



**NARRATIVE**  
RESEARCH

# Climate Change and Energy Perceptions Report

August 2022

Prepared for:  
The City of Edmonton





## Background

The City of Edmonton has various programs working together to meet the goals of the Energy Transition Strategy. This strategy aims to make Edmonton a more energy sustainable and resilient city, by reducing the city's greenhouse gas emissions, reducing and conserving energy, and promoting local generation of energy. The support and participation of residents in the programs is essential to the success of these programs. To be able to market, target and adapt these programs effectively, the City of Edmonton seeks to understand its audiences, their perceptions, what motivates them and their barriers to action. For this purpose, the City of Edmonton has commissioned research in past years, the most recent being an online survey in June-July 2022. The purpose of the current survey is to compare results to previous survey iterations in 2018-2021, and the baseline established in 2017, thereby facilitating an assessment of changes in awareness and perceptions, while also measuring the effectiveness of current messaging.

## Research Objectives

The following are the specific objectives of the current survey:

- *To measure and compare changes in behaviours and perceptions regarding climate change and energy efficiency.*
- *To measure and compare awareness and perceptions regarding City programs against the results obtained in previous years.*
- *To measure the effectiveness of marketing campaign messages and images.*



## Target Audience

- Residents of the city of Edmonton, 18 years of age or older.



## Approach

- Online survey using a general population online panel with records provided by Dynata (formerly Research Now) and by The Logit Group.
- To meet current needs, changes were made to the 2022 Climate Change and Energy Perceptions Survey from the previous version, including changes in the wording of selected questions.
- Data was statistically weighted by age, gender, and region (quadrants) using 2016 Census data to reflect the city’s population along these dimensions.
- As this is a general population non-probability panel survey, to report a margin of error is inappropriate.
- Percentage point changes year-over-year are noted throughout the report providing it is a difference of at least five percentage points from the previous year’s results.
- The first iteration of this survey was conducted in 2017.

**1,008**  
Completed Surveys

**18**  
days

### Survey Dates

- 20 June – 7 July, 2022

**15**  
minutes

### Survey Length

- 15 minutes, on average



## Important Notes on Reading this Report

This iteration marks the sixth iteration of the climate change and energy report for the City of Edmonton. As such, readers are reminded that the wording of many questions throughout this report have changed to a greater or lesser degree over the years of this tracking research study to meet the evolving needs of the City. Changes to question wording are only noted in the report in the year in which the change has occurred. For example, changes are noted in most graphs, for all changes to wording made for 2021 or other years.

In addition, where a five-point scale ('strong agree' to 'strongly disagree') is shown for multiple statements on the same graph, statements are listed or ordered top to bottom by the percentage of respondents who offered a "strongly agree" response, from highest to lowest.

Occasionally, language used is purposefully chosen in order to avoid an unnecessarily personal degree of specificity. In particular "higher" income refers to household incomes that exceed \$100,000 annually, "lower" income refers to incomes up to and including \$60,000 annually, and "moderate" income reflects the range in between the two.



## Feelings Toward Climate Change

It is timely to reflect on public attitudinal changes that have occurred since the study began in 2017. Specifically, public agreement concerning various aspects of climate concern has increased relative to 2017/2018. Please note, given that this study has been administered via an online survey methodology, it is the case that statistical testing cannot strictly be applied to the research in the absence of probability sampling. Nonetheless, in comparing the results from 2017/ 2018 to those collected this year, there are – in selected instances – substantial differences and commendable improvements with respect to public perceptions and feelings vis-à-vis climate change. And while the overall public level of concern about climate change has remained relatively constant over the last five years, agreement that Edmontonians at large are concerned and taking action on climate change has more so increased.

In terms of specific metrics, a majority of Edmontonians continue to agree (75%) that climate change is a concern, with an equal proportion agreeing that there is a need to act now to address this issue, consistent with the 2021 results. A total of 71 percent of Edmonton residents also agree that climate change is caused mostly by human activities, on par with 2021 results. Sixty-six percent say that their individual actions contribute to the global impacts of climate change, showing a modest decrease over the past year. Meanwhile, 70 percent say that Edmonton residents should be doing more to help prevent climate change, and 68 percent agree that they want to do more personally to help prevent climate change, generally consistent with the results observed in 2021. A total of 68 percent of Edmontonians affirm they are taking action to prevent climate change, generally on par with last year's result.

In addition to expressing their own personal opinions on these matters, residents were also asked their perceptions of how Edmontonians in general feel in regards to climate change. As in 2021, residents are more so inclined to agree that they themselves hold progressive perceptions vis-à-vis issues related to climate change, as compared to the general public.



## Feelings Toward Climate Change (continued)

Edmontonians wish for the City to either *increase* (47%, consistent with 2021) or *maintain* (23%) its efforts to address climate change. While 19 percent of residents are unsure how much effort the City should put in, 12 percent want the City to *decrease* such efforts. A total of 46 percent of residents perceive the City of Edmonton is taking the right actions to address climate change, on par with results from 2021. Substantial proportions of Edmontonians recognize economic and employment opportunities associated with energy efficiency and addressing climate change. Specifically, 72 percent agree that investing in energy efficiency provides job opportunities for Edmonton, 69 percent agree that transitioning to renewable sources of energy provides job opportunities for the city, and 64 percent agree that efforts to prevent climate change present economic opportunity for Edmonton (with all three metrics generally on par with 2021 results). There is also widespread knowledge of the impacts of greenhouse gas emissions and various human actions (e.g., transportation choices, home as well as workplace heating/cooling and electricity use, food choices, and so forth) on climate change (with between 62% and 79% agreement, generally on par with last year, excepting agreement that human-caused climate change is linked to natural disasters, which has risen by 5 percentage points this year).

A total of 75 percent of Edmontonians say it is important to talk about climate change, on par with 74 percent last year. A total of 71 percent of residents feel comfortable talking about climate change with their family, friends, or colleagues, and 49 percent of residents mentioned regularly doing so (increased from 42% in 2021). Additionally, a total of 78 percent of Edmontonians agree that climate change affects the health and well-being of individuals, consistent with 2021 results, while 68 percent believe human caused climate change is linked to the occurrence of natural disasters, an increase since 2021. Seventy percent of residents believe climate change is affecting Edmonton's weather in general, on par with 2021 results. When asked, aided, if inclement weather events were risks associated with climate change, 83 percent of residents agree in terms of at least one type of weather event, unchanged from 2021. In particular, 76 percent of Edmontonians think extreme heat is associated with climate change (on par with 75% in 2021), while 74 percent feel the same about increased drought (on par with 71% in 2021). In the last two years, 90 percent of residents say they have experienced at least one extreme weather event (on par with 86% in 2021), while the average resident experienced 4.5 events. Additionally, one-half of Edmonton residents (52%, up from 46% in 2021) are currently adapting their property to better suit the changing climate.



## Actions to Reduce Climate Change Impact

*Home Energy Efficiency:* The proportion of residents taking action to improve their home energy efficiency has increased somewhat since 2021, although reports of taking action, unaided, to increase home energy efficiency remain unchanged, and thus, lower than levels observed four and five years ago (e.g., 48% in 2022 compared with 56% in 2018). When aided with examples, including switching to LEDs or adjusting thermostats to conserve heat are provided, the proportion of residents who report taking action to increase their home's energy efficiency rises to 87 percent (unchanged from 2021). Notably, the average person reports having taken approximately four (4.1) actions in the past year. Those who have taken actions to increase home energy efficiency have largely done so by switching to LED lightbulbs (69%), or adjusting their thermostats to conserve heat (58%). A total of 41 percent are aware of the EnerGuide home evaluation program, consistent with results from the last three years. When renovating their home, 76 percent agree that having an EnerGuide evaluation conducted would be useful, while 76 percent agree this evaluation would be valuable when deciding whether to buy a home.

*Other Actions to Reduce Climate Change Impact:* When asked, aided, about their participation in a series of specific actions to mitigate climate change, 94 percent say they took at least one of the listed actions, while 72 percent say they reduced food waste in the last year, and 71 percent say they utilized reusables.

## Solar Energy and Energy Efficiency

Results for various measures in this domain have generally remained consistent with 2021 results, with 73 percent of Edmontonians agreeing that having solar panels installed in their homes decreases their homes' impact on climate change. A total of 31 percent of Edmontonians are aware of a program that helps homeowners install solar panels on their home to generate electricity, edging upward from benchmark results. This year, 16 percent of Edmonton residents report having solar panels installed on their home, marking a notable increase since 2021. Edmontonians do appear to be growing more receptive to solar panels, as 29 percent (up nine percentage points since 2021) of Edmonton home-owners are likely to either install solar panels for the first time or add additional panels in the next three years. Edmontonians also place considerable importance in the energy efficiency of the buildings in which they work, study, play, or shop, as 76 percent (on par with 75% in 2021) of residents indicate that energy efficiency is important for such buildings.



## Electric Vehicles

Thirty-eight percent of Edmonton residents are extremely or very familiar with electric vehicles (up from 25% in 2021), while 25 percent describe themselves as unfamiliar (on par with 28% in 2021). A decreased number of residents (43%, down from 48% in 2021) indicated they have no experience with electric vehicles, although it should be noted additional aided response options were added this year. Three in ten residents plan to buy an electric vehicle for their next vehicle purchase (up from 21% in 2021). Residents frequently cite reduced maintenance costs and not having to pay for gas (43% in 2022 vs. 49% in 2021), as a key factor *motivating* them to purchase an electric vehicle, and the price of electric vehicles as a key factor in *preventing* them from buying (55%, down from 60%). This year, the performance of electric vehicles in the winter appears to be a growing concern (42%, up from 33%).

## Electric Bicycles

Up notably from 2021, 24 percent of Edmontonians say they are likely to purchase an electric bicycle in the next three years, while 34 percent are not likely to purchase. One percent of Edmonton residents say they already own an electric bicycle.

## Transportation Choices and Climate Change Impact

Driving a motor vehicle was most frequently mentioned by Edmontonians as a means of transportation used in the past 30 days (69%, down from 74%), followed by walking (43%, down from 50%), and being a passenger on private transportation (36%, on par with 33% in 2021). The proportion who use public transportation has increased moderately compared to 2021 (30%, up from 21%) but remains lower than pre-pandemic levels. A total of 40 percent (up from 31%) say they are likely to walk, bike, take public transit or car share for the majority of their trips to reduce their impact on climate change, while four percent mentioned that they already do these types of activities.





## Campaigns

A total of 22 percent of residents recall, unaided, seeing or hearing about climate change programs or advertisements from the City, on par with 2021. It should be noted that the City launched a waste collection advertising campaign in the past year, and 14 percent of residents who remember a recent City of Edmonton ad about climate change programs or advertisements, recall that it touched upon ‘waste/recycling’ as a theme. When prompted or aided with specific campaign images, 37 percent of Edmontonians recall at least one of the four specific images from the *Change for Climate* campaign. Residents who recalled, unaided, seeing or hearing about climate change programs or advertisements are generally more likely to agree with statements regarding impact on climate change, and taking action to prevent climate change, perceptions that fellow Edmontonians do the same.

## Synopsis

Overall, the survey results are generally consistent with those observed in 2021 with respect to climate change perceptions, although certain improved trends are evident on various metrics. For example, selected gains have been made in the frequency in which residents attest they are discussing climate change and its effects with their family, friends, or colleagues, and there has been an increase in agreement that residents are personally taking action to adapt to a changing climate. Another noteworthy survey finding is that in many instances younger Edmontonians, as well as women, tend to be more concerned about climate change and want to see more action, as compared to their older and male counterparts. At the same time, there seems to be downward movement on selected measures.

Increasing awareness of public charging stations may present a key opportunity to help motivate use of electric vehicles. As well, another opportunity would be to further increase awareness of the EnerGuide program. Solar panels and electric bicycles currently also have opportunities for greater incidence among Edmonton’s population as well, given indication that interest in them is increasing. Moreover, there is a modest opportunity to educate Edmontonians concerning actions that the City is undertaking. Finally, there is an opportunity to educate (particularly younger) Edmontonians on how to make homes more energy efficient.



NARRATIVE  
RESEARCH

# Feelings Towards Climate Change



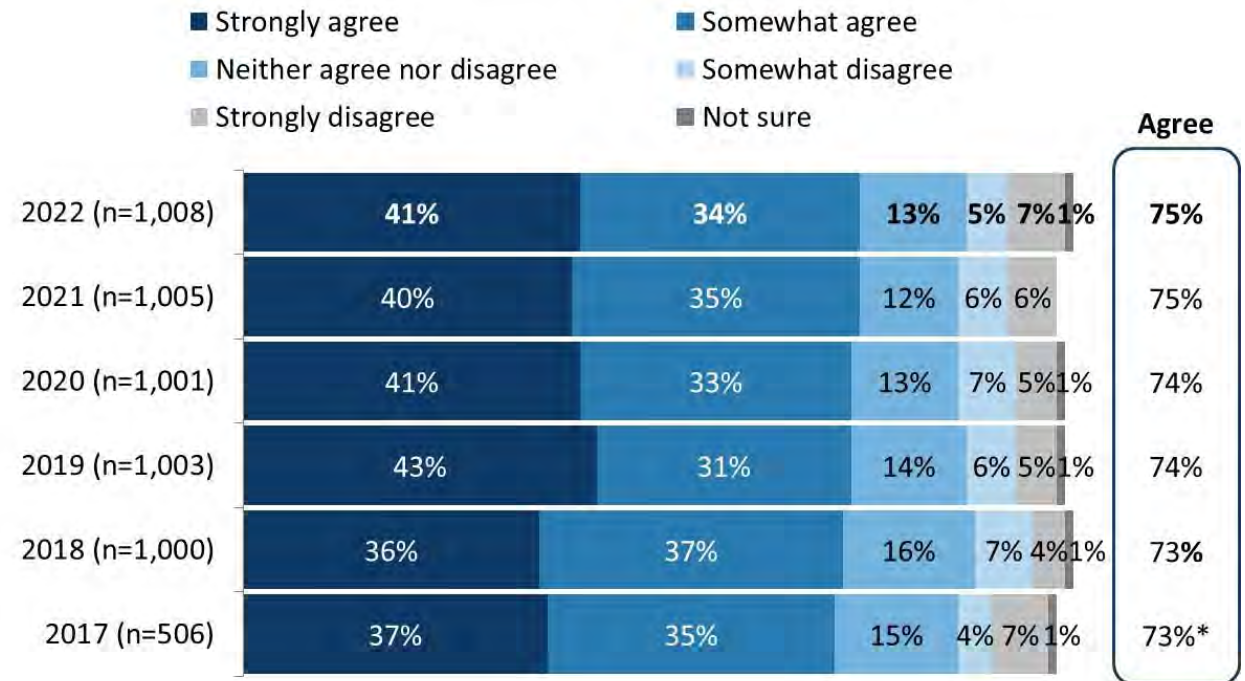
Three-quarters of Edmonton residents are concerned about climate change, including 41 percent who strongly agree they are concerned. Results have remained consistent over the past 5 years.

Concern is elevated among younger Edmonton residents as compared to older residents. In particular, nearly one-half of residents aged 18-34 strongly agree they are concerned about climate change, while four in ten of those aged 35-54 strongly agree that they are concerned, alongside 33 percent of those aged 55+ who feel likewise.

	Age		
	18-34	35-54	55+
Strongly agree	47%	40%	33%

## I am Concerned about Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.1a: The next few statements are about how you **personally** feel about climate change. To what extent do you agree or disagree with the following statements? *\*Due to rounding.*



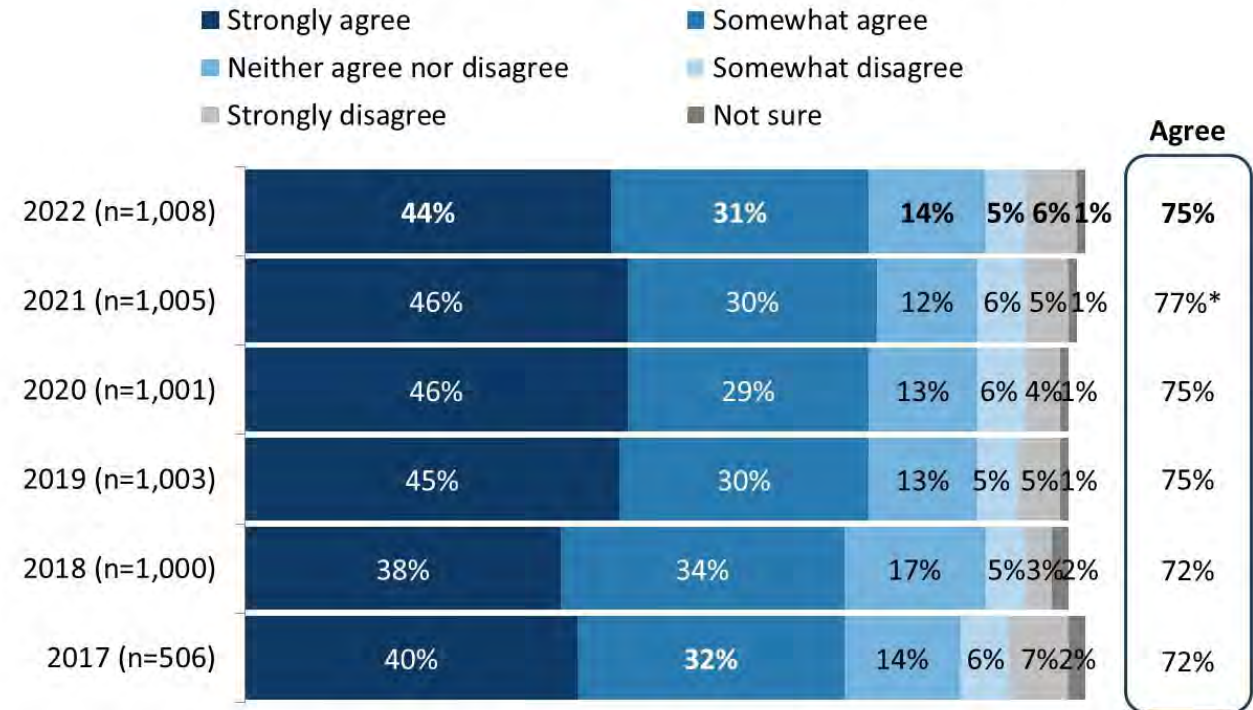
A total of 75 percent of Edmonton residents believe immediate action is required to address climate change, generally consistent with the previous year's results.

Younger residents aged 54 and below are more likely than older residents to perceive an immediate need for action on climate change. Also, women are more inclined than men to believe immediate action is required to address climate change.

	Age			Gender	
	18-34	35-54	55+	Woman	Man
Strongly/Somewhat agree	82%	76%	65%	79%	71%

## I Think We Need to Act Now to Address Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.1f: The next few statements are about how you personally feel about climate change. To what extent do you agree or disagree with the following statements? \*Due to rounding.





A total of 71 percent of Edmontonians believe climate change is caused mostly by human activities, while 66 percent believe their individual actions contribute to the global impacts of climate change. Results are three points and five points, respectively, below those from a year ago.

Agreement that climate change is caused mostly by human activities is elevated among younger residents.

	Age		
	18-34	35-54	55+
Strongly/Somewhat agree	80%	73%	57%

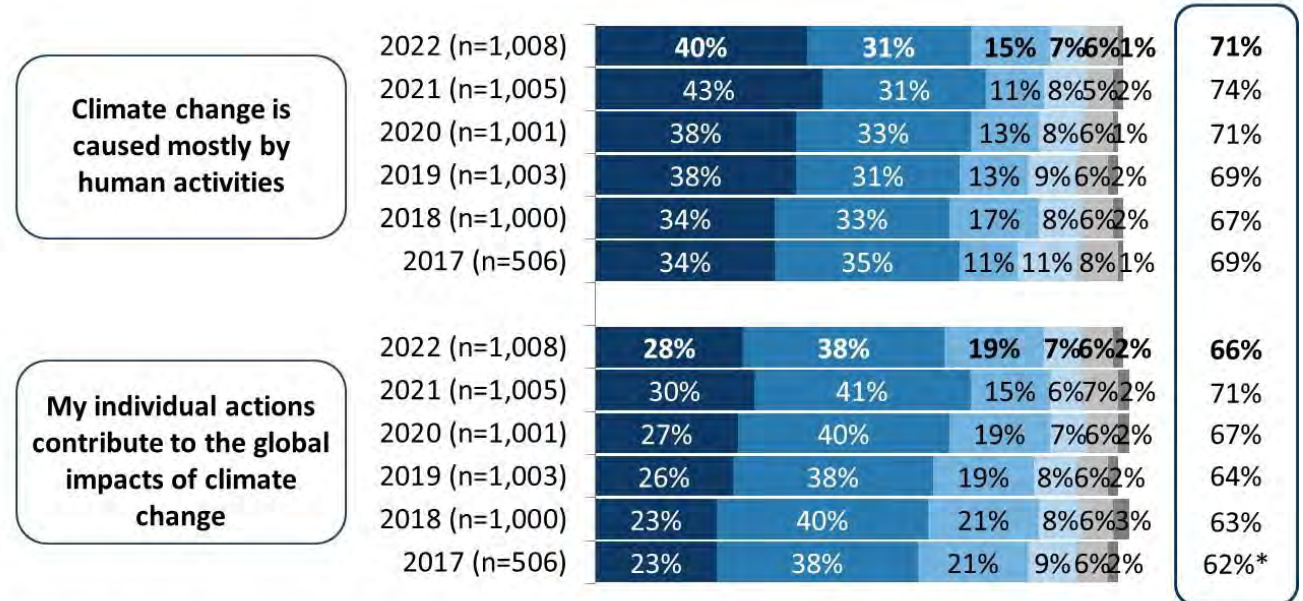
Agreement that individual actions contribute to the global impacts of climate change is also elevated among younger Edmontonians, and among female residents compared to their male counterparts.

	Age			Gender	
	18-34	35-54	55+	Woman	Man
Strongly/Somewhat agree	75%	64%	56%	71%	60%

## Extent Agree with Statement About Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree
- Not sure



Q.1b-c: The next few statements are about how you **personally** feel about climate change. To what extent do you agree or disagree with the following statements? \*Due to rounding.



# Desire to Do More to Prevent Climate Change

A total of 70 percent of Edmontonians believe residents of the city should be doing more to prevent climate change, while 68 percent want to do more personally to prevent climate change. Agreement is consistent, in both instances, with observed levels from 2021, but represents a positive trend since 2017.

Younger residents are more inclined than older residents to think that Edmontonians should be doing more to help prevent climate change, as are females when compared to males.

	Age			Gender	
	18-34	35-54	55+	Woman	Man
Strongly/Somewhat agree	75%	72%	60%	73%	67%

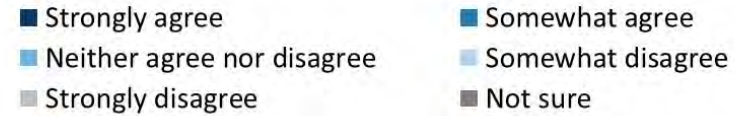
The sentiment to do more personally to help prevent climate change is elevated among younger residents compared to older residents, and among Edmontonians with moderate household incomes. Females are also slightly more inclined than males to agree with this statement.

	Age			Gender	
	18-34	35-54	55+	Woman	Man
Strongly/Somewhat agree	76%	68%	58%	72%	64%

	Income		
	Lower	Moderate	Higher
Strongly/Somewhat agree	69%	73%	67%

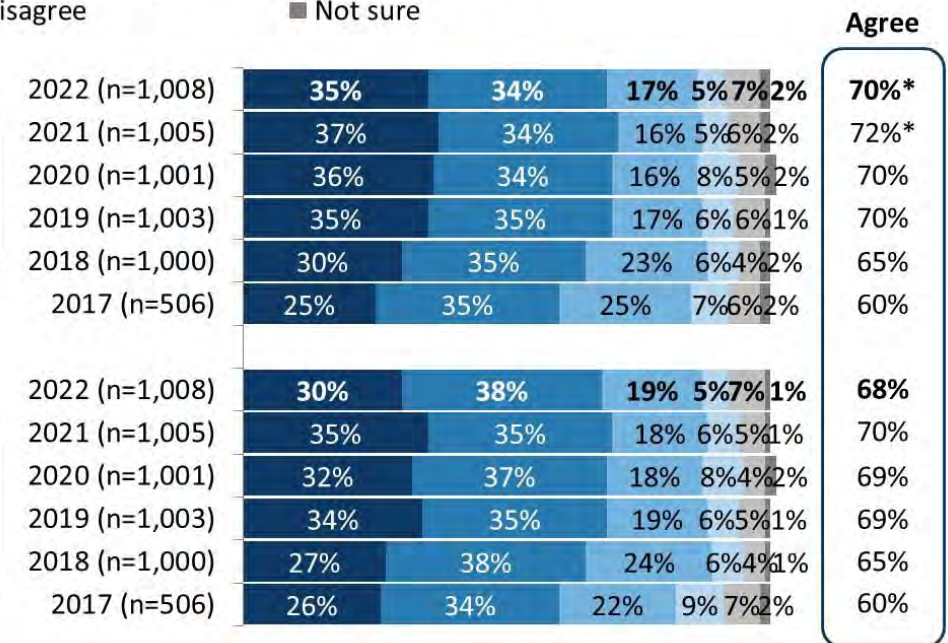
## Extent Agree with Statement About Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale



I think Edmontonians should be doing more to help address climate change~

I want to do more personally to help address climate change~



Q.1d-e: The next few statements are about how you personally feel about climate change. To what extent do you agree or disagree with the following statements? ~Note: Slight change in wording in 2021, changed from "prevent" to "address". \*Due to rounding.





A total of 68 percent of Edmonton residents are taking actions to help prevent climate change. This result is generally consistent with that of 2021.

Younger residents are more inclined than older residents to confirm they are taking action to help prevent climate change.

Residents who are post-secondary graduates, as well as those with a moderate household income, are more likely to agree that they are taking action to address climate change, as compared to their counterparts.

	Age			Income		
	18-34	35-54	55+	Lower	Moderate	Higher
Strongly/Somewhat agree	73%	67%	62%	66%	74%	70%

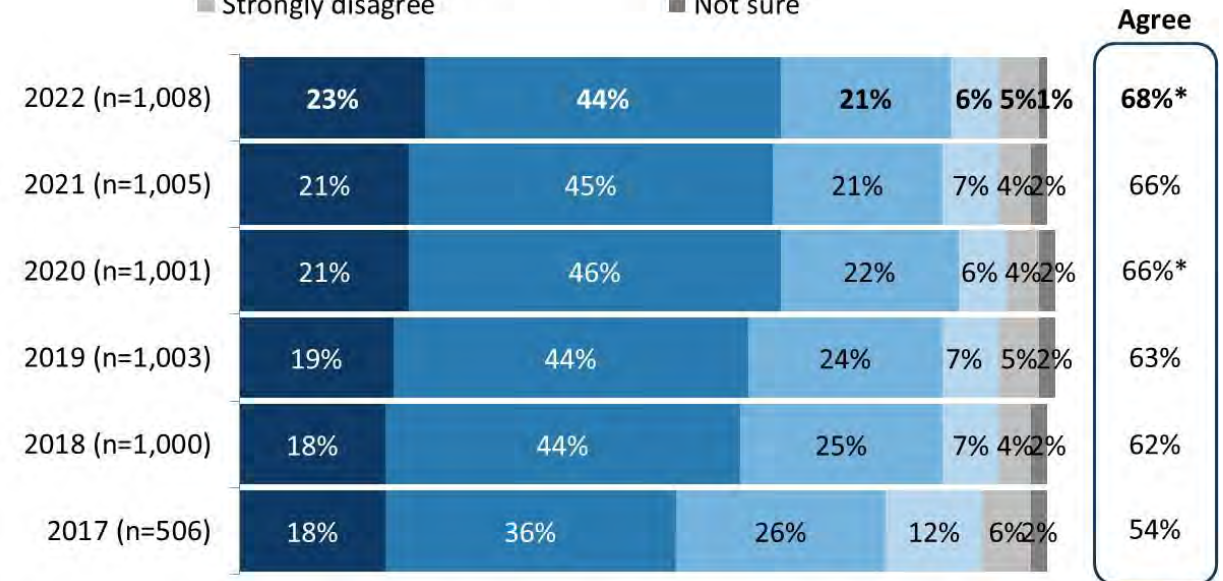
  

	Education			
	Less than HS	Grad HS	Some PS	Grad PS
Strongly/Somewhat agree	59%	55%	66%	72%

## I am Taking Action to Help Address Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree
- Not sure



Q.1g: The next few statements are about how you **personally** feel about climate change. To what extent do you agree or disagree with the following statements? ~Note: Slight change in wording in 2021, changed from "prevent" to "address".  
\*Due to rounding.



# Perceived Opinions of Edmontonians on Climate Change

*As in previous years, residents are more so inclined to agree that they themselves hold progressive perceptions vis-à-vis issues related to climate change, as compared to the general public of Edmonton as a whole. Certain measures remain consistent with results from last year, together with modest increases in agreement on some questions.*

This year, there is a modest increase in agreement in terms of thinking that *residents should be doing more to help address climate change*, that *residents want to do more personally to help address climate change*, and that *residents are taking action to address climate change*.

In general, younger residents, those living in duplexes/town or row houses, and those who recalled communication from the City on climate change (unaided) are more likely than their counterparts to believe that Edmontonians as a whole hold progressive perceptions regarding matters concerning climate change.

## Opinions on Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale

	Perceived Agreement Among Edmontonians						GAP* (% Personally - % Edmontonians)					
	2017 (n=506)	2018 (n=1,000)	2019 (n=1,003)	2020 (n=1,001)	2021 (n=1,005)	2022 (n=1,008)	2017 (n=506)	2018 (n=1,000)	2019 (n=1,003)	2020 (n=1,001)	2021 (n=1,005)	2022 (n=1,008)
Concerned about climate change	39%	47%	47%	47%	52%	56%	34%	25%	27%	27%	23%	19%
Need to act now to address climate change	41%	48%	50%	49%	52%	56%	31%	25%	25%	26%	25%	19%
Climate change is caused mostly by human activities	48%	54%	52%	55%	59%	58%	20%	14%	17%	16%	15%	13%
Individual actions contribute to the global impacts of climate change	37%	44%	43%	44%	48%	50%	24%	19%	21%	23%	23%	16%
Edmonton residents should be doing more to help address climate change~	36%	47%	47%	47%	51%	56%	24%	18%	23%	23%	21%	14%
Want to do more personally to help address climate change~	35%	44%	44%	43%	46%	51%	25%	21%	25%	26%	24%	17%
Taking action to address climate change~	25%	34%	32%	32%	36%	44%	30%	28%	31%	34%	30%	24%

Q.2a-g: The next few statements are about how you think Edmontonians feel about climate change. To what extent do you agree or disagree with the following statements? \*Note: The GAP figures presented here are based on calculations rounded to the nearest percent. ~Note: Slight change in wording in 2021, changed from "prevent" to "address".





# City of Edmonton's Actions to Address Climate Change

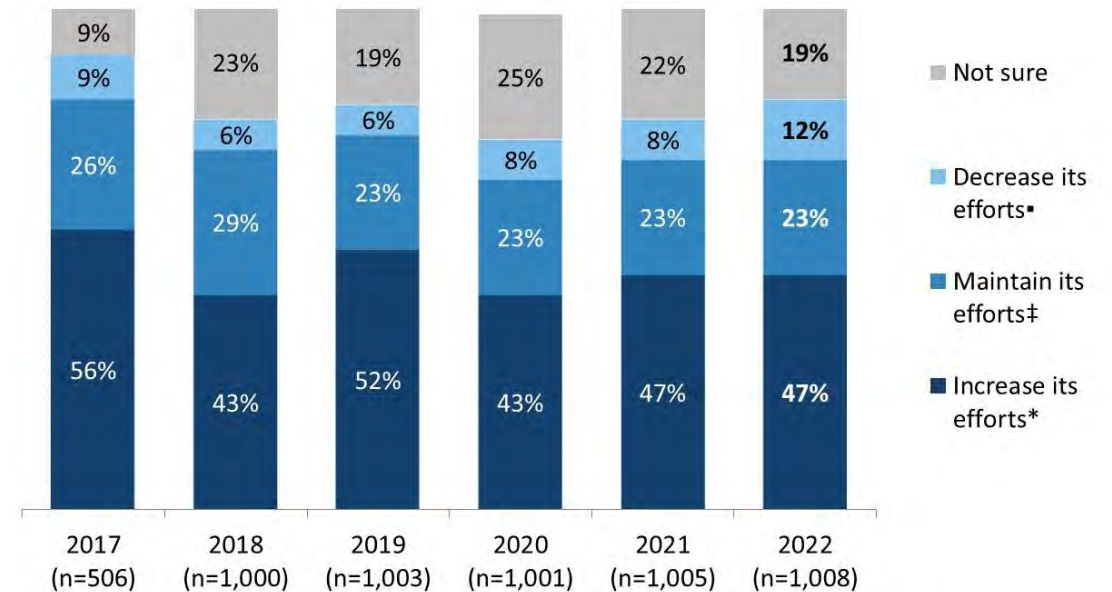
Edmontonians clearly want the City to either increase or maintain its efforts to address climate change. That said, two in ten remain uncertain on whether the City needs to change its effort, while one in ten say it should decrease its efforts, consistent with last year's results.

Opinion that the City of Edmonton should increase its efforts to address climate change declines with age. Additionally, uncertainty around whether the City should adjust its efforts is more common among females than males. Residents who recall, unaided, climate change communication from the City are more likely than their counterparts to say that the City should increase its efforts.

	Age			Gender	
	18-34	35-54	55+	Woman	Man
Increase its efforts	55%	48%	35%	47%	46%
Decrease its efforts	11%	13%	11%	10%	13%
Maintain its efforts	20%	22%	26%	21%	25%
Not sure/I do not know what the City of Edmonton is doing to address climate change	13%	17%	28%	22%	16%

	Unaided Campaign Recall	
	Yes	No
Increase its efforts	59%	43%
Decrease its efforts	15%	11%
Maintain its efforts	19%	24%
Not sure/I do not know what the City of Edmonton is doing to address climate change	6%	23%

## Perception of the City of Edmonton's Efforts to Address Climate Change



Q.3: Based on what you may know or have heard about climate change and what the City is doing about it, do you think the City should increase, decrease or maintain its efforts to address climate change? Note: Change in question wording in 2020, previously: "Do you think the City of Edmonton [should be doing more than it currently is/is currently doing the right amount/should be doing less than it currently is/not sure] to address climate change?" \*Change in wording in 2020, previously: "Should be doing more". ‡Change in wording in 2020, previously: "Currently doing the right amount". •Change in wording in 2020, previously: "Should be doing less".



# City of Edmonton's Action to Address Climate Change

*This year, 46 percent of residents, on par with 2021, perceive that the City of Edmonton is taking the right action to address climate change.*

Agreement in this regard decreases with the age of residents. Agreement is also higher among residents with moderate household incomes, as well as those who recall, unaided, communication from the City on the topic of climate change.

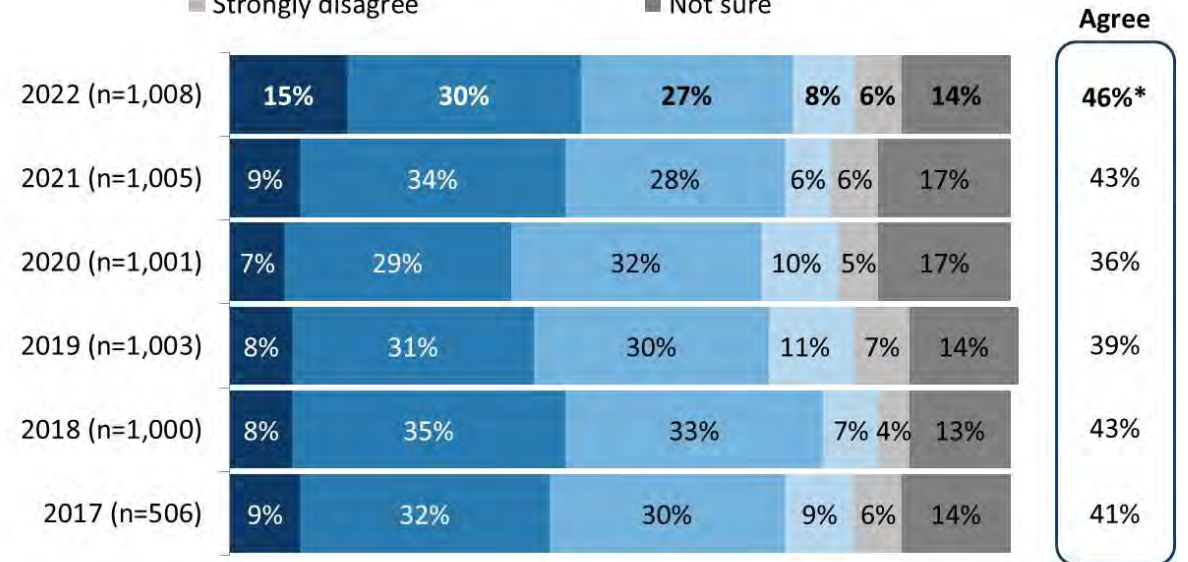
	Age			Income		
	18-34	35-54	55+	Lower	Moderate	Higher
Strongly/Somewhat agree	58%	47%	30%	41%	54%	49%

	Unaided Campaign Recall	
	Yes	No
Strongly/Somewhat agree	71%	39%

## Extent Agree that City of Edmonton Is Taking the Right Action to Address Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree
- Not sure



Q.4d: To what extent do you agree or disagree with the following statements about climate change? \*Due to rounding.



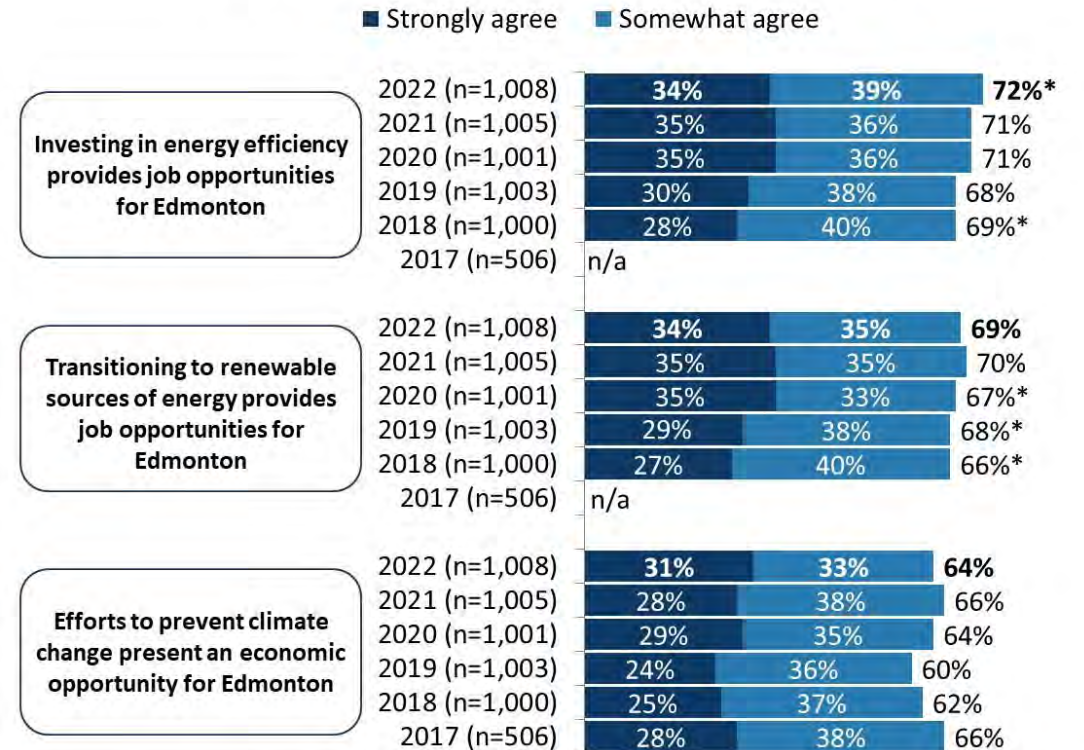
Between 64 percent and 72 percent of Edmontonians recognize economic and employment opportunities associated with energy efficiency and addressing climate change, on par with previous years.

In all three instances examined on this slide, agreement levels are highest among younger residents (aged 18 to 34 years), those who are post-secondary graduates, and among those who recall, unaided, communication from the City on the topic of climate change.

Strongly/Somewhat agree	Age			Education				Unaided Campaign Recall	
	18-34	35-54	55+	Less than HS	Grad HS	Some PS	Grad PS	Yes	No
Investing in energy efficiency provides job opportunities for Edmonton	77%	75%	64%	59%	64%	72%	76%	83%	69%
Transitioning to renewable sources of energy provides job opportunities for Edmonton	75%	71%	60%	69%	62%	65%	73%	78%	67%
Efforts to prevent climate change present an economic opportunity for Edmonton	72%	67%	52%	59%	58%	61%	67%	77%	60%

## Economic and Employment Impacts

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.4a-c: To what extent do you agree or disagree with the following statements about climate change? \*Due to rounding.





*Knowledge remains generally widespread regarding the belief that greenhouse gas emissions contribute to climate change and three-quarters of Edmontonians agree that their transportation choices have an impact on climate change, as well as that workplace heating/cooling and electricity use contribute to climate change, all generally consistent with last year's results.*

Agreement that greenhouse gas emissions contribute to climate change is lowest among residents 55 or older, while level of agreement regarding transportation choices impacting climate change are higher among females and those who are post-secondary graduates, as compared to their counterparts. In general, those who are able to recall, unaided, communication from the City on the topic of climate change, are more likely to agree with each of the three statements.

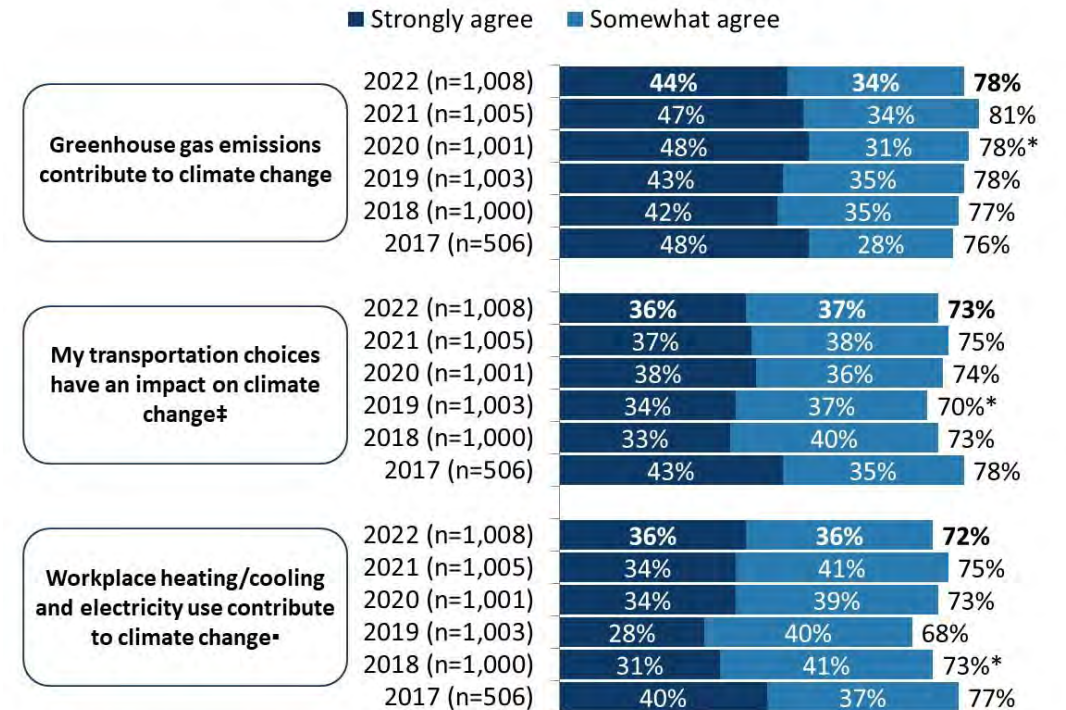
Strongly/Somewhat agree	Age		
	18-34	35-54	55+
Greenhouse gas emissions contribute to climate change	79%	81%	74%

Strongly/Somewhat agree	Gender		Education			
	Woman	Man	Less than HS	Grad HS	Some PS	Grad PS
My transportation choices have an impact on climate change	78%	68%	73%	68%	66%	77%

Strongly/Somewhat agree	Unaided Campaign Recall	
	Yes	No
Greenhouse gas emissions contribute to climate change	84%	76%
My transportation choices have an impact on climate change	80%	71%
Workplace heating/cooling and electricity use contribute to climate change	81%	69%

## Impact of Actions on Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.4e, g, j: To what extent do you agree or disagree with the following statements about climate change? \*Due to rounding. ‡Change in wording in 2019, previously: "My transportation choices impact greenhouse gas emissions". \*Change in wording in 2019, previously: "Workplace heating/cooling and electricity use contribute to greenhouse gas emissions".



*Eight in ten residents agree that walking, cycling or taking public transit instead of driving a car can reduce the impact on climate change, while seven in ten agree more broadly that their household energy choices have an impact on climate change. Meanwhile, two-thirds of residents agree that driving electric vehicles reduces the impact on climate change.*

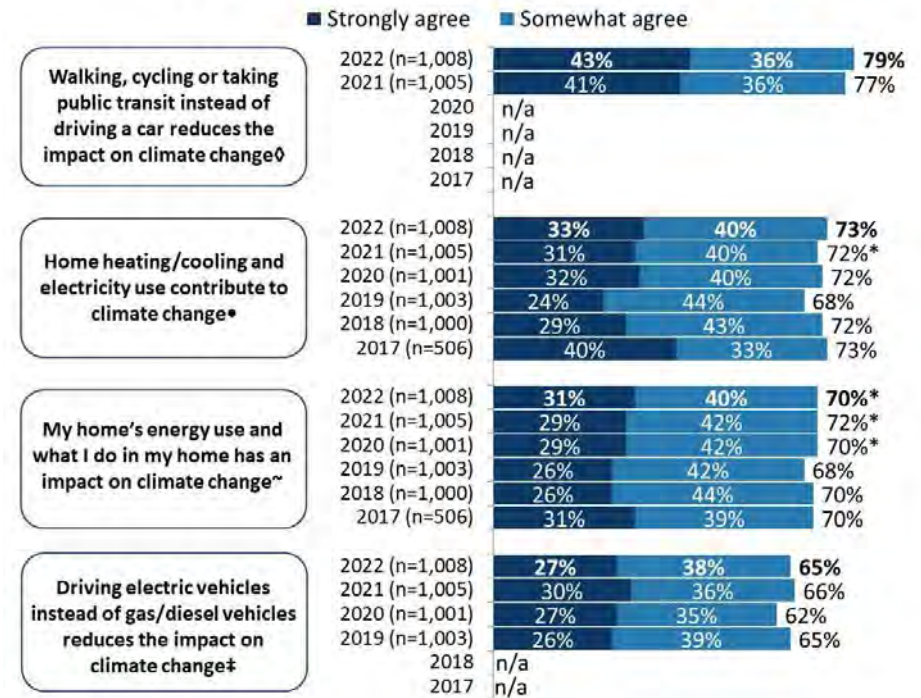
The survey results are generally stable with those recorded last year. With respect to all statements, agreement declines with age, while being elevated among those who recall, unaided, communication from the City on the topic of climate change. Women are also more likely than men to agree that walking, cycling or taking public transit reduces climate change impact, and that their home's energy use and what they do at home has an impact on climate change.

	Age			Unaided Campaign Recall	
	18-34	35-54	55+	Yes	No
Strongly/Somewhat agree					
Walking, cycling or taking public transit instead of driving a car reduces the impact on climate change	82%	82%	71%	85%	77%
Home heating/cooling and electricity use contribute to climate change	77%	75%	65%	82%	70%
My home's energy use and what I do in my home has an impact on climate change	77%	71%	62%	84%	67%
Driving electric vehicles instead of gas/diesel vehicles reduces the impact on climate change	79%	67%	46%	76%	61%

Strongly/Somewhat agree	Gender	
	Woman	Man
Walking, cycling or taking public transit instead of driving a car reduces the impact on climate change	82%	76%
My home's energy use and what I do in my home has an impact on climate change	74%	67%

## Impact of Actions on Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.4f, h, i, p: To what extent do you agree or disagree with the following statements about climate change? \*Due to rounding. <sup>0</sup>New statement in 2021. <sup>\*</sup>Change in wording in 2019, previously: "Home heating/cooling and electricity use contribute to greenhouse gas emissions". <sup>~</sup>Change in wording in 2021, previously: "Driving electric vehicles instead of combustion vehicles reduces the impact on climate change." <sup>‡</sup>Change in wording in 2019, previously: "My home and what I do in it has an impact on climate change".





Three-quarters of residents agree that having solar panels on your home reduces your home's impact on climate change. Meanwhile, two-thirds agree that their consumption choices have an impact on climate change, while six in ten agree that their food choices makes a climate change contribution.

For all statements, agreement is highest among those with moderate household incomes, and those who are able to recall, unaided, communication from the City on the topic of climate change.

Residents aged 18-34 years, females, and those who are post-secondary graduates are more likely to agree that their consumption choices have an impact on climate change, as compared with their counterparts.

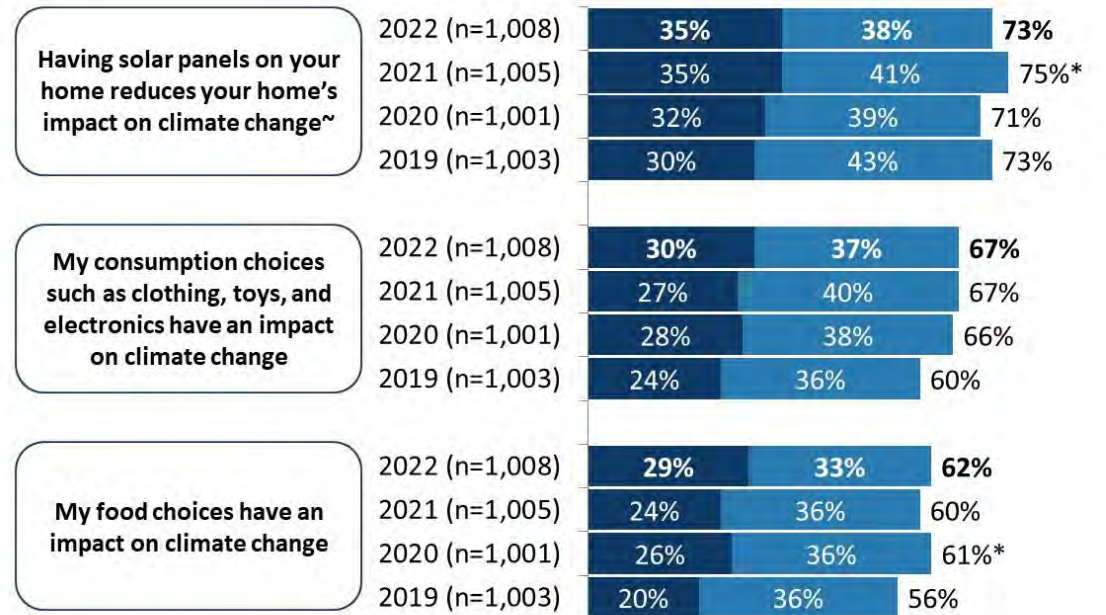
Strongly/Somewhat agree	Age			Gender	
	18-34	35-54	55+	Woman	Man
My consumption choices such as clothing, toys, and electronics have an impact on climate change	74%	67%	58%	73%	61%

Strongly/Somewhat agree	Education			
	Less than HS	Grad HS	Some PS	Grad PS
My consumption choices such as clothing, toys, and electronics have an impact on climate change	60%	54%	62%	73%

## Impact of Actions on Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale

■ Strongly agree ■ Somewhat agree



Q.4k, l, o: To what extent do you agree or disagree with the following statements about climate change? \*Due to rounding. ~ Change in wording in 2021, previously: "Having solar panels on your home decreases your home's impact on climate change."



A total of 78 percent of Edmontonians agree that climate change affects the health and well-being of individuals, consistent with 2021. A less robust, albeit steadily growing, proportion believe that human caused climate change is linked to the occurrence of natural disasters (68 percent, up five points), while seven in ten agree that climate change is affecting Edmonton’s weather, modestly up from last year.

For all three measures, the level of agreement decreases with age. In other words, younger residents are more inclined to agree with each of the statements, as compared to their older counterparts. Edmontonians who have completed post-secondary education are also generally more inclined than their respective counterparts to agree that human caused climate change is linked to natural disasters.

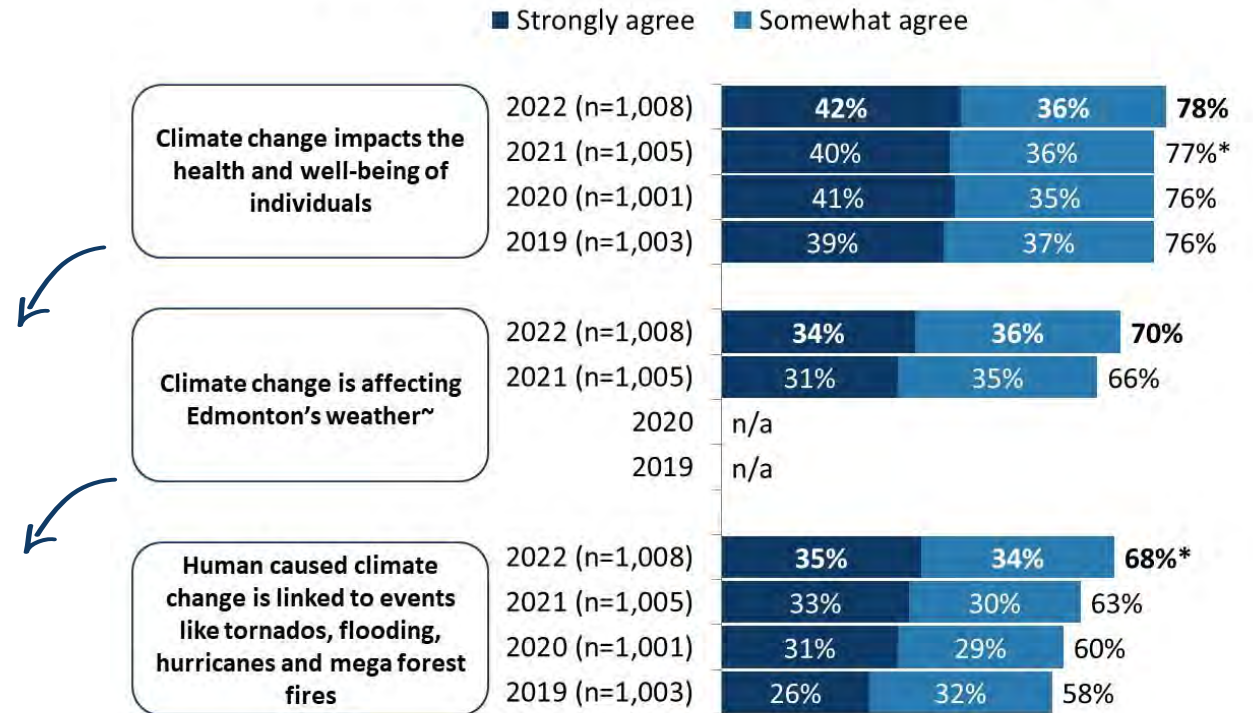
Additionally, women are more likely than men to believe that climate change affects Edmonton’s weather.

Strongly agree	Age		
	18-34	35-54	55+
Climate change impacts health and well-being of individuals	48%	42%	36%

Strongly agree	Age		
	18-34	35-54	55+
Climate change is affecting Edmonton’s weather	33%	39%	31%

## Impact of Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.4m, n, q: To what extent do you agree or disagree with the following statements about climate change? \*Due to rounding. ~New statement in 2021.



Three-quarters of Edmontonians think it is important to talk about climate change, while seven in ten agree that they are comfortable talking about climate change with family, friends, or colleagues. One-half attest that they regularly talk to family, friends, or colleagues about climate change, up from last year.

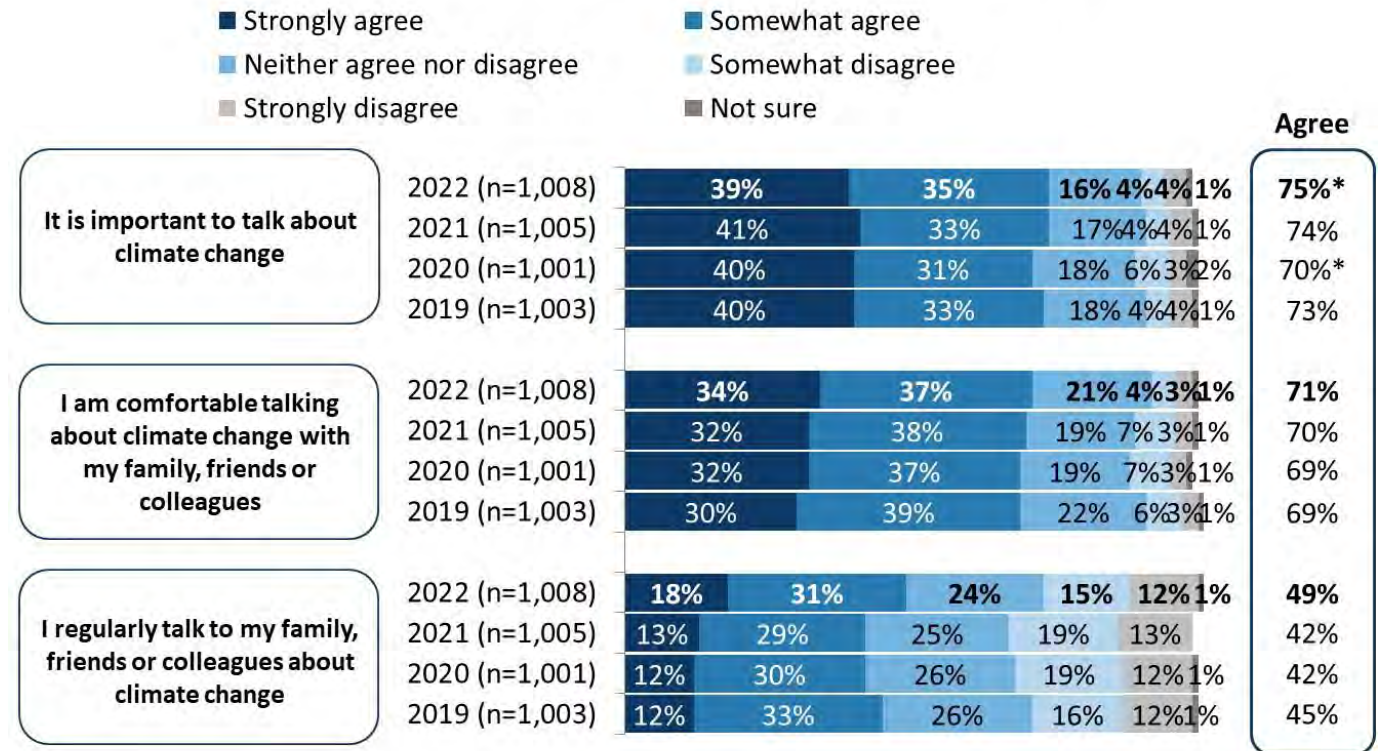
Agreement has remained consistent with last year's results, save for agreement regarding *talking regularly with family, friends, or colleagues about climate change*, which has increased since 2021.

Agreement on all three measures declines with age. That is, residents aged 18-34 are most inclined to agree with the statements, followed by those age 35-54, and those 55 or over.

Agreement is also higher among those with moderate household incomes, as well as those who recall seeing or hearing from the City about climate change programs and initiatives.

## Talking About Climate Change

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.5a-c: To what extent do you agree or disagree with the following statements about climate change? \*Due to rounding.





# Impact of Climate Change on Weather Events

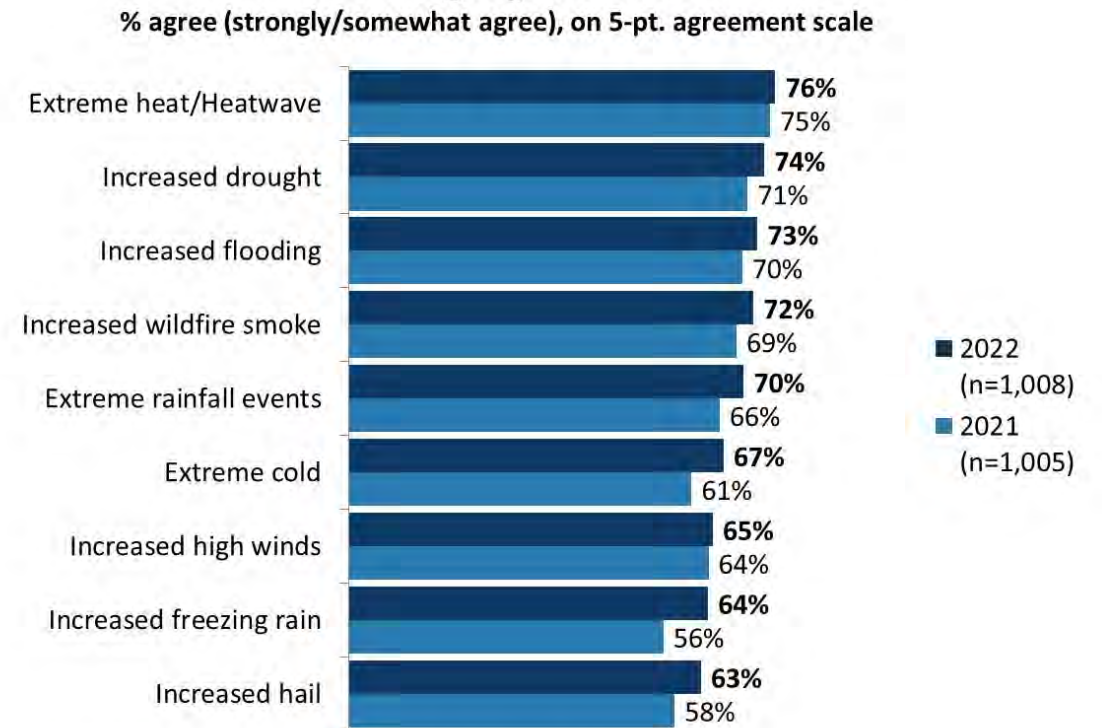
A majority of Edmontonians continue to agree that the incidence of inclement weather events is affected by a changing climate. In particular, three-quarters of residents agree that the risk of extreme heat events, drought, and flooding arises from climate change.

Results are generally consistent with those observed last year, with the exception of *extreme cold*, *increased freezing rain*, and *increased hail*, all of which have experienced an increase in agreement this year.

For all risks, agreement decreases with age. In general, agreement is also higher among women than among men.



## Extent Agree that Weather Events are Risks Arising from a Changing Climate



	Age			Gender	
	18-34	35-54	55+	Woman	Man
Strongly/Somewhat agree					
Extreme heat/Heatwave	82%	77%	68%	80%	72%
Increased Drought	78%	76%	67%	78%	70%
Increased flooding	74%	76%	67%	77%	68%
Increased wildfire smoke	73%	75%	67%	74%	69%
Extreme rainfall events	74%	73%	63%	75%	66%
Extreme cold	72%	70%	56%	74%	59%
Increased high winds	68%	66%	59%	69%	60%
Increased freezing rain	68%	66%	56%	69%	59%
Increased hail	67%	66%	54%	66%	59%

Q.6a-i: To what extent do you agree or disagree that the following are risks arising from a changing climate? *Note: New question in 2021. \*Due to rounding.*



# Impact of Climate Change on Weather Events

*Virtually all Edmontonians have experienced at least one extreme weather event in the past two years. Notably, experiences with extreme heat or with freezing rain have seen increases this year.*

Seven in ten residents report experiencing *extreme heat/heatwave* this year, an increase of fully 26 percentage points since 2021. Similarly, there has been a 17 point increase in the proportion of residents who have experienced *freezing rain* this year.

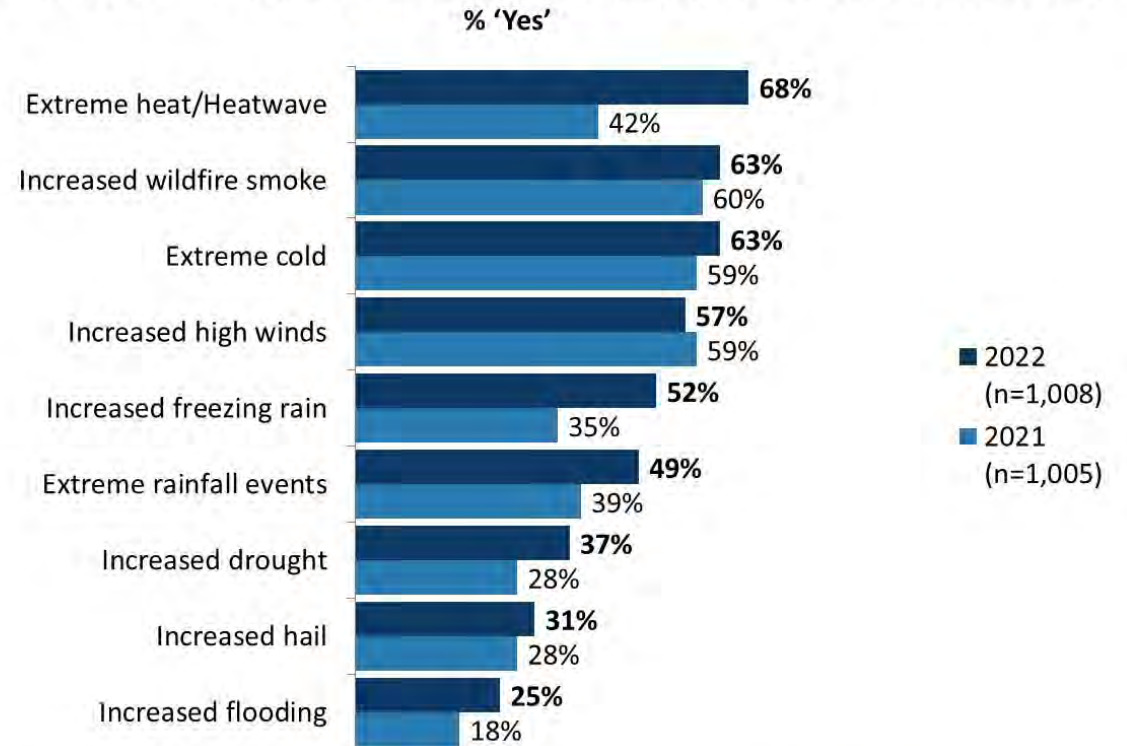
*Extreme rainfall, increased drought, and increased flooding* have also been experienced by a notably greater proportion of residents this year as compared to last. Other experiences with extreme weather events have remained consistent with results from 2021.

In general, women are more likely than men to report experiencing some form of inclement weather in the past two years.

**90%**  
Have experienced at least one of the weather events in Edmonton in the past 2 years  
*(vs. 86% in 2021)*

**4.5**  
Average number of weather events experienced  
*(vs. 3.7 in 2021)*

## Experienced Weather Events in Edmonton in Past 2 Years



Q.7a-i: Have you experienced any of these weather events in Edmonton in the past 2 years? *Note: New question in 2021.*



# Taking Action to Adapt to Climate Change

*One-half of Edmonton residents agree that they are taking action, from the perspective of protecting their property, to adapt to a changing climate. One-quarter of residents neither agree nor disagree that they are taking action, while a slightly smaller percentage disagrees with this notion.*

There is an increase of six percentage points in the proportion of residents who agree this year regarding this query.

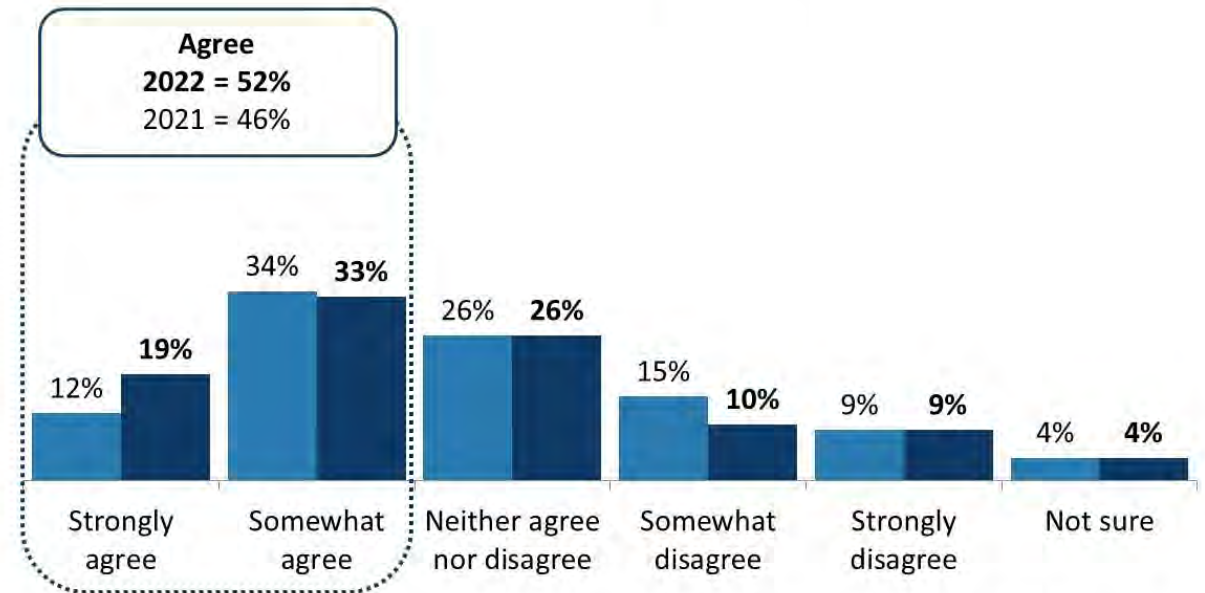
Younger residents aged 18-34 are more likely to agree, compared to their older counterparts. Women are also more likely to agree compared to men, as are those with annual household incomes greater than \$60,000, and those who are able to recall seeing or hearing from the City about climate change programs and initiatives.

Residents who own their home are more likely than those who lease or rent to agree that they are taking action to adapt to a changing climate. Additionally, those who dwell in a fully or semi detached home or townhome are more likely their counterparts to be taking action.

## I am Taking Action to Adapt to a Changing Climate

% agree (strongly/somewhat agree), on 5-pt. agreement scale

■ 2021 (n=1,005) ■ 2022 (n=1,008)



Q.7k: To what extent do you agree or disagree with the following statement: I am taking action to adapt to a changing climate (for example, flood proofing my property, securing loose shingles from winds, having an emergency preparedness plan, etc.). *New question in 2021.*



NARRATIVE  
RESEARCH

# Home Energy Efficiency





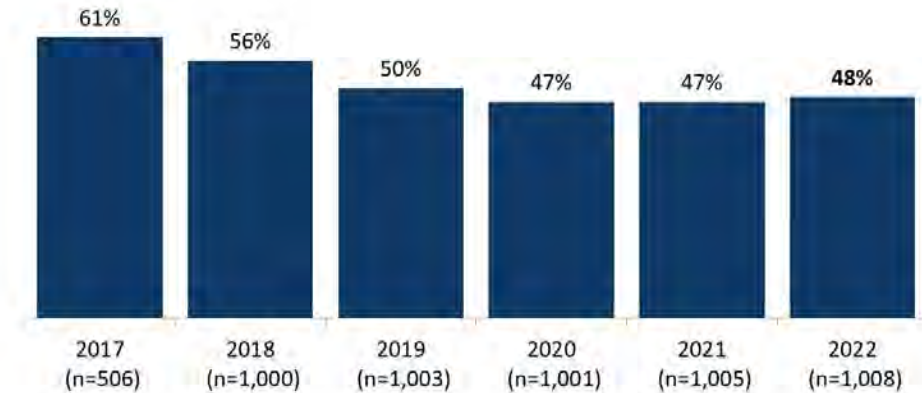
# Actions Taken to Increase Energy Efficiency in the Home

*One-half of Edmontonians indicate they have taken actions to increase energy efficiency in their homes in the past year. This result is consistent with 2021.*

The likelihood to act decreases with age. Women are more likely to act as compared to men, as are those who are able to recall seeing or hearing communication from the City about climate change programs and initiatives.

Those with moderate household incomes, as well as residents in fully/semi detached, duplex, town or row house dwellings are more likely to have acted in the past year, as compared to their counterparts with other annual income levels, or those in in condos/apartments.

**Taken Actions to Increase Home's Energy Efficiency in Past Year**  
% 'Yes'



Q.8: Have you taken any actions to increase the energy efficiency of your home in the past year?

## Taken Actions to Increase Home's Energy Efficiency in Past Year

By home ownership and dwelling type

	Home Ownership												Dwelling Type											
	Own						Lease/Rent						Fully/Semi Detached or Townhouse						Condo/Apartment					
	2017 (n=369)	2018 (n=732)	2019 (n=681)	2020 (n=678)	2021 (n=673)	2022 (n=709)	2017 (n=129)	2018 (n=268)	2019 (n=322)	2020 (n=323)	2021 (n=332)	2022 (n=299)	2017 (n=375)	2018 (n=741)	2019 (n=717)	2020 (n=725)	2021 (n=726)	2022 (n=729)	2017 (n=110)	2018 (n=242)	2019 (n=266)	2020 (n=256)	2021 (n=251)	2022 (n=267)
% Yes	62%	62%	56%	51%	51%	49%	56%	42%	39%	40%	40%	45%	63%	59%	55%	51%	51%	50%	52%	47%	37%	37%	38%	43%

Q.8: Have you taken any actions to increase the energy efficiency of your home in the past year?



# Actions Taken to Increase Energy Efficiency in the Home

When provided aided examples, a strong majority of Edmontonians indicate they have taken actions in their home in the past year to minimize their impact on climate change. On average, residents took approximately four actions in their home in the past year.

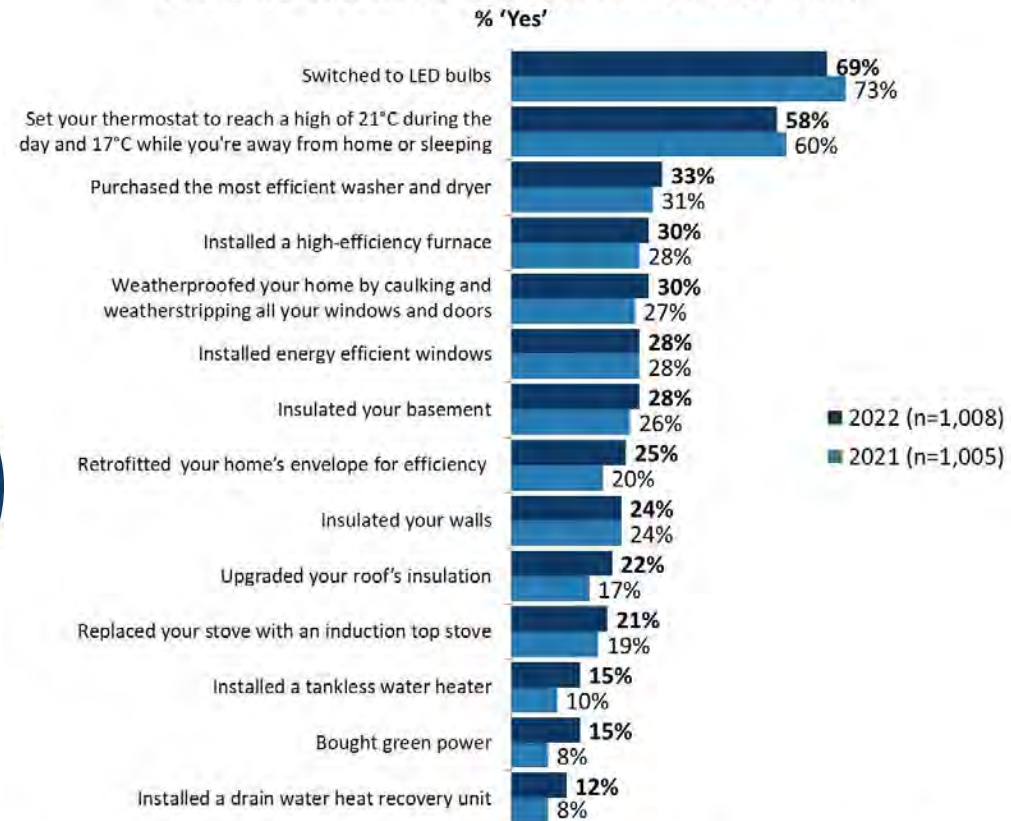
Switching to LED bulbs and setting the thermostat to certain temperatures while away or sleeping remain the top mentions. While some results are generally consistent with those recorded in 2021, exceptions are the proportion that report having retrofitted their home's envelope for efficiency (up 5 percentage points), having upgraded their roof's insulation (up 5 percentage points), having installed a tankless water heater (up 5%), and having bought green power (up 7 percentage points).

In general, homeowners are more likely than residents who lease or rent their homes to undertake the listed actions to increase energy efficiency in the home, as are those in fully/semi detached dwellings or townhomes compared to those in condos/apartments. Those who recall having seen or heard information from the City about climate change programs are also more likely to report taking the listed actions.

**87%**  
Have taken actions in home in past year  
*(vs. 87% in 2021)*

**4.1**  
Average number of actions taken in home in past year  
*(vs. 3.8 in 2021)*

## Actions Taken in Your Home in Past Year



Q.9a-n: Which of the following actions have you taken in your home in the past year? Select all that apply. (n=1,005)  
Note: New question in 2021.

Other than increasing the energy efficiency of their homes, 47 percent of Edmontonians have taken actions to reduce their impact on climate change in the past year.

The likelihood of having taken actions, not including home efficiency upgrades, to reduce impact on climate change in the past year decreases with age. That is, younger residents are more likely than older residents to have taken actions. Women are also more likely than men to have taken actions to reduce their impact on climate change in the last year.

Residents in semi-detached/duplex/town/row houses are more likely than residents in condos/apartments to have taken other actions to reduce impact on climate change in the past year, as are those who recall having seen or heard information from the City about climate change programs.

## Taken Actions to Reduce Impact on Climate Change in Past Year

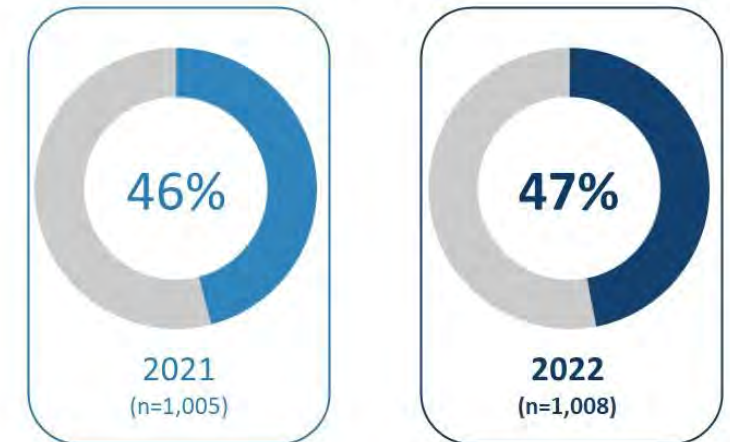
By home ownership and dwelling type

	Home Ownership				Dwelling Type			
	Own		Rent/Lease		Fully/Semi Detached or Townhouse		Condo/ Apartment	
	2021 (n=673)	2022 (n=709)	2021 (n=332)	2022 (n=299)	2021 (n=726)	2022 (n=729)	2021 (n=251)	2022 (n=267)
% Yes	44%	<b>47%</b>	51%	<b>48%</b>	46%	<b>48%</b>	49%	<b>47%</b>

Q.10: Have you taken any [IF 'YES' IN Q.8: Other] actions to reduce your impact on climate change in the past year? *New question in 2021.*

## Taken Actions to Reduce Impact on Climate Change in Past Year

% 'Yes'



Q.10: Have you taken any [IF 'YES' IN Q.8: Other] actions to reduce your impact on climate change in the past year? *New question in 2021.*





# Actions to Reduce Climate Change Impact

*Virtually all Edmontonians have taken one or more of the examined actions in the past year to reduce their impact on climate change, consistent with results from 2021.*

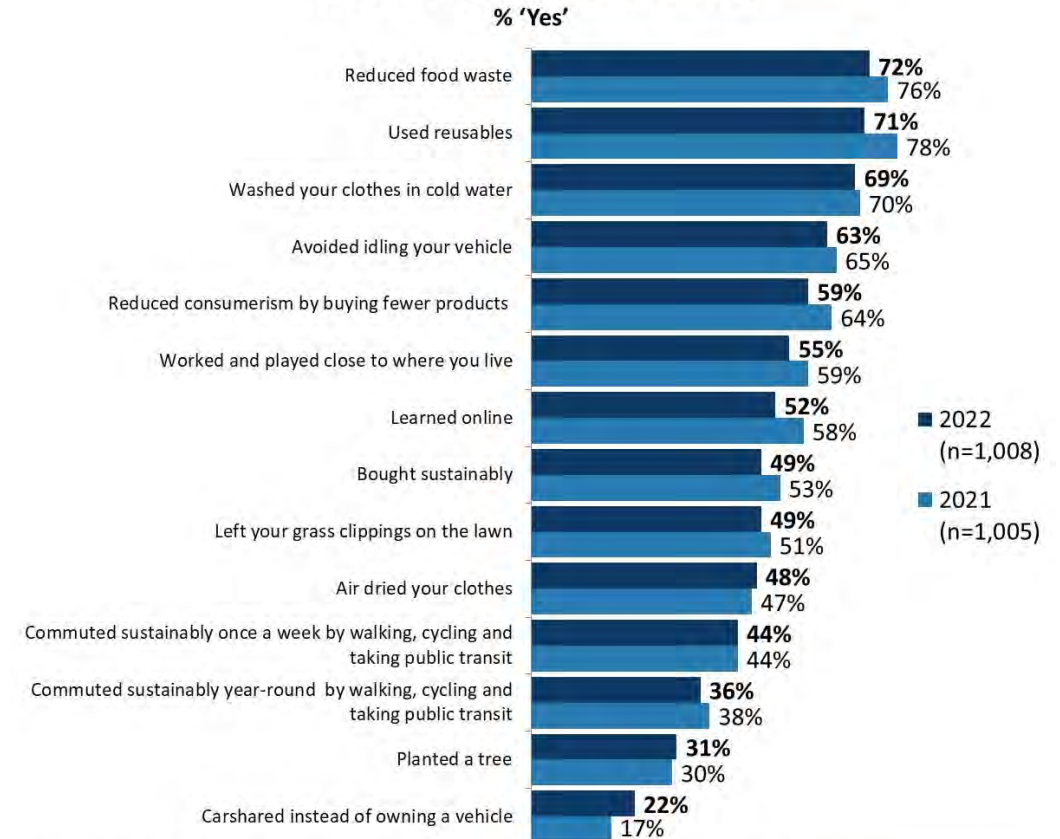
This year, a smaller proportion of residents report having *reduced consumerism by buying fewer products, using reusables, or learning online*. In contrast, the proportion reporting that they *car shared instead of owning a vehicle* has increased slightly since 2021. Other mentions remain generally consistent with results observed last year. Residents made an average of seven (7.2) actions in the past year.

In general, women are more likely than men to report having taken action, as are residents who recall communication from the City about climate change initiatives, as compared to their counterparts.

**94%**  
Have taken actions in past year  
*(vs. 96% in 2021)*

**7.2**  
Average number of actions taken in past year  
*(vs. 7.5 in 2021)*

## Actions Taken in Past Year



Q.11a-n: Which of the following actions have you taken in the past year? Select all that apply. *Note: New question in 2021.*





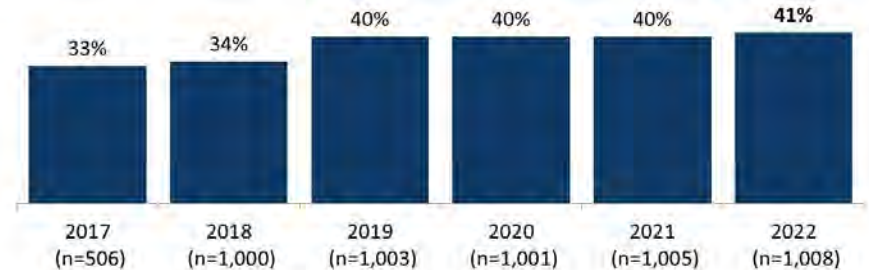
# Awareness of EnerGuide Program

Four in ten Edmontonians indicate awareness of the City's EnerGuide home evaluation program, consistent with results from the past three years.

Awareness of the EnerGuide program increases with both age and household income. Residents who are graduates of a post-secondary program are also more likely to be aware than their counterparts, as are residents who recall communication from the City about climate change initiatives.

Awareness is also elevated among homeowners relative to those who lease or rent their homes, and among those who live in a fully/semi-detached/duplex/town or row house compared to those in condos/apartments.

**Aware of EnerGuide Program**  
% 'Yes'



Q.12: Have you heard of a program that helps residents make their homes more energy efficient by providing an EnerGuide energy evaluation and incentives for home improvements? *Slight change in question wording in 2019.*

## Aware of EnerGuide Program

By home ownership and dwelling type  
% Yes

	Home Ownership												Dwelling Type											
	Own						Rent/Lease						Fully/Semi Detached or Townhouse						Condo/Apartment					
	2017 (n=369)	2018 (n=732)	2019 (n=681)	2020 (n=678)	2021 (n=673)	2022 (n=709)	2017 (n=129)	2018 (n=268)	2019 (n=322)	2020 (n=323)	2021 (n=332)	2022 (n=299)	2017 (n=375)	2018 (n=741)	2019 (n=717)	2020 (n=725)	2021 (n=726)	2022 (n=729)	2017 (n=110)	2018 (n=242)	2019 (n=266)	2020 (n=256)	2021 (n=251)	2022 (n=267)
% Yes	34%	37%	44%	42%	45%	49%	33%	27%	31%	34%	31%	27%	35%	35%	42%	41%	42%	46%	28%	32%	36%	39%	37%	32%

Q.12: Have you heard of a program that helps residents make their homes more energy efficient by providing an EnerGuide energy evaluation and incentives for home improvements? *Slight change in question wording in 2019.*



Generally on par with last year, three-quarters of Edmontonians each agree that having an EnerGuide evaluation with recommendations on how to make the home more energy efficient would be valuable when renovating, and that when buying a home, they would like to see the results of the EnerGuide evaluation of that home compared to others.

The survey results are consistent with those observed last year.

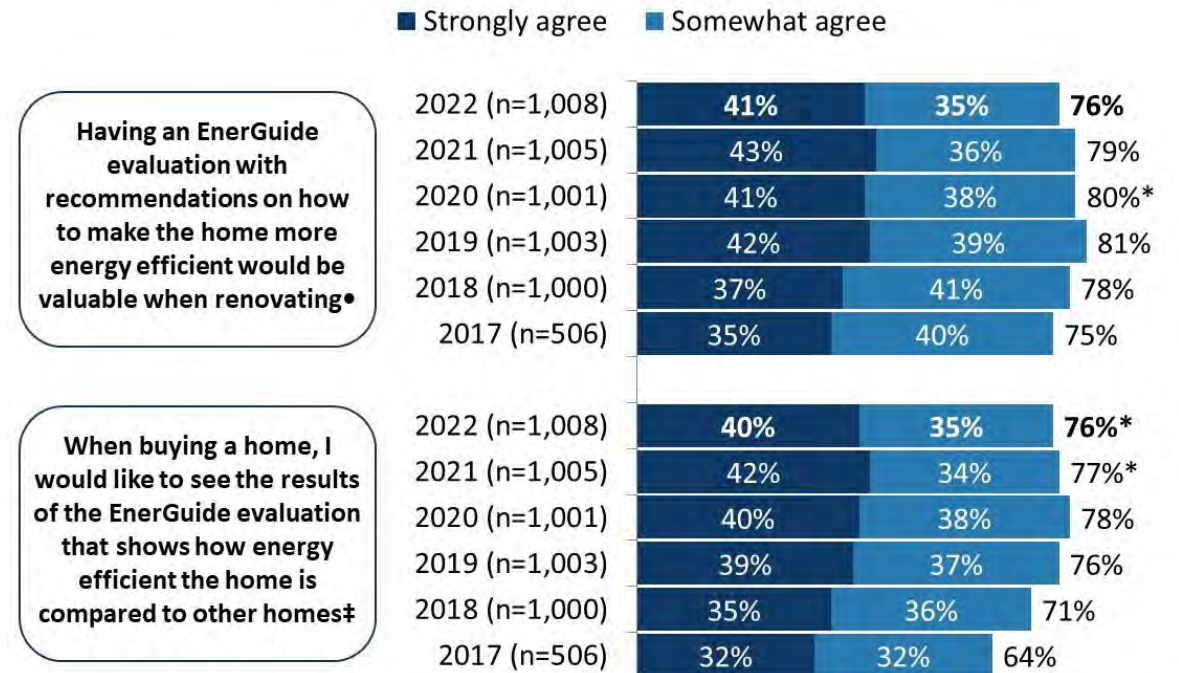
Agreement on the desire to see the EnerGuide evaluation on a home before buying is elevated among women as compared to men.

Residents with a household income above \$60,000 are more likely to agree that there is value in having an EnerGuide evaluation on how to make the home more energy efficient when renovating, as are home owners.

Residents who recall hearing or seeing information about climate change programs from the City are more likely to see the value of the EnerGuide evaluation in both stated scenarios.

## Opinions on EnerGuide Evaluation

% agree (strongly/somewhat agree), on 5-pt. agreement scale



Q.15b-c: To what extent do you agree or disagree with the following statements about energy efficiency? \*Due to rounding. •Change in wording in 2019, previously: "The EnerGuide evaluation and expert advice would be valuable to reference when renovating a home". †Change in wording in 2019, previously: "When buying a home, I would like to see the EnerGuide label".



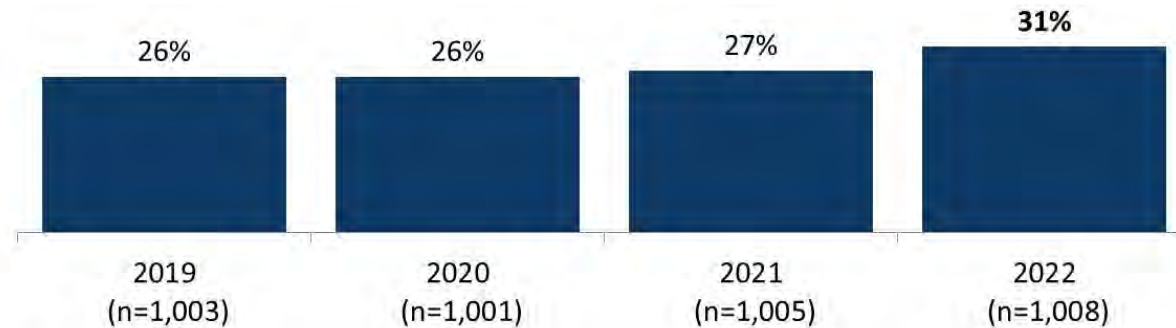
NARRATIVE  
RESEARCH

# Solar Energy and Energy Efficiency

Three in ten Edmontonians are aware of a program that helps homeowners install solar panels on their home, edging upward over preceding years.

## Heard of Program That Helps Owners Install Solar Panels on Their Home to Generate Own Electricity

% 'Yes'



Q.18: Have heard of a City of Edmonton program that helps home owners install solar panels on their home to generate their own electricity?





# Solar Panels Currently Installed on Home

The vast majority of Edmontonians do not have solar panels installed on their homes, although there has been an increase in the proportion that have installed solar panels this year.

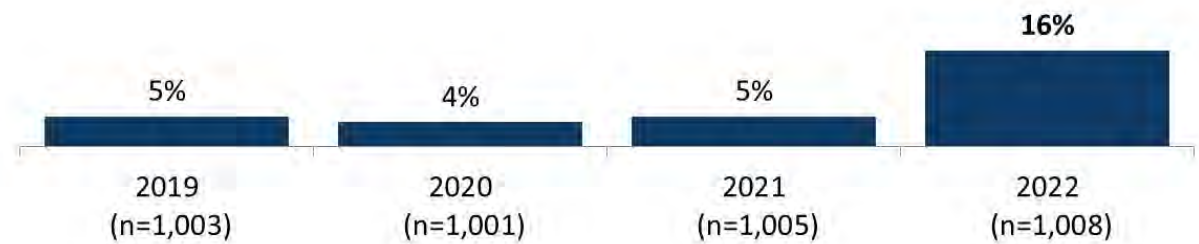
The proportion of residents who have installed solar panels in their home has increased by 11 percentage points this year, a notable increase from 2021.

Younger residents (age 18-34) are much more likely than older residents to already have solar panels installed on their home, as are those who are home owners rather than renters, as well as those who recall hearing or seeing information about climate change programs from the City.

Have Solar Panels Installed	Age			Unaided Campaign Recall	
	18-34	35-54	55+	Yes	No
Yes	28%	15%	4%	43%	8%

Have Solar Panels Installed	Home Type		
	Detached	Semi/Duplex/Town /Row	Condo/Apt
Yes	14%	28%	13%

## Currently Have Solar Panels Installed on Home % 'Yes'



Q.20: Do you currently have solar panels installed on your home?



# Likelihood of Installing Residential Solar Energy System

In the next three years, three in ten Edmonton home-owners are likely to install additional or first-time solar panels on their homes, a figure that has steadily increased over the years.

The likelihood of installing solar panels decreases with the age of residents, and is higher among men than women in terms of examining scores of 5 (very likely), as well as among residents with household incomes of above \$60,000.

Edmontonians residing in a semi, duplex, town or rowhouse are more likely than their counterparts in detached homes or condominiums to state an intention to install solar panels in the next three years. Likewise, those who recall hearing or seeing information about climate change programs from the City are also more likely.

## Likelihood of Installing Solar Panels on Home in Next 3 Years

Among those who own their primary residence



Q.21: [IF 'OWN' IN Q.17 AND 'NO' IN Q.20] How likely is it that you will install solar panels on your home in the next 3 years? / [IF 'OWN' IN Q.17 AND 'YES' IN Q.20] How likely is it that you will install additional solar panels on your home in the next 3 years? *Slight change in question wording in 2019. \*Due to rounding.*

Likelihood of Installing Solar Panels	Age			Dwelling Type		
	18-34	35-54	55+	Detached	Semi/Duplex/Town/Row	Condo/Apt
Likely % (5,4)	48%	35%	9%	26%	49%	18%

Likelihood of Installing Solar Panels	Unaided Campaign Recall	
	Yes	No
Likely % (5,4)	59%	20%



Edmontonians place considerable importance on the energy efficiency of the buildings in which they work, study, play, or shop, as three-quarters of residents indicate that energy efficiency is important for such buildings, stable with 2021 results but above preceding years.

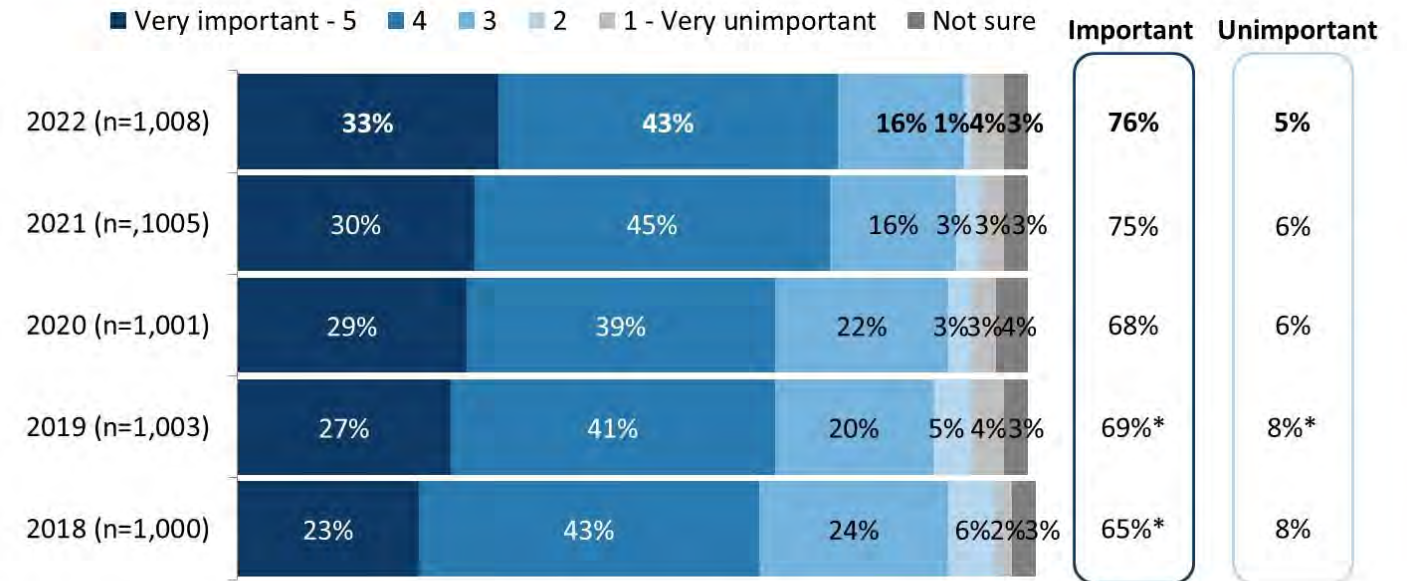
Importance of energy efficient buildings is elevated among younger residents, aged 18-34, and among those who completed some or all of their post-secondary education, as compared to their counterparts.

Residents who recall seeing or hearing messaging about climate change programs from the City are more likely to say energy efficiency in the buildings they use is important.

Importance of EE Buildings	Age			Unaided Campaign Recall	
	18-34	35-54	55+	Yes	No
Very/Somewhat Important	81%	77%	70%	89%	72%

Importance of EE Buildings	Education			
	Less than HS	Grad HS	Some PS	Grad PS
Very/Somewhat Important	63%	67%	77%	79%

## Importance of Building Where People Work, Study, Play, and Shop Being Energy Efficient



Q.24: How important or unimportant is it that buildings you work, study, play, or shop in are energy efficient? \*Due to rounding.



NARRATIVE  
RESEARCH

# Electric Vehicles





A growing minority of Edmonton residents are familiar with electric vehicles, while one-quarter describe themselves as unfamiliar. The remainder of Edmontonians mention self-report as being somewhat familiar with electric vehicles.

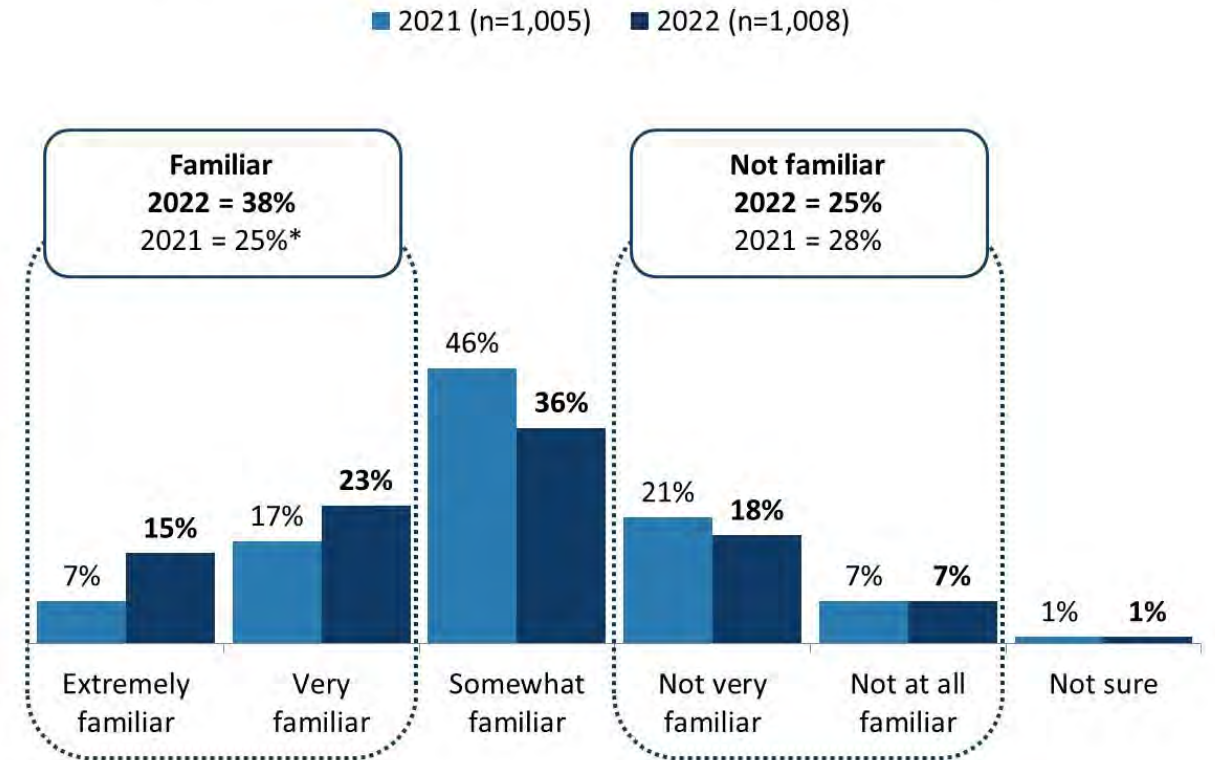
The proportion of residents who are *familiar* with electric vehicles has increased by 13 percentage points this year.

Familiarity with electric vehicles decreases with age. Men are also increasingly likely to be *familiar* with electric vehicles compared to women. Residents with a lower annual household income are more likely to be *unfamiliar* with electric vehicles, relative to their counterparts. Residents who recall seeing or hearing messaging about climate change programs from the City, are more likely to be *familiar*.

Familiarity with EV	Age			Gender	
	18-34	35-54	55+	Women	Men
Extremely/Very Familiar	55%	39%	15%	31%	44%

Familiarity with EV	Income			Unaided Campaign Recall	
	Lower	Moderate	Higher	Yes	No
Not Very/Not At All Familiar	33%	18%	17%	5%	31%

## Level of Familiarity with Electric Vehicles



Q.26: How familiar are you with electric vehicles? (n=1,005) New question in 2021. \*Due to rounding.



*Four in ten Edmontonians indicate having no experience with electric vehicles, while three in ten residents have learned about electric vehicles from a friend, the news or advertising, one-quarter have researched electric vehicles. One in six have spoken with an electric vehicle owner, or have driven or been a passenger in an electric vehicle, while 13% own or have owned an electric vehicle in the past.*

The proportion of Edmonton residents who *have no experience with electric vehicles* has decreased this year by five percentage points. In contrast, the proportion of residents who *own or have owned an electric vehicle* has increased by ten percentage points since 2021. All other results have remained generally consistent with last year. The result indicating that 13% of Edmontonians are electric vehicle owners is notably higher than “true data” from the City, whereby only two percent (1.58%) of Edmontonians own an electric vehicle.

Having no experience with electric vehicles increases with age, and decreases with household income. Women are also more likely than men to have no experience with electric vehicles, while those who recall communications from the City on climate change programs are less likely than their counterparts to have no experience.

The likelihood for both having learned about electric vehicles from a friend, the news or advertising, and owning or having owned an electric vehicle, decreases with age. The likelihood of having researched or looked for information about electric vehicles is elevated among men, and among those with household incomes above \$100,000.

## Statements That Personally Apply in Terms of Electric Vehicles

	2019 (n=1,003)	2020 (n=1,001)	2021 (n=1,005)	2022 (n=1,008)
I have no experience with electric vehicles	61%	61%	48%	<b>43%</b>
I have learned about electric vehicles from a friend, news or advertising*	n/a	n/a	28%	<b>28%</b>
I have researched or looked for information about electric vehicles	23%	22%	27%	<b>25%</b>
I have spoken with the owner of an electric vehicle	13%	15%	14%	<b>17%</b>
I have driven or been a passenger in an electric vehicle	15%	14%	13%	<b>15%</b>
I own (or owned) an electric vehicle	4%	4%	3%	<b>13%</b>
Other	4%	3%	1%	<b>1%</b>

Q.27: Which of the following statements apply to your personal experience with electric vehicles? Please select as many as apply to you. *Note: Slight question wording change in 2021. Question allowed for multiple responses to be selected. \*New statement in 2021.*

While three in ten Edmontonians are likely to buy an electric car for their next vehicle purchase, an equal proportion are unlikely to buy.

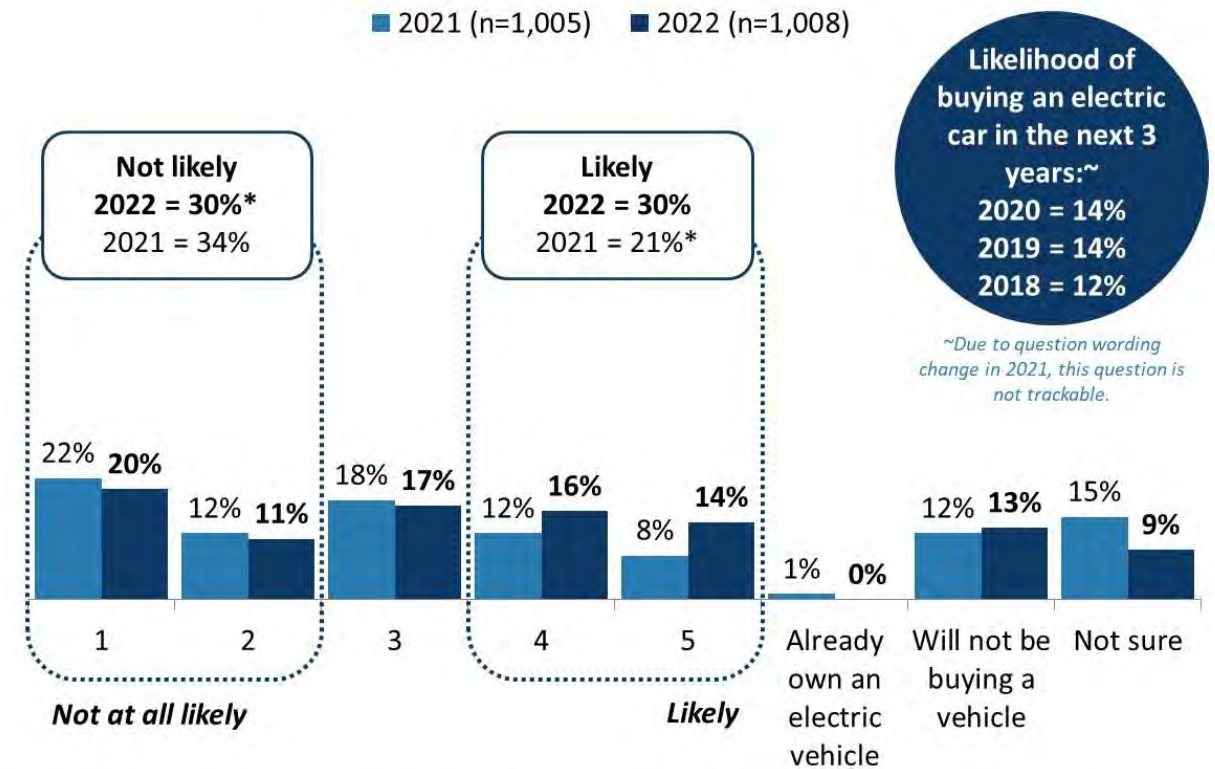
The proportion of residents who are *likely* to buy an electric car has increased by nine percentage points this year.

For Edmonton residents, the likelihood of buying an electric car as their next vehicle purchase decreases with age, as residents aged 18-34 are *most* likely. The likelihood is also *decreased* among residents with household incomes of \$60,000 or less.

Residents who recall climate change campaigns from the City are more likely to buy an electric car as their next vehicle, as compared to their counterparts.

Note that one percent of respondents confirmed that they already own an electric vehicle, while others who may also already own an electric vehicle would have provided a different response when queried about the likelihood of buying another electric vehicle.

## Likelihood of Buying Electric Vehicle for Next Vehicle



Q.28: How likely are you to buy an electric vehicle for your next vehicle purchase? (n=1,005) \*Due to rounding.





*The price of an electric vehicle, and issues with access to or distance between charging stations, remain the top factors limiting purchases of electric vehicles.*

The proportion of residents naming *price* as an inhibitor has decreased by five percentage points this year, while the proportion naming *access to charging stations* has decreased by seven percentage points from 2021. Moreover, the performance of electric vehicles in the winter is now in the top three responses, with a nine percentage point increase from 2021.

*Vehicle performance in the winter* is a growing concern, with the proportion naming it having increased by nine percentage points this year. All other mentions, besides the proportion that have an electric vehicle, have remained consistent with results from 2021.

Issues related to *price* and *charging stations* are more likely to be cited by men compared to women. *Performance of vehicles in the winter* is more likely to be a factor for older residents, particularly those aged 55 or older. Those with household incomes of \$100,000 or more are also more likely to cite *access to charging stations*, *performance in the winter*, *distance between charging stations not allowing them to go where they want to go*, and/or the *limited availability of new electric vehicles for purchase in Edmonton* as impeding factors.

## Factors Preventing Electric Vehicle Purchase

	2019 (n=1,003)	2020 (n=1,001)	2021 (n=1,005)	2022 (n=1,008)
The price of an electric vehicle	62%	65%	60%	55%
Access to electric vehicle charging stations	37%	38%	52%	45%
The performance of electric vehicles in the winter <sup>δ</sup>	30%	31%	33%	42%
Distance between charging stations doesn't allow me to travel where I want to go	36%	35%	42%	41%
Availability of electric vehicles for purchase in Edmonton <sup>~</sup>	21%	16%	n/a	n/a
<i>The limited availability of <u>new</u> electric vehicles for purchase in Edmonton</i>	n/a	n/a	18%	21%
<i>The limited availability of <u>used</u> electric vehicles for purchase in Edmonton</i>	n/a	n/a	23%	20%
Availability to test drive the vehicle before purchasing	10%	11%	12%	13%
I don't drive	11%	10%	8%	8%
I already have an electric vehicle	2%	2%	1%	5%
Improved/greener batteries <sup>□</sup>	n/a	n/a	n/a	2%
Other	8%	10%	4%	2%
None of the above/Will not be buying an electric vehicle*	7%	7%	8%	7%
Will not be buying any vehicle <sup>•</sup>	n/a	n/a	7%	6%

Q.30: Which, if any, of the following factors might prevent you from purchasing an electric vehicle in the future? Please select as many as apply to you. Note: Slight question wording change in 2020. Question allowed for multiple responses to be selected. <sup>δ</sup>Changed in wording in 2022, previously: "Electric vehicles are not good in the winter". <sup>~</sup>No longer an option since 2021, replaced by: "The limited availability of new electric vehicles for purchase in Edmonton" and "The limited availability of used electric vehicles for purchase in Edmonton". <sup>□</sup> New unaided mention in 2022. \*Change in wording in 2019, previously: "None of the above". <sup>•</sup>New option in 2021.





*Motivating factors for purchasing an electric vehicle remain varied. While some factors were mentioned in previous years, new factors have emerged this year, albeit they are mentioned by a very small proportion of residents.*

The *cost of an electric vehicle being lower* and the *economic benefits* remain the top two mentions this year. Mentions of *economic benefits* have decreased by six percentage points this year, while mentions of *cost being lower* have shifted by three percentage points.

Mentions of *incentives to purchase an electric vehicle* have decreased, as is the case with *incentives to purchase charging stations, the cost being the same, reduced greenhouse gas emissions, and abundant availability of electric vehicles for purchase in the city.*

New mentions this year include *improved batteries, reliability in cold weather, and availability of charging stations.*

Innovation, Other and None of the above mentions have all remained generally stable.

Those with higher annual household incomes are more likely to cite *economic benefits, incentives to purchase and electric vehicle, incentives to purchase charging stations, reduced greenhouse gases, and the abundant availability of electric vehicles for purchase in Edmonton* from the presented list of motivating factors.

### Factors Motivating Electric Vehicle Purchase

	2019 (n=1,003)	2020 (n=1,001)	2021 (n=1,005)	2022 (n=1,008)
If the cost of an electric vehicle is lower than a non-electric one*	n/a	n/a	49%	46%
Economics – reduced maintenance costs and not having to pay for gas	53%	49%	49%	43%
Incentives to purchase an electric vehicle	46%	45%	45%	40%
Incentives to purchase charging stations for your home	33%	31%	40%	34%
If the cost of an electric vehicle is the same as a non-electric one*	n/a	n/a	40%	34%
Reduced greenhouse gas emissions that contribute to climate change	38%	37%	36%	30%
Abundant availability of electric vehicles for purchase in Edmonton, including used ones*	n/a	n/a	32%	26%
Innovation – I like being at the forefront of new technologies and ideas	15%	13%	15%	16%
Improved/greener batteries**	n/a	n/a	n/a	1%
Reliability/performance in harsh climates/cold weather**	n/a	n/a	n/a	1%
Availability of charging stations**	n/a	n/a	n/a	1%
Other	4%	6%	5%	3%
None of the above	20%	25%	16%	18%

Q.29: Which, if any, of the following factors might motivate you to purchase an electric vehicle in the future? Note: Slight question wording change in 2020. Question allowed for multiple responses to be selected. \*New statement in 2021. \*\*New unaided mention in 2022.

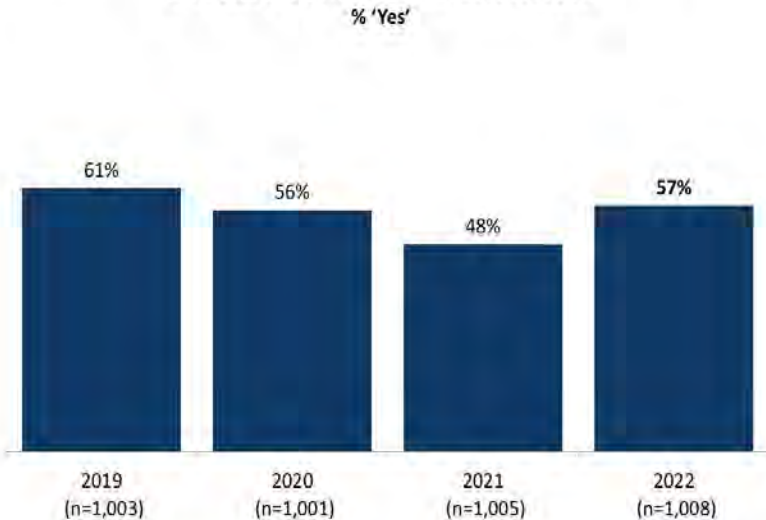


# Awareness of Public Charging Stations for Electric Vehicles

Six in ten Edmontonians are aware that there are public charging stations for electric vehicles in Edmonton, marking an increase of nine percentage points since 2021.

Awareness is lower among older residents (aged 55+) compared to younger residents. Awareness of public charging stations increases with household income, and is elevated among homeowners, and those residing in a fully/semi detached or townhouse dwelling, relative to their respective counterparts. Awareness appears (not surprisingly) to be positively linked to ownership of electric vehicles, whereby residents who have no experience with electric vehicles are notably less likely to say that they are aware of public charging stations (43%), in contrast to those who have experience with electric vehicles. Perhaps unsurprisingly, owners of electric vehicles are the most likely (83%) to say that they are aware of charging stations.

**Aware That There Are Public Charging Stations for Electric Vehicles in Edmonton**



Q.30A: Are you aware that there are public charging stations for electric vehicles in Edmonton?

**Awareness of Public Charging Stations Versus Experience With Electric Vehicles**

	Aware of Public Charging Stations					
	2021			2022		
	Yes	No	Not sure	Yes	No	Not sure
I have no experience with electric vehicles	37%	46%	17%	43%	41%	17%
I have some experience with electric vehicles, I have:						
I own or have owned an electric vehicle	64%	28%	8%	83%	13%	4%
Spoken with an electric vehicle owner	57%	31%	12%	70%	22%	8%
Driven or been a passenger in an electric vehicle	53%	35%	12%	69%	20%	10%
Researched information about electric vehicles	65%	26%	9%	68%	22%	9%
Learned about electric vehicles	57%	30%	13%	65%	24%	11%
Other	30%	36%	33%	64%	36%	0%

Q.27: Which of the following statements apply to your personal experience with electric vehicles? Please select as many as apply to you.  
 Note: Slight question wording change in 2021. Question allowed for multiple responses to be selected. | Q.30A: Are you aware that there are public charging stations for electric vehicles in Edmonton?



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# Electric Bicycles





One-quarter say they are likely to purchase an electric bicycle in the next three years, up 11 points since 2021. Meanwhile, one-third are not likely to purchase an electric bike in the same timeframe, a decrease of six percentage points from last year.

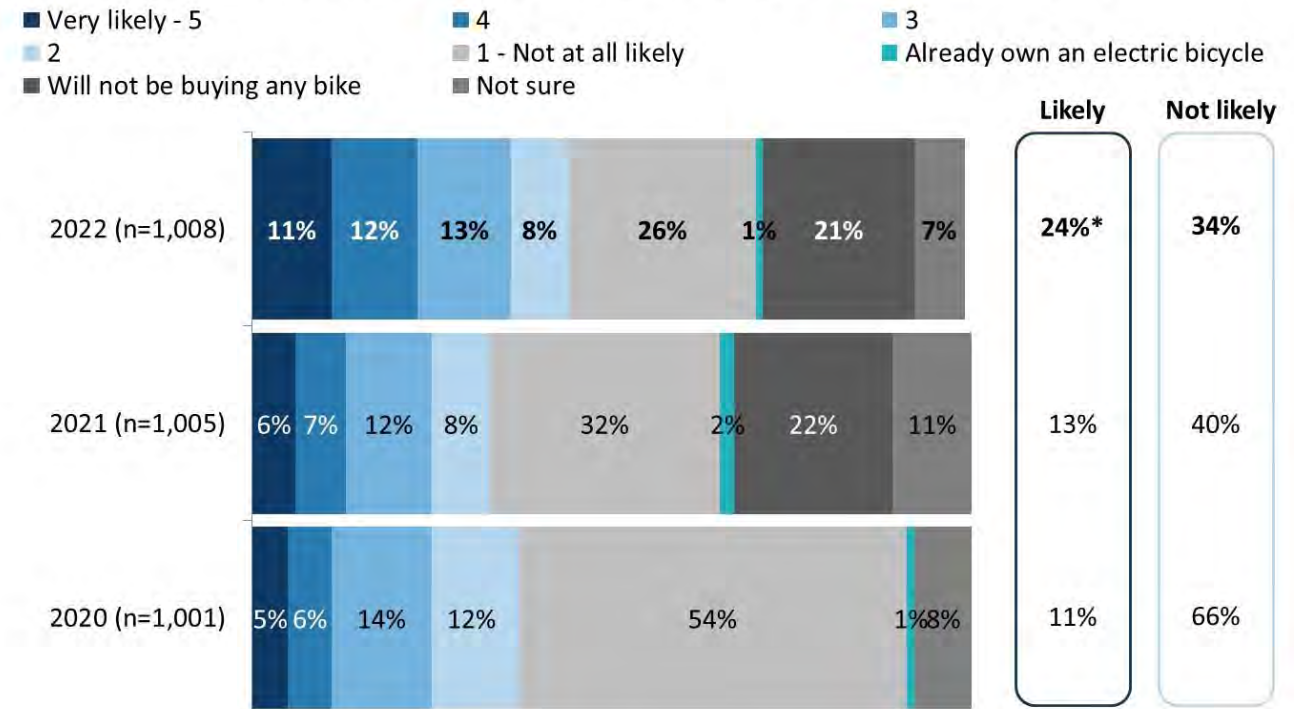
The likelihood of purchasing an electric bicycle decreases with age.

Additionally, residents who recall seeing or hearing information about climate change programs from the City are more likely to say they are likely to buy an electric bicycle.

Just one percent of Edmontonians report that they already own an electric bicycle.

Likelihood of Purchasing Electric Bicycle	Age			Unaided Campaign Recall	
	18-34	35-54	55+	Yes	No
Likely % (5,4)	37%	25%	7%	56%	14%

## Likelihood of Buying Electric Bicycle in Next 3 Years



Q.31: How likely or unlikely are you to buy an electric bicycle (e-bike) in the next three years? *New question in 2020. \*Due to rounding.*





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# Transportation Choices and Climate Change Impact



*Consistent with past results, driving a motor vehicle remains the most frequently mentioned means of transportation used in the past 30 days, followed by walking on foot, and riding as a passenger in private transportation.*

Of note, the proportion who were the *driver of a motor vehicle* in the last 30 days has decreased compared to 2021 results (by 5 percentage points), while the proportion who were *pedestrians* decreased by seven percentage points. In contrast, the proportion who *used public transportation* has increased by nine percentage points this year. All other measures have remained fairly consistent.

Older residents aged 55+ years are most likely to have been a driver of a motor vehicle in the past 30 days, or to have been a pedestrian, and least likely to have been a passenger of public or private transportation, or to have been a motorcycle rider.

Men are more likely than women to have been the driver of a vehicle in the past 30 days, as are those with household incomes of above \$60,000. Homeowners are also more likely than renters to have driven a motor vehicle, and far less likely to have used public transportation or to have been a pedestrian.

## Transportation Used in Past 30 Days

	2019 (n=1,001)	2020 (n=998)	2021 (n=1,005)	2022 (n=1,008)
Driver of a motor vehicle	73%	75%	74%	<b>69%</b>
Pedestrian	50%	53%	50%	<b>43%</b>
Passenger of private transportation vehicle, for example, a car, van, truck or motorcycle	41%	38%	33%	<b>36%</b>
Passenger of public transportation including bus or LRT	40%	18%	21%	<b>30%</b>
Cyclist – non-motorized	13%	21%	17%	<b>13%</b>
Motorcycle rider, that is, primarily a driver, not a passenger	3%	3%	3%	<b>7%</b>
Cyclist – e-bike/electric bicycle*	n/a	2%	2%	<b>2%</b>
Other	1%	2%	1%	<b>1%</b>

Q.40: In the past 30 days, which of the following modes of transportation have you used for getting around? *\*New category in 2020. Note: Question allowed for multiple responses to be selected. Two respondents in 2019 and three respondents in 2020 failed to provide an answer for this question.*



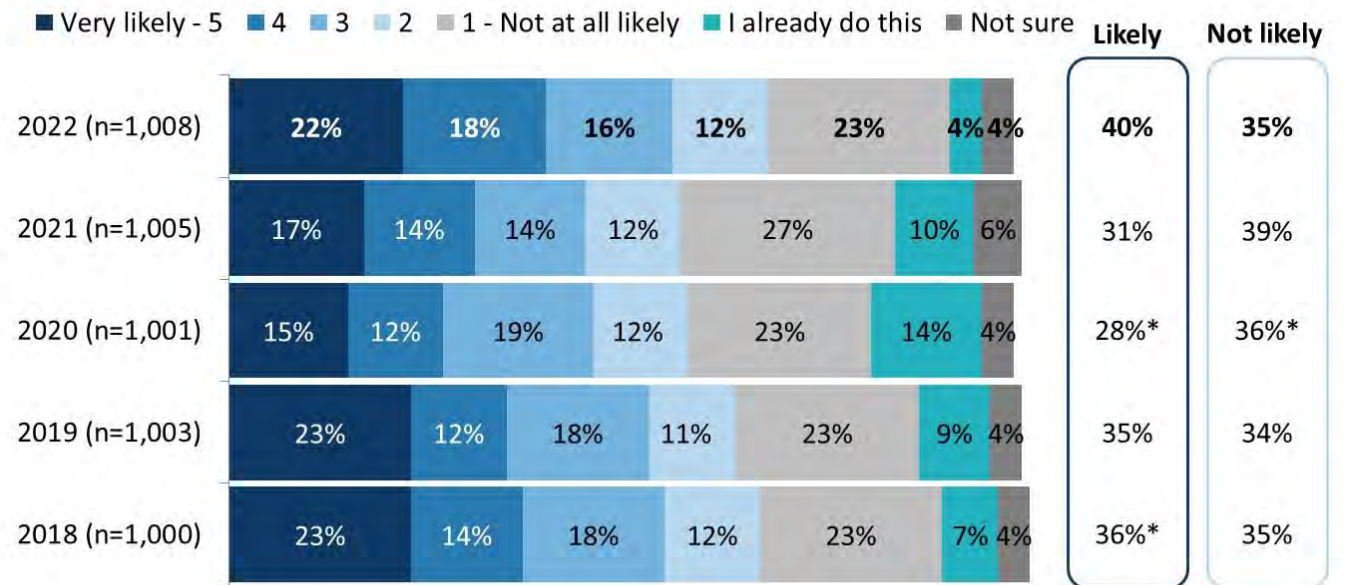
# Likelihood of Altering Transportation to Reduce Climate Change Impact

Four in ten residents indicate they are likely to walk, bike, take public transit or car share for the majority of trips to reduce their impact on climate change, while one-third believe they are not likely to perform such activities. Four percent mentioned they already do these activities, down six points since 2021.

On a positive note, the proportion saying they are likely to make eco-friendly transportation choices has increased by nine percentage points this year.

The likelihood of undertaking eco-friendly transportation the majority of the time decreases with age, and with household income. Homeowners are also less likely than renters to routinely use eco-friendly transportation. Meanwhile, residents who recall City communications about climate change programs are more likely to regularly use eco-friendly transportation, as compared to their counterparts. Women are also more likely to state that they are likely to make eco-friendly transport choices, when compared to men.

## Likelihood of Walking, Biking, Taking Public Transit, or Car Sharing for a Majority of Trips to Reduce Impact on Climate Change



Q.32: How likely or unlikely are you to walk, bike, take public transit, or car share for the majority of your trips to reduce your impact on climate change? *Note: Change in question wording in 2020, previously: "How likely or unlikely are you to walk, bike, take public transit, or car share for the majority of your trips to reduce your greenhouse gas emissions?" \*Due to rounding.*



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# Campaigns



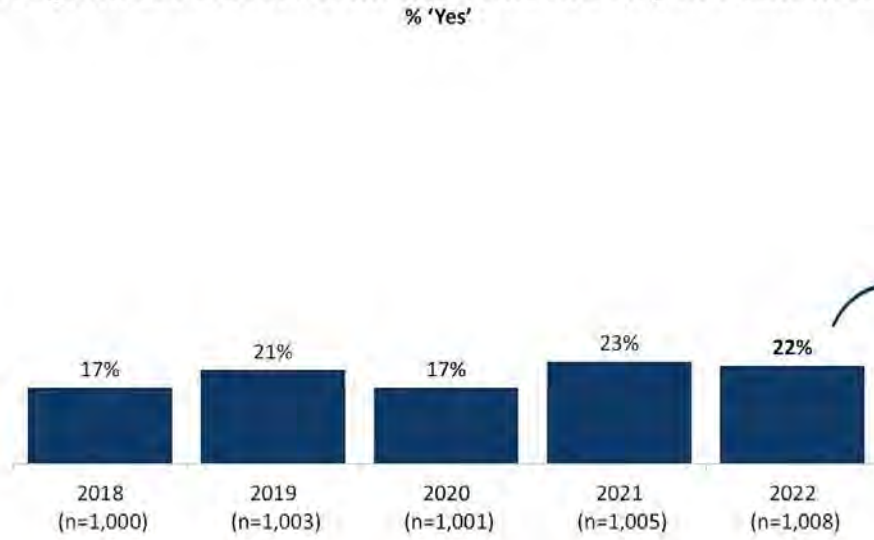


# Recall Climate Change Programs or Advertisements

*Two in ten residents recall, unaided, seeing or hearing about climate change programs or advertisements from the City of Edmonton, on par with 2021. When prompted to recall what residents saw or heard, 14 percent of that group mention waste reduction/recycling information, and ten percent mention non-specific information.*

No single element was recalled, unaided/unprompted, by a substantial proportion of residents. Rather, a wide variety of topics were identified among those who recall messaging of this nature, with only a small number of residents citing any given aspect. Apart from the mentions of waste reduction/recycling, other topics identified included information about climate change, energy efficiency upgrades and rebates and incentives.

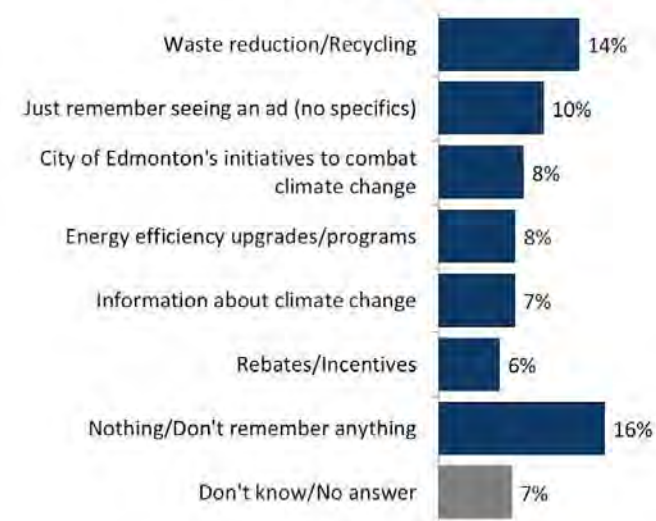
**Recall Seeing or Hearing About Climate Change Programs or Advertisements from the City of Edmonton**  
% 'Yes'



Q.33: Do you recall seeing or hearing about any climate change programs or advertisements from the City of Edmonton?

**Information Recalled**

Key unaided mentions

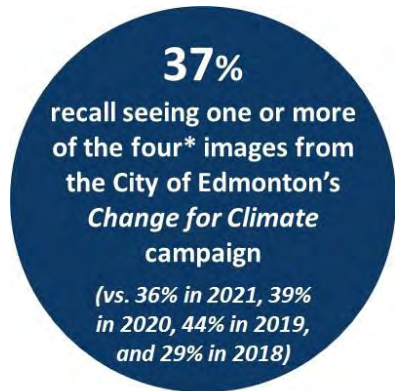


Q.34: [IF 'YES, DO RECALL' IN Q.33] Please describe what you recall seeing or hearing about climate change programs or advertisements from the City of Edmonton? Please be as detailed as possible. (n=217)

*When aided or prompted with specific campaign images, 37 percent of residents recall at least one of the four individual images from the City of Edmonton's Change for Climate campaign.*

Results are on par with those observed last year, although the number of campaign images has decreased to four from six in 2021.

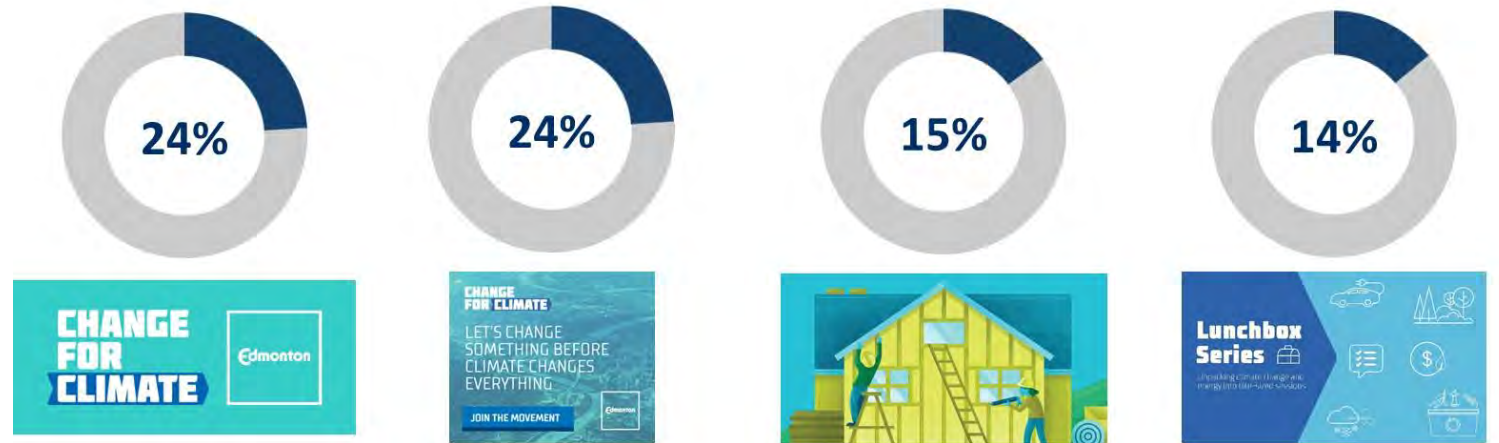
Younger residents (age 18-34) were more likely than their older counterparts to recall the campaign images. Recall also decreases with household income for all images.



*\*In 2018 and 2019, seven images were tested, in 2020 nine images were tested, and in 2021 six images were tested.*

## Recall of Images from City of Edmonton's Change for Climate Campaign

% Saying 'Yes'



Q.35a-d: Which, if any, of the following images related to the City of Edmonton's Change for Climate campaign do you recall seeing? (n=1,008) This question was asked in 2018, 2019, and 2020 but tracking is not provided as different campaign images were tested.



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# Five-Year Summary



*The public is more inclined than was the case in 2018 to say that the perceptions of other Edmontonians are well disposed towards environmental matters.*

With another iteration of the Climate Change and Energy Perceptions Report for the City of Edmonton completed, it is important to reflect on notable changes that have occurred since the study’s outset. Given that this study has been administered via an online survey methodology, it should be noted that statistical testing cannot strictly be applied, in the absence of probability sampling during the data collection phase of the endeavour. That said, in comparing the results from 2018 to those collected this year, there are modest differences and improvements with respect to public perceptions and feelings vis-à-vis climate change.

While Edmontonians’ *personal* feelings concerning various aspects related to climate change (Q1) have remained stable across five of the seven measurements since 2018, increases may be observed in agreement that *residents should be doing more to address climate change*, and that they are *taking action to address climate change*. Meanwhile, agreement has increased on six out of seven categories in terms of perceptions of *other Edmontonians* on climate change topics (Q2), ranging from minor to moderate increases.

## Climate Change Opinions 2018 vs. 2022

% agree (strongly/somewhat agree), on 5-pt. agreement scale

	Personal Feelings			Perceptions About Edmontonians		
	2018 (n=1,000)	2022 (n=1,008)	% Change	2018 (n=1,000)	2022 (n=1,008)	% Change
Concerned about climate change	73%	75%	↑ 2%	47%	56%	↑ 9%
Need to act now to address climate change	72%	75%	↑ 3%	48%	56%	↑ 8%
Climate change is caused mostly by human activities	67%	71%	↑ 4%	54%	58%	↑ 4%
Individual actions contribute to the global impacts of climate change	63%	66%	↑ 3%	44%	50%	↑ 6%
Edmonton residents should be doing more to help address climate change~	65%	70%	↑ 5%	47%	56%	↑ 9%
Want to do more personally to help address climate change~	65%	68%	↑ 3%	44%	51%	↑ 7%
Taking action to address climate change~	62%	68%	↑ 6%	34%	44%	↑ 10%

Q.1a-g: The next few statements are about how you **personally** feel about climate change. To what extent do you agree or disagree with the following statements? | Q.2a-g: The next few statements are about how you think **Edmontonians** feel about climate change. To what extent do you agree or disagree with the following statements? ~Note: Slight change in wording in 2021, changed from “prevent” to “address”.





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# Classification Questions



The accompanying table summarizes the weighted demographic profile of survey respondents.

	(n=1,008)
<b>Gender</b>	
Woman	50%
Man	49%
Non-binary	1%
Transgender	<1%
Two-spirit	<1%
Another gender not listed above	<1%
Prefer not to answer	<1%
<b>Age</b>	
18-24	9%
25-34	26%
35-44	18%
45-54	16%
55-64	15%
65 or older	15%
<b>Highest Level of Education Completed</b>	
Some high school or less	3%
Completed high school	16%
Some community college/technical college/CEGEP	13%
Completed community college/technical college/CEGEP	19%
Some university	10%
Completed university	28%
Post-graduate degree	11%

	(n=1,008)
<b>Household Income in 2021</b>	
Up to \$40,000	19%
\$40,001 - \$60,000	14%
\$60,001 - \$80,000	13%
\$80,001 - \$100,000	18%
\$100,001 - \$150,000	18%
More than \$150,000	9%
Prefer not to answer	9%
<b>Dwelling Type</b>	
Fully detached house	50%
Condo/apartment	28%
Townhouse/row house	10%
Semi-detached house/duplex	10%
Other	1%
Not sure	0%
<b>[If currently rent or lease]</b>	
<b>Planning to Buy a Home in Next 12 Months</b> (n=299)	
Yes	14%
No	69%
Not sure	18%



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# Climate Change and Energy Perceptions Report

August 2022

Prepared for:  
The City of Edmonton

