

2021 Citizen Perspectives Survey Report Climate Change January 13, 2022

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Background & Methodology

Background

To help support City decisions, The City of Calgary surveys citizens about their opinions, preferences and attitudes. To help in "making life better every day" for Calgarians, The City conducts the Citizen Perspectives Survey at various intervals throughout the year. In 2018, The City ran a wave of the survey on the topic of extreme weather and home energy efficiency. In 2019, the survey was conducted again but with the addition of questions about climate change. The survey, including the new climate change questions and minor revisions, was conducted in 2020 and 2021. This report presents the results of the 2021 survey as well as results from the previous surveys for tracking purposes, where applicable.

Methodology

The telephone survey was conducted by Leger November 22 - December 1, 2021 with 500 Calgarians. To ensure a random and statistically representative sample of Calgarians was obtained, Leger used random digit dialing (RDD) of both landlines (23% of completed surveys) and cell phones (77% of completes). Sample quotas were set for age, gender, and city quadrant of the general population aged 18 years and older. Data were then weighted to the 2016 Civic Census for age and gender. The margin of error (MOE) for the total sample of n=500 is \pm 4.4 percentage points, 19 times out of 20. The survey averaged 23 minutes in duration.

Survey	Data collection dates	n=
2021	Nov 22 – Dec 1, 2021	500
2020	Oct 19 – 29, 2020	500
2019	Sep 16 – 23, 2019	504
2018	Sep 11 – 21, 2018	500

Where applicable, statistically significant differences from one year to the next are noted with:

- ↑ Statistically <u>higher</u> than previous year
- ↓ Statistically <u>lower</u> than previous year



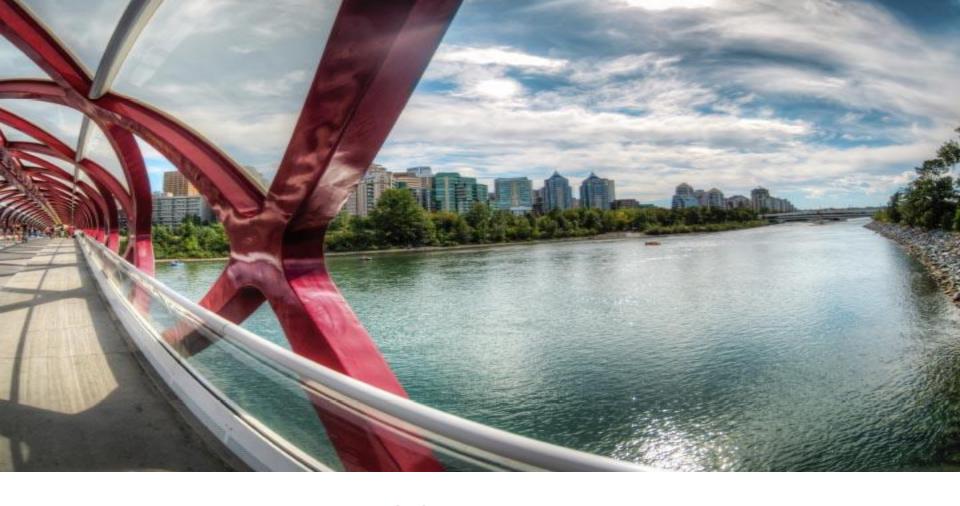
Highlights

- Although the majority of Calgarians are satisfied overall with the job The City is doing to protect the environment, fewer are 'very satisfied' than 'somewhat satisfied.'
- When it comes specifically to climate change, a slight majority think The City should be doing more than it currently is
 and around one-half of Calgarians trust The City as a source of information about climate change.
- · Awareness of elements of The City's Climate Program is not very high.
- The majority of Calgarians agree:
 - · They're concerned about climate change (causes and impacts);
 - · Climate change is caused mostly by human activities;
 - · Their individual actions contribute to the issue;
 - · We need to act now to address the causes and prepare for local impacts;
 - · Calgarians should be doing more to prevent climate change; and
 - · They are personally taking action and want to do more to help prevent it.
- Calgarians 18 to 34 years of age, those who identify as being of Asian descent, and those born outside of Canada are
 more likely to agree than other Calgarians to agree with the above sentiments about climate change.
- A large minority say they've become more supportive of taking action on climate change in the past year, with the main reason being an increase in extreme weather events.
- The majority of Calgarians support the city (The City and citizens) moving to a target of net-zero emissions by the year 2050.
- A majority of Calgarians are concerned about the impact extreme weather events are having, or might have, on their life, and the proportion saying they are 'very concerned' increased since last year.
- Calgarians are more likely to say they've taken energy-saving actions to save money rather than because of environmental concerns.



Detailed Findings





Perceptions of Calgary's Environment and The City's Protection Efforts



Summary: Calgary's Environment

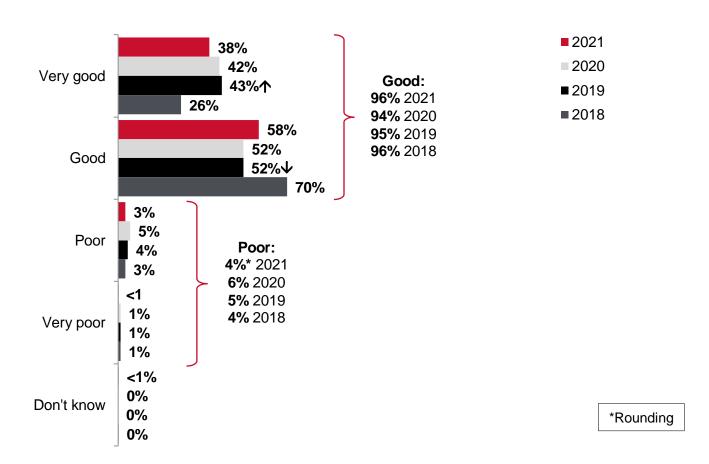
Nearly all Calgarians rate the overall state of the city's environment as good and the majority are satisfied with The City's protection of the environment and related programs and services.

- Most Calgarians (96%) rate the overall state of Calgary's environment as good ('very good' or 'good'), consistent with results since 2018.
- Four-in-five (82%) are satisfied with the job The City is doing to protect the environment, on par with results since 2018.
- Four-in-five (79%) are satisfied with The City's programs and services aimed at helping Calgarians reduce their environmental impact.



Perception of State of Calgary's Environment

Perception of the Overall State of Calgary's Environment

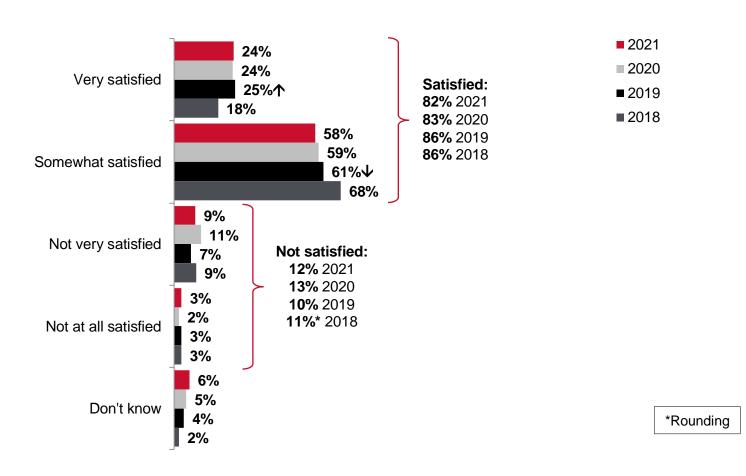


Thinking about things such as air, water, and land quality in the city, how would you rate the overall state of Calgary's environment today? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Satisfaction with The City's Protection of the Environment

Satisfaction with the Job The City is Doing to Protect the Environment

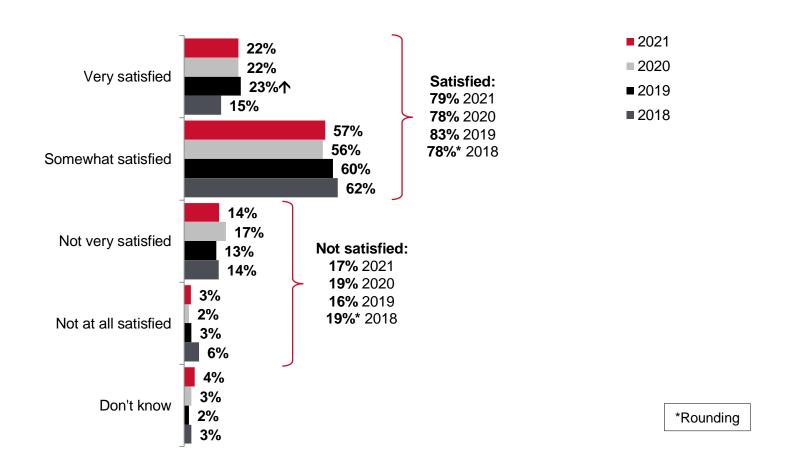


How satisfied are you with the job The City of Calgary is currently doing to protect the environment? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)

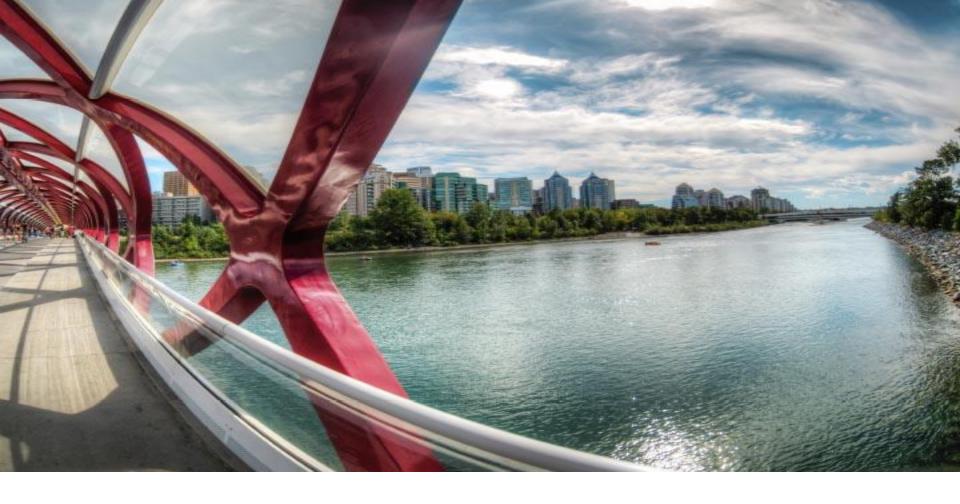


Satisfaction with The City's Programs/Services to Help Calgarians Reduce Environmental Impact

Satisfaction with The City's Programs and Services to Help Calgarians Reduce Environmental Impact



How satisfied are you with The City of Calgary's programs and services aimed at helping Calgarians reduce their environmental impact? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Climate Change



Summary: Climate Change

The majority of Calgarians are concerned about the causes and impacts of climate change and agree we need to act now to address the causes and prepare for local impacts.

- Nearly four-in-five Calgarians (78%) agree they are concerned about the causes of climate change and three-quarters (74%) agree they're concerned about the impacts of climate change on Calgarians.
- The majority (78%) agree we need to act now to prepare for local impacts of climate change and as many (77%) agree we need to act now to address the causes.

The majority of Calgarians agree climate change is caused mostly by human activities and that their individual actions contribute to global climate change.

• Seven-in-ten Calgarians (71%) agree that climate change is caused mostly by human activities and as many (73%) agree their individual actions contribute to global climate change, both measures on par with results from 2020.

The majority agree Calgarians should be doing more to help prevent climate change, they are taking action to help prevent it, and they want to do more personally to help prevent it; however, fewer agree they are taking action to prepare for a changing climate.

- Seven-in-ten Calgarians (72%) agree Calgarians should be doing more to prevent climate change.
- Four-in-five (79%) agree they are taking action to help prevent climate change and three-quarters (75%) agree they want to do more personally to help prevent it.
- Three-in-five Calgarians (60%) agree they are taking action to prepare for a changing climate.



A slight majority of Calgarians think The City should be doing more to address climate change than it currently is doing.

• Just more than one-half (58%) of Calgarians think The City should be doing more to address climate change, consistent with results from 2020; however, the proportion who think The City is doing the right amount dropped from 37% in 2020 to 27% in 2021 and there was an increase in the proportion saying The City should be doing less, from 8% in 2020 to 15% in 2021.

The majority of Calgarians say they were supportive of taking action on climate change one year ago and just under one-half of Calgarians say they've become more supportive in the past year.

- Four-in-five Calgarians (79%) say that one year ago, they were supportive of taking action on climate change and two-in-five Calgarians (43%) say that they have become more supportive of taking action on climate change in the past year.
- Among those who say they are more supportive now, just over one-half (55%) were already 'very' supportive one year ago and two-in-five (39%) were 'somewhat' supportive. Among Calgarians who are less supportive now, 7% were 'very' supportive last year and 28% were 'somewhat' supportive.
- The main reason given for becoming more supportive of taking action on climate change is the increase in extreme weather events (51%, up from 24% in 2020). Other reasons include it's getting worse/we're at a tipping point (13%, up from 4% in 2020), we need to clean up/be greener/reduce our carbon footprint (12%, up from 6% in 2020 and on par with 2019) and seeing the effects of climate change (11%).
- Among those who were very supportive of taking action one year ago, 64% are even more supportive now, 32% haven't changed their support in the past year, and only 3% are less supportive. Among those who were somewhat supportive one year ago, 41% are now more supportive and 47% are neither more nor less supportive while 12% are now less supportive.
- Among those who were very opposed to taking action on climate change one year ago¹, only 3% are more supportive now, 29% haven't changed their support, and 68% are even less supportive now. Among those who were somewhat opposed to taking action one year ago¹, 9% are more supportive, 30% are neither more nor less supportive, and 61% are less supportive now.

¹Caution: Small sample size



Around one-half of Calgarians trust The City as a source of information about climate change.

• Approximately one-half (53%) of Calgarians trust The City as a source of climate change information while around one-in-five (18%) neither trust nor distrust The City and one-quarter (26%) distrust The City as a source of information about this topic.

Awareness of various elements of The City's Climate Program is not very strong.

One-half (48%) of Calgarians are aware that the Climate Program includes a climate action plan. Fewer are aware that the
program includes a Clean Energy Improvement Program (35%), a Climate Ready Home Guide (28%), or the Calgary Climate
Symposium (19%).

The majority of Calgarians support Calgary moving to net-zero emissions by the year 2050.

• After hearing a brief definition of net-zero emissions: "reducing the amount of man-made greenhouse gas released into the atmosphere and removing an equivalent amount of emissions from the environment", three-quarters (77%) say they support the city, meaning the municipal government and citizens, moving to net-zero by the year 2050.



Those aged 18 to 34 years are more likely than older Calgarians to agree they're concerned about the causes and impacts of climate change and supportive of doing more to prevent it.

- Calgarians 18 to 34 years of age are more likely than those 35 to 64 and 65 or older to agree with the following statements:
 - Climate change is caused mostly by human activities (81% vs. 67% and 64%, respectively);
 - My individual actions contribute to global climate change (83% vs. 70% and 63%);
 - I am concerned about the causes of climate change (86% vs. 74% and 73%);
 - I am concerned about the impacts of climate change on Calgarians (81% vs. 71% and 68%);
 - I think we need to act now to address the causes of climate change (89% vs. 71% and 74%);
 - I think Calgarians should be doing more to help prevent climate change (81% vs. 68% and 67%);
 - I think we need to act now to prepare for local impacts of climate change (86% vs. 75% and 71%); and
 - I want to do more personally to help prevent climate change (86% vs. 72% and 64%).
- Calgarians 18 to 64 are more likely than seniors to agree they're taking action to prevent climate change (84% 18 to 34 and 81% 35 to 64 vs. 66% 65 or older).
- Calgarians 18 to 34 years of age are more likely than those 35 to 64 to support the city (municipal government and citizens) moving to a target of net-zero emissions by the year 2050 (83% vs. 73%, respectively).



Females are more likely than males to agree their individual actions contribute to global climate change, they want to do more personally to help prevent climate change, and Calgarians should be doing more to help prevent it.

- Females are more likely than males to agree with the following statements:
 - My individual actions contribute to global climate change (78% vs. 69%, respectively);
 - I want to do more personally to help prevent climate change (79% vs. 71%); and
 - I think Calgarians should be doing more to help prevent climate change (79% vs. 66%).
- Males are more likely than females to disagree with the following statements:
 - My individual actions contribute to global climate change (26% vs. 16%, respectively);
 - I think we need to act now to prepare for local impacts of climate change (21% vs. 14%);
 - I think Calgarians should be doing more to help prevent climate change (24% vs. 14%); and
 - I think we need to act now to address the causes of climate change (20% vs. 12%).

Females are more likely than males to say that one year ago, they were supportive of taking action on climate change but there is no gender difference in terms of change in support compared to one year ago.

• Females are more likely than males to say that one year ago, they were supportive of taking action on climate change (82% vs. 75%); however, they are as likely as males to now be more supportive (44% vs. 43%, respectively), neither more nor less supportive (38% vs. 37%), or less supportive (16% vs. 19%) in the past year.



Those who identify as being of Asian descent¹ are more likely than Calgarians who identify as Canadian/French Canadian, White/Caucasian, or European² to be concerned about climate change and support taking action regarding it.

- Calgarians who identify as being of Asian descent are more likely than those who identify as Canadian/French Canadian, White/Caucasian, or European to agree with the following statements about climate change:
 - I am concerned about the causes of climate change (91% vs. 70%, 73%, and 75%, respectively);
 - I am concerned about the impacts of climate change on Calgarians (86% vs. 71%, 70%, and 73%);
 - Climate change is caused mostly by human activities (87% vs. 60%, 69%, and 70%);
 - My individual actions contribute to global climate change (86% vs. 69%, 70%, and 70%);
 - I think Calgarians should be doing more to help prevent climate change (85% vs. 67%, 71%, and 71%);
 - I want to do more personally to help prevent climate change (92% vs. 65%, 73%, and 71%);
 - I think we need to act now to address the causes of climate change (90% vs. 66%, 75%, and 76%);
 - I think we need to act now to prepare for local impacts of climate change (92% vs. 69%, 76%, and 74%);
 - I am taking action to prepare for a changing climate (73% vs. 52%, 55%, and 60%).
- Although there is no statistically significant difference in overall agreement with the statement "I am taking action to help prevent climate change," those of Asian descent are more likely than others to 'strongly' agree (39% vs. 17% Canadian/French Canadian, 25% Caucasian/White, and 26% European descent).
- Calgarians of Asian descent are more likely than those who identify as Canadian/French Canadian, White/Caucasian, or European to:
 - Have been supportive of taking action on climate change one year ago (89% vs. 76%, 75%, and 78%, respectively);
 - Be more supportive of taking action compared to one year ago (58% vs. 33%, 38%, and 42%);
 - Trust The City as a source of information about climate change (66% vs. 50%, 47%, and 50%); and
 - Support the city (municipal government and citizens) moving to a target of net-zero emissions by the year 2050 (89% vs. 64%, 76%, and 77%).

¹"Asian" descent includes those who identify as South Asian, East Asian, Southeast Asian, West Asian, or Middle Eastern.

²Sample sizes for other ethnicities are too small to report results.



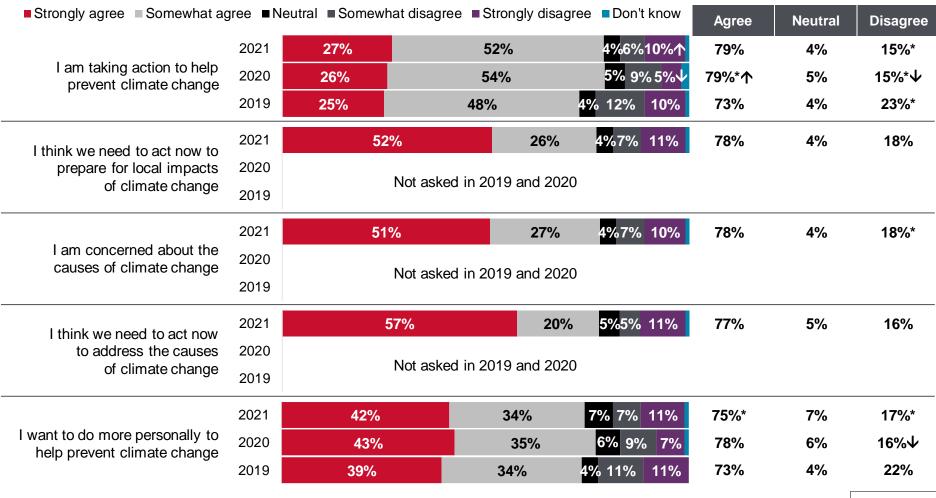
Foreign-born Calgarians are more likely than those born in Canada to be concerned about climate change and support taking action regarding it.

- Calgarians who were born outside of Canada are more likely than those born in Canada to agree with the following statements:
 - I am concerned about the causes of climate change (84% vs. 75%, respectively);
 - Climate change is caused mostly by human activities (79% vs. 67%);
 - My individual actions contribute to global climate change (79% vs. 70%);
 - I want to do more personally to help prevent climate change (85% vs. 71%);
 - I think we need to act now to address the causes of climate change (86% vs. 73%);
 - I think we need to act now to prepare for local impacts of climate change (85% vs. 74%);
 - I am taking action to prepare for a changing climate (70% vs. 55%).
- Foreign-born Calgarians are also more likely than other Calgarians to say they've become more supportive of taking action on climate change in the past year (51% vs. 40%, respectively) and to trust The City as a source of information about climate change (63% vs. 48%).



Climate Change Opinions

Perceptions about Climate Change



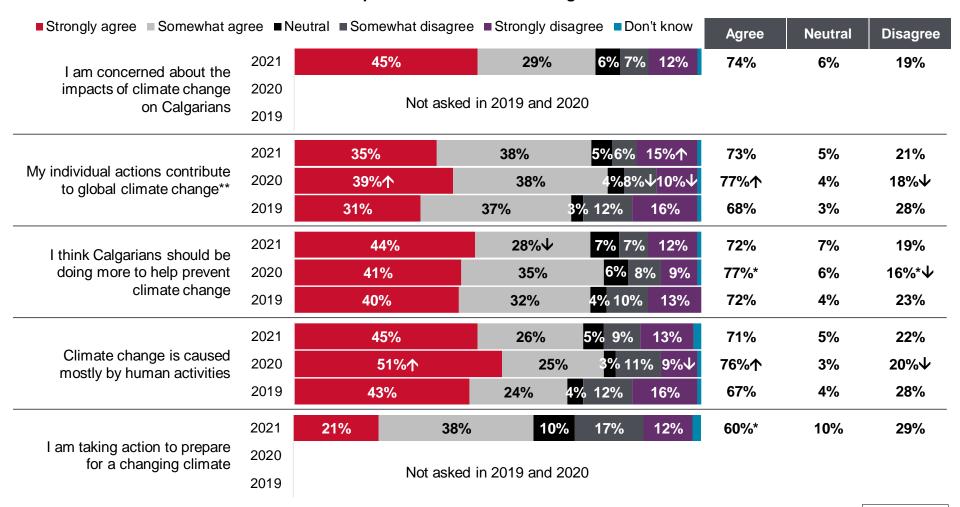
*Rounding

The next few statements are about how you personally feel about climate change. To what extent do you agree or disagree with the following? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504)



Climate Change Opinions - cont'd

Perceptions about Climate Change



^{**}In 2019 and 2020, the wording was: My individual actions contribute to global impacts of climate change

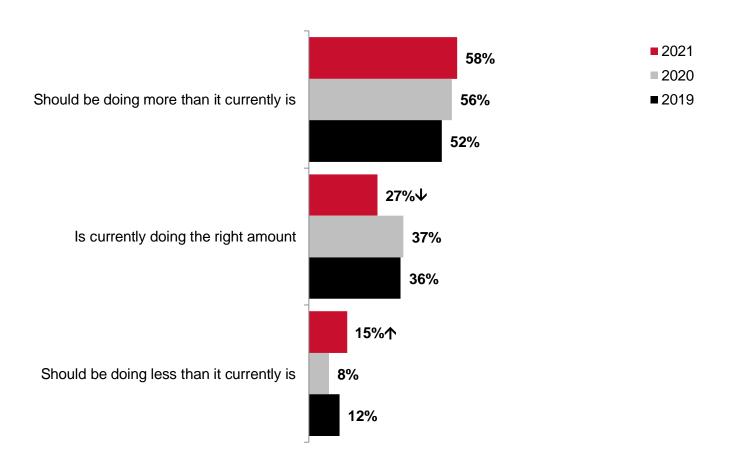
*Rounding

The next few statements are about how you personally feel about climate change. To what extent do you agree or disagree with the following? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504)



Perception of The City's Efforts to Address Climate Change

Opinion about the Work The City is Doing to Address Climate Change



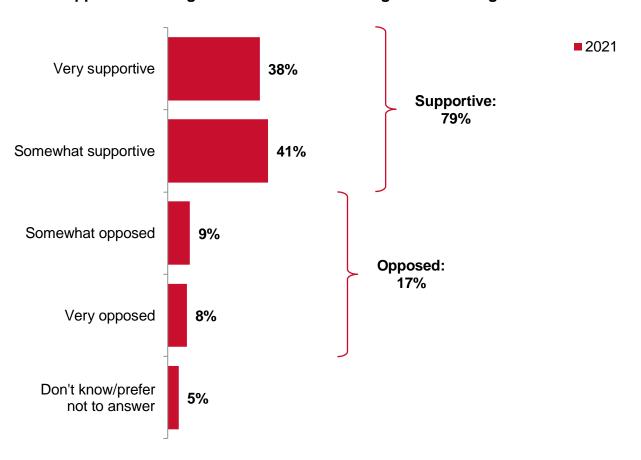
Please tell me which of the following statements best describes your opinion about what The City of Calgary is doing to address climate change? Do you think The City . . .

Base size: All respondents excluding those who responded 'not sure' (2021: n=364; 2020: n=456; 2019: n=327)



Support for Taking Action on Climate Change in the Past

Support for Taking Action on Climate Change One Year Ago



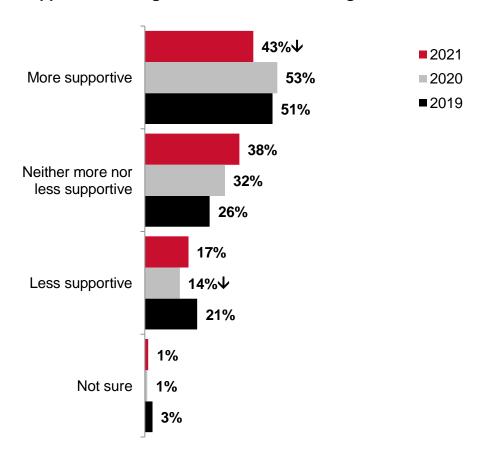
Thinking back to one year ago, to what extent did you support or oppose taking action on climate change? Were you ... Base size: All respondents (n=500)

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Change in Support for Taking Action on Climate Change

Change in Support for Taking Action on Climate Change in the Past Year



In the past year, have you become more or less supportive of taking action on climate change? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504)



Change in Support for Taking Action on Climate Change – cont'd

Change in Support for Taking Action on Climate Change in the Past Year by Level of Support One Year Ago

	Very supportive one year ago (n=178)	Somewhat supportive one year ago (n=204)	Somewhat opposed one year ago (n=52*)	Very opposed one year ago (n=43*)
More supportive now	64%	41%	9%	3%
Neither more nor less supportive now	32%	47%	30%	29%
Less supportive now	3%	12%	61%	68%
Don't know	1%	1%	0%	0%

Note: Columns don't total 100% due to responses of "don't know" and "prefer to not answer"

How to read this table:

Example: Among those who were "very supportive" of taking action on climate change one year ago, 64% are even more supportive now.

Example: Among those who were "very opposed" to taking action on climate change one year ago, 68% are now less supportive.

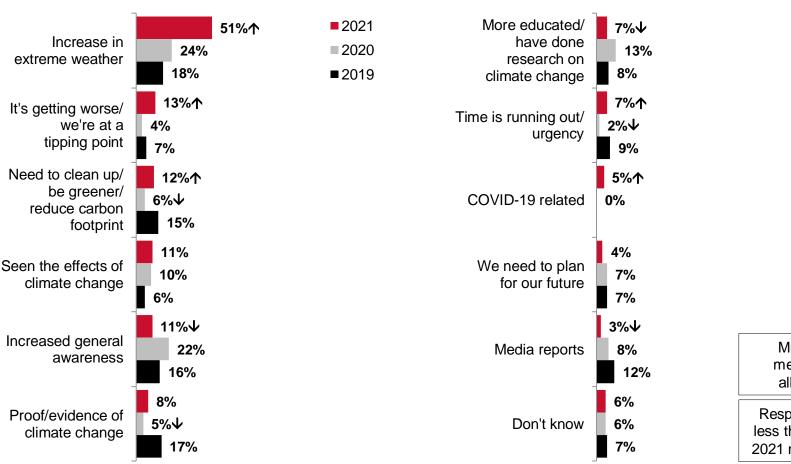
Thinking back to one year ago, to what extent did you support or oppose taking action on climate change? In the past year, have you become more or less supportive of taking action on climate change?

*Caution: Small sample size



Reasons for Increase in Support in Last Year

Reasons for Being More Supportive of Taking Action on Climate Change in the Last Year



Multiple mentions allowed

Responses of less than 2% in 2021 not shown

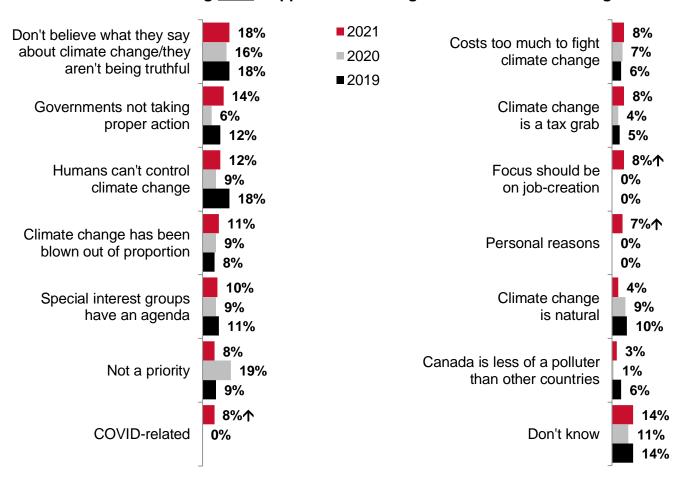
Why has your level of support for taking action on climate change changed in the last year? NOTE: Response options were not read to the respondent.

Base size: Respondents who answered 'more supportive' in the last year (2021: n=213; 2020: n=253; 2019: n=249)



Reasons for Decrease in Support in Last Year

Reasons for Being Less Supportive of Taking Action on Climate Change in the Last Year



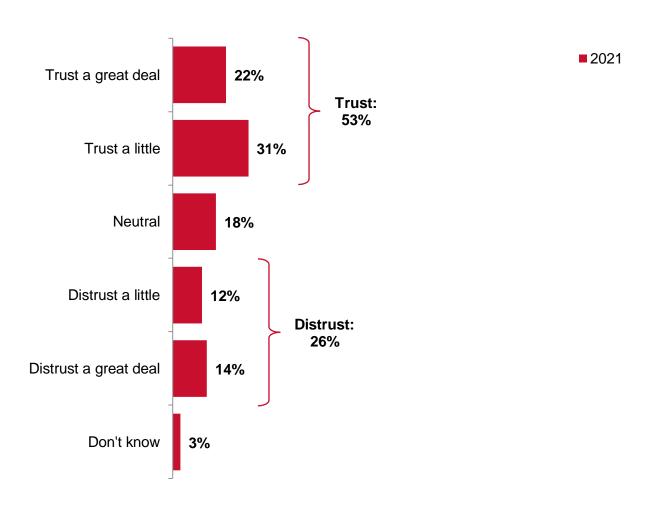
Why has your level of support for taking action on climate change changed in the last year? NOTE: Response options were not read to the respondent.

Base size: Respondents who answered 'less supportive' in the last year (2021: n=94; 2020: n=82; 2019: n=111)



Trust in The City as a Source of Information about Climate Change

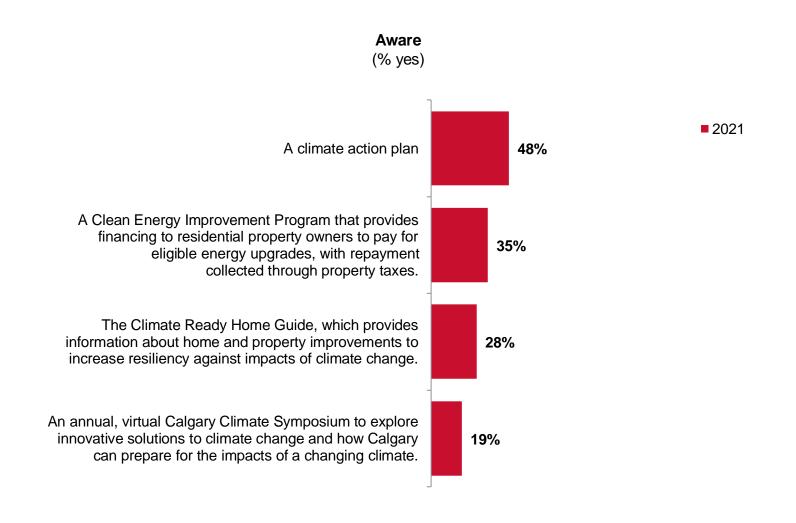
Trust in The City as a Source of Information about Climate Change



To what extent do you trust or distrust The City as a source of information about climate change? Base size: All respondents (n=500)



Aware of Elements of The City's Climate Program

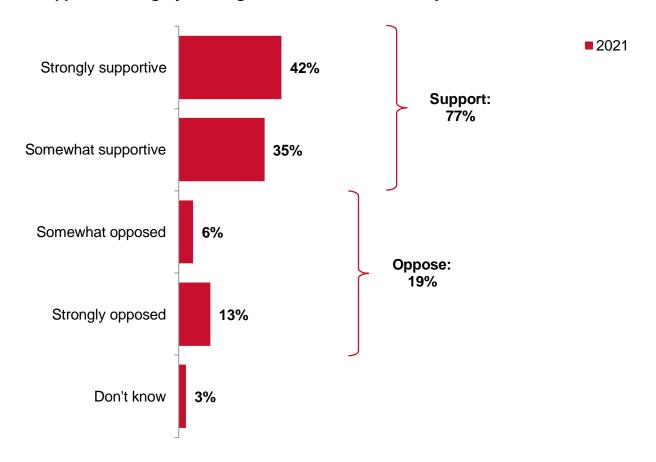


Before now, were you aware that The City's Climate Program includes the following: Base size: All respondents (n=500)



Support for Net-Zero Emissions Target for Calgary

Support for Calgary Moving to Net-Zero Emissions by the Year 2050



The next question is about net-zero emissions. This means reducing the amount of man-made greenhouse gas released into the atmosphere and removing an equivalent amount of emissions from the environment. To what extent do you support or oppose the city, meaning the municipal government and citizens, moving to net-zero by the year 2050?

Base size: All respondents (n=500)



Extreme Weather Events



Summary: Extreme Weather

The majority of Calgarians have been impacted by at least one type of extreme weather event in the past five years.

- Nearly three-quarters (72%) of Calgarians have been impacted by at least one type of extreme weather event in the past five years, up from 63% in 2020 and on par with 2019. Being 'impacted' means experiencing damage, incurring costs, health impacts or injury as a result of the weather event.
- Nearly one-half (45%) of Calgarians say they have been impacted by wildfire/smoke, up from 37% in 2020 but consistent with 2018 and 2019. Four-in-five (38%) were impacted by hailstorms, up from 28% in 2020 but on par with 2018 and 2019. Around one-quarter (29%) were impacted by snow/ice storms and one-quarter (24%) by heat waves/extreme heat, up from 10% in 2020. One-in-five (20%) were impacted by severe winds, consistent with results dating back to 2018.
- Fewer say they were impacted by extreme rain events and associated flooding, excluding river flooding (10%), drought (6%), river flooding (5%), or tornados (1%).

The types of extreme weather events Calgarians most anticipate will increase in frequency in the next ten years are wildfires/smoke, heat waves/extreme heat, and hailstorms.

- Nearly two-thirds (64%) of Calgarians think there will be more wildfires/smoke in the next decade, nearly as many (62%) think there will be more heat waves/extreme heat (up from 49% in 2020), and around one-half (53%) think there will be more hailstorms.
- Around one-half (48%) of Calgarians think there will be more drought in the next ten years (up from 38% in 2020) and just as many (47%) expect more extreme rain events and associated flooding.



Summary: Extreme Weather – cont'd

The majority of Calgarians have taken at least one action to reduce the impact of extreme weather events on them.

- Approximately four-in-five Calgarians (82%) have taken at least one action to reduce the impact of extreme weather events on them.
- One-third of Calgarians have purchased an air purifier (33%, up from 27% in 2020), improved water drainage on their property (32%), installed air conditioning (32%, up from 26% in 2020) and/or planted trees for shade (31%). One-quarter have planted drought-resistant plants (25%) while one-in-five purchased flood insurance (21%) and/or installed hail-resistant roofing (20%). Fewer have moved to a different location (13%) or installed hail-resistant siding (12%).

The majority of Calgarians are concerned about the impact of extreme weather events on their life and their level of concern has increased since 2020.

• Two-thirds (66%) of Calgarians are concerned about the impact extreme weather events are having, or might have, on their life. While statistically consistent with 2020 (62%), the proportion saying they are 'very' concerned has increased from 14% to 26% in the past year while fewer say they are 'somewhat' concerned (40%, down from 48% last year).

Calgarians are divided in terms of who they think should be leading citizens in taking action to reduce impacts of extreme weather events.

• When asked, unaided, who they think should be leading citizens in taking action to help reduce the potential impacts of extreme weather events, first mentions are split between municipal government (24%), provincial government (17%), federal government (16%), and individuals/citizens (14%). Nearly one-in-ten (7%) say everyone needs to do their part and one-in-ten (10%) answered "don't know."



Summary: Extreme Weather – cont'd

Calgarians 18 to 34 years of age are more likely than those 35 or older to anticipate there being more extreme heat/heat wave events and wildfire/smoke in the next ten years and more likely than those 65 or older to be concerned about the impact of extreme weather events on them.

- Those 18 to 34 years of age are more likely than older Calgarians to expect we'll see more extreme heat/heat wave events (72% vs. 58% 35 to 64 and 55% 65 or older) and/or more wildfire/smoke (74% vs. 60% 35 to 64 and 58% 65 or older) in the next ten years.
- Compared to seniors, Calgarians aged 18 to 34 are more likely to be concerned about the impact extreme weather events are having, or might have, on their lives (72% 18 to 34 vs. 58% 65 or older).

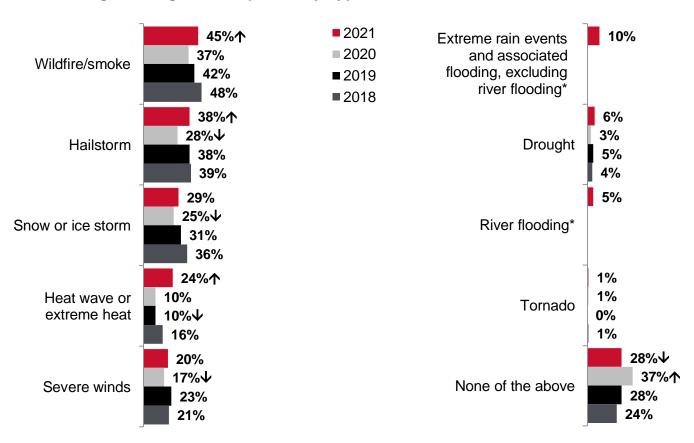
Females are more likely than males to expect there to be more extreme weather events in the next ten years and to be concerned about the impact of them on their life.

- Females are more likely than males to anticipate more of the following extreme weather events in the next 10 years:
 - Snow/ice storms (41% vs. 32%, respectively).
 - Hailstorms (60% vs. 46%);
 - River flooding (47% vs. 35%);
 - Drought (55% vs. 41%);
 - Extreme heat/heat waves (68% vs. 56%); and
 - Wildfire/smoke (71% vs. 57%).
- Females are more likely than males to be concerned about the impact extreme weather events are having, or might have, on their lives (73% vs. 60%, respectively).



Extreme Weather Events

Percentage of Calgarians Impacted by Types of Extreme Weather Events in Past 5 Years



^{*}Prior to 2021, the question asked about "flooding" and in 2021, this was broken out into "river flooding" and "extreme rain events and associated flooding, not including river flooding."

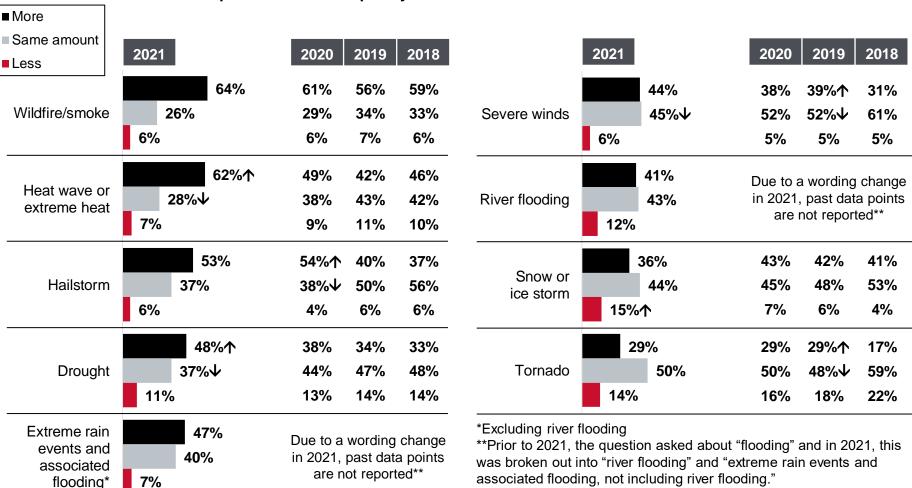
Have you been impacted by any of the following weather events in the past 5 years? By impacted, I mean where there has been damage, you have incurred costs, health impacts or injury.

Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Expectations about Future Weather Events

Opinions about Frequency of Weather-Related Events in the Next 10 Years



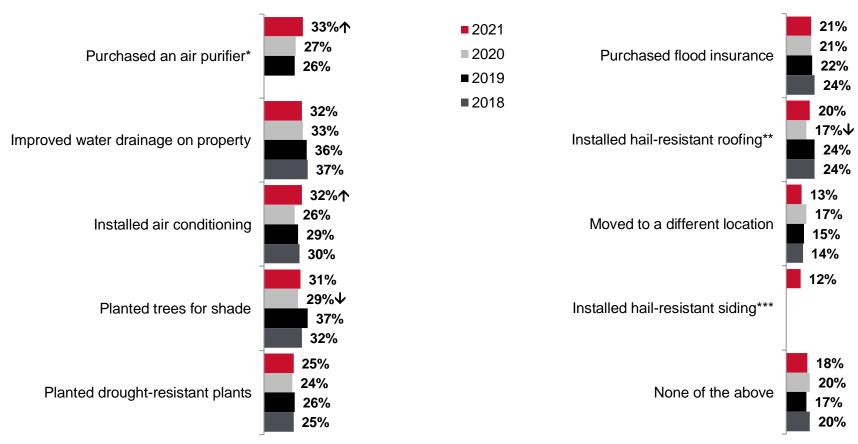
Note: Percentages do not total 100% due to responses of "don't know"

Please tell me if you think there will be more, less or about the same amount of each of the following weather-related events in the next 10 years. Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Actions Taken to Reduce Impact

Actions Taken by Calgarians to Reduce Impact of Extreme Weather Events on Them



^{*}Not asked in 2018

Please indicate if you have done any of the following to reduce the impact of these types of events on you:.

Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)

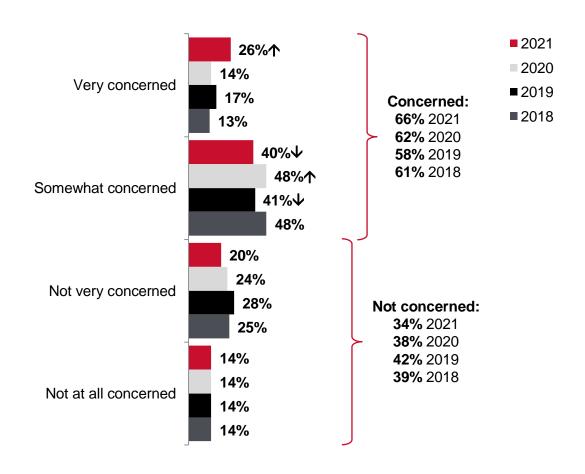
^{**}Wording prior to 2021: Upgraded to hail-resistant shingles

^{***}Not asked in 2018 - 2020



Concern about Impact of Extreme Weather

Concern about Impact of Extreme Weather Events on One's Life



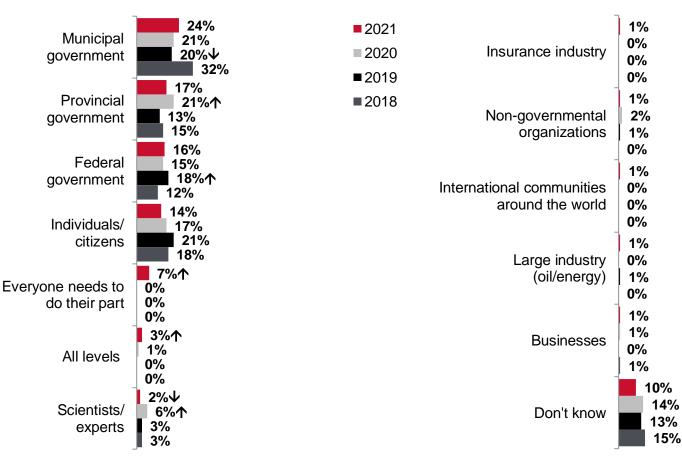
How concerned are you about the impact that extreme weather events are having, or might have, on your life? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Perceived Leadership Responsibility

Perception of Who Should be Leading Citizens in Taking Action to Reduce Impacts of Extreme Weather Events





In your opinion, who should be leading citizens in taking action to help reduce the potential impacts of extreme weather events? NOTE: Response options were not read to the respondent.

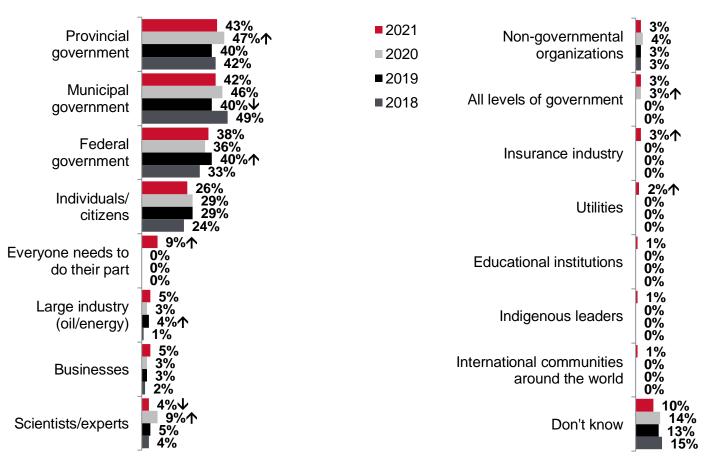
Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Perceived Leadership Responsibility

Perception of Who Should be Leading Citizens in Taking Action to Reduce Impacts of Extreme Weather Events

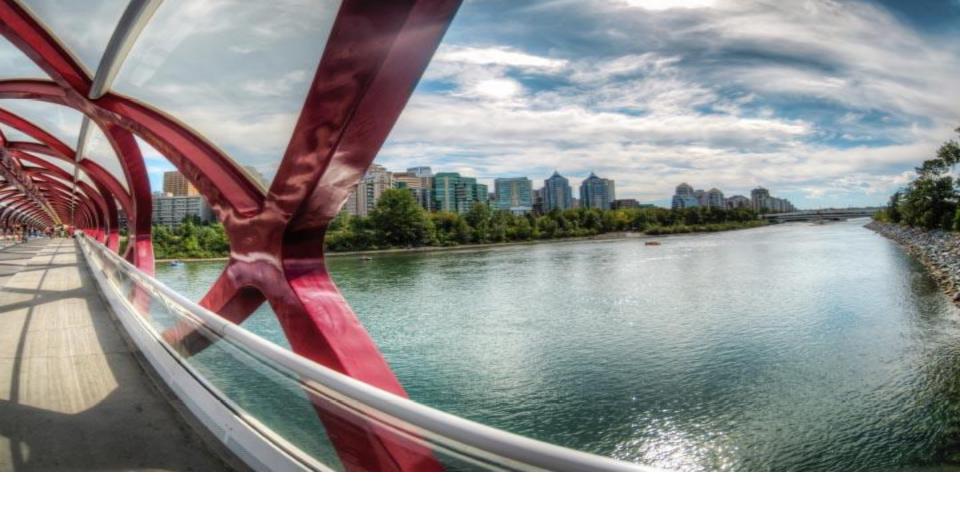
Total (First + Other) Mentions



Multiple mentions allowed

In your opinion, who should be leading citizens in taking action to help reduce the potential impacts of extreme weather events? Any others? NOTE: Response options were not read to the respondent.

Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Home Energy Efficiency



Summary: Home Energy Efficiency

Energy efficient appliances and programmable thermostats are the most common home energy efficient actions undertaken by Calgarians overall.

- Home energy improvements reported by the most Calgarians are energy efficient appliances (69%), a programmable thermostat (69%), and weather-stripping or caulking around doors/windows (55%). More than two-in-five (44%) have energy efficient windows.
- Among those living in a single-detached home, a duplex/triplex/fourplex, or a townhouse/rowhouse, the majority (69%) have insulated basements and/or an energy efficient furnace (60%). Substantially fewer have insulated exposed hot water pipes (37%) and/or increased insulation in their attic (30%). Only 2% have solar panels.

The vast majority of Calgarians report they regularly turn off lights when not needed and/or using energy efficient bulbs but fewer wash laundry in cold water or unplug electronics when not being used.

- Nearly all Calgarians (96%) say they regularly turn off lights when not needed in order to save energy in their home and nine-inten (90%) use energy efficient bulbs.
- Fewer, although still the majority of Calgarians, minimize the use of air conditioning in the summer (76%), keep heat set to a lower temperature in the winter (72%), wash laundry in cold water (69%). Just over one-half (56%) unplug electronics when they're not in use.



Summary: Home Energy Efficiency – cont'd

Saving money continues to outweigh environmental concerns as the reason for taking actions to save energy.

• The most common reason given for taking actions to save energy is to save money, with 58% of Calgarians saying this is the main reason and 74% saying it is one of the reasons. Fewer say protecting the environment, global warming or reducing greenhouse emissions is the main reason (19%) or one of the reasons (47%) they are taking actions to save energy. The term "climate change" was mentioned by 5% as the main reason and by 11% as one of the reasons.

Consistent with previous years, cost is the most common reason among Calgarians for not doing more to save energy.

- Around two-in-five Calgarians (43%) say cost/not having the money needed is the main reason they don't do more to save energy and 51% say it is one of the reasons.
- One-in-ten (11%) say they already do as much as they can to save energy.

When asked who should be leading citizens in taking action to improve home energy efficiency, the top-of-mind response is the municipal government, followed by individuals/citizens, provincial government and the federal government.

• The top-of-mind response regarding who should be leading citizens in taking action to improve home energy efficiency is municipal government, mentioned by 23% of Calgarians. Other top-of-mind responses are individuals/citizens (17%), provincial government (15%), and federal government (15%).



Home Energy Efficiency Improvements

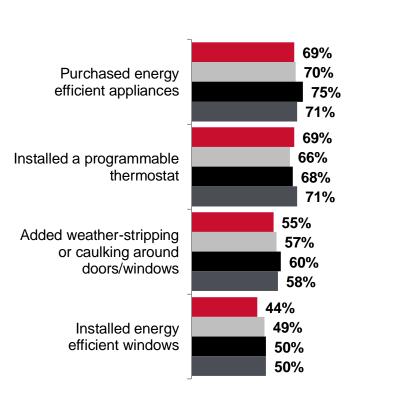
Home Energy Efficiency Improvements Made to House

2021

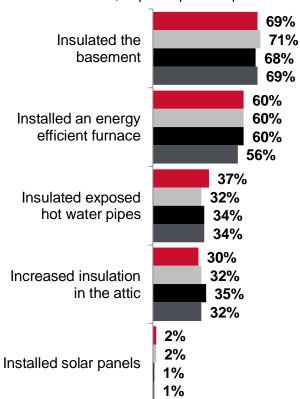
2020

2019

2018



The following were asked only of respondents living in a single-detached home, duplex/triplex/fourplex or townhouse/rowhouse*:



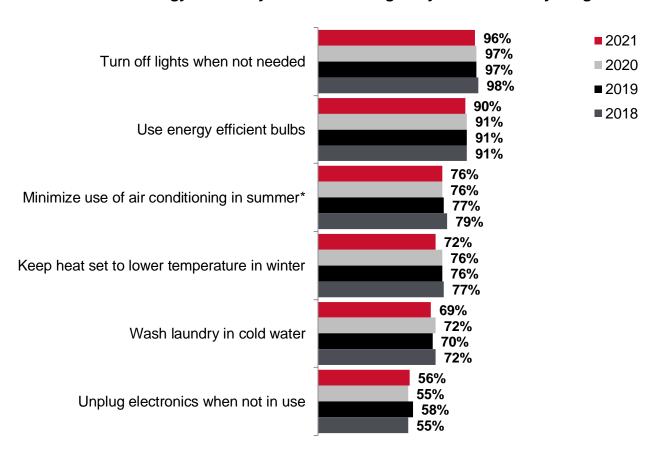
*Base size: 2021: n=425; 2020: n=397; 2019: n=441; 2018: n=446

EF2. Please tell me which of the following actions you've done to your home or was done to your home by a previous owner. Base size: All respondents, unless otherwise specified (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Home Energy Efficiency Behaviours

Home Energy Efficiency Behaviours Regularly Undertaken by Calgarians



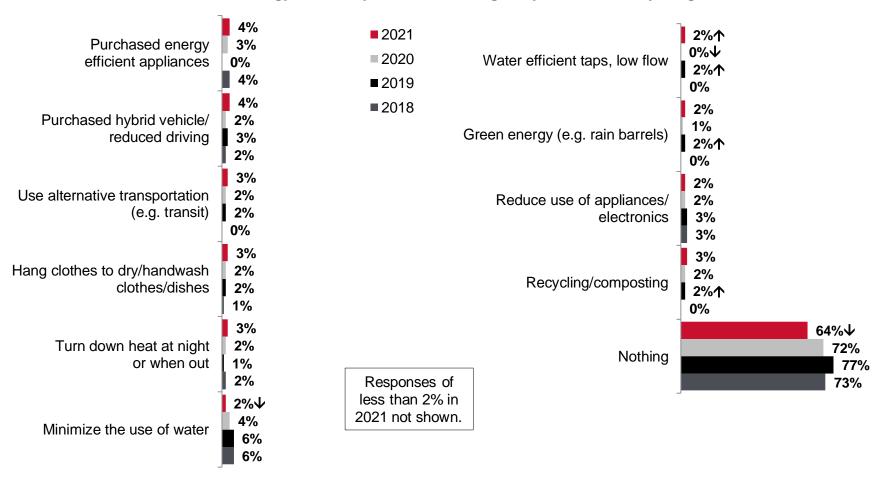
^{*}Adjusted to exclude those who answered "not applicable."

And which of the following do you regularly do to save energy in your home? Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Home Energy Efficiency Behaviours – cont'd

Other Home Energy Efficiency Behaviours Regularly Undertaken by Calgarians



Are there any other energy-saving actions you've taken?

NOTE: Response options were not read to the respondent.

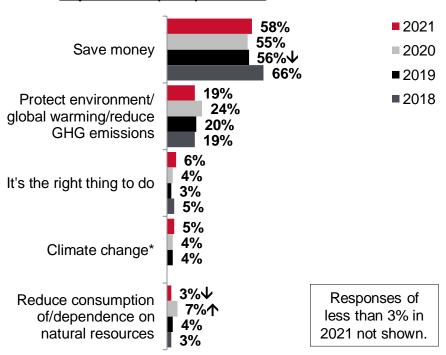
Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Reasons for Taking Actions to Save Energy

Reasons Given for Taking Actions to Save Energy

Top-of-Mind (First) Mention



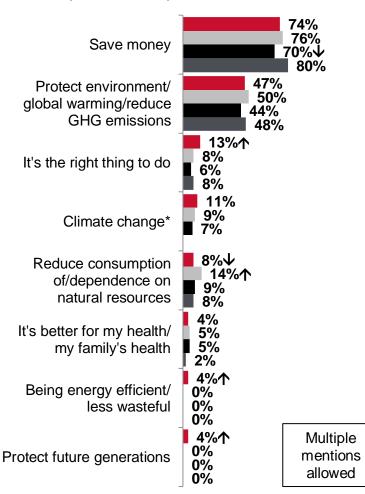
*In the 2019 survey, "climate change" was a separate category from "protect environment/global warming/reduce GHG emissions" in order to determine how many Calgarians would use the specific term as a reason for taking action to save energy.

What is your main reason for taking actions to save energy? Are there any other reasons?

NOTE: Response options were not read to the respondent.

Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)

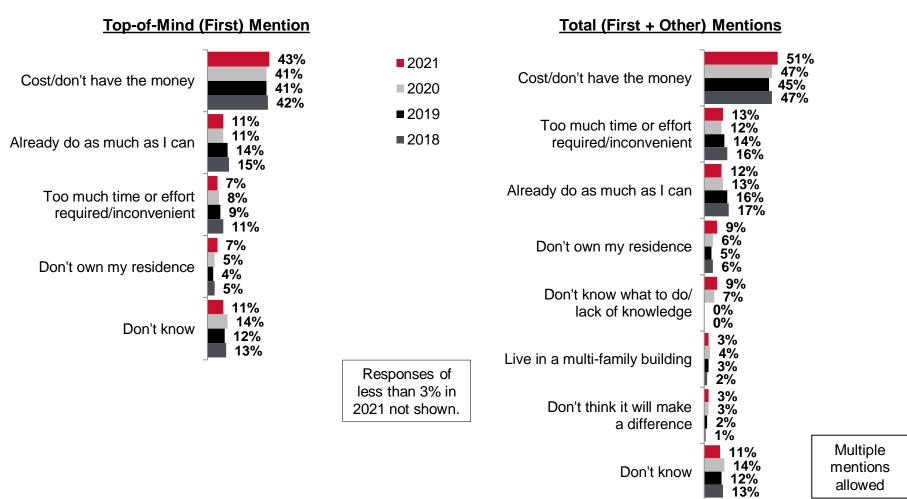
<u>Total (First + Other) Mentions</u>*





Reasons for Not Doing More to Save Energy

Reasons Given for Not Doing More to Save Energy



What prevents you from doing more to save energy? Are there any other reasons?

NOTE: Response options were not read to the respondent.

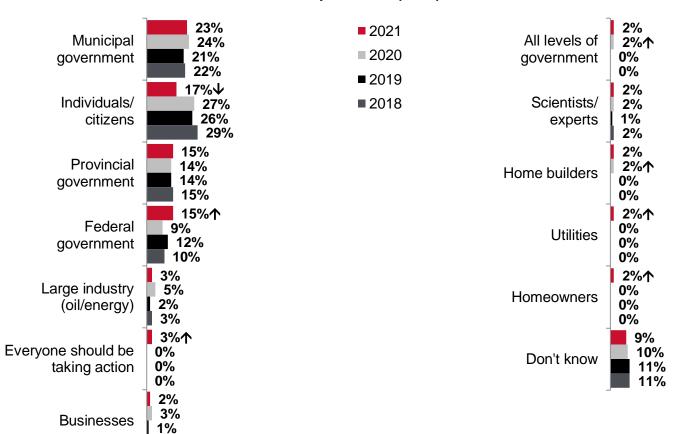
Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)



Perceived Leadership Responsibility

Perception of Who Should be Leading Citizens in Taking Action to Improve Home Energy Efficiency

Top-of-Mind (First) Mention



Responses of less than 2% in 2021 not shown.

In your opinion, who should be leading citizens in taking action to improve home energy efficiency? Any others? NOTE: Response options were not read to the respondent.

Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)

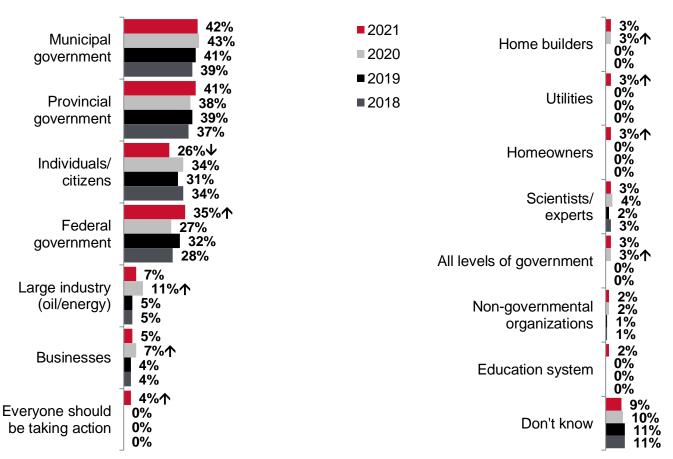
3%



Perceived Leadership Responsibility

Perception of Who Should be Leading Citizens in Taking Action to Improve Home Energy Efficiency

Total (First + Other) Mentions



Multiple mentions allowed

Responses of less than 2% in 2021 not shown

In your opinion, who should be leading citizens in taking action to improve home energy efficiency? Any others? NOTE: Response options were not read to the respondent.

Base size: All respondents (2021: n=500; 2020: n=502; 2019: n=504; 2018: n=500)

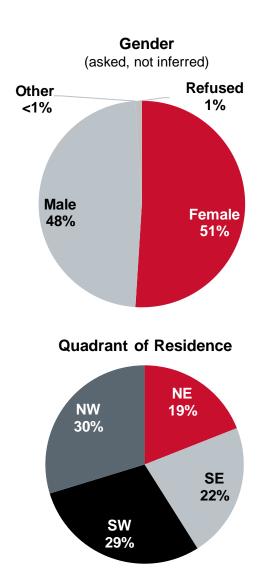


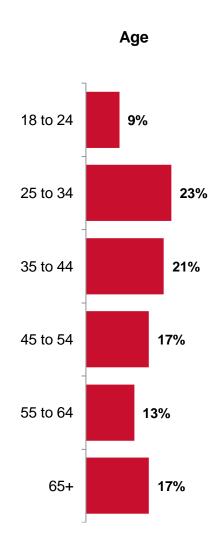
Demographics





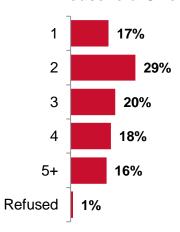
Demographics



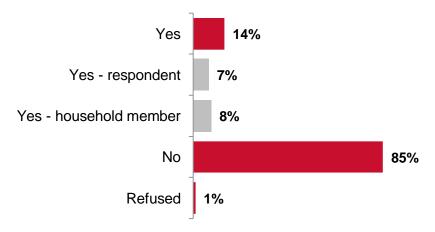




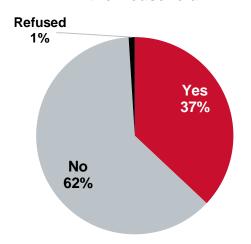
Household Size



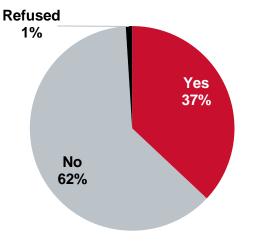
Self-reported Disability (Respondent or Family Member)



Children Under the Age of 18 in the Household

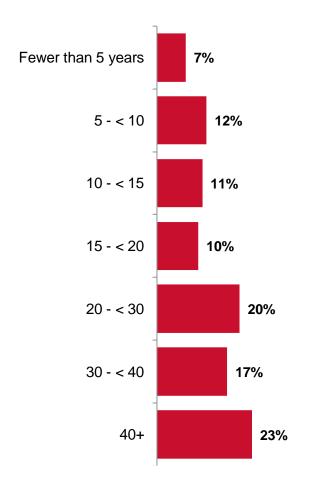


Senior (aged 65+ years) in the Household

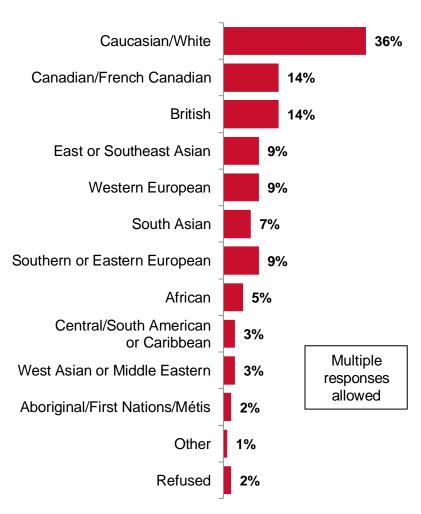




Years Lived in Calgary



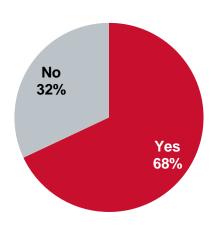
Main Ethnic Background*



*Response options are not read to the respondent

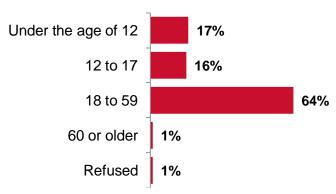


Born in Canada

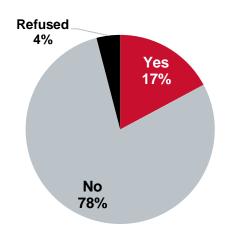


Age Upon Arrival in Canada

(among those not born in Canada, n=126)

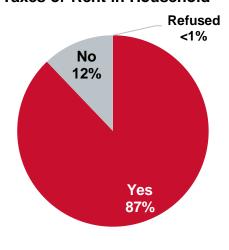


Self-Report as a Racialized or Indigenous Person

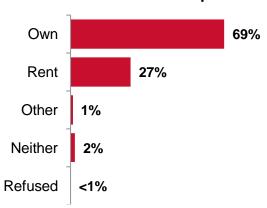




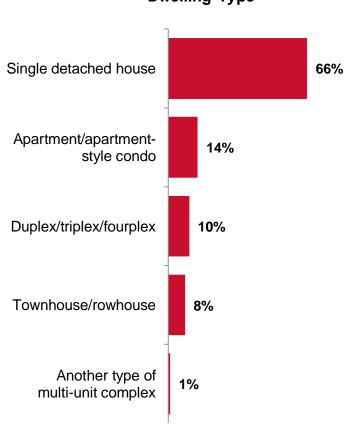
Primarily or Jointly Responsible for Paying Taxes or Rent in Household



Home Ownership

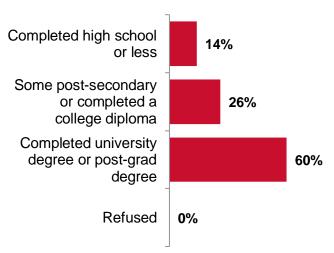


Dwelling Type

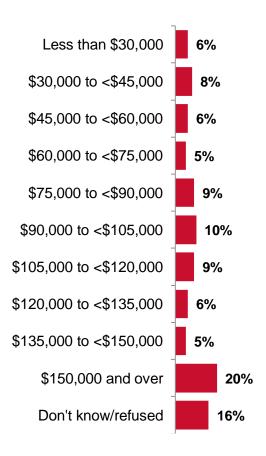




Highest Level of Schooling Obtained



Household Income





Questionnaire





Questionnaire

2021 Citizen Perspectives Survey – Climate Change November 15, 2021

INTRODUCTION

Hello, my name is I'm calling from Leger, a national public opinion research company. I am not selling anything. The City of Calgary has commissioned us to conduct a survey to understand your opinions about life in Calgary.

(INTERVIEWER NOTE: IF CREDIBILITY IS AN ISSUE OR IF RESPONDENT HAS A CONCERN SAY: If you wish to talk to a City official about this survey, we encourage you to contact The City at 311 and specifically mention the "2021 Citizen Perspectives Survey." City staff would be happy to address your concerns.)

The survey will take approximately 15 minutes depending on your answers. Before we begin, I have a few questions about you.

PREQ.

I want to let you know that the personal information collected in this survey is done so under the authority of the Freedom of Information and Protection of Privacy Act, Section 33(c) and is used to provide guidance to The City of Calgary when it comes to making decisions regarding municipal matters. If you have questions about the collection or use of your information, please contact a City of Calgary Research Coordinator at 403-268-3617 and specifically mention the "2021 Citizen Perspectives Survey" or send a letter to "Research Coordinator, The City of Calgary, Mail code 8305, P.O. Box 2100, Station M. Calgary, AB Canada T2P 2M5,"

S1. Are you 18 years of age or older?

- 1. Yes [CONTINUE]
- 2. No, May I please speak with someone who is? [REPEAT INTRODUCTION]
- 3. No, not qualified / available [THANK & TERMINATE]

ITRACK GENDER QUOTAS WITHIN QUADRANTS – BASED ON \$3 AND \$41

S3. Record Gender (DO NOT ASK)

Male

Female

S4. And which of the following age groups do you belong to? Just stop me when I get to your age group.

- 1. 18 to 19 yrs
- 20 to 24 vrs
- 25 to 34 vrs
- 35 to 44 vrs
- 5. 45 to 54 yrs
- 6. 55 to 64 vrs
- 7. 65 to 74 yrs
- 8. 75 and older
- 9. Refused [DO NOT READ]

[TRACK AGE QUOTAS WITHIN QUADRANTS/GENDER - BASED ON \$5, \$3 AND \$4]

Male 18 to 34 Male 35 to 54

Male 55 Plus

Female 18 to 34

Female 35 to 54

Female 55 Plus

S5. Can you tell me which quadrant of the city you live in? (WAIT FOR RESPONSE - READ LIST TO CLARIFY IF NEEDED)

- 1. Southwest
- 2. Southeast
- 3. Northwest
- 4. Northeast

[If outside of Calgary go to End]

ENVIRONMENT

E1. Thinking about things such as air, water, and land quality in the city, how would you rate the overall state of Calgary's environment today? Would you say that it is (READ LIST)

> Very good Good

Poor

Very poor

Don't know (DO NOT READ)

E2. How satisfied are you with the job The City of Calgary is currently doing to protect the environment? Are you (READ LIST)?

Very satisfied

Somewhat satisfied Not very satisfied

Not at all satisfied

Don't know (DO NOT READ)

Refused (DO NOT READ)

Page 1 of 12 Page 2 of 12



E3. How satisfied are you with The City of Calgary's programs and services aimed at helping Calgarians reduce their environmental impact? Are you (READ LIST)?

(INTERVIEWER NOTE: programs and services include such things as Blue cart recycling, multi-family recycling. Green Cart, water use reduction programs, carpooling support, and public education including school programming)

> Very satisfied Somewhat satisfied Not very satisfied Not at all satisfied Don't know (DO NOT READ) Refused (DO NOT READ)

In this survey, when I say 'The City', I'm referring to The City of Calgary municipal government.

WEATHER EVENTS

Have you been impacted by any of the following extreme weather events in the past 5 years? By impacted, I mean where there has been damage, you have incurred costs, health impacts, or injury. [READ AND SELECT ALL THAT APPLY]

[RANDOMIZE]

Snow or ice storm Hailstorm Severe winds

IKEEP NEXT 2 TOGETHER AND IN ORDER1

Extreme rain events and associated flooding, not including river flooding River flooding

Drought Tornado

Heat wave or extreme heat

Wildfire/smoke

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

Please tell me if you think there will be more, less, or about the same amount of each of the following extreme weather events over the next 10 years?

[RANDOMIZE]

Snow or ice storm Hailstorm Severe winds

[KEEP NEXT 2 TOGETHER AND IN ORDER]

Extreme rain events and associated flooding, not including river flooding

River flooding Drought

Tornado

Heat wave or extreme heat Wildfire/smoke

> More Less About the same Don't know (DO NOT READ) Prefer to not answer (DO NOT READ)

How concerned are you about the impacts that extreme weather events are having, or might have, on your life?

> Very concerned Somewhat concerned Not very concerned Not at all concerned Don't know (DO NOT READ) Prefer to not answer (DO NOT READ)

Please indicate if you have done any of the following to reduce the impact of these types of events on you? Please answer yes, or no.

[RANDOMIZE, READ EACH ITEM]

Installed hail-resistant roofing Installed hail-resistant siding Purchased flood insurance Planted drought-resistant plants Planted trees for shade Improved water drainage on your property Moved to a different location Installed air conditioning Purchased an air purifier Other (please specify): Nothing (DO NOT READ) Don't know (DO NOT READ) Prefer to not answer (DO NOT READ)

In your opinion, who should be leading citizens in taking action to help reduce the potential impacts of extreme weather events?

> [PRE-CODE LIST; DO NOT READ; MULTI-PUNCH; RECORD FIRST MENTION SEPARATELY

Individuals/citizens Businesses

Government (PROBE FOR MUNICIPAL, PROVINCIAL OR FEDERAL GOVERNMENT)

Municipal government

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Provincial government
Federal government
Insurance industry
Large industry (e.g. oil/energy companies)
Utilities
Non-governmental organizations
Scientists/Experts
Other (please specify);
Don't know (DO NOT READ)
Prefer to not answer (DO NOT READ)

ENERGY EFFICIENCY

EF1. To ensure we ask only questions that are relevant to you, please tell me which of the following best describes the type of home you live in:

Single detached house (INTERVIEWER NOTE: This includes bungalow, split level, 2-story, suite in a house, etc.)

Duplex, triplex or fourplex

Townhouse or rowhouse

Apartment or apartment-style condominium

Another type of multi-unit complex (INTERVIEWER NOTE: This includes

mobile home park, trailer park, seniors' home, etc.)

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

EF2. Please tell me which of the following actions you've done to your home or was done to your home by a previous owner.

(INTERVIEWER NOTE: Repeat the question if needed after first few items in list.)

[RANDOMIZE; READ LIST]

Installed a programmable thermostat

Purchased energy efficient appliances

Added weather-stripping or caulking around doors and windows

Installed energy efficient windows

[DO NOT ASK THE FOLLOWING 5 ITEMS IF QEF1 IS "APARTMENT/APARTMENT-STYLE CONDO" OR "ANOTHER TYPE OF MULTI-UNIT COMPLEX"]

Installed an energy efficient furnace

Insulated your basement

Increased insulation in your attic

Insulated exposed hot water pipes

Installed solar panels

istalieu solai parie

Yes

NO

Not applicable (DO NOT READ; SELECT ONLY IF RESPONDENT INDICATES

IT DOESN'T APPLY TO THEM)

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

EF3. And which of the following do you regularly do to save energy in your home?

[ASK ALL; RANDOMIZE; READ LIST; MULTI-PUNCH]

Keep the heat set at a lower temperature in the winter

Minimize use of air conditioning in the summer

Turn off lights when they are not needed

Wash laundry in cold water

Unplug electronics when not in use

Use energy efficient light bulbs

Yes

Nο

Not applicable (DO NOT READ; SELECT ONLY IF RESPONDENT INDICATES

IT DOESN'T APPLY TO THEM)

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

EF4. Are there any other actions you've taken to save energy in your home?

[OPEN END]

No (DO NOT READ)

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

[IF "YES" TO ANY IN EF2 OR EF3, ASK EF5; ELSE SKIP TO EF6]

EF5. What is your main reason for taking actions to save energy? Are there any other

[PRE-CODE LIST; DO NOT READ; MULTI-PUNCH; RECORD FIRST MENTION SEPARATELY]

Save money

Protect the environment/pollution

Reduce greenhouse gas emissions/global warming

Climate change

It's better for my health/my family's health

Reduce consumption of/dependence on natural resources

It's the right thing to do

Pressure from family/other members of the household

Received grant/program assistance

Protect animals and/or other non-human species

Other (please specify):

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

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EF6. What prevents you from doing more to save energy in your home? Are there any other reasons?

[PRE-CODE LIST; DO NOT READ; MULTI-PUNCH; RECORD FIRST MENTION SEPARATELY]

Cost/don't have the money

Too much time or effort required/inconvenient

Don't think it will make a difference

Don't care

Don't own my residence

Live in a multi-family residence/building

Already do as much as I can

Don't know what to do

Other (please specify):

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

EF10. In your opinion, who should be leading citizens in taking action to improve home energy efficiency? Any others?

[PRE-CODE LIST; DO NOT READ; MULTI-PUNCH; RECORD FIRST MENTION SEPARATELY]

Individuals/citizens

Businesses

GOVERNMENT)

GOVERNMENT)

Municipal government

Provincial government

Federal government

Large industry (e.g. oil/energy companies)

Utilitie

Non-governmental organizations

Scientists/Experts

Other (please specify):

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

CLIMATE CHANGE

C1. The next few statements are about how you <u>personally</u> feel about climate change. To what extent do you agree or disagree with the following statements?

[RANDOMIZE]

I am concerned about the causes of climate change.

I am concerned about the impacts of climate change on Calgarians

Climate change is caused mostly by human activities.

My individual actions contribute to global climate change.

I think Calgarians should be doing more to help prevent climate change.

I want to do more personally to help prevent climate change.

I think we need to act now to prepare for local impacts of climate change [KEEP LAST 2 TOGETHER; ASK LAST]
I am taking action to help prevent climate change.

I think we need to act now to address the causes of climate change.

I am taking action to prepare for a changing climate.

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Not sure

Prefer to not answer (DO NOT READ)

C2. Please tell me which of the following statements best describes your opinion about what The City of Calgary is doing to address climate change. Do you think The City . . .

Should be doing more than it currently is,

Is currently doing the right amount, Should be doing less than it currently is, or

You're not sure

Prefer to not answer (DO NOT READ)

C5. Thinking back to one year ago, to what extent did you support or oppose taking action on climate change? Were you ...

Very supportive

Somewhat supportive

Somewhat opposed

Very opposed

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

C3. And in the past year, have you become more or less supportive of taking action on climate change?

More supportive

Neither more nor less supportive

Less supportive

Don't know (DO NOT READ)

Prefer to not answer (DO NOT READ)

[IF 'MORE SUPPORTIVE' OR 'LESS SUPPORTIVE' IN C3, ASK C4]

C4. Why has your level of support for taking action on climate change changed in the last year? Please be as specific as possible.

[OPEN END]

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Don't know (DO NOT READ) Prefer to not answer (DO NOT READ)

C6. To what extent do you trust or distrust The City as a source of information about climate change?

Trust a great deal
Trust a little
Neither trust nor distrust
Distrust a little
Distrust a great deal
Don't know (DO NOT READ)
Prefer to not answer (DO NOT READ)

C7. Before now, were you aware that The City's Climate Program includes the following:

[RANDOMIZE]

A Clean Energy Improvement Program that provides financing to residential property owners to pay for eligible energy upgrades, with repayment collected through property taxes.

The Climate Ready Home Guide, which provides information about home and property improvements to increase resiliency against impacts of climate change.

An annual, virtual Calgary Climate Symposium to explore innovative solutions to climate change and how Calgary can prepare for the impacts of a changing climate.

A climate action plan.

Yes No Don't know (DO NOT READ) Prefer to not answer (DO NOT READ)

C8. The next question is about net-zero emissions. This means reducing the amount of manmade greenhouse gas released into the atmosphere and removing an equivalent amount of emissions from the environment. To what extent do you support or oppose the city, meaning the municipal government and citizens, moving to net-zero by the year 2050? (INTERVIEWER NOTE: If respondent thinks The City is already net-zero, respond with "The City is not yet net-zero.")

> Strongly support Somewhat support Somewhat oppose Strongly oppose Don't know (DO NOT READ) Prefer to not answer (DO NOT READ)

DEMOGRAPHICS

And finally, I have a few questions that will be used to help us classify responses.

DQ1. How many people, including yourself, live in your household?

RECORD NUMBER (RANGE 1 - 10)

[IF 2 OR MORE IN DQ1 ASK DQ2 AND DQ3, ELSE SKIP TO DQ4]

DQ2. Do you have any children under the age of 18 living in your household?

Yes No

DQ3. Is there anyone aged 65 years or older living in your household? [PROGRAMMER: IF RESPONDENT IS 65 OR OLDER, PREFACE QUESTION WITH "BESIDES YOURSELF"]

Yes No Refused

[ASK ALL]

DQ4. Are you either primarily or jointly responsible for paying property taxes or rent in your household?

Yes No

DQ5. Do you own or rent your current place of residence?

Own Rent Other (VOLUNTEERED) Neither (DO NOT READ)

DQ6. How many years have you lived in Calgary? (IF LESS THAN 1 YEAR ENTER 0)

Enter number []

DQ7. We want to ensure our research is reflective of all Calgarians. Were you born in Canada?

Yes [go to DQ9] No [go to DQ8]

[IF YES OR DK/REF, SKIP TO DQ13, ELSE CONTINUE WITH DQ8]

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DQ8. How old were you when you arrived in Canada? (READ LIST)

Under the age of 12 12 to 17 18 to 59 60 or older (DO NOT READ) Decline to respond

DQ9. As you know, Canadians come from many different ethnic backgrounds. What is your main ethnic background? (DO NOT READ LIST. ACCEPT UP TO 2 RESPONSES.) (PROBE TO CLARIFY ONLY IF NECESSARY)

Canadian/French Canadian

Caucasian/White

British (English/Scottish/Welsh/Irish)

Western European (from Austria, Belgium, France, Germany, Netherlands, or other)

Southern or Eastern European (from Greece, Italy, Portugal, Spain, Bosnia, Croatia, Serbia, Czech Republic, Hungary, Poland, Slovakia, Ukraine, former Soviet Republics, or other)

South Asian (Punjabi, Indian, Tamil, Sri Lankan, Pakistani, Bangladeshi, Nepalese)

East or Southeast Asian (from China, Hong Kong, Japan, North or South Korea, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam or other) West Asian or Middle Eastern (from Afghanistan, Iran, Iraq, Israel, Lebanon, Saudi Arabia, Syria, Turkey or other)

African

Central/South American or Caribbean (from Argentina, Brazil, Columbia, El Salvador, Guatemala, Mexico, Venezuela, Barbados, Jamaica, or other)

Aboriginal/First Nations/Métis

Other (Specify)

Decline / Refuse to respond

DQ13. What is the highest level of schooling that you have obtained? (READ LIST)

Completed high school or less Some post secondary or completed a college diploma Completed university degree or post-grad degree

DQ14. Which of the following categories best describes the total annual income, before taxes, of all the members of your household? Please stop me when I get to your category.
(READ LIST – ACCEPT RESPONSE BEFORE FINISHING LIST)

Less than \$90,000 \$90,000 and over [DO NOT READ] Don't Know/Refused [IF "Less than \$90,000" ASK DQ15. IF "\$90,000 and over" ASK DQ16. IF DK/REF, GO TO DQ17]

DQ15. Would that be... (READ LIST – ACCEPT RESPONSES BEFORE FINISHING LIST) Less than \$30.000

\$30,000 to just under \$45,000 \$45,000 to just under \$60,000 \$60,000 to just under \$75,000 \$75,000 to just under \$90,000

DQ16. Would that be... (READ LIST – ACCEPT RESPONSES BEFORE FINISHING LIST)

\$90,000 to just under \$105,000 \$105,000 to just under \$120,000 \$120,000 to just under \$135,000 \$135,000 to just under \$150,000 \$150,000 and over

DQ17. Do you consider yourself to be a racialized or Indigenous person?

Yes No Refused [DO NOT READ]

DQ18. Do you or a member of your household have a disability?

Yes – I do Yes – a household member does No Refused [DO NOT READ]

DQ19. What is your gender?

IF NECESSARY - DO NOT READ EXCEPT TO CLARIFY: Gender refers to the gender that a person internally feels and/or the gender a person publicly expresses in their daily life, including at work, while shopping, or accessing other services, in their home or in the broader community.

DO NOT READ LIST EXCEPT TO CLARIFY

01 – Male 02 – Female

03 - Other - please specify

99 - Refused / prefer not to say

This completes the survey. Thank you very much for taking the time to provide feedback.

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