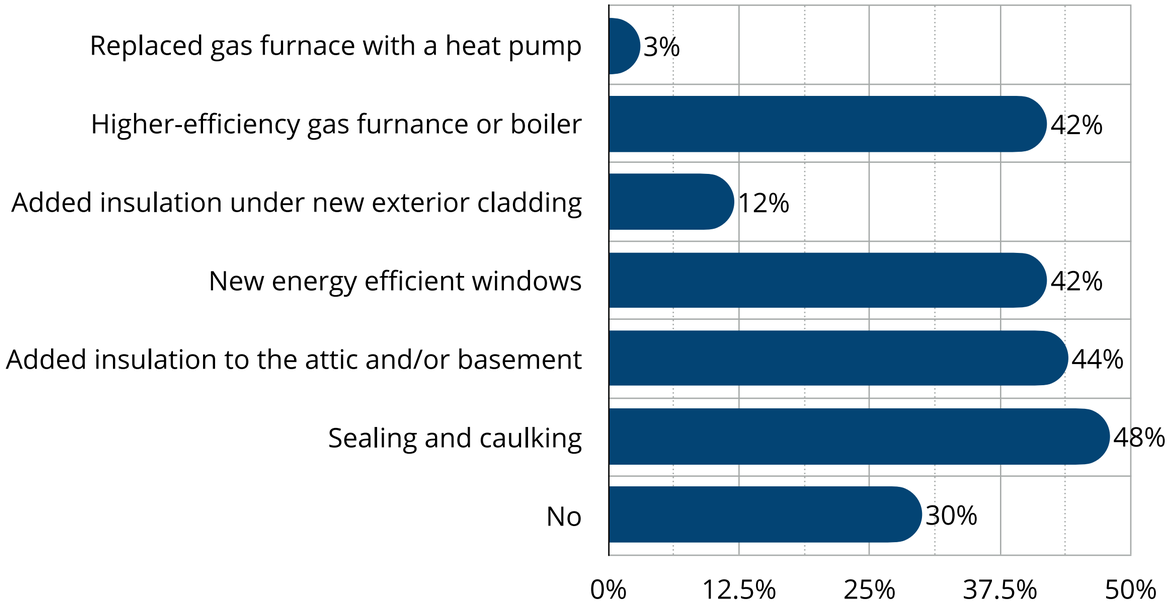
Climate Change

What worries you the most about climate change? Please pick up to five.

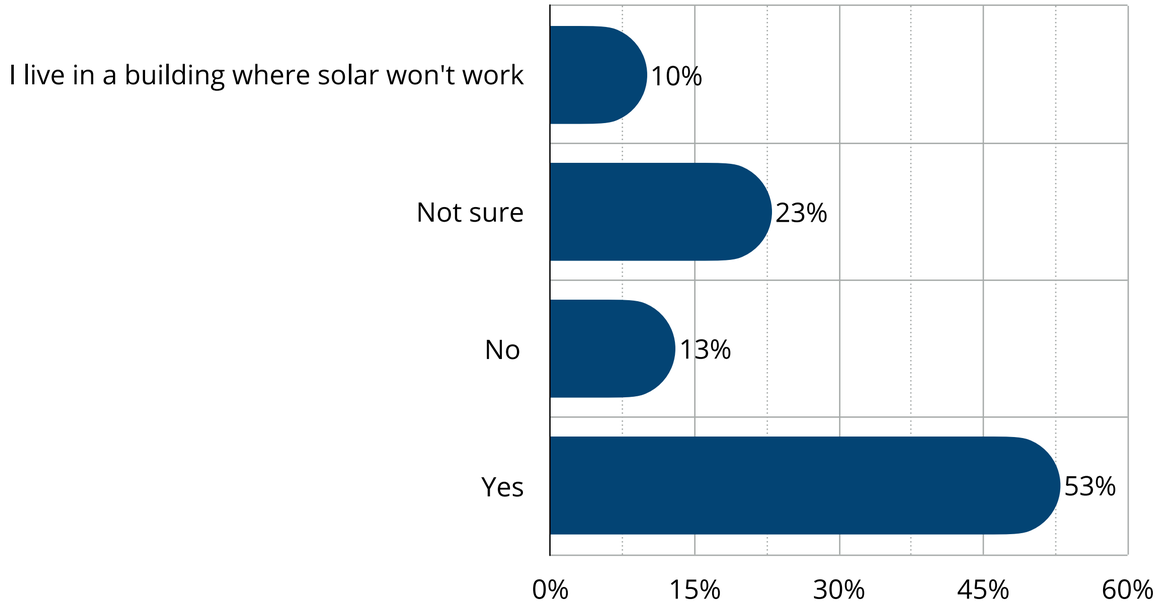


How We Live

Have you done anything to make your house more energy efficient?

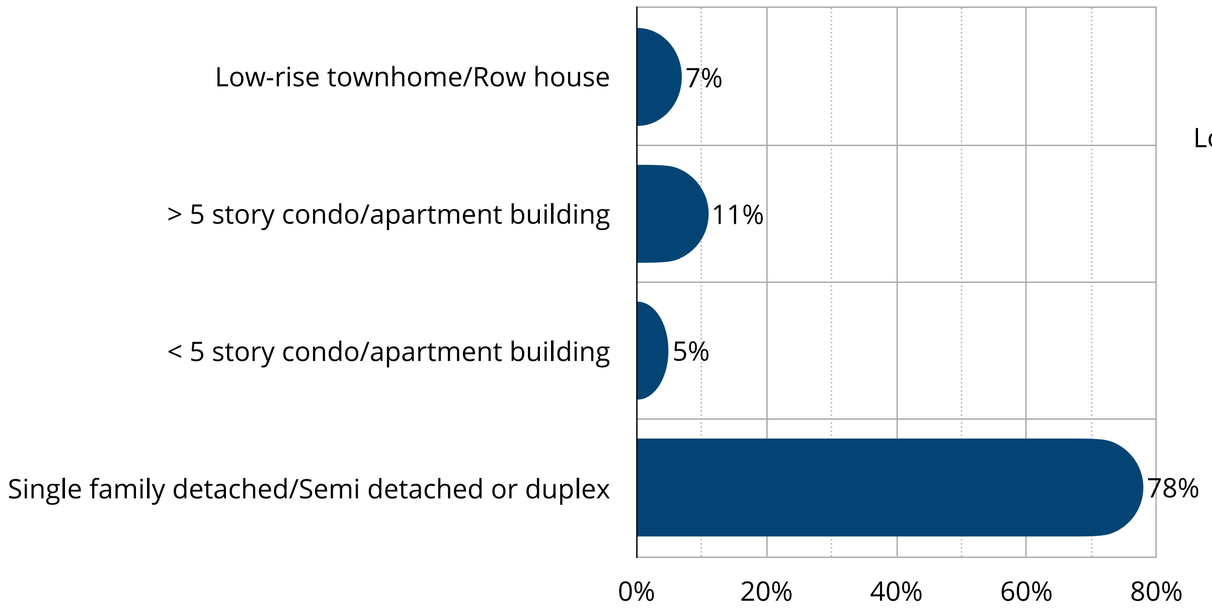


If there were an incentive offered for solar hot water heating, would you consider putting solar hot water on your roof?

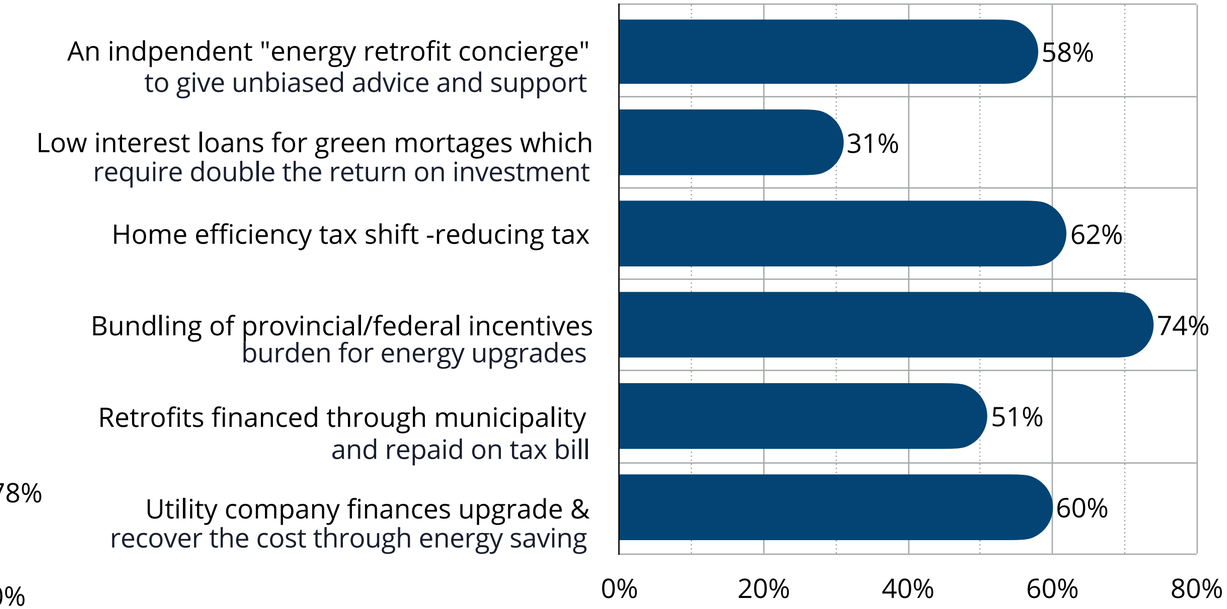


How We Live

What kind of home do you live in?

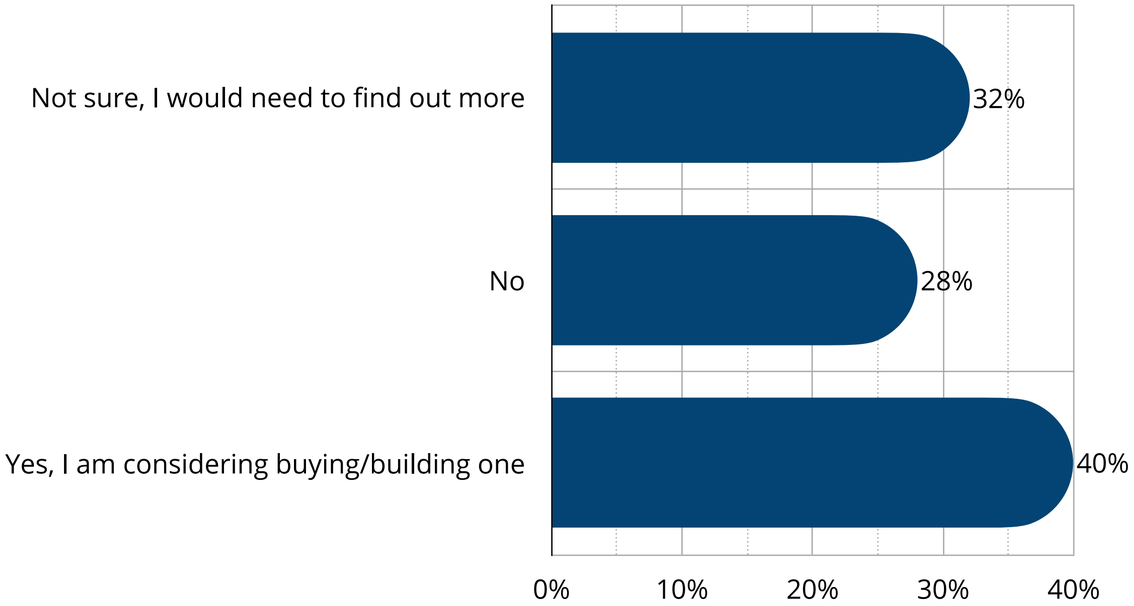


Would any of the following options help you decide to make your home more energy-efficient;

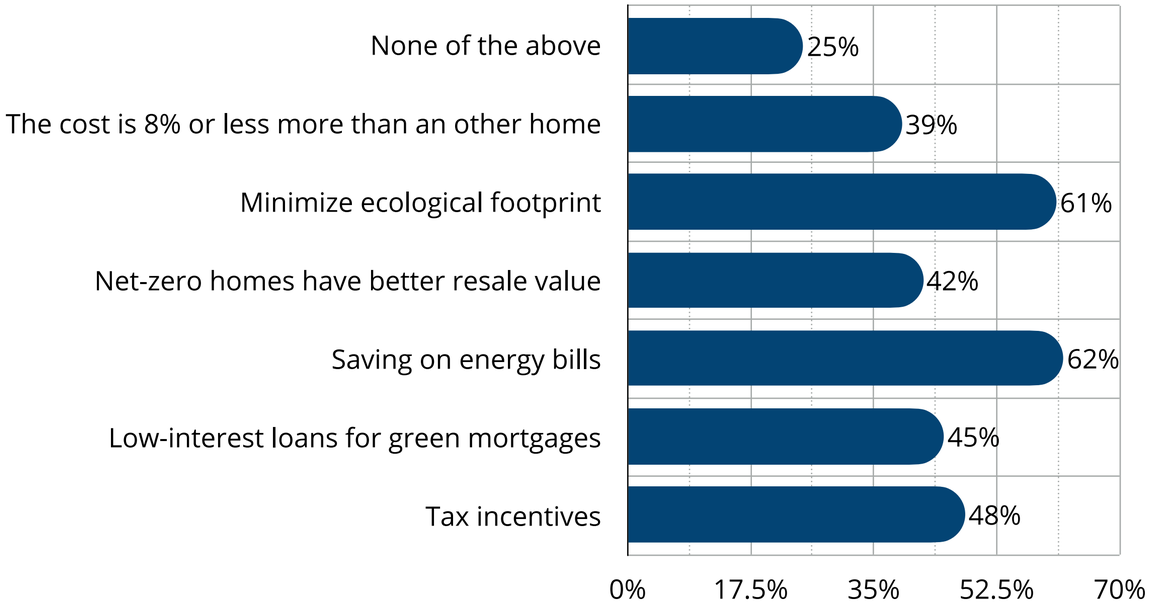


New Buildings

Would you consider buying a net zero home?

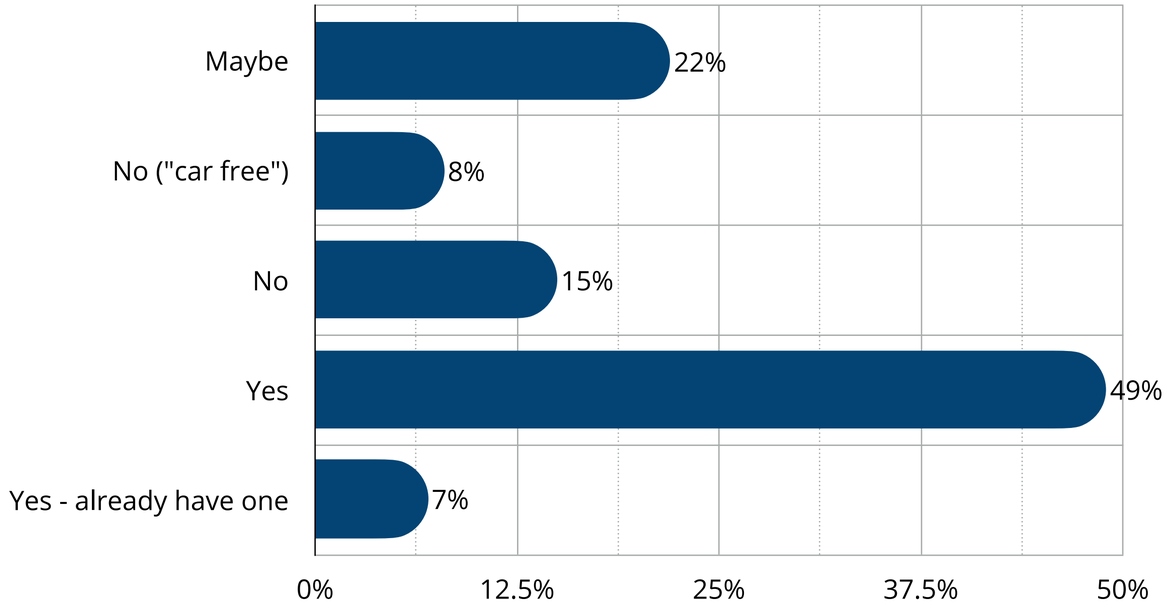


Which of the following would be most likely to influence your decision to make your next home a net-zero home?

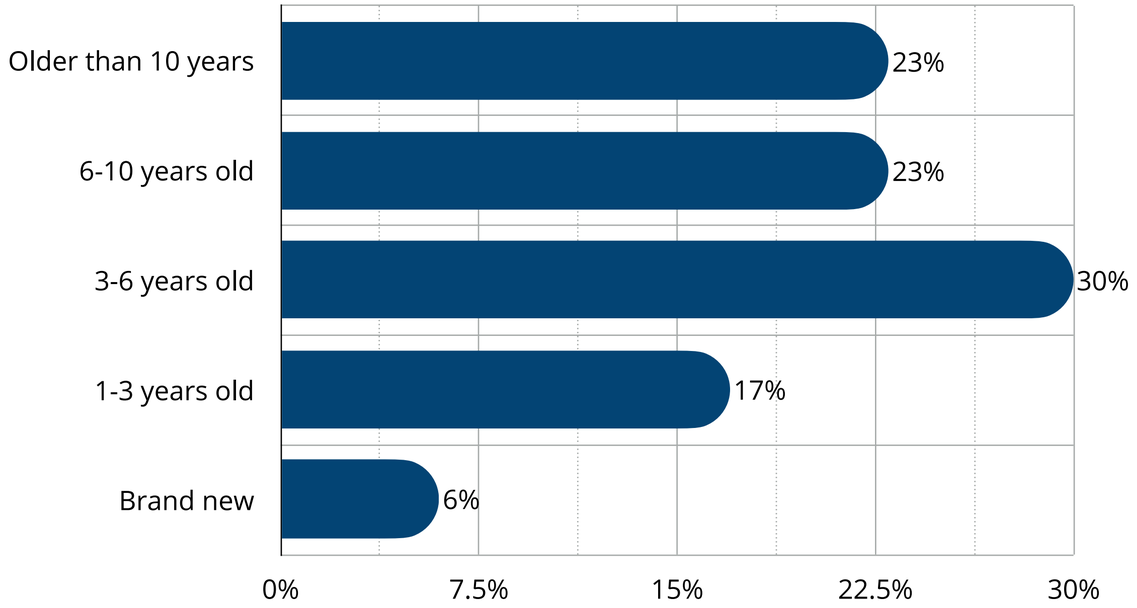


Transportation and You

Are you (or would you) consider buying an electric vehicle as your next vehicle?

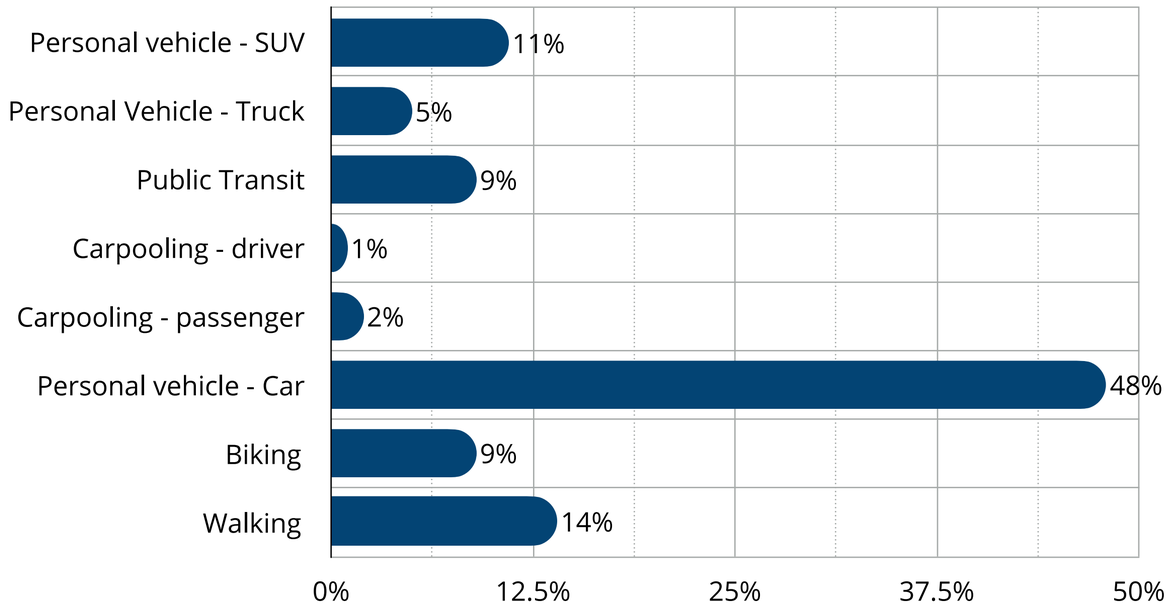


If you own a car - How old is your car?

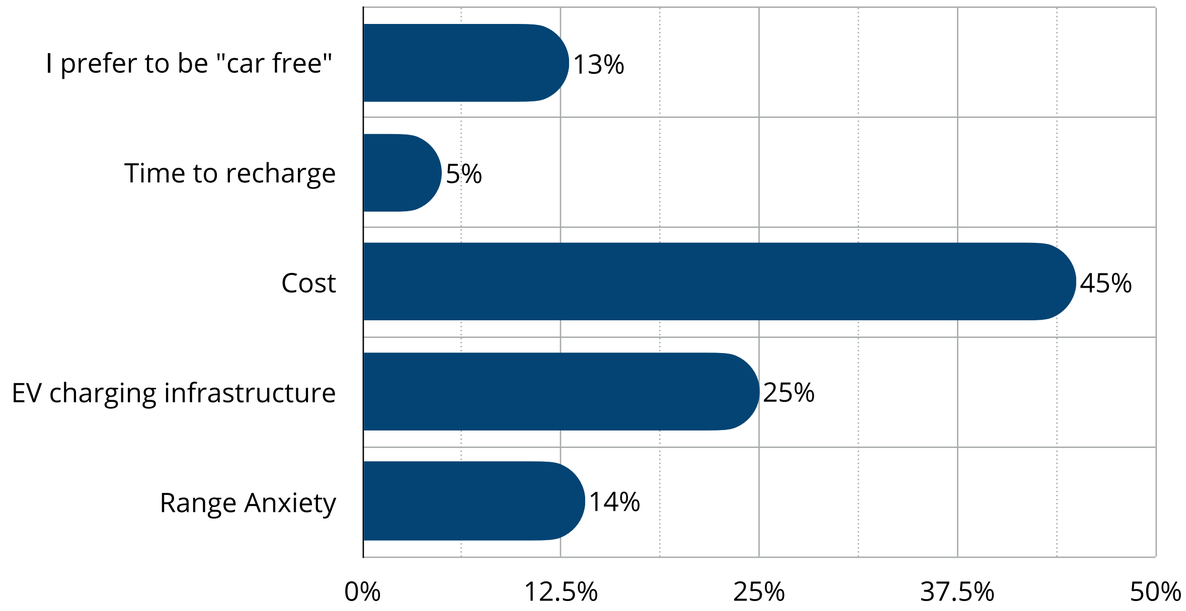


Transportation and You

Prior to COVID-19, what was your main mode of transportation for every day trips?

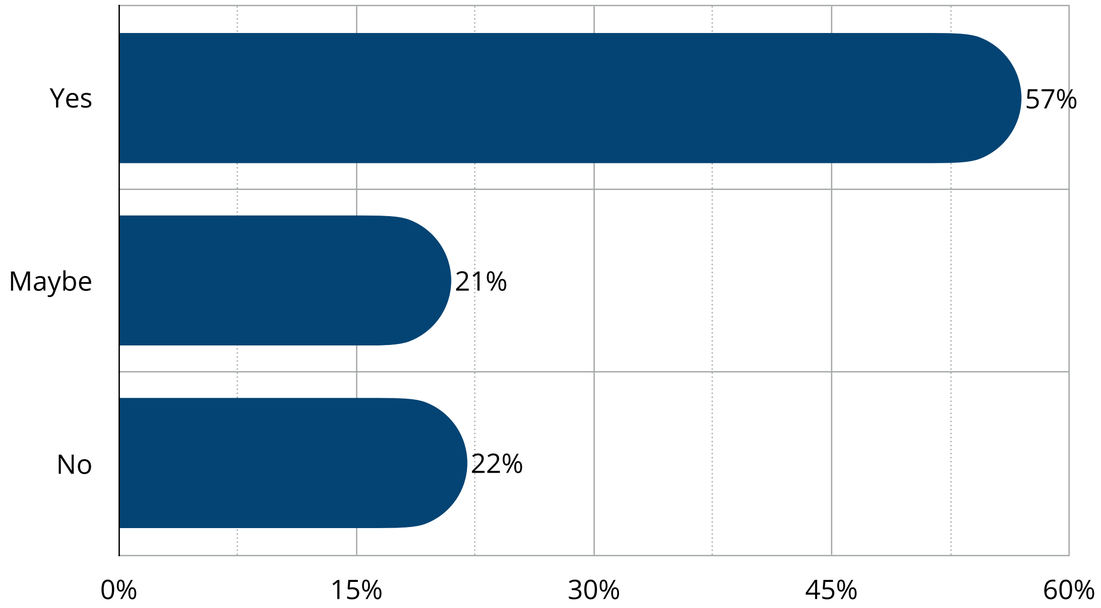


What are your barriers to buying an EV?

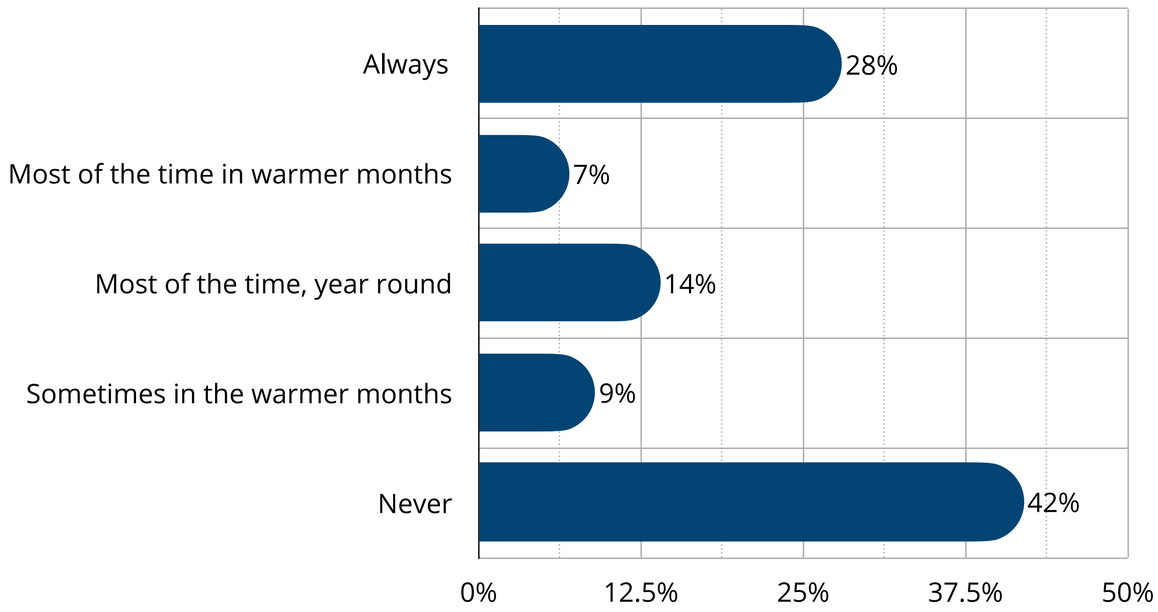


Waste Reduction and You

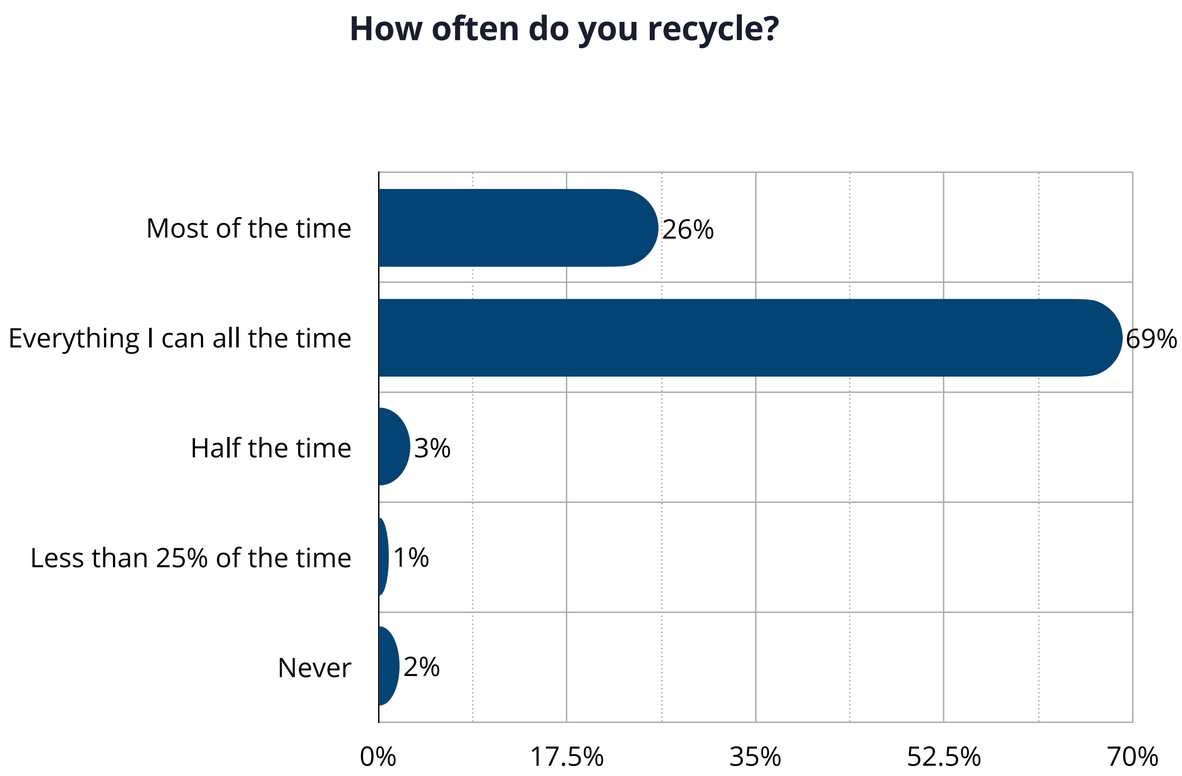
Do you feel that with an improved understanding of the impact of food waste, you or your family can reduce more of it?



How often do you compost at home?



Waste Reduction and You

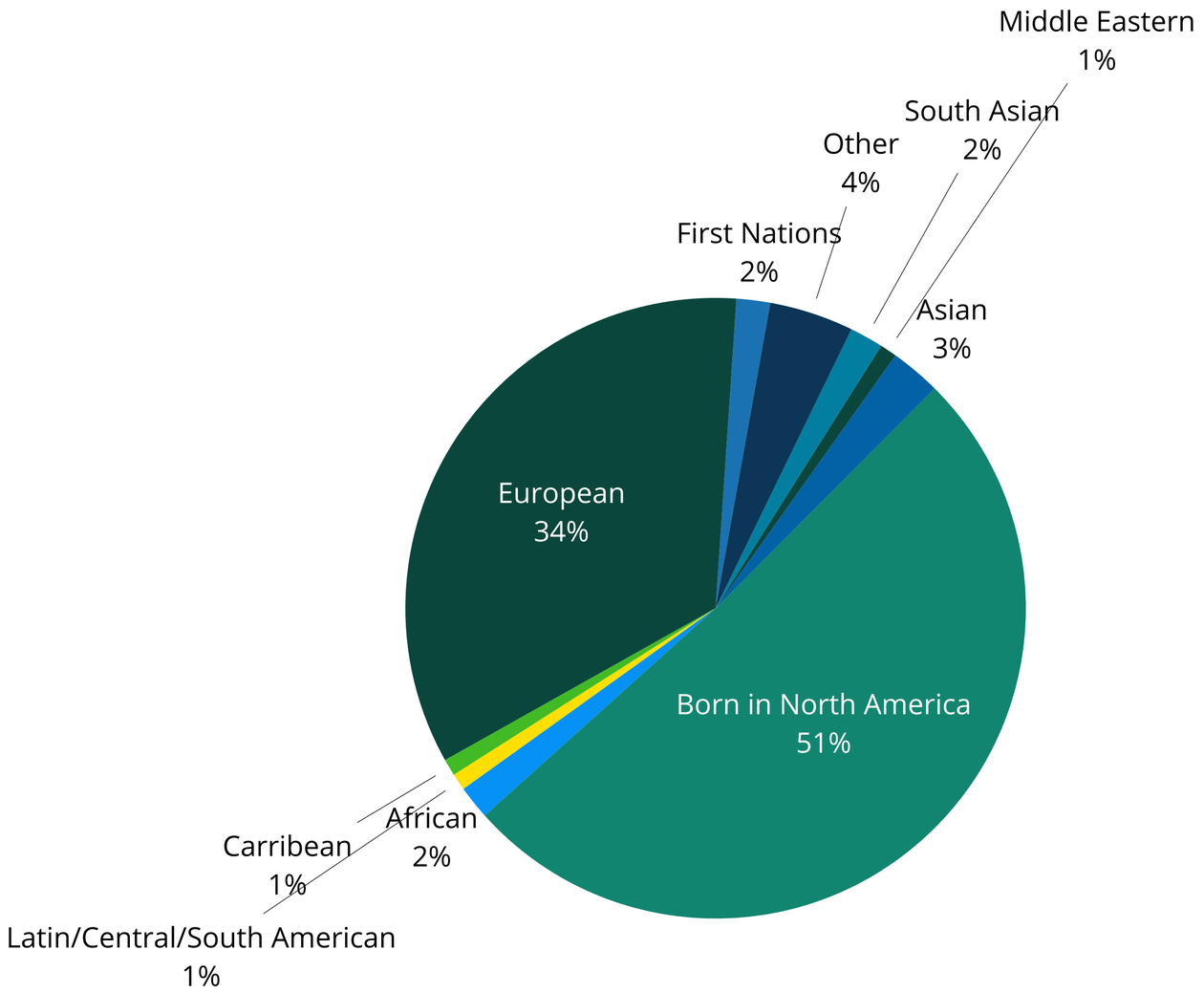


Demographics Information



Ethnicity

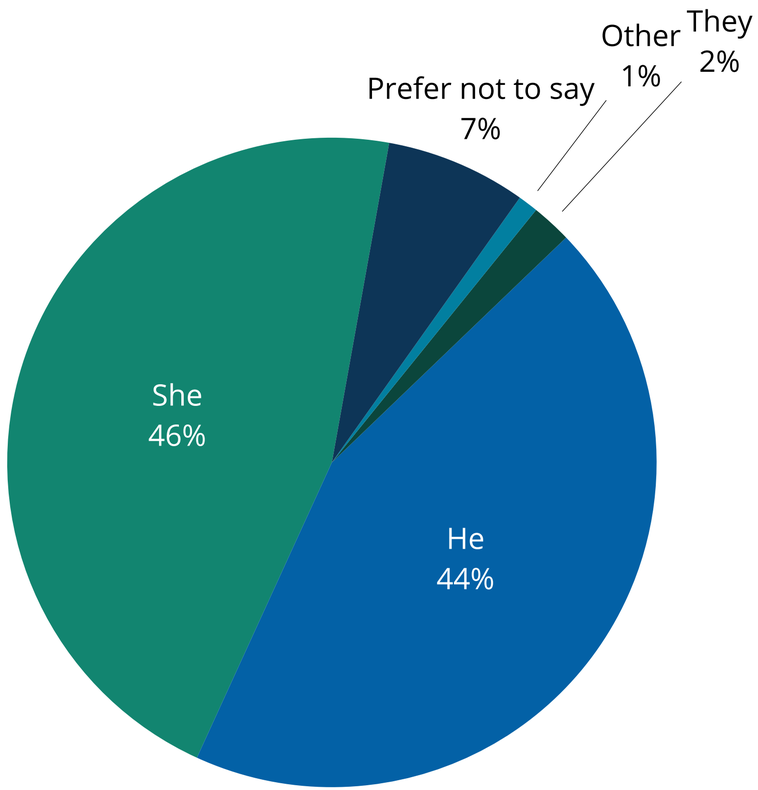
Participants were asked to indicate **their ethnicity.**



*Not included: Oceanic (<1%)

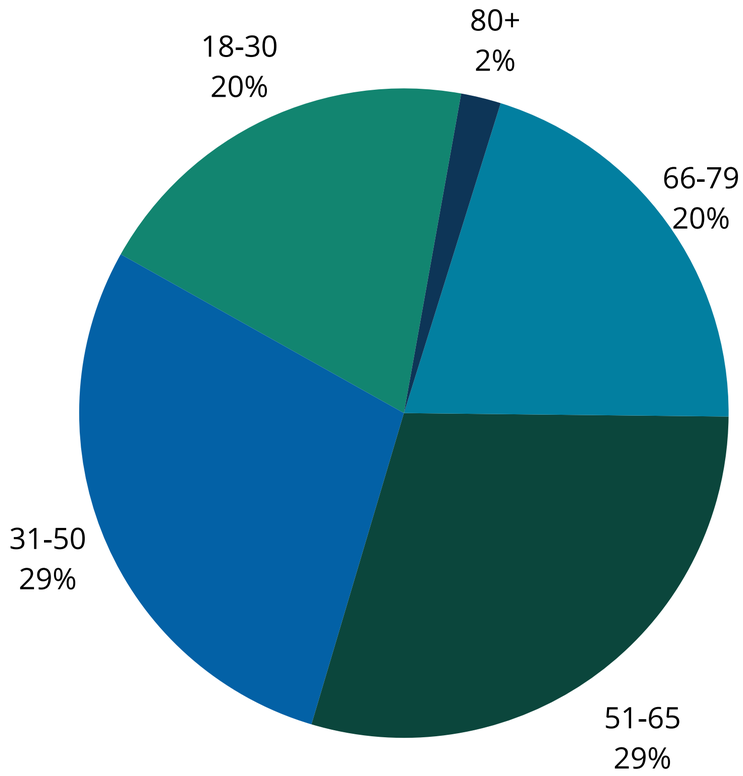
Gender Pronoun

Participants were asked to indicate **their gender pronoun.**



Your Age

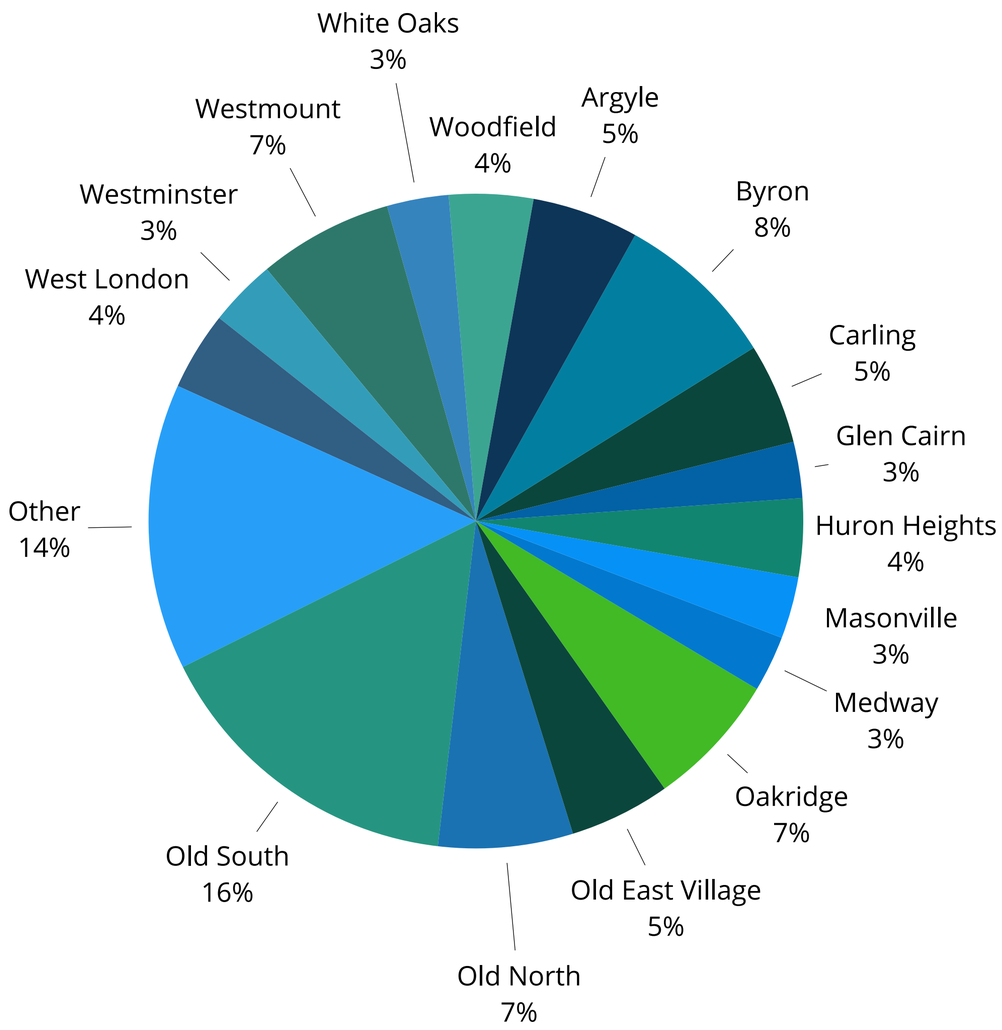
Participants were asked to indicate **their age.**



*Not included: Under 18 (<1%)

Neighbourhood

Participants were asked to indicate **the neighbourhood they live in.**



*Not included: **0%**: River Bend, North End, Lambeth, Jackson, Crumlin, Bradley, Bostwick, Bishop Hellmuth, Woodhull
1%: Uplands, The Midtown District, Talbot, Sunningdale, Stoney Creek, Southcrest, Piccadilly, Orchard Park, Kensington Village, Highland, Highbury, Fox Hollow, Fanshawe, Cleardale, Blackfriars
2%: Westminster, Stoneybrook, Oxford Park, Medway, Masonville, Hydepark, Hamilton Road, White Oaks,


Thank you!
ETHELO