

**From:** "Mochrie, Paul" <Paul.Mochrie@vancouver.ca>

**To:** "Direct to Mayor and Council - DL"

**Date:** 7/28/2023 12:56:16 PM

**Subject:** Memo - Climate Polling Results 2023

**Attachments:** Memo to Mayor and Council - Climate Polling Results - 2023.pdf

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Dear Mayor and Council,

Please find attached a memo summarizing recent polling results regarding residents' perspectives on climate change and local climate action.

**Highlights from the memo include:**

- The City hired The Sentis Group to do this polling annually since 2019, to help inform our climate policy and communications work. The most recent polling was done in April 2023.
- The polling results indicate Vancouverites have grown more concerned about climate change, with 93% of respondents **very concerned or somewhat concerned** about climate change.
- Extreme heat is the top climate change worry for local residents, followed by sea level rise, poor air quality and extreme rainfall.
- When informed that the City is not currently on track to hit its climate targets, a combined 83% felt the City should either **push hard to get CEAP back on track** or **try to get closer to CEAP targets**.

If you have any questions, please feel free to reach out to [Theresa.O'Donnell@vancouver.ca](mailto:Theresa.O'Donnell@vancouver.ca).

Best,  
Paul

**Paul Mochrie** (he/him)  
City Manager  
City of Vancouver  
[paul.mochrie@vancouver.ca](mailto:paul.mochrie@vancouver.ca)



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səliłwətał (Tsleil-Waututh) Nations.

## MEMORANDUM

July 26, 2023

TO: Mayor and Council

CC: Paul Mochrie, City Manager  
Armin Amrolia, Deputy City Manager  
Karen Levitt, Deputy City Manager  
Lon LaClaire, General Manager of Engineering Services  
Andrea Law, General Manager of Development, Buildings and Licensing  
Patrice Impey, General Manager of Finance, Risk & Supply Chain  
Maria Pontikis, Chief Communications Officer, CEC  
Rosemary Hagiwara, Acting City Clerk  
Teresa Jong, Administration Services Manager, City Manager's Office  
Mellisa Morphy, Director of Policy, Mayor's Office  
Trevor Ford, Interim Chief of Staff, Mayor's Office

FROM: Theresa O'Donnell  
General Manager, Planning, Urban Design and Sustainability

SUBJECT: 2023 Public Opinion Poll – Climate Change

RTS #: N/A

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The purpose of this memo is to update Council on recent public polling done in Vancouver regarding climate change.

In 2019 the City of Vancouver awarded a contract to The Sentis Group to conduct market research related to the City's climate plans. Staff use the polling results to develop more effective climate-related communications material, which is aimed at increasing the level of climate change awareness and literacy amongst Vancouver residents, as well as informing our climate-related work.

Since 2019 Sentis has executed several rounds of public opinion polling on behalf of the City to gain insight into residents':

- attitudes, understanding and actions relating to climate change;
- awareness and support for City's Climate Emergency Action Plans and Climate Change Adaptation Strategy; and
- awareness and perceptions of heat pumps and energy sources.

The latest public opinion polling results (conducted in April 2023) are included as an appendix to this memo. They reflect the responses to a 10-minute online survey, are considered accurate to +/-5%, and have been weighted by age, gender, and region to accurately reflect Vancouver's adult population (18+).

Highlights from the results include:

- Concern about climate change remains very high, returning to pre-pandemic levels; 93% of 2023 poll respondents are “very concerned or somewhat concerned” about climate change.
- Just over half of respondents recognize that extreme heat, sea level rise, poor air quality and extreme rainfall are the top climate hazards facing Vancouver. Extreme heat registered above the others, particularly among older residents.
- A small but growing number of respondents (10% compared to 6% in 2022) are aware that burning natural gas to heat buildings and domestic water is Vancouver's biggest local source of carbon pollution.
- A higher portion of respondents (32% in 2023 and 2022) were aware that burning gas and diesel for vehicles is the other major source of emissions in Vancouver.
- Familiarity and usage of heat pumps is growing: 81% of respondents have heard of heat pumps and 67% know they can be used for both heating and cooling.
- 15% of all homeowners surveyed report having a heat pump and 53% have considered one.
- 38% of respondents are aware of the City's Climate Emergency Action Plan and 23% are aware of the Climate Change Adaptation Strategy.
- When informed that the City is not currently on track to hit its climate targets, a combined 83% felt the City should either “push hard to get CEAP back on track” or “try to get closer to CEAP targets”.

In summary, respondents are concerned about the climate crisis and want the City to take climate action, but have a relatively low understanding of the main sources of local carbon pollution and Vancouver's action plans. Given limited resources, it's unlikely that staff can significantly increase the level of climate literacy at a city-wide scale. Instead, staff will focus on more targeted climate literacy work, aimed primarily at residents and organizations who are most keen to learn about climate change and take action. This work will be done in collaboration with other levels of government and BC Hydro. Staff will also continue to include climate literacy materials as part of any public engagement done on climate-related policies or programs.

The next round of public opinion polling currently planned will support development of the 2026-2030 climate plans.

Please direct any questions related to this public opinion poll to [theresa.o'donnell@vancouver.ca](mailto:theresa.o'donnell@vancouver.ca).



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General Manager, Planning, Urban Design and Sustainability  
604.673.8434 | [theresa.o'donnell@vancouver.ca](mailto:theresa.o'donnell@vancouver.ca)

## APPENDIX





# City of Vancouver 2023 Public Opinion Poll

FINAL REPORT June 29, 2023



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## CONTENT OVERVIEW

# Where To Find What You're Looking For

<b>Objectives &amp; Approach</b>	<b>03</b>
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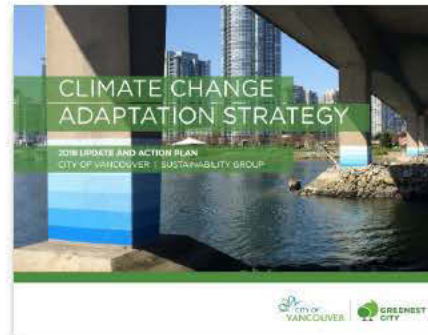
# RESEARCH OBJECTIVES

The City of Vancouver first partnered with Sentis in 2019 to understand how public awareness, knowledge, interest and support for climate action and broader environmental action evolve through the engagement process in support of the development of the Climate Emergency Action Plan.

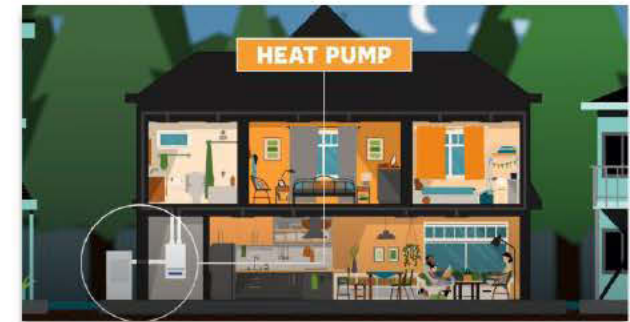
Since 2019, Sentis has conducted several waves of public opinion polling for the City to gain insight into:



Attitudes, Understanding & Actions Relating to Climate Change



Awareness & Support for the City's Climate Emergency Action Plan & Adaptation Strategy



Awareness & Perceptions of Heat Pumps and Energy Sources



# APPROACH

## Sample & Method



City of Vancouver residents aged 18+\*



Respondents were sourced from online panels to yield a demographically representative sample of the City residents



10-minute email-to-online survey

## Survey Responses

Wave	Date	Completed Surveys
<b>April 2023</b>	<b>April 17 – 26</b>	<b>427</b>
April 2022	April 1 – 12	417
July 2020	July 21 – July 30	435
Apr 2020	Apr 8 – Apr 17	419
Oct 2019	Sept 30 – Oct 8	421



Results on the total sample are accurate to  $\pm 5\%$  (19 times out of 20).  
A shift of 7 points is required between waves.



Results have been weighted by age, gender and region to accurately reflect City of Vancouver adult population.

\*Note: In 2019 and 2020, we surveyed residents aged 20+.





KEY HIGHLIGHTS

# What You Need To Know

# HIGHLIGHTS

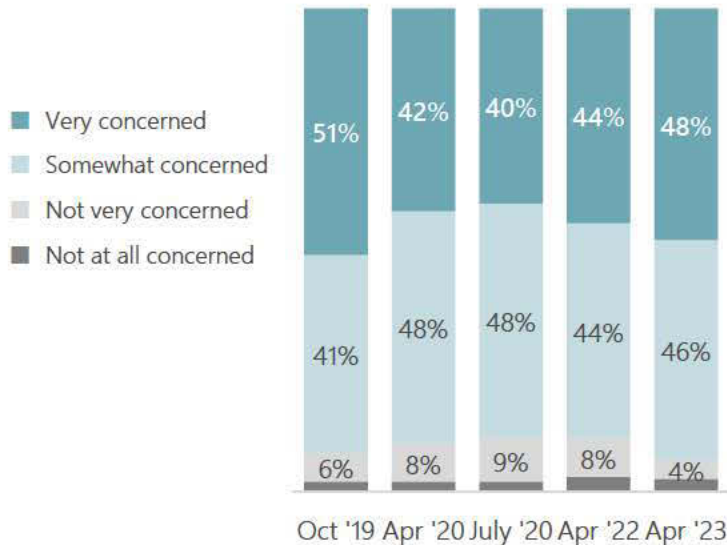
## Concern about climate change strengthens

After softening during COVID-19, Vancouverites have grown more concerned about climate change. 48% register as “very concerned”, which is up 4 points since 2022, which also saw a 4-point rise since July 2020.

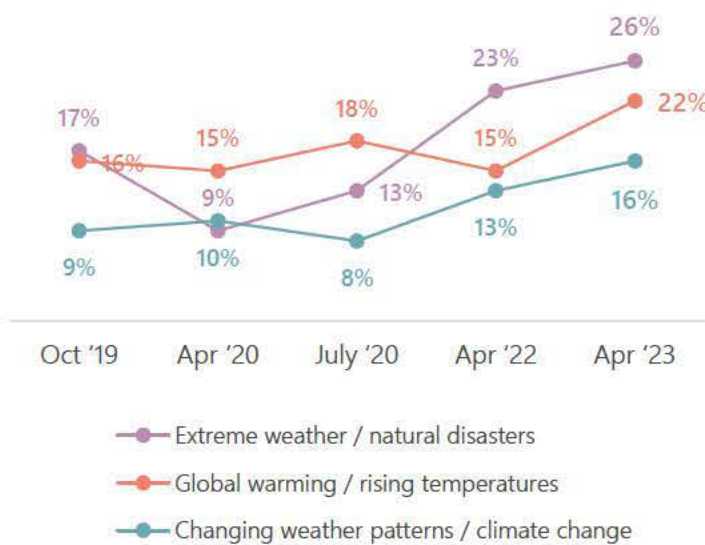
Three concerns have become more worrisome to residents: extreme weather and natural disasters (26%), global warming and rising temperatures generally (22%), and changing weather patterns and climate change generally. Conversely, residents have become less conscious of rising sea levels / melting glaciers and the impact on wildlife / habitats.

Just over half of residents believe that Extreme Heat, Sea Level Rise, Poor Air Quality and Extreme Rainfall are top hazards facing Vancouver. Extreme Heat registers above the others, particularly among older residents.

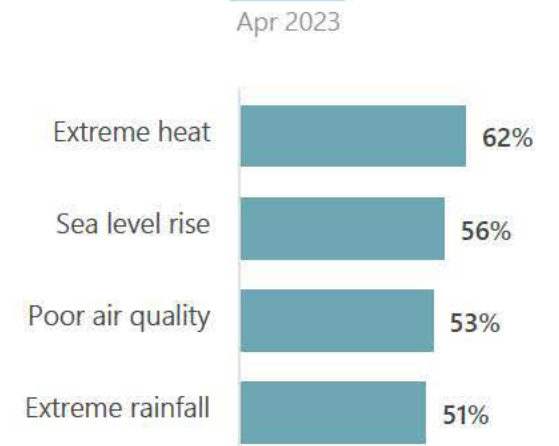
Level of Concern about Climate Change



Top Concerns about Climate Change



Top Perceived Climate Change Hazards for Vancouver (Aided)



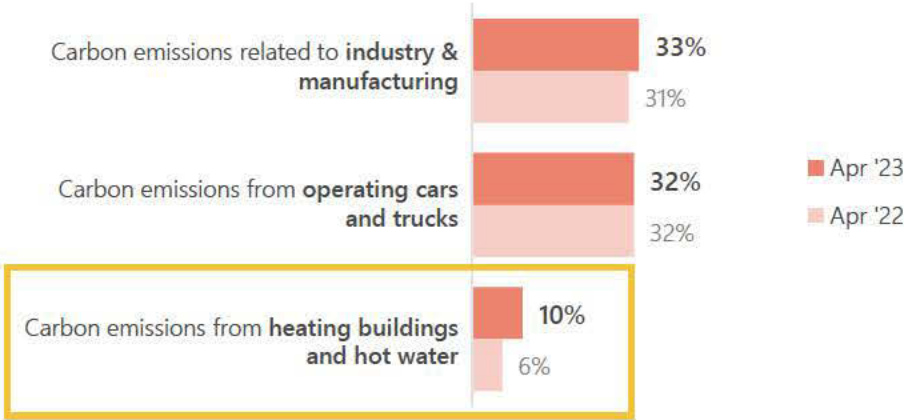
# HIGHLIGHTS

## A small but growing number of residents are aware that heating buildings and water is the number one source of carbon pollution in Vancouver and know that switching to a heat pump would help.

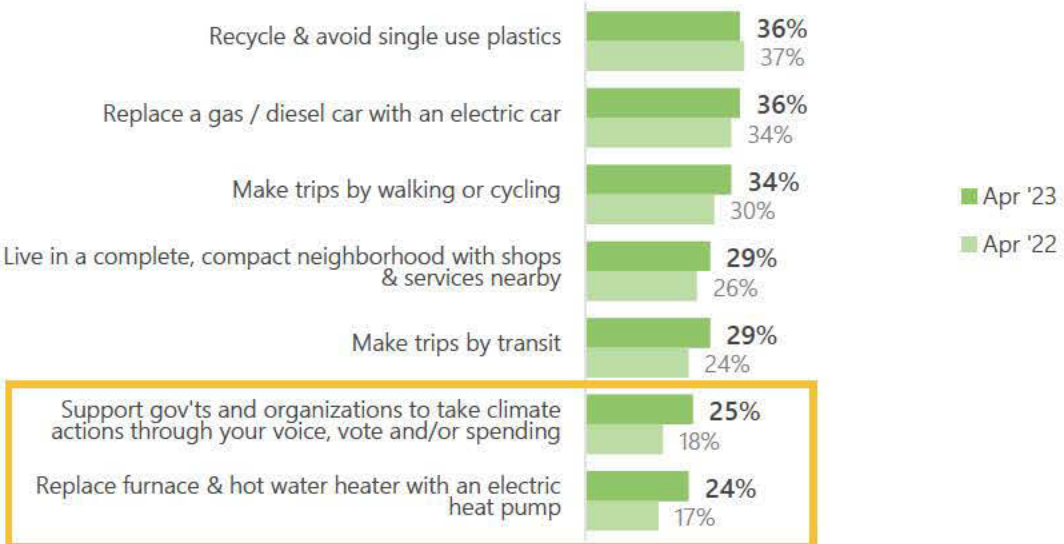
Most residents still believe that vehicles and industry are the main contributors to climate change. As such, when it comes to taking personal action, residents still think about changing their transportation or reducing their use of plastics.

On the upside, slightly more this year do identify heating buildings and hot water as the top source of emissions (10%, up from 6% last year) and more are recognizing that replacing their furnace and hot water heater with an electric heat pump would be helpful (24%, up from 17% last year). We also see that more residents are recognizing their power as citizens and consumers to support climate actions of governments, businesses, and organizations (25%, up from 18% last year).

Vancouver's Perceived Biggest Contributors to Climate Change



Top Actions Residents Believe They Can Do To Have Biggest Impact on Climate Change



B2. Depending on where in the world you live, different pollution sources contribute more or less to climate change. What do you think is Vancouver's biggest contributor to climate change? Please select one. / B3. Thinking of Vancouver residents generally, what do you think people in Vancouver could do to have the biggest impact on climate change? Please select up to 3 top factors that would have the biggest impact.



# HIGHLIGHTS

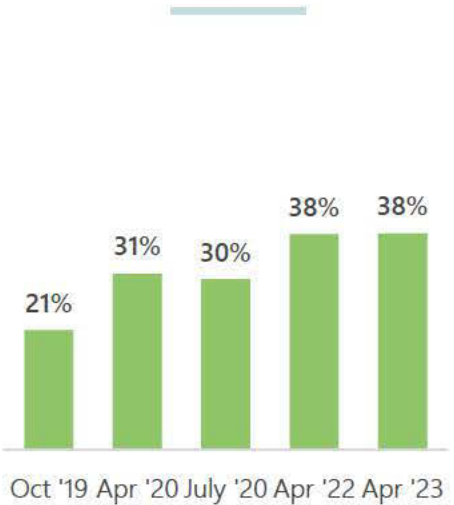
## While most residents aren't aware of the City's Climate Emergency Action Plan or Climate Change Adaptation Strategy, they do want to see the City get closer to meeting its goals.

Four-in-ten have heard of the City's Climate Emergency Action plan and 23% have heard of the City's Climate Change Adaptation Strategy.

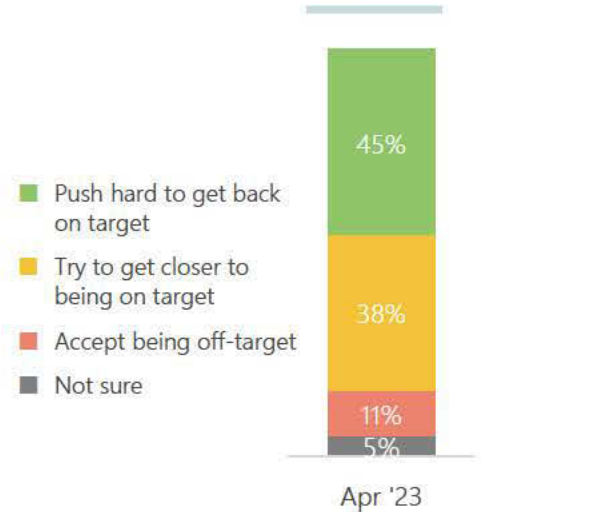
Opinions on the City's efforts in adapting to climate change are split between thinking the City is doing the right amount (35%) and doing not enough (37%). Very few think the City is doing too much (6%).

While residents are not that familiar with the City's plans or strategy for climate change, when informed that the City is not on track to meet its climate goals, most want to see the City to push hard to get back on target (45%) or try to get closer to being on target (38%).

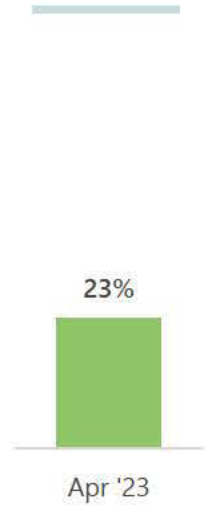
Percent Aware of City's Climate Emergency Action Plan



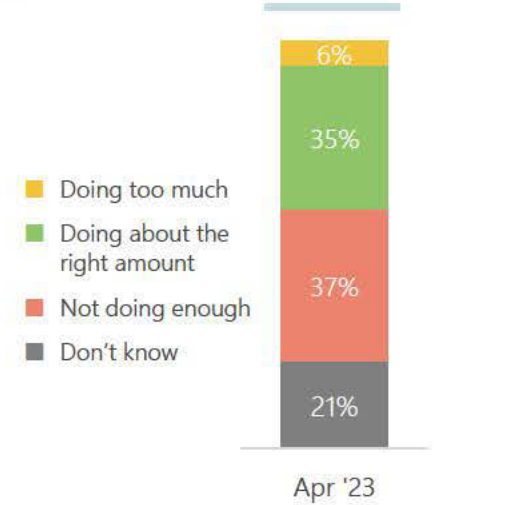
What the City Should do About Being Off-Track



Percent Aware of City's Climate Change Adaptation Strategy



City's Efforts on Adapting to Climate Change



B5. Before today, had you heard anything about Vancouver's Climate Emergency Action Plan? / B5b. What would you like to see the City do? / B6. Before today, had you heard anything about Vancouver's Climate Change Adaptation Strategy? / B6a. How would you describe the City of Vancouver's efforts on adapting to climate change?



# HIGHLIGHTS

## Familiarity and usage of heat pumps grows.

81% of residents have heard of heat pumps (up from 74% in 2022) and 67% know that they are used for heating and cooling (up from 60% in 2022).

Most homeowners already have (15%) or have considered a heat pump (53%).

The primary motivation for installing a heat pump is that it can also be used for cooling. Nearly as motivating are the government rebates that cover about half the cost of installation. However, the cost of installation remains the top barrier for heat pumps. Other barriers include the cost to run a heat pump and thinking that a heat pump won't work for certain homes.

### Awareness & Consideration of Heat Pumps

#### AMONG ALL RESIDENTS

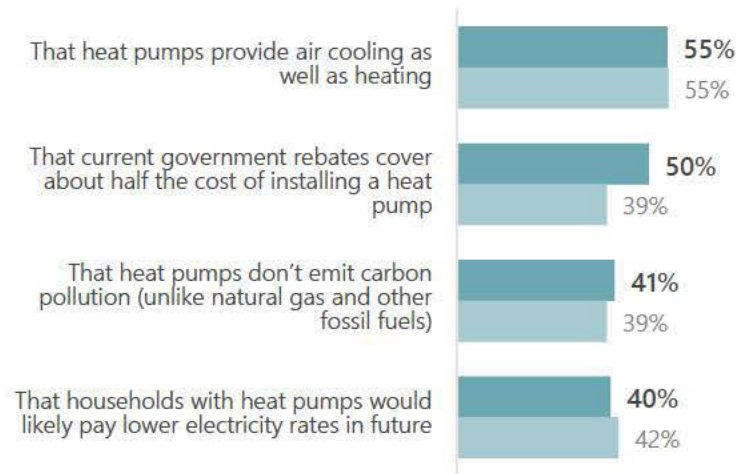


#### AMONG HOMEOWNERS



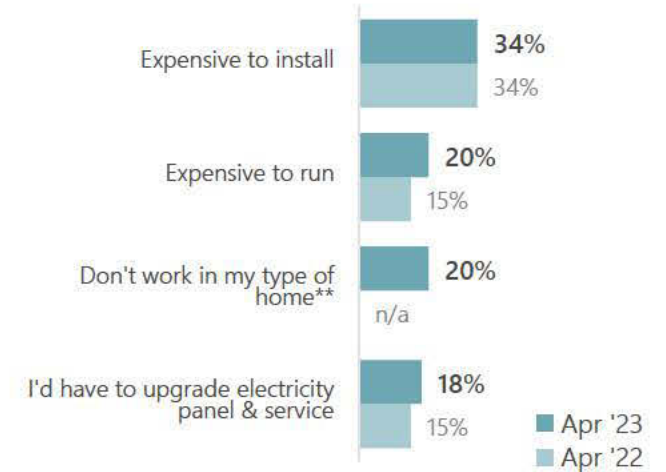
### Most Motivating Reasons for Installing a Heat Pump

Among homeowners: % selecting as a top 3 reason



### Top Perceptions about Heat Pumps

Among all residents



\*In 2023, we added a response option to the consideration for heat pumps question. As a result, the 2022 results are not directly comparable to the 2023 results and therefore, have not been trended. / \*\*Answer option added in 2023. C1a. Before today had you heard of heat pumps? / C1c. Did you know that heat pumps can also be used to cool homes? / C1f. Have you considered whether a heat pump might work for your home? / C2. There are several reasons for installing a heat pump. Which of these reasons [are / were] most encouraging or motivating to you? Please rank up to 3 reasons / C4. Here are some possible perceptions that some people may have. Do you personally have any of these reservations about heat pumps? Please select all that apply



SUMMARY OF FINDINGS

# General Concern and Knowledge about Climate Change

# Concern for climate change has returned to 2019 levels.

48% of Vancouver residents are very concerned about climate change and virtually all are at least somewhat concerned (93%).

Resident concern softened between 2020 and 2022 but has since strengthened.

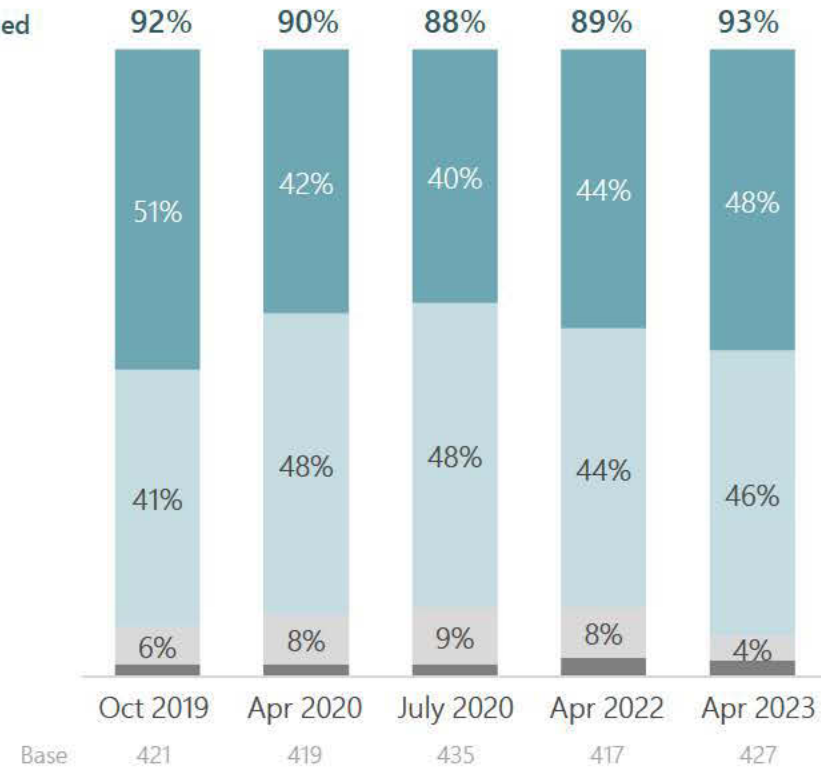
Those aged 40-59 are the least inclined to feel very concerned about climate change (39%).

### Level of Concern about Climate Change

Base: All residents

% Very or Somewhat Concerned

- Very concerned
- Somewhat concerned
- Not very concerned
- Not at all concerned



# Consistent with 2022, extreme weather / natural disasters continues to be the top concern about climate change.

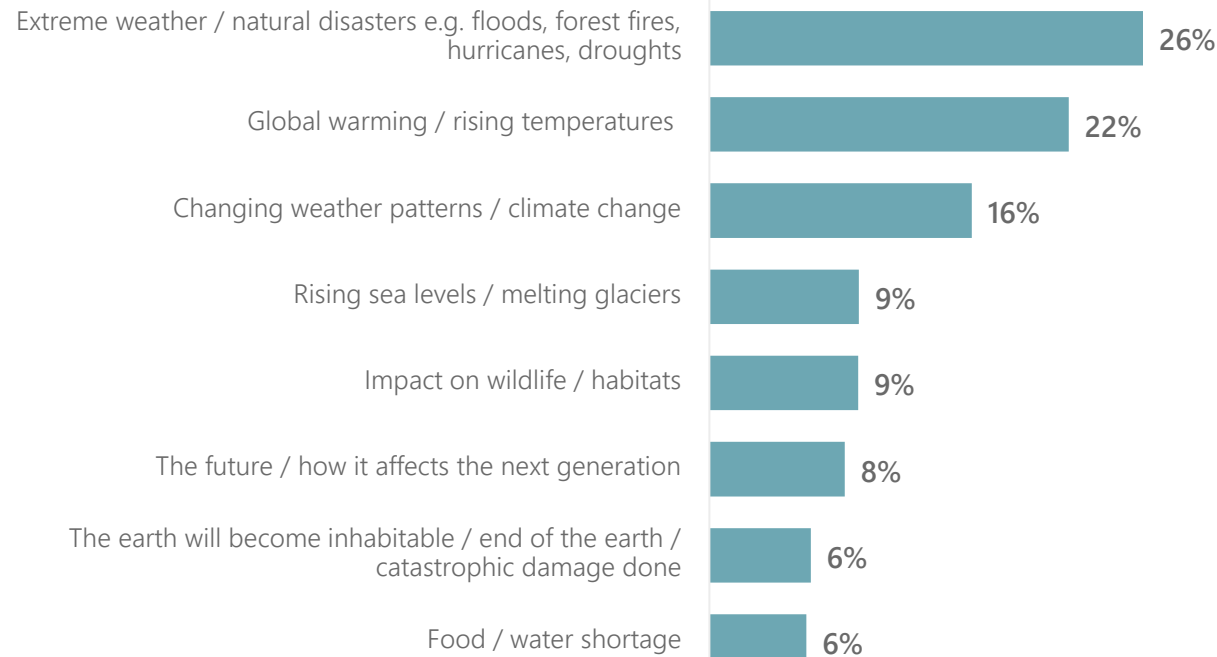
26% of residents are concerned about extreme weather / natural disasters.

Other common concerns are global warming / rising temperatures (22%, up from 15% in April 2022) and changing weather patterns / climate change (16%).

## Top Concerns about Climate Change (Unaided)

Apr 2023 Base: All residents (427)

**93%** are very / somewhat concerned



	Oct '19	Apr '20	July '20	Apr '22	Apr '23
	n=421	n=419	n=435	n=417	n=427
Extreme weather / natural disasters e.g. floods, forest fires, hurricanes, droughts	17%	9%	13%	23%	26%
Global warming / rising temperatures	16%	15%	18%	15%	22%▲
Changing weather patterns / climate change	9%	10%	8%	13%	16%
Rising sea levels / melting glaciers	13%	9%	12%	9%	9%
Impact on wildlife / habitats	15%	8%	11%	9%	9%
The future / how it affects the next generation	7%	10%	6%	6%	8%
The earth will become inhabitable / end of the earth / catastrophic damage done	7%	4%	5%	8%	6%
Food / water shortage	7%	6%	11%	5%	6%

▲▼ Significantly higher/lower than Apr 2022



# CONCERNS CLASSIFIED INTO CLIMATE CHANGE HAZARDS & IMPACTS



The City has identified 4 Climate Change Hazards and their associated Impacts as particularly applicable to Vancouver.

Accordingly, Sentis has classified the concerns expressed by residents into those particular hazards and impacts.

Resident concerns fall mainly into Extreme Heat (43%) and/or Extreme Rainfall (38%), followed by Sea Level Rise (30%), and lastly Poor Air Quality (9%).

In addition to the 4 Climate Change Hazards, many residents expressed other concerns and reflected on the broader implications of climate change.

## Climate Change Concerns Classified into Hazards & Impacts

Apr 2023 Base: All residents (427)



### Climate Change Impacts - Top Mentions

<ul style="list-style-type: none"> <li>Changing weather patterns / climate change</li> <li>Global warming / rising temperatures</li> <li>Hotter summers / extreme heat</li> <li>Fires</li> </ul>	<ul style="list-style-type: none"> <li>Changing weather patterns / climate change</li> <li>Extreme weather / natural disasters (general)</li> <li>Floods</li> </ul>	<ul style="list-style-type: none"> <li>Extreme weather / natural disasters (general)</li> <li>Floods</li> <li>Rising sea levels</li> </ul>	<ul style="list-style-type: none"> <li>Fires</li> </ul>	<ul style="list-style-type: none"> <li>Impact on wildlife / habitats</li> <li>The future / how it affects the next generation</li> <li>Earth will become inhabitable / end of the earth / catastrophic damage done</li> </ul>
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# Those not concerned about climate change tend to say that there are more pressing issues or that it's a natural phenomenon.

Since 2019, 5%-7% of residents have voiced a reason for not being concerned about climate change.

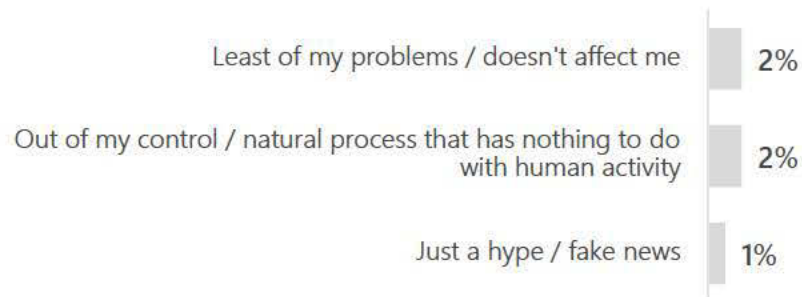
This segment of the population tends to have two lines of thinking:

- That there are bigger problems to deal with / it doesn't affect me
- That climate change is not real.

## Why Not Concerned about Climate Change (Unaided)

Apr 2023 Base: All residents (427)

**7%** are not very / not at all concerned



	Oct '19	Apr '20	July '20	Apr '22	April '23
	n=421	n=419	n=435	n=417	n=427
Least of my problems / doesn't affect me	<1%	1%	3%	2%	2%
Out of my control / natural process that has nothing to do with human activity	3%	1%	3%	2%	2%
Just a hype / fake news	1%	2%	1%	2%	1%

“ Climate change is a natural phenomenon that always changes. ”

“ I have seen the hoaxes and big tech/government silencing anyone who questions it. If so sure, why not allow debate? Also look at the oligarchs who have profited from it. Look at Al Gore's movie and how full of rubbish it was. Fear mongering. ”

“ I am not experiencing a direct impact in my day-to-day life and am out of the loop in terms of statistics on the world's eco system. ”

“ We have a lot more problems like housing, economy and inflation to take care of first. ”

# Most residents don't consider themselves very knowledgeable about climate change.

Just 21% feel they are “very knowledgeable” about climate change.

Young residents (18-39) feel they are the most knowledgeable (29% very knowledgeable vs. 19% of those 40-59 and 9% of those over 60). Men also feel more knowledgeable (27% very knowledgeable vs. 15% of women).

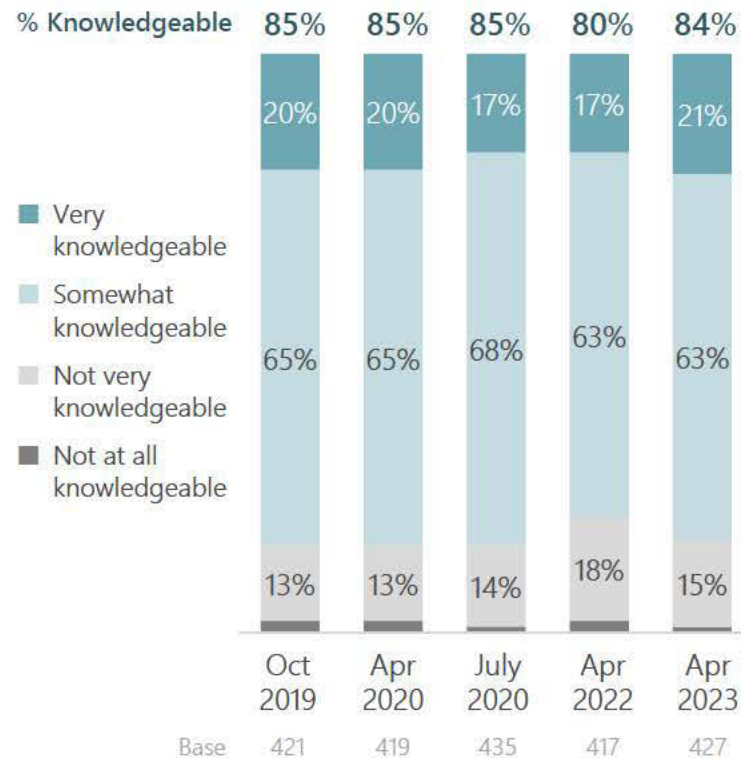
A quadrant analysis shows those who feel very knowledgeable about climate change tend to be very concerned about it (15%) rather than just somewhat or less concerned (5%).

Most residents, however, admit to being only somewhat or less knowledgeable about climate change. Unfortunately, this group is often not very concerned about climate change (47% vs. 33% who are very concerned).

The problem with people being “somewhat knowledgeable” and “somewhat concerned” is that this is a comfortable position to take and that makes it very difficult to motivate them to take action on climate change.

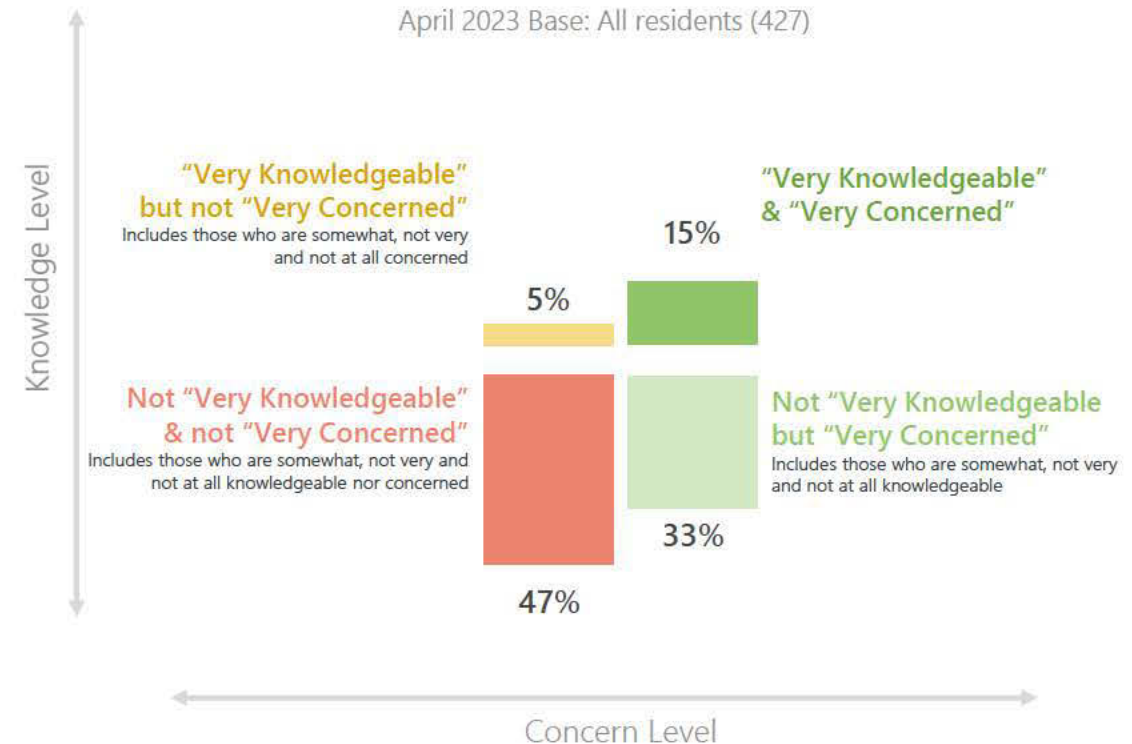
## Level of Knowledge of Climate Change

Base: All residents



## Concern for Climate Change by Knowledge of Climate Change

April 2023 Base: All residents (427)



Note: Net percentages may not add up to the sum of the individual response categories due to rounding.

B1a. How would you rate your current understanding of climate change?





SUMMARY OF FINDINGS

# Awareness and Perceptions about Climate Change in Vancouver



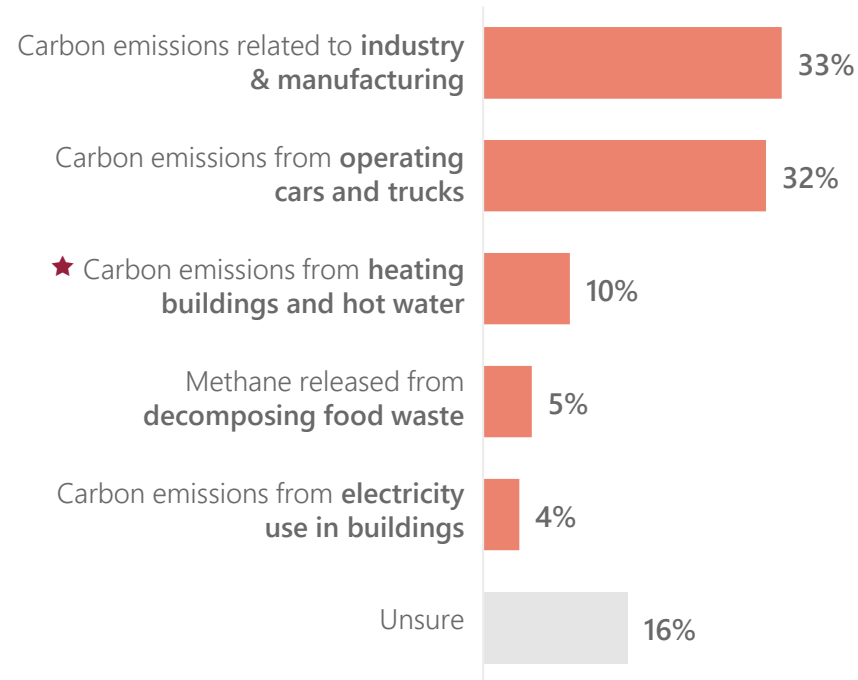
# Industry, manufacturing and transportation continue to be the top perceived contributors to climate change.

Just 10% are aware that carbon emissions from heating buildings and hot water is Vancouver's biggest contributor to climate change. However, this represents a slight gain from 6% identifying this as the prime contributor in 2022.

5% selected methane released from decomposing food waste this year (up from 2% last year).

## Vancouver's Perceived Biggest Contributors to Climate Change (Aided)

Apr 2023 Base: All residents (427)



★ Note, this is the top contributor, accounting for an estimated 60% of emissions.

	Oct '19	Apr '20	July '20	Apr '22	Apr '23
n=421	n=419	n=435	n=417	n= 427	
	24%	24%	21%	31%	<b>33%</b>
	44%	44%	37%	32%	<b>32%</b>
	7%	5%	10%	6%	<b>10%▲</b>
	4%	4%	3%	2%	<b>5%▲</b>
	6%	4%	5%	3%	<b>4%</b>
	15%	19%	24%	26%	<b>16%▼</b>

▲▼ Significantly higher/lower than Apr 2022

# PERCEIVED BIGGEST CONTRIBUTORS TO CLIMATE CHANGE

## BY DEMOGRAPHIC GROUPS

Among house and duplex owners, just one in ten recognize that carbon emissions from heating buildings and hot water is Vancouver's biggest contributor to climate change.

	Total	Age			Home Type/Ownership		
		18-39	40-59	60+	Own house / duplex	Own multi-family home	Rent
Apr 2023 Base	427	181	129	117	140	83	189
Carbon emissions related to industry and manufacturing	33%	42%	36%	15%	33%	40%	32%
Carbon emissions from operating cars and trucks	32%	24%	29%	46%	33%	30%	31%
Carbon emissions from heating buildings and hot water	10%	12%	7%	9%	10%	4%	12%
Methane released from decomposing food waste	5%	7%	4%	5%	5%	6%	6%
Carbon emissions from electricity use in buildings	4%	3%	5%	3%	4%	4%	4%
Unsure	16%	11%	18%	22%	15%	17%	16%

■ ■ Significantly higher/lower than counterparts

# About half of residents recognize Vancouver's top four climate change hazards.

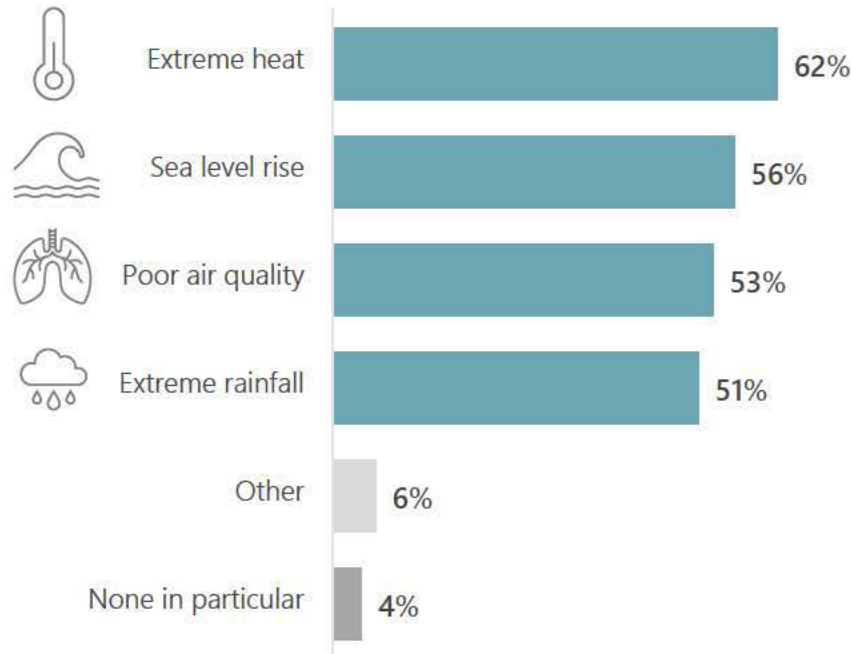
Six-in-ten residents selected Extreme Heat (62%) as a top hazard facing Vancouver. Extreme Heat was especially likely to be chosen by older residents (71% of those 60+).

Nearly as many selected the remaining hazards of Sea Level Rise (56%), Poor Air Quality (53%) and Extreme Rainfall (51%).

When expressing their own concerns about climate change, residents showed less concern about Poor Air Quality and prioritized Extreme Heat, Extreme Rainfall, and Sea Level Rise.

## Top Perceived Climate Change Hazards for Vancouver (Aided)

Apr 2023 Base: All residents (427)



# Awareness of the climate change impacts for Vancouver are high.

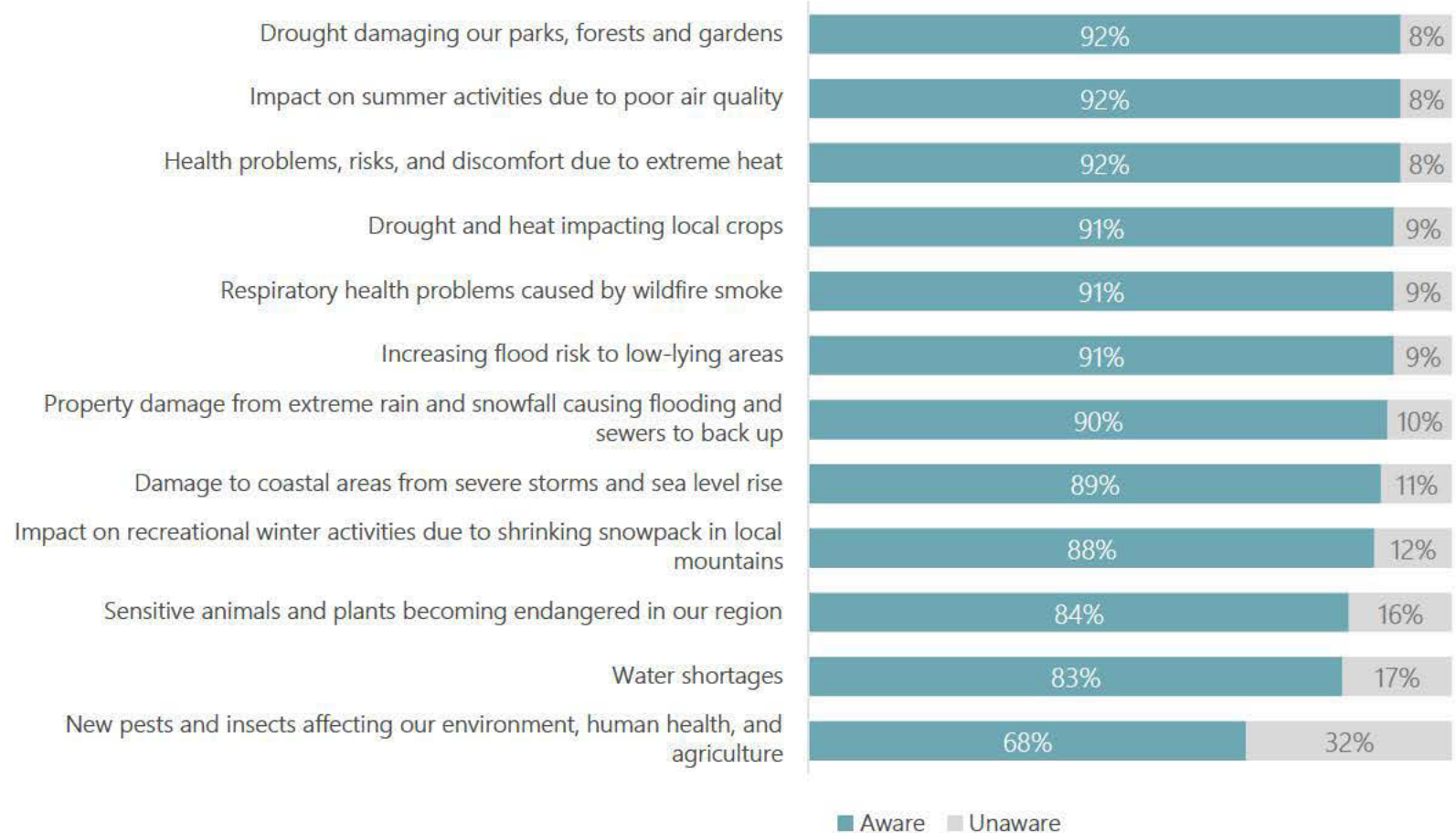
Residents recognize most of the climate change impacts facing Vancouver.

Only three impacts register as less familiar to residents:

- Sensitive animals and plants becoming endangered
- Water shortages
- New pests and insects affecting our environment, human health and agriculture.

## Awareness of Climate Change Impacts for Vancouver (Aided)

Apr 2023 Base: All residents (427)



Note: Question added in April 2023.

B4b. Vancouver is likely to experience several impacts from climate change. Are there any climate impacts listed here that you were not aware of before today? Please select those you were NOT previously aware of.



# AWARENESS OF CLIMATE CHANGE IMPACTS FOR VANCOUVER

## BY DEMOGRAPHIC GROUPS



% Aware	Region						Gender		Age		
	Total	DWE	NE	NW	SE	SW	Male	Female	18-39	40-59	60+
Apr 2023 Base	427	66	77	74	134	76	203	217	181	129	117
Drought damaging our parks, forests and gardens	92%	91%	91%	94%	91%	96%	92%	93%	91%	91%	96%
Impact on summer activities due to poor air quality	92%	92%	92%	95%	93%	88%	92%	92%	89%	95%	94%
Health problems, risks, and discomfort due to extreme heat	92%	91%	90%	99%	92%	91%	94%	90%	91%	91%	95%
Drought and heat impacting local crops	91%	91%	87%	96%	89%	92%	90%	92%	88%	90%	96%
Respiratory health problems caused by wildfire smoke	91%	92%	90%	95%	92%	86%	92%	90%	89%	89%	96%
Increasing flood risk to low-lying areas	91%	92%	93%	97%	85%	90%	93%	88%	89%	88%	97%
Property damage from extreme rain and snowfall causing flooding and sewers to back up	90%	92%	87%	93%	91%	85%	90%	89%	87%	90%	94%
Damage to coastal areas from severe storms and sea level rise	89%	89%	83%	93%	89%	89%	88%	90%	88%	86%	92%
Impact on recreational winter activities due to shrinking snowpack in local mountains	88%	83%	83%	92%	90%	92%	88%	88%	84%	90%	94%
Sensitive animals and plants becoming endangered in our region	84%	83%	84%	86%	87%	78%	83%	86%	86%	84%	81%
Water shortages	83%	83%	83%	78%	88%	82%	83%	84%	83%	81%	86%
New pests and insects affecting our environment, human health, and agriculture	68%	63%	65%	73%	65%	75%	74%	62%	66%	74%	64%

■ ■ Significantly higher/lower than counterparts

Note: Question added in April 2023.

B4b. Vancouver is likely to experience several impacts from climate change. Are there any climate impacts listed here that you were not aware of before today? Please select those you were NOT previously aware of.

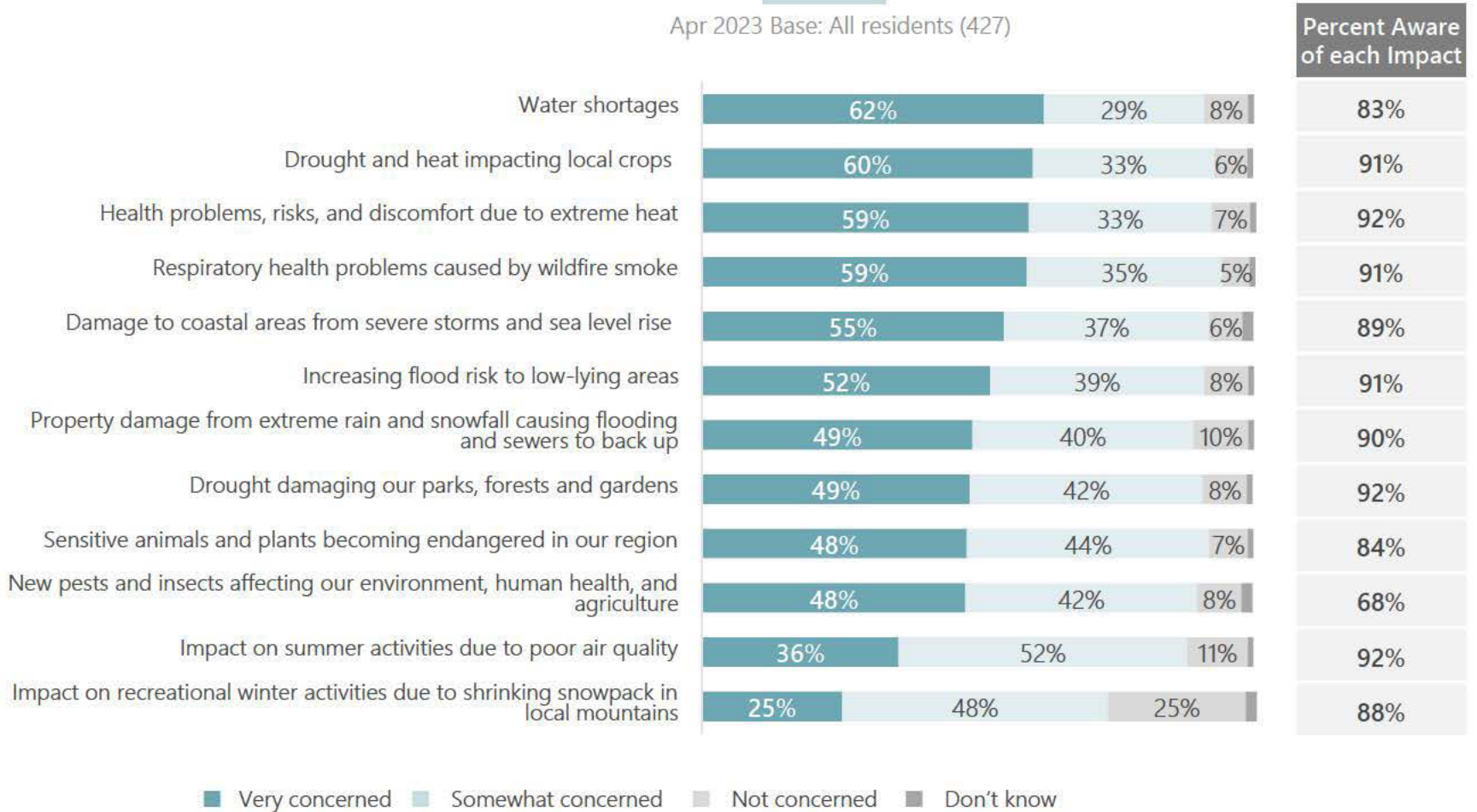
# CONCERN FOR CLIMATE CHANGE IMPACTS FOR VANCOUVER

Residents are most concerned about water shortages (62%), drought and heat impacting local crops (60%), health problems or discomfort due to extreme heat (59%) and respiratory problems due to wildfire smoke (59%).

They are least concerned about the impact on winter and summer activities (25% and 36%, respectively).

## Concern for Climate Change Impacts for Vancouver (Aided)

Apr 2023 Base: All residents (427)



Note: Question added in April 2023. B4c. Please indicate your level of concern for each of these impacts.

# CONCERN FOR CLIMATE CHANGE IMPACTS FOR VANCOUVER

## BY DEMOGRAPHIC GROUPS



% Very Concerned	Region						Gender		Age		
	Total	DWE	NE	NW	SE	SW	Male	Female	18-39	40-59	60+
Apr 2023 Base	427	66	77	74	134	76	203	217	181	129	117
Water shortages	<b>62%</b>	61%	66%	63%	61%	61%	53%	70%	59%	59%	70%
Drought and heat impacting local crops	<b>60%</b>	53%	58%	56%	67%	60%	52%	67%	61%	55%	65%
Health problems, risks, and discomfort due to extreme heat	<b>59%</b>	61%	62%	57%	59%	58%	50%	67%	60%	52%	68%
Respiratory health problems caused by wildfire smoke	<b>59%</b>	65%	59%	56%	61%	54%	52%	65%	58%	54%	67%
Damage to coastal areas from severe storms and sea level rise	<b>55%</b>	56%	59%	52%	51%	58%	46%	63%	57%	44%	63%
Increasing flood risk to low-lying areas	<b>52%</b>	59%	50%	53%	48%	55%	46%	58%	57%	41%	56%
Property damage from extreme rain and snowfall causing flooding and sewers to back up	<b>49%</b>	49%	48%	39%	57%	47%	45%	52%	49%	46%	52%
Drought damaging our parks, forests and gardens	<b>49%</b>	58%	54%	50%	42%	44%	41%	56%	51%	41%	53%
Sensitive animals and plants becoming endangered in our region	<b>48%</b>	47%	56%	50%	46%	44%	41%	54%	54%	39%	49%
New pests and insects affecting our environment, human health, and agriculture	<b>48%</b>	52%	56%	44%	45%	45%	41%	53%	48%	48%	47%
Impact on summer activities due to poor air quality	<b>36%</b>	35%	44%	27%	40%	29%	34%	38%	45%	28%	30%
Impact on recreational winter activities due to shrinking snowpack in local mountains	<b>25%</b>	27%	30%	22%	23%	27%	27%	25%	30%	22%	22%

■ ■ Significantly higher/lower than counterparts

Note: Question added in April 2023.

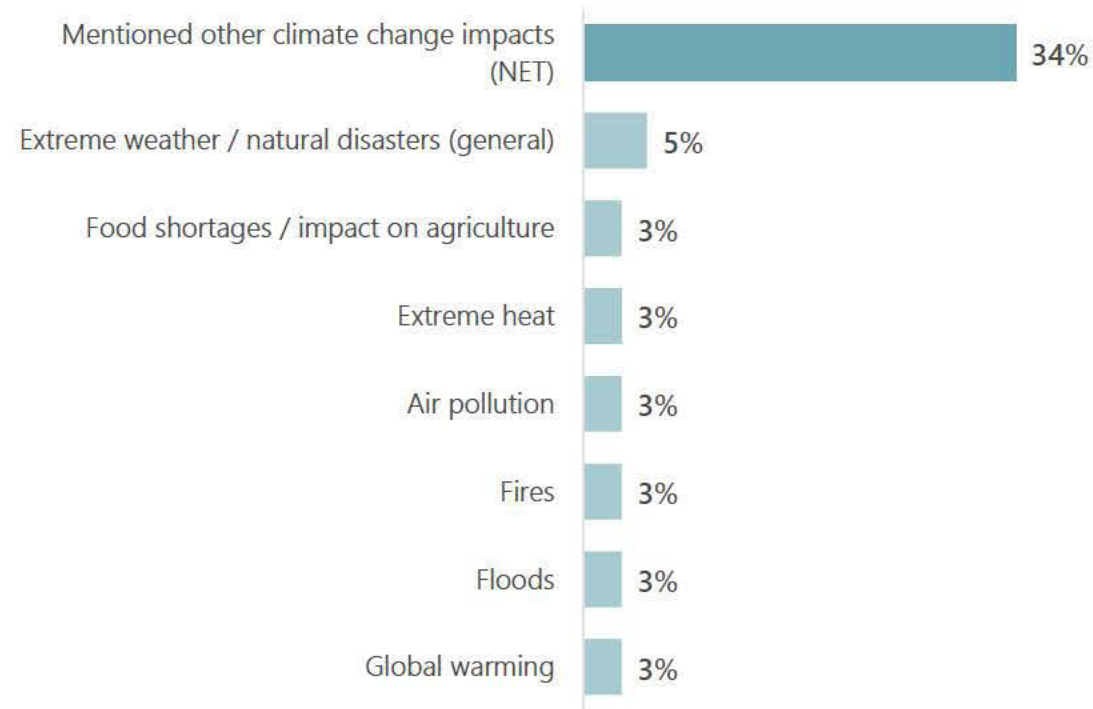
B4c. Please indicate your level of concern for each of these impacts.

# One-third mentioned other climate change impacts that they're concerned about.

The top mentions include extreme weather / natural disasters (general) (5%), food shortages / impact on agriculture (3%), extreme heat (3%), air pollution (3%), fires (3%), floods (3%) and global warming (3%).

## Other Climate Change Impacts for Vancouver that Residents are Concerned about (Unaided)

Apr 2023 Base: All residents (427)



# Residents are starting to look beyond recycling and EVs to combat climate change.

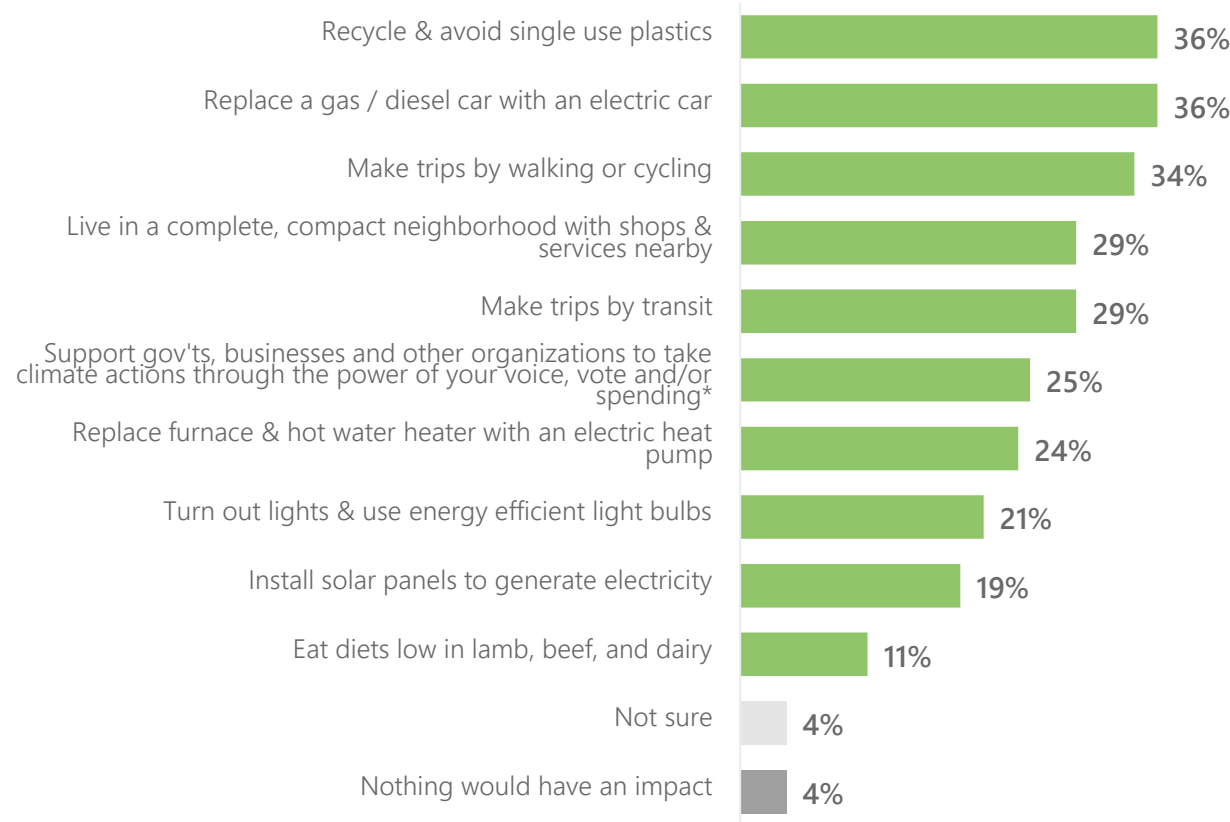
When asked what people could do to have the biggest impact on climate change, the top actions continue to be recycling and avoiding single use plastics, switching to electric cars, and making trips by walking or cycling.

However, over the last few years, a growing number of residents – now 24%, recognize that switching to heat pumps for space and hot water heating would be helpful.

Compared to last year, more residents are recognizing the power they have as citizens and consumers to support climate actions of governments, businesses, and organizations.

## Top Actions Residents Believe They Can Do To Have Biggest Impact on Climate Change (Aided)

Apr 2023 Base: All residents (427)



	Oct '19	Apr '20	Apr '22	Apr '23
	n=421	n=419	n=417	n=427
Recycle & avoid single use plastics	44%	52%	37%	36%
Replace a gas / diesel car with an electric car	40%	40%	34%	36%
Make trips by walking or cycling	32%	34%	30%	34%
Live in a complete, compact neighborhood with shops & services nearby	25%	33%	26%	29%
Make trips by transit	32%	24%	24%	29%
Support gov'ts, businesses and other organizations to take climate actions through the power of your voice, vote and/or spending*	n/a	n/a	18%	25%▲
Replace furnace & hot water heater with an electric heat pump	12%	12%	17%	24%▲
Turn out lights & use energy efficient light bulbs	22%	22%	22%	21%
Install solar panels to generate electricity	23%	22%	19%	19%
Eat diets low in lamb, beef, and dairy	18%	17%	16%	11%▼
Not sure	3%	2%	9%	4%▼
Nothing would have an impact	2%	3%	4%	4%

▲▼ Significantly higher/lower than April 2022

Note: Question not asked in July 2020.

\*Answer option added in April 2022.

B3. Thinking of Vancouver residents generally, what do you think people in Vancouver could do to have the biggest impact on climate change? Please select up to 3 top factors that would have the biggest impact.



# ACTIONS BELIEVED TO HAVE BIGGEST IMPACT ON CLIMATE CHANGE BY DEMOGRAPHIC GROUPS



	Gender			Age			Knowledge of Climate Change	
	Total	Male	Female	18-39	40-59	60+	Very Knowledgeable	Not 'Very Knowledgeable'
Apr 2023 Base	427	203	217	181	129	117	88	339
Recycle and avoid single use plastics (e.g. straws, plastic bags)	<b>36%</b>	27%	45%	33%	40%	36%	29%	38%
Replace a gas / diesel car with an electric car	<b>36%</b>	40%	34%	36%	30%	44%	33%	38%
Make trips by walking or cycling	<b>34%</b>	37%	32%	30%	36%	39%	24%	37%
Live in a complete, compact neighborhood with shops and services nearby so you can walk, cycle, transit to get groceries	<b>29%</b>	27%	31%	34%	24%	28%	35%	28%
Make trips by transit	<b>29%</b>	30%	27%	25%	30%	33%	23%	30%
Support gov'ts, businesses and other organizations to take climate actions through the power of your voice, vote and/or spending	<b>25%</b>	24%	26%	31%	19%	21%	36%	22%
Replace furnace and hot water heater with an electric heat pump (by occupant or building owner)	<b>24%</b>	34%	14%	22%	25%	25%	38%	20%
Turn out lights and use energy efficient light bulbs	<b>21%</b>	18%	23%	18%	26%	22%	11%	24%
Install solar panels to generate electricity	<b>19%</b>	18%	21%	23%	19%	14%	25%	18%
Eat diets low in lamb, beef, and dairy	<b>11%</b>	11%	11%	12%	11%	8%	13%	10%
Not sure	<b>4%</b>	3%	6%	5%	6%	3%	2%	5%
Nothing would have an impact	<b>4%</b>	5%	2%	3%	4%	4%	6%	3%

■ ■ Significantly higher/lower than counterparts



SUMMARY OF FINDINGS

# Vancouver's Climate Change Policy

# Identical to 2022, four-in-ten are aware of Vancouver's Climate Emergency Action Plan.

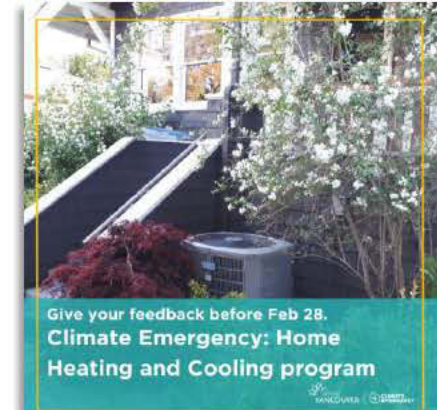
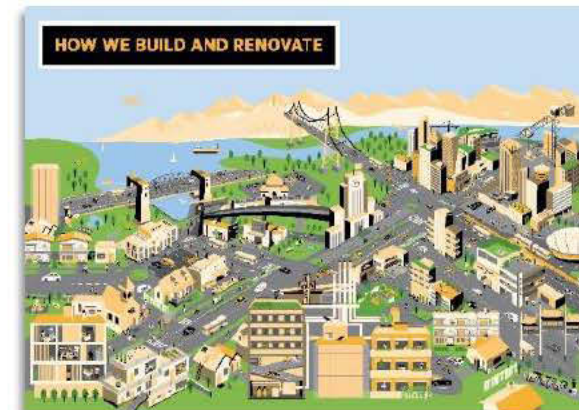
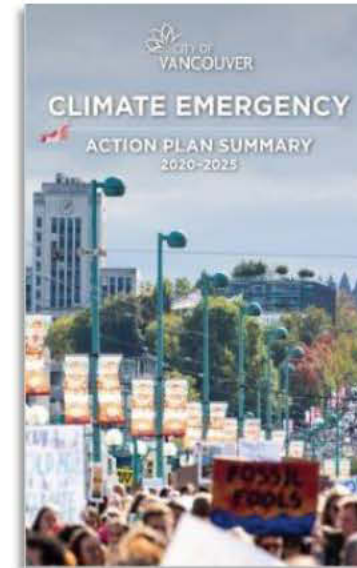
## Awareness of Climate Emergency Action Plan

Apr 2023 Base: All residents (427)

Men and those aged 18-39 are the most aware of the Climate Emergency Action Plan (45% and 47%, respectively).



Oct '19	Apr '20	July '20	Apr '22	Apr '23
n=421	n=419	n=435	n=417	n=427
21%	31%	30%	38%	38%



# Nearly half of residents are aware the City is not on track and would like to push hard to get back on target.

43% of Vancouverites are aware the City is not on track to meet its climate targets.

About the same proportion, 45%, would like the City to push hard to get back on target. Most of the remainder, 38%, favour trying to get close to being on target. Just 11% believe that the City should just accept being off-target.

A majority of younger residents want the city to push hard to get back on target (55% of those aged 18-39).

Residents that know the City is not on track to meet targets are only a little more likely to want it to push hard to get back on target.

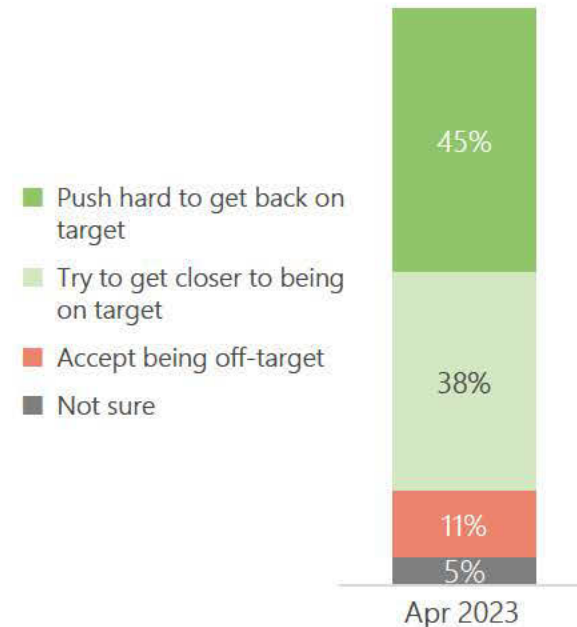
## Awareness that City of Vancouver is not on Track to Meet Climate Targets

Apr 2023 Base: All residents (427)



## What the City Should do

Apr 2023 Base: All residents (427)



Note: Questions added in April 2023.

B5a. The City is currently not on track to meet its climate targets. Were you aware of this? / B5b. What would you like to see the City do?





SUMMARY OF FINDINGS

# Vancouver's Climate Adaptation Policy



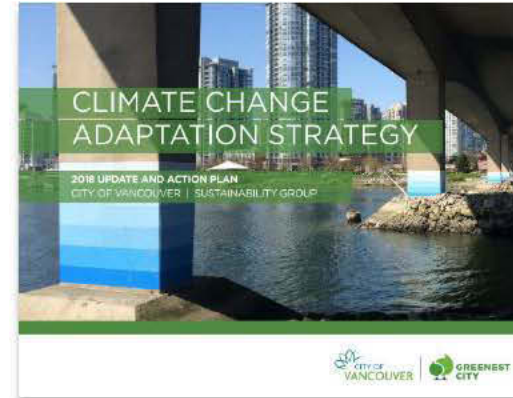
# About one-quarter are aware of the City's Climate Change Adaptation Strategy.

## Awareness of Climate Change Adaptation Strategy

Apr 2023 Base: All residents (427)

While 38% have heard of the City's Climate Emergency Action Plan, 23% are aware of the City's Adaptation Strategy.

Young people are the most aware segment: 31% residents aged 18-39 report hearing about the City's Climate Change Adaptation Strategy.



# Attitudes towards the City's efforts on adapting to climate change are mixed.



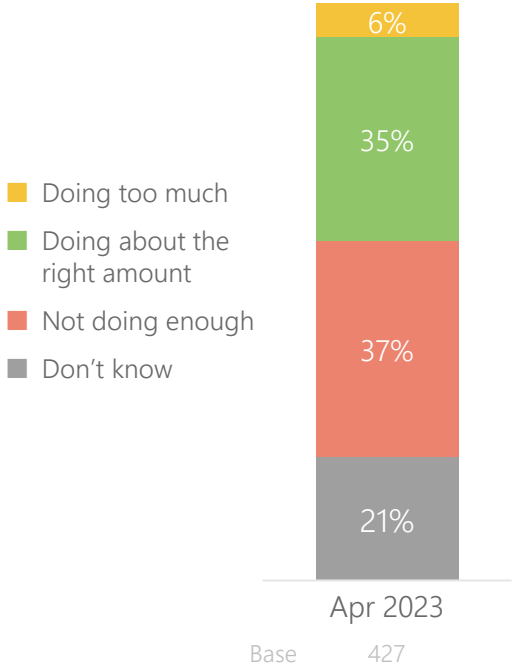
Given that most residents aren't aware of the City's Climate Adaptation Strategy, it's not surprising that six-in-ten residents either don't feel the City is doing enough (37%) or don't have an opinion (21%).

Those who say the City is doing too much tend to feel that the problem is too big for Vancouver to tackle and instead should be dealt with on the federal/global level.

Those feeling that City is not doing enough tend to blame either a lack of action or a lack of communication about what the City is doing.

## City's Efforts on Adapting to Climate Change

Base: All residents



## Reasons for Feeling the City **Doing Too Much** (Unaided)\*

Apr 2023 Base: All residents (427)

*6% feel the City is doing too much because...*

Issue is federal / global - not Vancouver's problem to solve	3%
There are more important issues to address	1%
Just more taxes / will increase our taxes	1%

“ If climate change is real then it can't be solved by Vancouver alone, there are plenty of regions around the world that would make a bigger dent to addressing the problem. Vancouver is making the least of impact because this can't be solved by one region only. ”

“ Just feel like this topic is taking focus away from other more immediate social concerns like unaffordable housing prices, etc. ”

## Reasons for Feeling the City is **not Doing Enough** (Unaided)\*

Apr 2023 Base: All residents (427)

*37% feel the City is not doing enough because...*

Don't see or hear of any actions being taken	8%
Not doing enough / more needs to be done	6%
Need to raise more awareness / promote actions being taken	5%
We aren't meeting / are falling behind on our targets	5%

“ I have not heard anything about attempts to adapt and have not seen any evidence of these attempts. I would not be able to say what is being done or what they hope to do. ”

Note: Questions added in April 2023.

\*Showing major mentions only

B6a. How would you describe the City of Vancouver's efforts on adapting to climate change? / B6b. Why do you feel that way?



SUMMARY OF FINDINGS

# Heat Pumps & Other Energy Sources

# Awareness of heat pumps continues to grow.

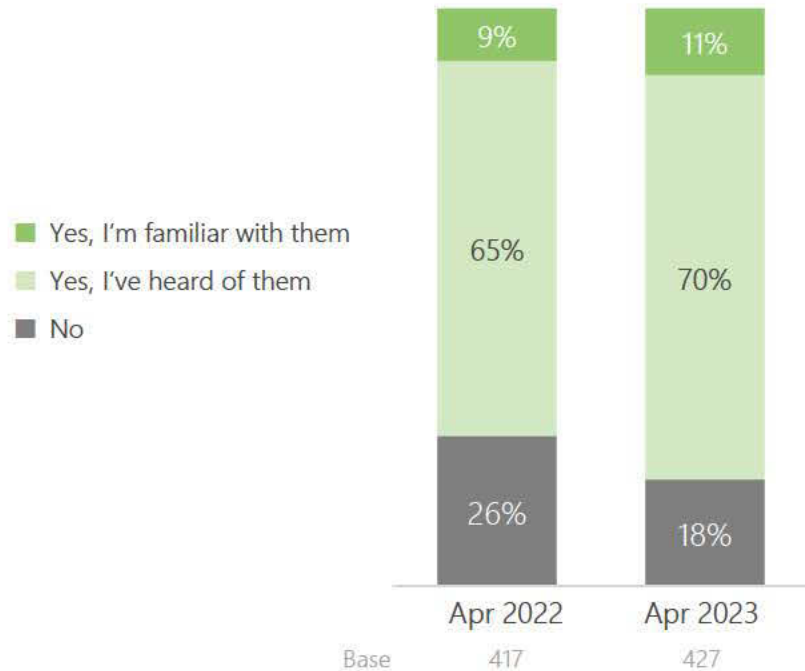
81% of residents have at least heard of heat pumps, including 11% who say they are familiar with them.

Residents are also more aware that heat pumps can be used to cool homes (67% vs. 60% in 2022).

Older residents and men are the most aware of heat pumps and the most likely to know they can be used to cool homes.

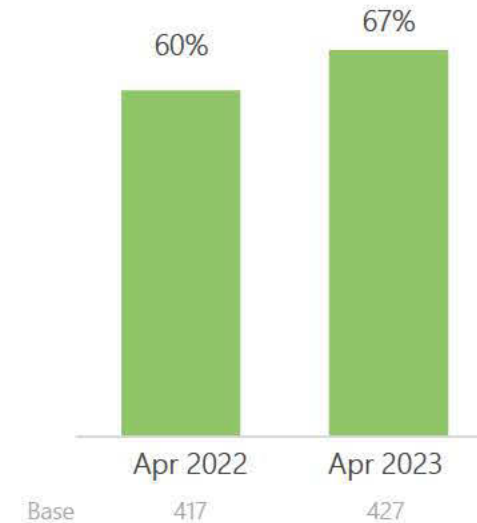
## Awareness of Heat Pumps

Base: All residents



## Aware Heat Pumps Can be Used to Cool Homes

Base: All residents





# 15% of residents report having a heat pump.

15% of Vancouver homeowners claim to have a heat pump, including 12% that installed one and 3% that had one in their home when they moved in.

This compares to 8% that had a heat pump in 2022.

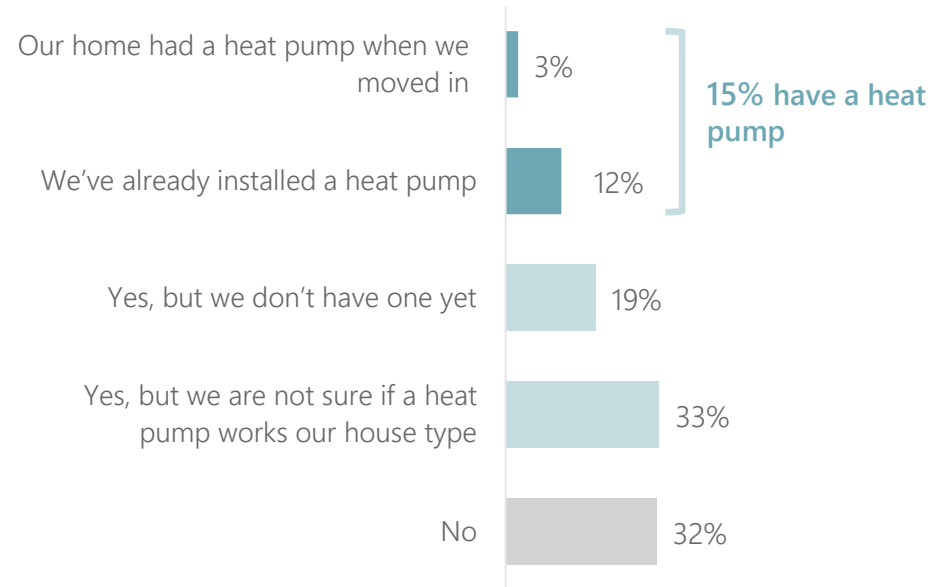
About half have considered a heat pump, although 33% are not sure if it will work for their house type.

A third have not considered a heat pump.

**Among house and duplex owners,** 18% have a heat pump, including 16% who say they installed it themselves. 24% have considered a heat pump but don't have one yet, while 27% are not sure if a heat pump works for their house or duplex. This leaves 30% that neither have nor considered a heat pump.

## Considered a Heat Pump for Home

Apr 2023 Base: All Homeowners (224)



# The top motivator is that heat pumps also cool homes.

For 55% of homeowners, the ability of heat pumps to cool homes is an important motivator for installing one.

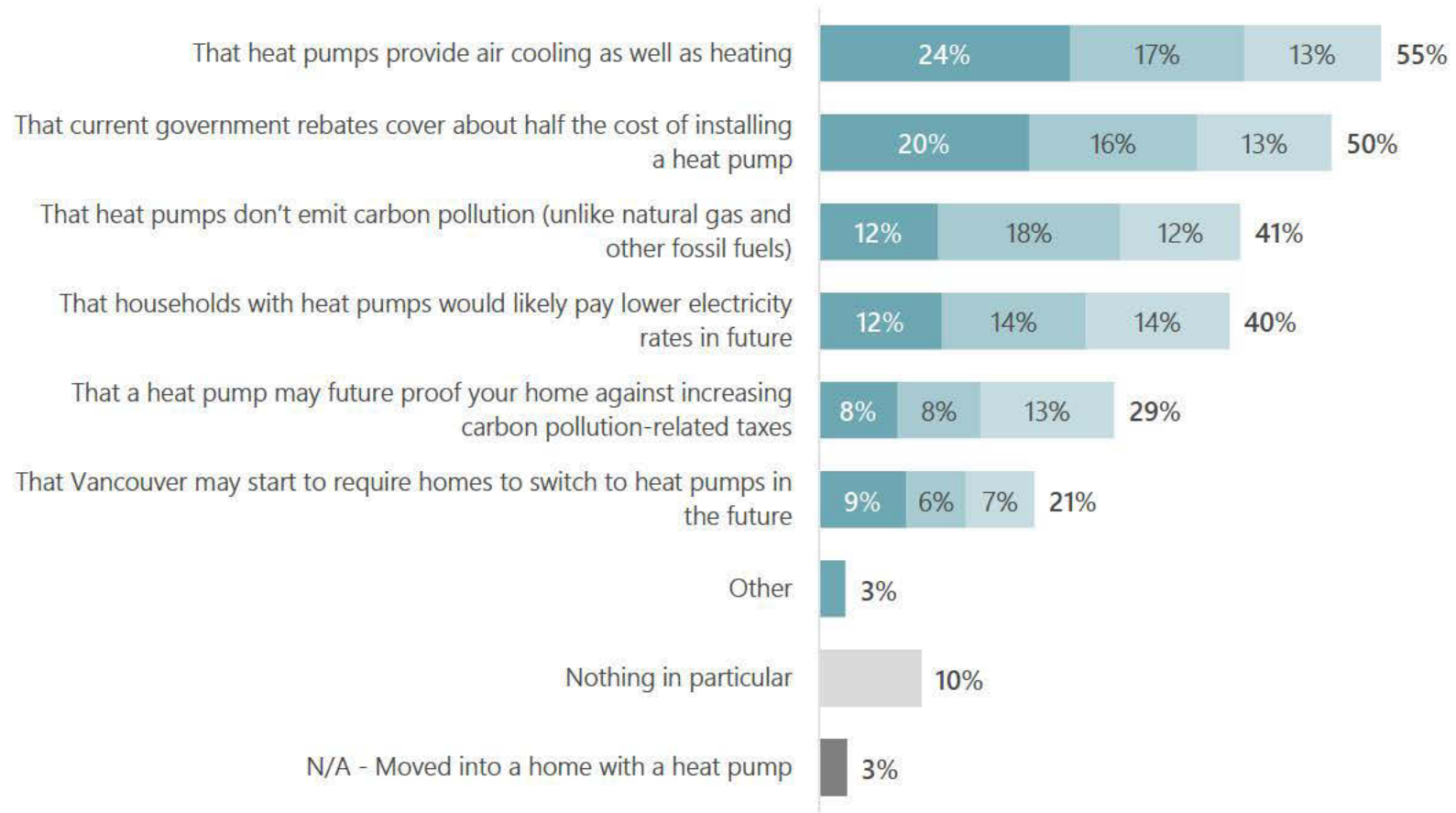
Government rebates that cover about half the cost of installing a heat pump also encourage homeowners. 50% cite this as a motivator, up from 39% a year ago.

Playing more of a supporting role in the decision is that heat pumps do not emit carbon pollution (41%). However, among younger residents, this is more important factor (53%).

The possibility of paying lower electricity rates or avoiding carbon pollution taxes currently register as moderately motivating. However, should such costs become a reality they would no doubt encourage many homeowners to install a heat pump.

## Most Motivating Reasons for Installing a Heat Pump (Aided)

April 2023 Base: All Homeowners (224)



### Total Selecting

	Apr '22	Apr '23
	n=246	n=224
That heat pumps provide air cooling as well as heating	55%	55%
That current government rebates cover about half the cost of installing a heat pump	39%	50%▲
That heat pumps don't emit carbon pollution (unlike natural gas and other fossil fuels)	39%	41%
That households with heat pumps would likely pay lower electricity rates in future	42%	40%
That a heat pump may future proof your home against increasing carbon pollution-related taxes	25%	29%
That Vancouver may start to require homes to switch to heat pumps in the future	19%	21%
Other	4%	3%
Nothing in particular	14%	10%
N/A - Moved into a home with a heat pump	3%	3%

■ Rank 1 ■ Rank 2 ■ Rank 3

Total Selecting

▲▼ Significantly higher/lower than April 2022

Note: Question added in April 2022. / Net percentages may not add up to the sum of the individual response categories due to rounding.  
 C2. There are several reasons for installing a heat pump. Which of these reasons [are / were] most encouraging or motivating to you? Please rank up to 3 reasons

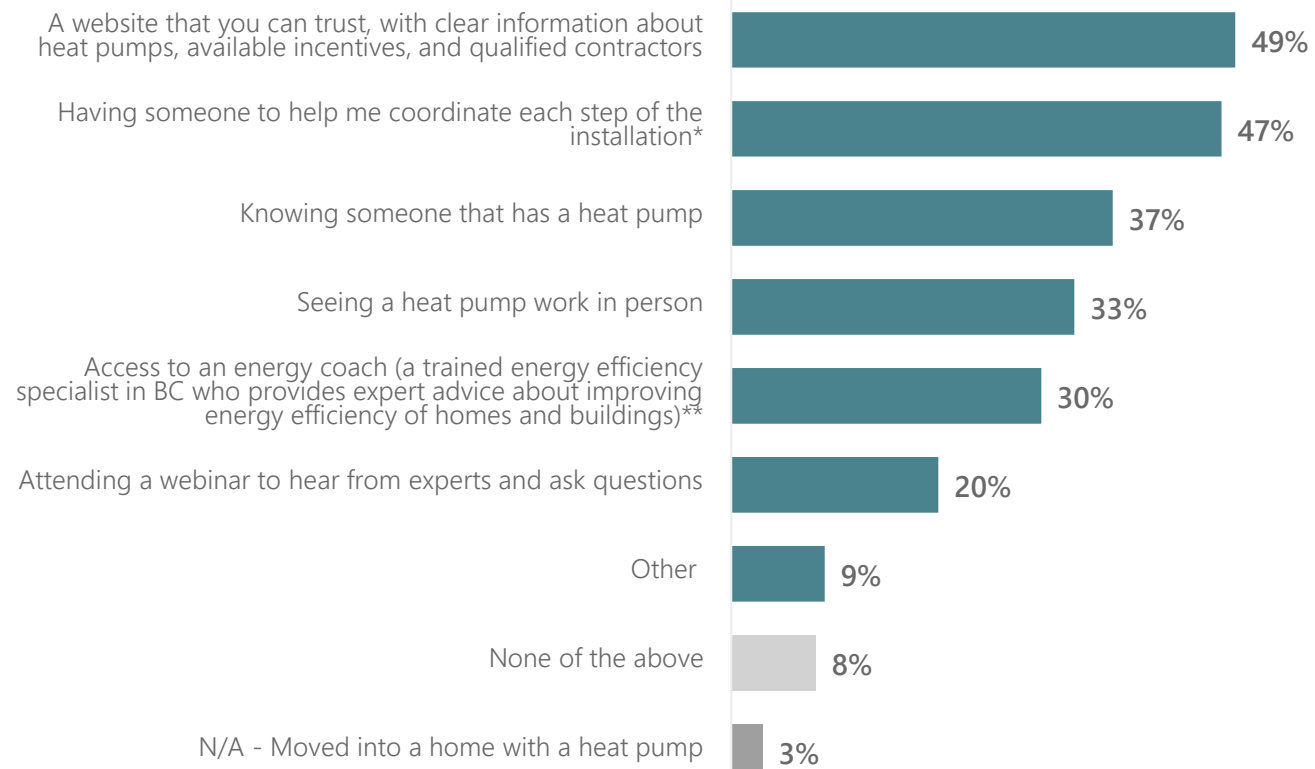
# Homeowners would appreciate a trustworthy informative website and someone to help them coordinate installation.

Other helpful resources would be knowing someone who has already installed a heat pump (37%) and seeing a heat pump in action (33%).

When it comes to energy coaches, younger homeowners expressed more interest (39%) than those 40 or older (27%).

## What Would be Helpful if Thinking about Installing a Heat Pump? (Aided)

April 2023 Base: All Homeowners (224)



	Apr '22	Apr '23
	n=246	n=224
	54%	49%
	n/a	47%
	31%	37%
	36%	33%
	32%	30%
	19%	20%
	9%	9%
	15%	8%
	3%	3%

Note: Question added in April 2022.

\*Answer option added in April 2023 / \*\*April 2022 wording: Access to an energy coach that can answer your questions and point you to available incentives C3. And what [would you find / would you have found] helpful if you were thinking of installing a heat pump?

# Installation remains the top barrier for heat pumps.

All residents were asked about their perceptions of heat pumps.

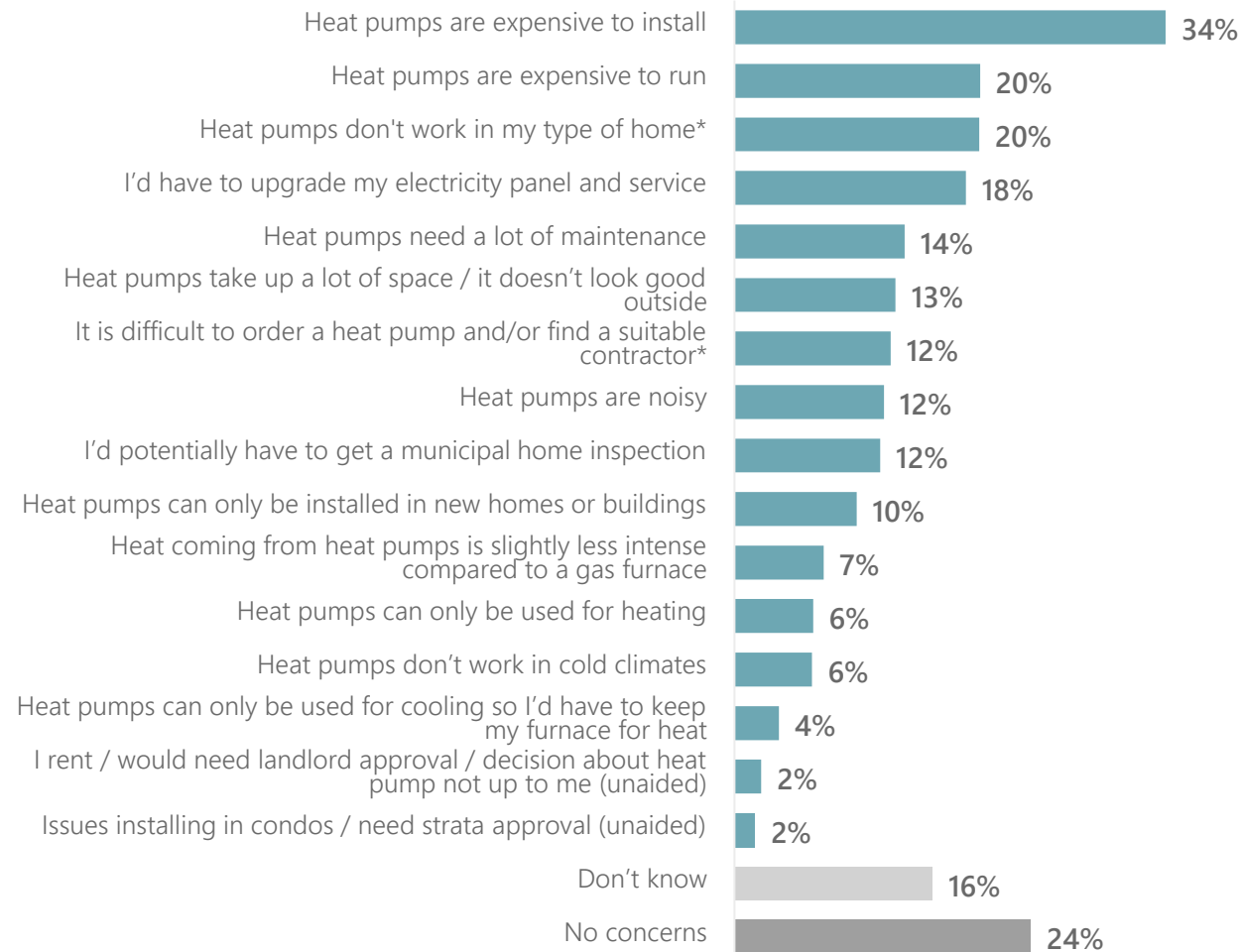
The most common belief is that heat pumps are expensive to install (34%), are not suitable for their type of home (20%) or would require an electricity panel and service upgrade (18%).

Operating a heat pump can also be a perceived barrier with 20% believing they are expensive to run (20%) or need a lot of maintenance (14%).

Homeowners hold the same set of perceptions but at higher levels. In particular, 43% of homeowners cite installation costs as a reservation about heat pumps.

## Perceptions about Heat Pumps (Aided)

Apr 2023 Base: All residents (427)



Apr '22	Apr '23
n=417	n=427
34%	34%
15%	20%
n/a	20%
15%	18%
11%	14%
14%	13%
n/a	12%
14%	12%
12%	12%
12%	10%
7%	7%
4%	6%
6%	6%
3%	4%
2%	2%
3%	2%
24%	16% ▼
19%	24%

▲▼ Significantly higher/lower than April 2022

Note: Question added in April 2022. / \*Answer option added in April 2023.

C4. Here are some possible perceptions that some people may have. Do you personally have any of these reservations about heat pumps? Please select all that apply.



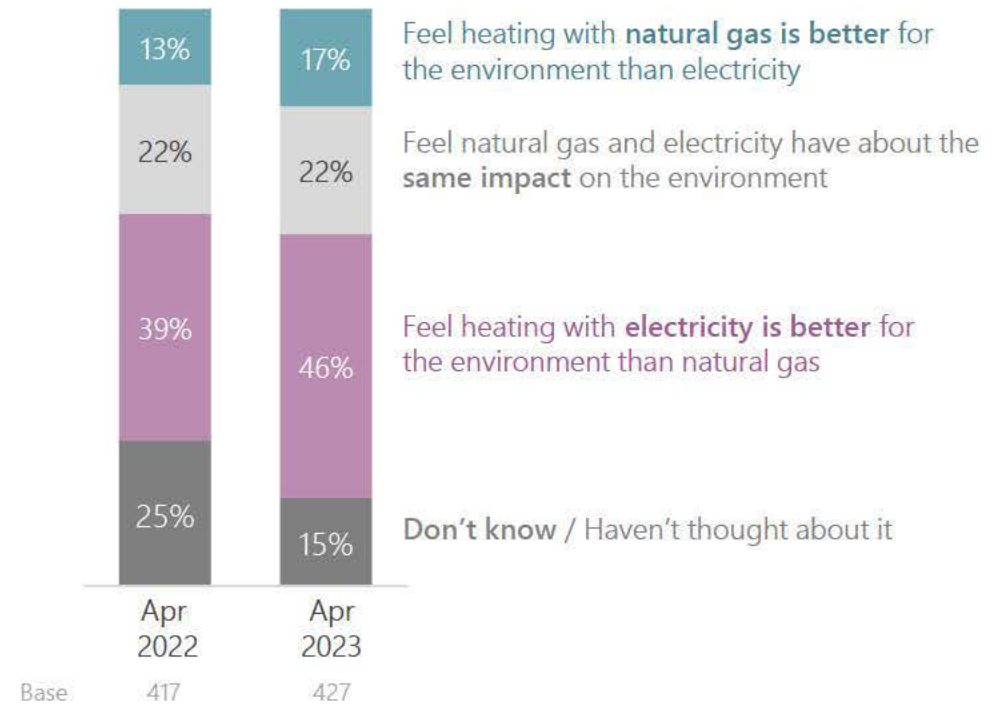
# Residents lean more toward electricity than natural gas.

By nearly a three-to-one margin, residents believe that heating with electricity is better for the environment than natural gas (46% vs. 17%).

Although the ratio of preference is fairly similar to a year ago, fewer residents hold neutral opinions on the topic or lack an opinion.

## Perceptions about Natural Gas versus Electricity

Base: All residents



Note: Question added in April 2022.

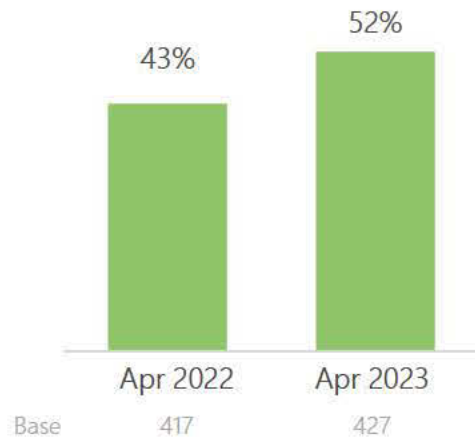
C5. The two most common sources of energy for home heating in British Columbia are natural gas and electricity. Please select the point on the scale that best reflects your view.

# Two-thirds of residents are concerned about the health concerns that have been linked to gas appliances.



### Aware that Air Pollution from Gas Appliances has been Linked to Health Concerns\*

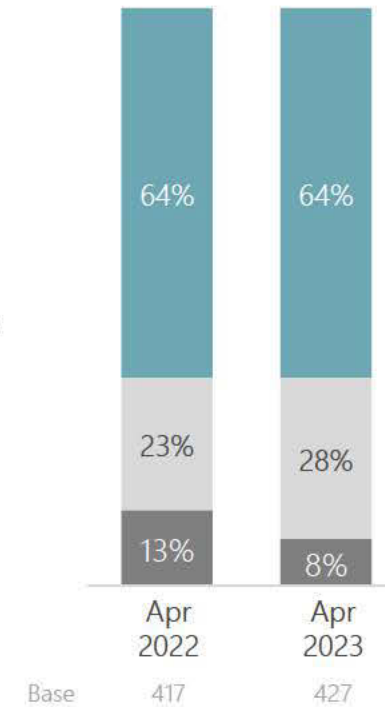
Base: All residents



### Are you Concerned about this?

Base: All residents

- Yes
- No
- Don't know



Note: Questions added in April 2022.

\*April 2022 question wording: C6a. Did you know that air pollution from gas appliances has been linked to health concerns especially for asthmatics and children?

C6a. Did you know that indoor air pollution from natural gas appliances (most notably kitchen gas stoves) has been linked to health concerns especially for asthmatics and children? / C6b. Are you concerned about this?

# Most residents are aware of and concerned about the health problems associated with motor vehicle pollution.

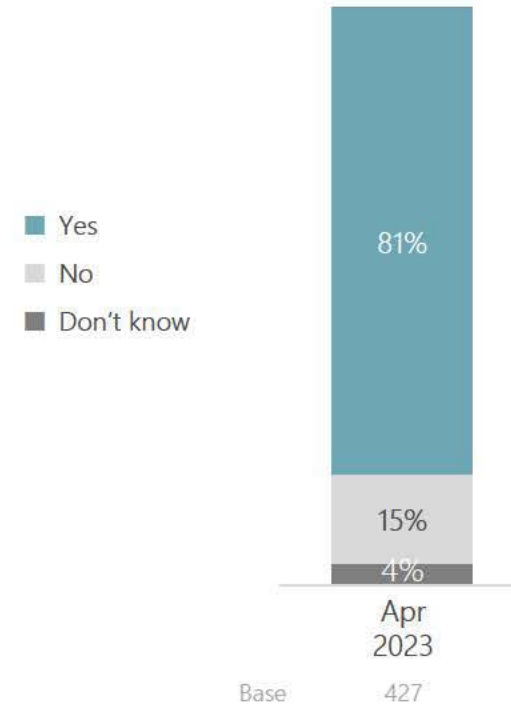
## Aware that Outdoor Air Pollution from Burning Fuel in Vehicles has been Linked to Health Concerns

Apr 2023 Base: All residents (427)



## Are you Concerned about this?

Base: All residents



Note: Questions added in April 2023.

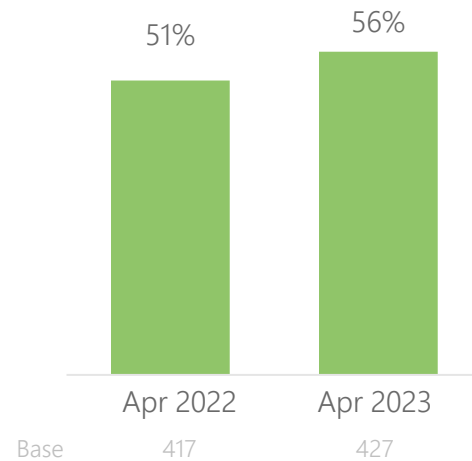
C6c. Did you know that outdoor air pollution from burning fuel in vehicles has been linked to health concerns, especially for those living on busy roads?/ C6d. Are you concerned about this?

# Those who have heard of Renewable Natural Gas tend to have favourable impressions.



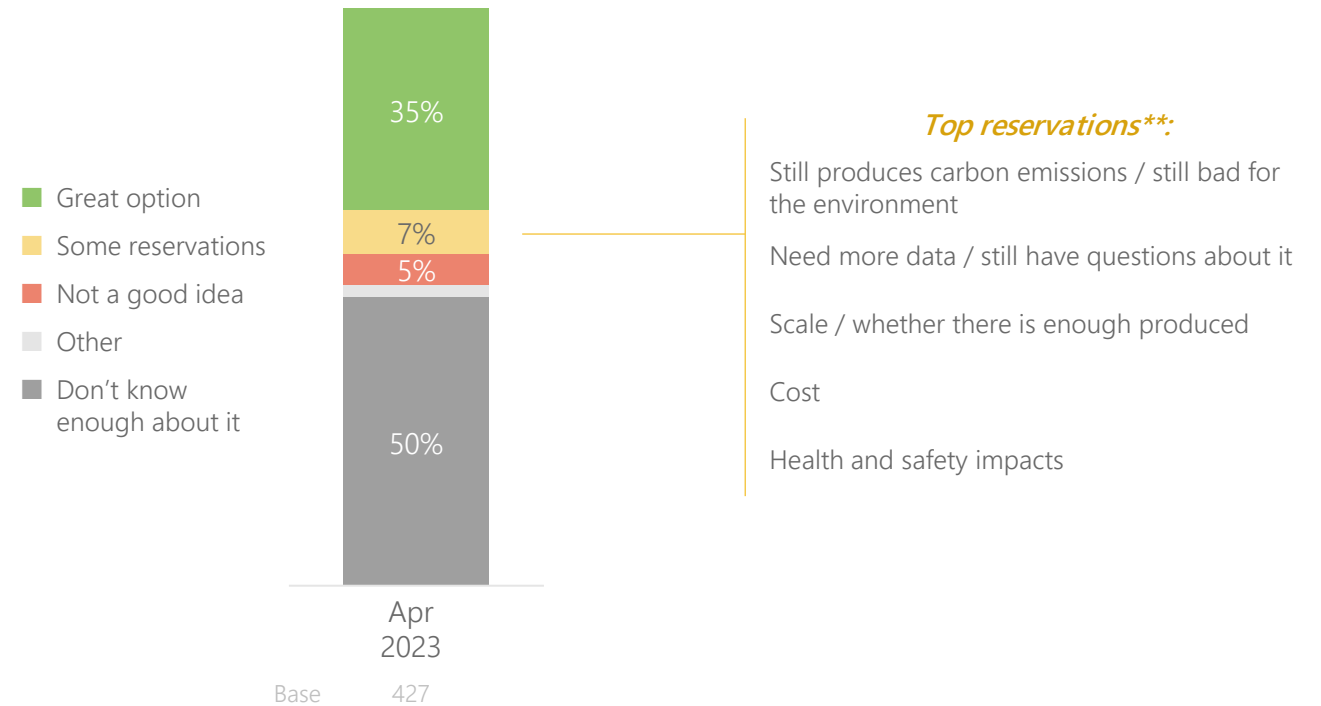
## Awareness of Renewable Natural Gas

Base: All residents



## Impressions of Renewable Natural Gas\*

Base: All residents



Note: Questions added in April 2022.

\*Removed the preamble about renewable natural gas from C7b in April 2023. This year's results are not directly comparable to April 2022. Therefore, the results have not been trended.. / \*\*Showing major mentions only C7a. Have you heard of renewable natural gas? / C7b. What is your impression of renewable natural gas? / C7c. What are your concerns?





APPENDIX

# Respondent Profile

# RESPONDENT PROFILE APR 2023

	Total
<b>Gender</b> (base)	427
Man	47%
Woman	52%
Non-binary / gender diverse	<1%
Other	0%
Prefer not to say	1%

	Total
<b>Age</b> (base)	427
18-29	14%
30-39	29%
40-49	17%
50-59	14%
60-69	13%
70-79	10%
80+	3%

	Total
<b>Region</b> (base)	427
DWE	16%
NE	18%
NW	17%
SE	31%
SW	18%

	Total
<b>Home Ownership</b> (base)	427
Own	52%
Rent	45%
Other	3%

	Total
<b>Home Type</b> (base: homeowners)	224
Condominium or apartment	30%
Single-detached home	58%
Townhouse or row home	8%
Duplex	4%
Triplex / Fourplex	0%
Other	<1%

	Total
<b>Household Income</b> (base)	427
Up to \$25,000	6%
\$25,000 to less than \$50,000	14%
\$50,000 to less than \$80,000	23%
\$80,000 to less than \$100,000	13%
\$100,000 or higher	30%
Prefer not to say	13%

	Total
<b>Race / Ethnicity of Ancestors</b> (base)	427
European Origins	48%
Asian Origins	37%
Latin, Central, or South American Origins	4%
North American Indigenous Origins	2%
African Origins	2%
Middle Eastern Origins	1%
Oceania Origins (Australia, New Zealand, Pacific Islander)	1%
Caribbean Origins	<1%
Other	5%
None in particular	1%
Prefer not to say	3%

	Total
<b>Language Spoken Most Often at Home</b> (base)	427
English	86%
Cantonese	6%
Mandarin	2%
French	1%
Punjabi	<1%
Spanish	<1%
Japanese	<1%
German	<1%
Korean	0%
Vietnamese	0%
Hindi	0%
Other	3%