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Technical Report

Re.Climate

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COMMUNICATING FOR CHANGE

BUILDING A SOCIAL MANDATE FOR CLIMATE ACTION

COMMUNICATING AFFORDABILITY

TECHNICAL REPORT

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Building a Social Mandate for Climate Action

A Technical Report for Communicating Affordability

The Evidence

The *Technical Report for Communicating Affordability* distills results from a national survey of 2,000 Canadians conducted from September 18 to October 3, 2024, by Environics Research on behalf of Re.Climate. The sample was drawn from a Canadian online panel with interlocking age and gender quotas within regions. Regional quotas were set disproportionately to allow for robust subsamples in Nova Scotia and New Brunswick (150 respondents in each province). The final sample was weighted to be representative of the Canadian population by age, gender, and region, according to the most recent census data. *NOTE: As online surveys use opt-in panels, this is a non-probability sample, and no margin of sampling error is calculated.*

The 2024 survey is the third to track Canadian perspectives on climate solutions like electrification and federal policies like the [clean electricity regulation](#). Each year¹, the survey measures fairness and acceptability perceptions of electrification and clean electricity regulation, as well as priorities for the electricity system (e.g., affordability, reliability, environmental sustainability). As a result, this *Technical Report for Communicating Affordability* reports results over two or three years, depending on the question.

New questions are included in the survey each year to explore emerging issues and test different narratives. In 2024, we measured agreement or disagreement with eight arguments for and against of heat pumps and electric vehicles. These arguments were part of discussions in 13 focus groups held from March 21 to April 25, 2024. These focus groups, conducted by Narrative Research on behalf of Re.Climate, also tested reactions to narratives designed to overcome arguments against Canada acting on climate change. We tested these narratives in the 2024 survey.

The link to the Environics topline report for the 2024 national survey is available in the Endnotes.¹ See the [Appendix](#) for results broken out by province and demographics. Crosstabs are available with results [weighted](#) and [unweighted](#). For more information on the historical research informing the 2024 survey, see our *Building a Social Mandate for Climate Action: A Playbook for Accelerating Public Engagement*² and our *Building a Social Mandate for Climate Action Technical Report*.³

¹ The first two national surveys were developed by Louise Comeau and the Conservation Council of New Brunswick

About Re.Climate

Re.Climate is Canada's go-to centre for training, research, and strategy on climate change communications and public engagement. Based at Carleton University, we provide strategic services to help practitioners reach new audiences, overcome polarization, communicate urgency, and motivate change.

Acknowledgments

The survey and the *Building a Social Mandate for Climate Action: A Technical Report for Communicating Affordability* was prepared by Dr. Louise Comeau, Senior Advisor at Re.Climate and a member of Canada's Net Zero Advisory Body. Jen Mayville was the copy editor. Design by Leigh Peterson, justafrog.net.

Topline recommendations

For communicators

1. Dollars and cents only messaging is not enough to increase uptake or support for climate change solutions.
2. Attend to the differing emotional needs of audiences. Align messaging with your audience's engagement level. Gain-framed messaging (makes your life more affordable) is most suited for more engaged audiences and loss-framed messaging (risks higher bills) is more suited for less engaged audiences.
3. Strengthen personal and collective agency and efficacy, and fairness perceptions:
 - a. I/We can do this; We are making progress.
 - b. I/We can do this effectively; Show how solution X works, how people accessed it, and why it works for the average Canadian.
 - c. Emphasize the benefits to nature and future generations from the energy transition and the use of energy-efficient technologies like heat pumps and electric vehicles:
 - i. Tell the story of how solutions address the primary cause of climate change: burning fossil fuels like oil, gas and coal.
4. Do more to engage rural communities and conservatives, to increase female confidence in solutions (technologies and processes), and to tell stories that resonate with lower-income and educated households.

For program managers and policymakers

1. Make energy-efficiency programs and incentives easier to access (e.g., no up-front costs, and/or higher incentives) to address the tendency to heavily discount future savings over current expenditures).
2. Focus on the users' experience and accessibility (e.g., provide assistance with applications processes). Promotional materials should:
 - Feature people who have adopted technologies like heat pumps and electric vehicles and let them tell their stories.
 - Answer non-financial questions such as how the solution or technology works and how it improves the users' quality of life.
 - Describe what the process is like and feature stories on how people access the incentives.
 - Explain options in less technical language for people less excited about the inner workings of a heat pump and an electric vehicle. Highlight reliability and other attributes like comfort and ease of use.
3. Explain and emphasize why solutions and electrification policies are reliable.

Background

Cost-of-living worries are a top-of-mind concern⁴ for Canadians and can be expected to remain so in the face of global, regional, and national economic turbulence.⁵ As environmental protection and climate change drops down the list of top-of-mind concerns, communicators have increasingly framed climate-change solutions as a way to improve affordability.

Given that cost-of-living worries also activate security values and emotions like fear, anxiety, and anger, it is reasonable to test whether the assumption that rationally constructed gain-framed messages are effective is correct. Academic research suggests that people, under certain conditions, are more sensitive to loss-framed (and fear-based) messaging than they are to gain-framed messaging.⁶

Climate change communicators are also more likely to be concerned about climate change. They may fall within a population segment called progressive activists who may be more open to gain-framed messaging. In other words, it is reasonable to ask whether we are communicating in ways that speak to people like ourselves.

We also know exposure to misinformation (e.g., sharing incorrect information unwittingly) and disinformation (knowingly sharing incorrect information) about climate-change solutions like carbon pricing, heat pumps, and electric vehicles is increasing⁷ skepticism and uncertainty about the effectiveness of these technologies and approaches. Re.Climate observed these issues in 13 focus groups held in the spring of 2024.

During the conversations, Re.Climate identified eight arguments used by focus group participants both for and against heat pumps and electric vehicles. We focused on household options because they are a more familiar reference point for individuals than system-level discussions on electrification or the energy system, although these were topics of discussion.

These eight arguments were included in our fall 2024 national survey of 2,000 Canadians as statements respondents could agree or disagree with using a 7-point Likert-type scale anchored by “strongly disagree” and “strongly agree”:

1. Only the wealthy can afford heat pumps and electric vehicles.
2. I have no choice but to use my current furnace or vehicle, even if they are not environmentally friendly.
3. I feel judged for living my life by elites who flaunt their heat pumps and electric vehicles.
4. I would invest in a heat pump or electric vehicle if I had financial help.
5. Heat pumps and electric vehicles aren't reliable; they're just a passing fad.
6. I feel angry that I can't afford a heat pump or electric vehicles.
7. I feel angry about being pressured into buying a heat pump or an electric vehicle.
8. I have a heat pump or electric vehicle, and they are saving me money.

We also measured, over the past three years, general fairness and acceptability evaluation of electrification due to the federal clean electricity regulation using two 7-point Likert-type scales (anchored by “very unfair” to “very fair” and “very unacceptable to very acceptable”).

In addition, we included in our survey a more detailed fairness measure assessing intrapersonal, interpersonal, and intergenerational perspectives about the potential distributional

effects of the clean electricity regulation (on a 7-point scale anchored by “strongly disagree” to “strongly agree”):⁸

- My financial situation will get worse.
- I will be worse off compared to others.
- Everybody will be affected to the same extent.
- People with low incomes will be affected more than people with high incomes.
- People who consume the most electricity will be most affected.
- Nature, the environment, and future generations will be protected.

These statements represent perceptions of distributional fairness, one important aspect of fairness evaluations. Depending on the situation, people may also assess the fairness of a process (e.g., is the process fair, am I supported in participating) and representational fairness (e.g., do I have access and can I influence outcomes).

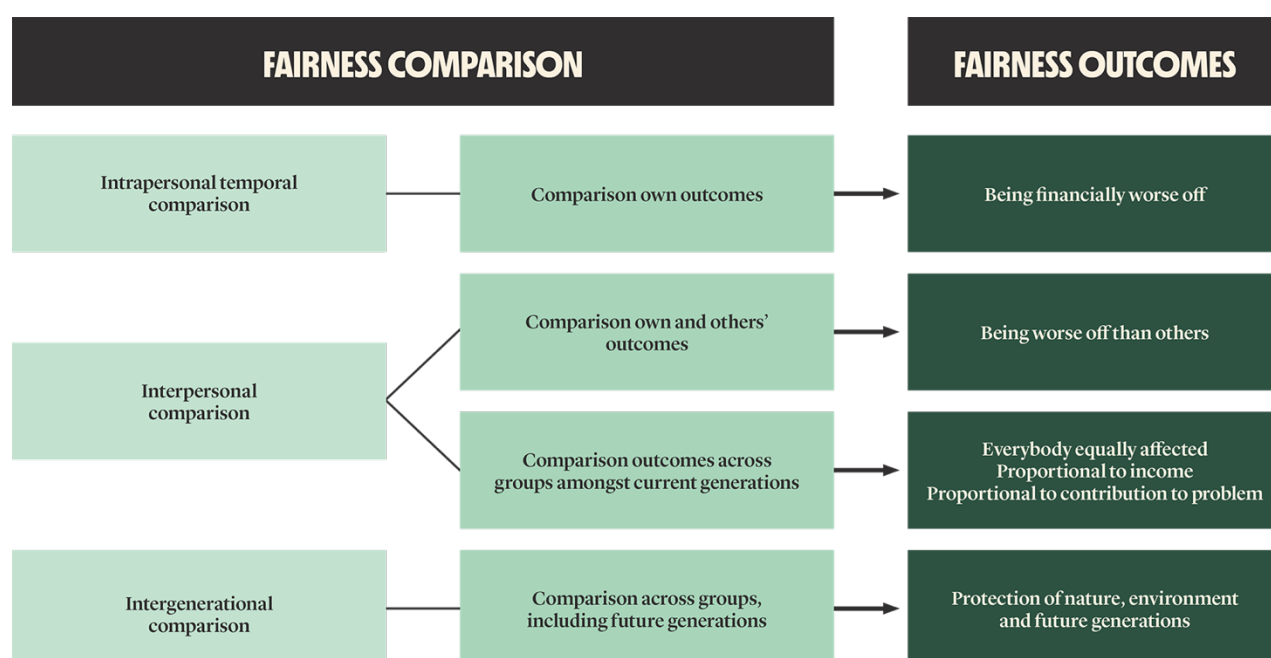


Figure 1. Adapted from Schuitema, G., Steg, L., & Kruining, M. v. (2011). *When are transport policies fair and acceptable?* *Soc Just Res*, 24, 66-84.

Given the affordability focus of our research, we focus on distributional fairness concerns for this survey. Figure 1 identifies three categories of fairness comparison (intrapersonal, interpersonal, and intergenerational) and four evaluation outcomes (the first two columns). The six fairness outcomes (third column) inform the statements used in the Re.Climate survey.

Fairness comparisons involve evaluating a potential outcome relative to myself (interpersonal, e.g., being worse off financially), between myself and others and across groups within current generations (interpersonal comparison, e.g., being worse off than others, everybody equally affected, affected proportional to income, or proportional to contribution to the problem), and across groups, including future generations (e.g., whether nature, environment, and future generations will be protected).

We also measure priorities for electricity based on utility legislation, generally requiring electricity to be affordable, reliable, and environmentally sustainable. Survey respondents who indicated that affordability is their primary concern when it comes to electricity were also asked whether existing policies that provide financial support to help cover the up-front costs of energy-efficiency upgrades, installing heat pumps, and switching from gasoline to electric vehicles make these options more affordable. Respondents could indicate “not more affordable”, “somewhat more affordable”, “more affordable”, and “much more affordable”.

Based on focus-group conversations, we also tested four narratives to counter the tendency of focus group participants to rationalize why Canada should not act on climate change. The narratives are framed as “Canada is making progress”, “Every tonne counts”, “We’ve done this before”, and “Keeping up with China”.

Canada is making progress

[Research](#) shows Canada’s carbon pollution is shrinking and investments in solutions like wind, solar, and battery storage are growing. Consumers are buying plug-in hybrids and electric vehicles and installing cold-climate heat pumps that work in -30C temperatures. Rules are being set to regulate critical minerals mining and to ensure vehicle and battery recycling. All these actions are part of a growing global trend. But the work isn’t finished. We need more clean energy to power our communities, clean up the air and water, and protect our health, here at home and around the world. When we say yes to clean electricity solutions, we control climate change before it is too late for our kids.

Every tonne counts

Some people argue Canada should do less to cut the pollution unbalancing the climate because we generate only 1.5 per cent of global emissions. They say Canada’s actions don’t matter because China and the United States are the world’s biggest polluters. In fact, according to [Environment Canada](#), Canada is the second highest per capita emitter in the world, and we rank in the top 12 of all countries in total emissions. It is also true that one-third of global emissions are produced by countries emitting 1.5 per cent or less of global carbon pollution. The hard truth of climate change is that the world needs to eliminate all fossil fuel pollution quickly, if we are to avoid making extreme weather worse. Every tonne counts, including Canada’s.

Keeping up with China

According to the International Energy Agency, in [2023](#), China commissioned as much solar photovoltaics (solar panels) as the entire world did in 2022, while its wind additions also grew by 66 percent year-over-year. China is now the world’s largest investor in wind and solar, followed by the United States, Germany, and India. Canada’s investments in renewable energy are growing, but not at the same pace as these countries or at levels high enough to reach our pollution-reduction and electrification goals. There will be costs to renew our electricity system, but these are worthwhile investments for our future competitiveness and the health of people and nature.

We’ve done this before

According to the [Canada Energy Regulator](#), Canada’s electricity system grew ten-fold between 1950 and 2000 to support a growing population and economy. Today, electricity

supplies about 20 per cent of the energy we use in Canada. In the next 20 years or so, electricity will power 60 per cent of our energy as we switch to efficient technologies like heat pumps and electric vehicles. We will also make most of our electricity from wind, solar, and hydro rather than coal, oil, and gas. We've grown the electricity system before, and we can do it again, with less pollution. There will be costs, but these are worthwhile investments for our future competitiveness and the health of people and nature.

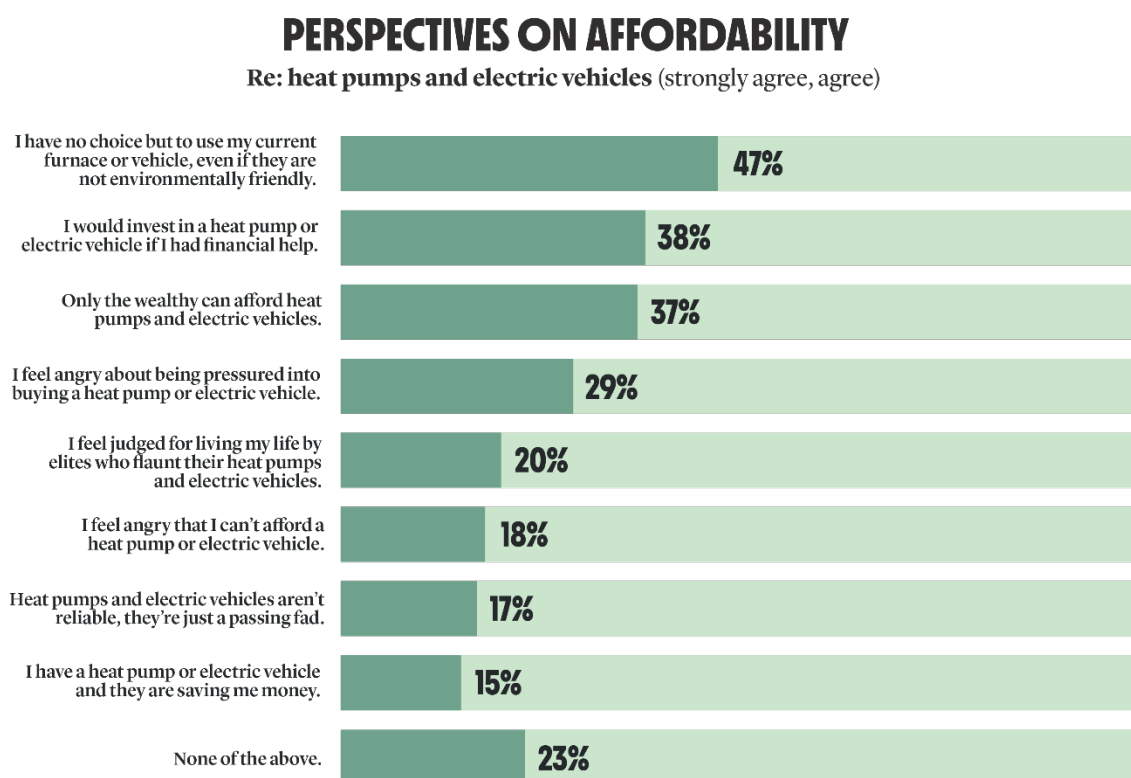
We propose refined narratives for testing in the recommendations section.

What did we learn?

Perspectives on affordability

Survey results validate focus group participants' perspectives:

- Nearly half of survey respondents (47 per cent) feel that they have no choice but to use their current furnace or vehicle even if they are not environmentally friendly.
- Almost four in 10 (38 per cent) say they would invest in a heat pump or electric vehicle if they had financial help.
- Yet, nearly the same number (32 per cent) also say that financial incentives do not make these technologies more affordable (discussed further below).



"To what extent do you agree or disagree with the following statements?" (strongly agree, agree)

Figure 2. While 23 per cent of survey respondents have no view of heat pumps or electric vehicles, those that do lack confidence in their ability to engage with these technologies.

- Almost four in 10 feel (37 per cent) that only the wealthy can afford heat pumps and electric vehicles.
- Twenty-three per cent have no opinion about any of the statements.

These perspectives suggest low agency and efficacy when it comes to adopting heat pumps and electric vehicles. Believing that you have a choice, that you can access climate change solutions, and that these technologies will work are essential to increasing the uptake of these technologies or supporting electrification policies.

Just as notable is the level of negative emotions, with almost three in 10 (29 per cent) feeling angry about being pressured into buying a heat pump or electric vehicle, two in 10 feeling (20 per cent) judged for living their life by elites who flaunt their heat pumps and electric vehicles, and 17 per cent who feel that heat pumps and electric vehicles aren't reliable, they're just a passing fad. These negative emotions are summarized in the top row of Figure 3.

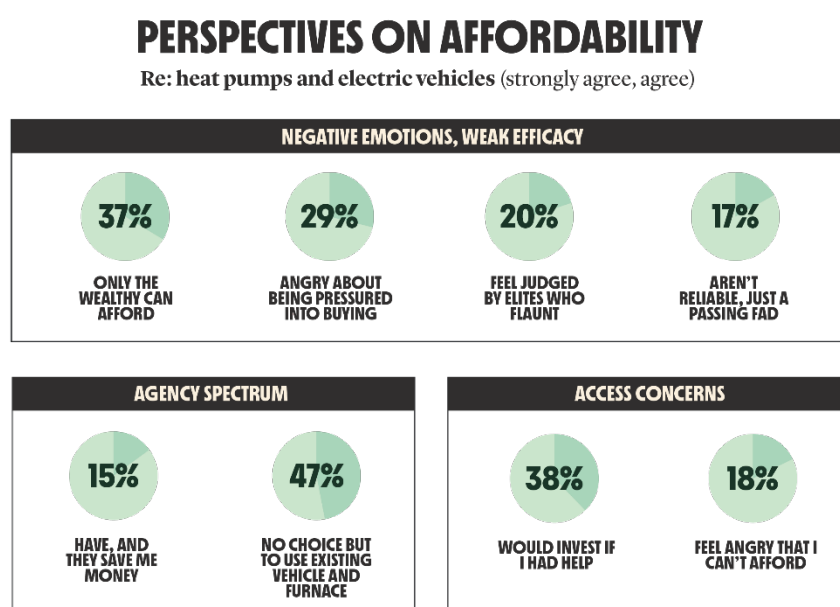


Figure 3. Items representing negative emotions or evaluations (top row) represent a coherent perspective, as are access concerns (bottom right). Bottom left items represent two independent items on opposite ends of the agency spectrum.

Statistical analysis² shows the four items representing negative emotions and evaluations (top row, Figure 3) are negative influences on survey responses. The bottom left items reflect independent perspectives at opposite ends of the agency spectrum, with respondents having a heat pump or electric vehicle consistently showing greater agency and support for electrification policies, while those with access concerns (bottom right, Figure 3) who feel they have no choice but to use their existing furnace and vehicle showing weaker agency and are more neutral or negative about electrification policies.

² Principle component factor analysis

Survey results reveal distinct demographic, regional and political patterns in perceptions of accessibility and agency regarding heat pumps and electric vehicles. People living in rural locations, having a high school or college education, or intending to vote Conservative tend toward more negative emotions than do people living in urban settings, having a university education, or intending to vote for left-leaning parties:

- Saskatchewan residents stand out in feeling that only the wealthy can afford heat pumps and electric vehicles and that the technology is unreliable and a passing fad relative to other provinces.
- Quebecers are more inclined to feel judged for living their lives by elites who flaunt their heat pumps and electric vehicles.
- People who live in rural communities or would vote New Democrat feel angry that they can't afford a heat pump or an electric vehicle.
- People living in Atlantic provinces are less inclined to feel these negative emotions.
- Access concerns (people who would invest with help and/or feel angry they can't afford) are highest for people with university degrees, males, or those who would vote Liberal or New Democrat.

With respect to the agency spectrum, we see an income split, with those having the technology most likely to earn more than \$120,000 a year and those who feel that they have no choice earning less than \$60,000 a year. Females and people who intend to vote Conservative also are more likely to feel that they have no choice but to use their existing furnace and gasoline vehicle. People already having heat pumps and electric vehicles are also more likely to be university educated, be between the ages of 55 and 74, male, and intend to vote Liberal.

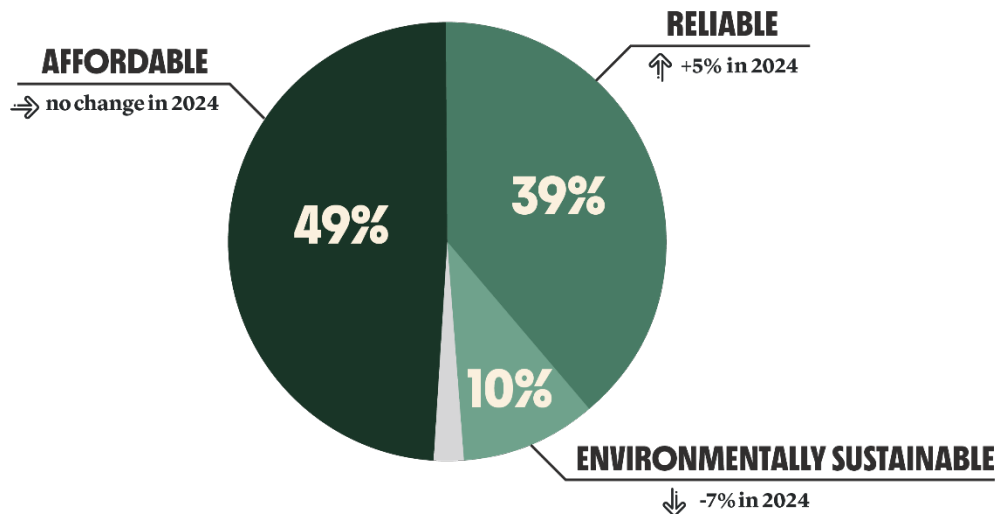
These results suggest legitimate reasons for perceiving the technology is accessible only to the wealthy, although cultural influences, gender-based confidence levels, and policy also play a role. People living in Saskatchewan and Alberta, with few supportive policies targeting households, are least likely to have the technology or to say they would invest with help. In contrast, people living in British Columbia, Quebec, and the Atlantic, where incentives are more prevalent,⁹ are most likely to say they would invest with help. Quebecers are most angry about not being able to afford a heat pump or electric vehicle; people living in Manitoba and Saskatchewan are least so.

Electricity priorities and the role of incentives

Affordability concerns are the number one priority for electricity followed by reliability and environmental sustainability.

- Forty-nine per cent say affordability is their number one priority, no change since 2023.
- Reliability is a growing concern, up five per cent over 2023 (39 per cent in 2024 from 34 per cent), and a number one priority for people living in Quebec, those over 65 years of age, and for people who intend to vote Liberal.
- Environmental sustainability is the number one priority for electricity for 10 per cent of survey respondents, down seven per cent from 2023, and consistent with the increase in cost-of-living concerns and other issues shifting attention from environmental protection and climate change.

Number one priority when it comes to electricity



*“Which aspect is most important to you when it comes to your electricity?” #1 Priority (compared to 2023)
Base: All respondents (n = 2,000) | 2% of respondents answered “Not sure” (displayed in grey)*

Figure 4. Reliability concerns are increasing, while environmental sustainability is falling as a priority for the electricity system.

People earning less than \$60,000 a year, or who have a high-school education, are 35-to-44 years old, live in rural locations or the Atlantic are more likely to rank affordability their number one priority for electricity. People who intend to vote Conservative feel the same way, suggesting a cultural dimension is also at play.

Conservatives are well represented in the survey sample at 28 per cent of respondents, followed by Liberals (21 per cent) and the New Democratic Party (14 per cent). Seventeen per cent are undecided. Conservatives in the survey sample are also high-income earners with 19 per cent earning more than \$120,000 a year, compared to Liberals (15 per cent) and New Democrats (13 per cent).

Do incentives help?

Survey results suggest that many Canadians remain skeptical about incentives for heat pumps and electric vehicles, particularly for those who prioritize affordability. Survey respondents who indicated that affordability was the priority for their electricity were also asked to indicate whether they thought financial incentives for heat pumps and electric vehicles made these technologies more affordable.

- 32 per cent (n = 970) say “not more affordable”, up five per cent since 2023.
- 32 per cent say only “somewhat more affordable”, down two per cent since 2023.
- six per cent of survey respondents believe incentives make the technology “much more affordable”, no change since 2023.
- 15 per cent indicate incentives make the technology “more affordable”, down three per cent since 2023.

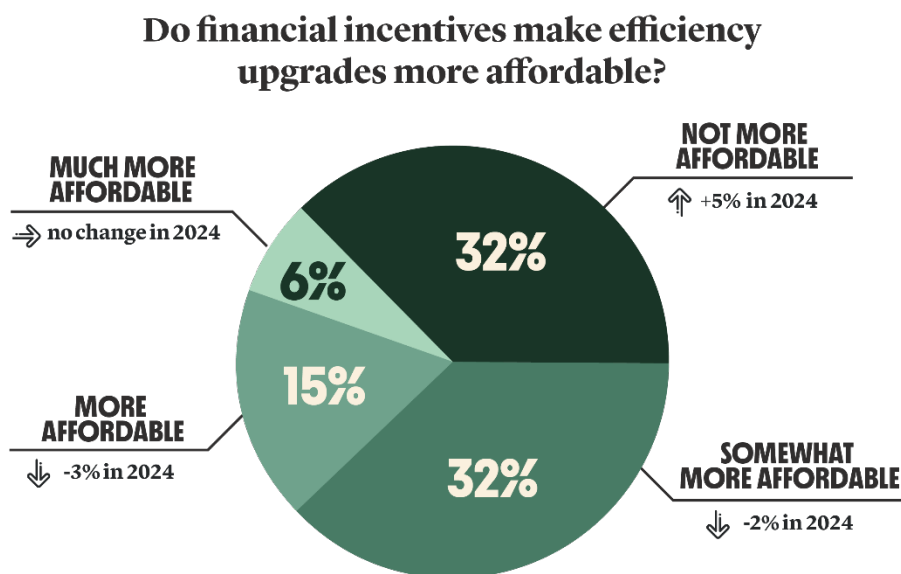
- Fifteen per cent are not sure.

People over 45 years of age are more inclined to think incentives do not make heat pumps and electric vehicles “more affordable”, while younger survey respondents say incentives make the technology at least “somewhat” or “more affordable”. Females are less optimistic than males about incentives, while people who would vote Liberal are more optimistic. While there are no significant differences among provinces, Alberta survey respondents are most inclined to say “not more affordable”.

Efficacy beliefs matter

Weak effectiveness beliefs are a concern as people won’t do something they don’t think works. This point is demonstrated by the fact that survey respondents who say they own a heat pump or electricity vehicle and are saving money are much more likely to say incentives help. For this group, 46 per cent say incentives make the technology “much more affordable” and 25 per cent say “more affordable”.

Canadians who own a heat pump or electric vehicle are essential and credible sources for stories about how they accessed incentives, how the process worked for them, and whether they find the technologies convenient and reliable.



“In the previous question, you indicated that ‘affordable’ is most important to you when it comes to your electricity. In your opinion, are existing policies that provide financial support to help cover the up-front costs of energy efficiency upgrades, installing heat pumps, and switching from gasoline to electric vehicles making these options more affordable?” (n = 970) Compared to 2023.

Figure 5. Sixty-four per cent of respondents don’t feel incentives make technology more affordable or only somewhat more affordable, with perspectives worsening since 2023.

What are we to make of these incentive results, given that 38 per cent of respondents say that they would invest in heat pumps or electric vehicles if they had financial help? Clearly, there is more at stake than just dollars and cents. Government and utility efficiency programs need to support people accessing programs in ways that extend beyond incentives to include assistance

with application processes. For many Canadians, there is a need to avoid upfront costs as people are heavily discounting current financial expenditures (loss) over potential gains.

What role do fairness evaluations play?

Public perceptions of the fairness of electrification policies have slightly improved, with more Canadians agreeing that the clean electricity regulation is fair in 2024 than in previous years.

- Fairness evaluations are up four per cent over 2023 (16 per cent in 2024 from 12 per cent in 2023, and up seven per cent from 2022, Figure 6).³
- The steep increase in unfairness evaluations from 2022 to 2023 has stalled, with little change from 2023 to 2024.
- Believing the clean electricity regulation is unfair increased nine per cent from 2022 to 2023, unfairness evaluations did not worsen from 2023 to 2024 (23 per cent in both years).
- There is a decline in the number of respondents with slightly negative/positive or neutral views (43 per cent from 49 percent in 2023 and 48 per cent in 2022).

Acceptability perspectives have remained stable in 2024 after falling 10 per cent from 2022 to 2023. Two in 10 respondents say the policy is “very acceptable” or “acceptable”. As with the fairness results, there is a large component of survey respondents who are neutral (44 per cent essentially unchanged from 2023 (43 per cent) and from 2022 (42 per cent)).

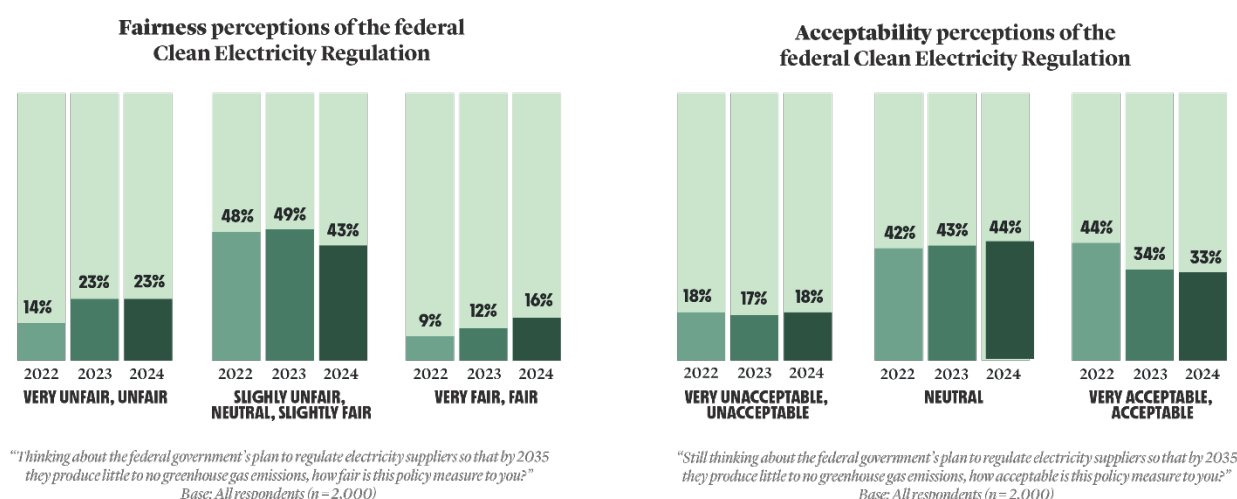


Figure 6. Fairness evaluations improved slightly in 2024, while unfairness evaluations held steady. Acceptability evaluations also held steady.

Demographic differences are consistent with results so far. People living in rural locations, or in Alberta and Saskatchewan, having a high-school or college education, or intending to vote Conservative find electrification policies like the clean electricity regulation unfair and

³ Each year, the survey question was edited only slightly to allow for comparability but also to reflect up-to-date information. In 2024, a slight change was made with loss-gain framing in mind.

unacceptable. People living in urban or suburban locations, or having a university education, or intending to vote Liberal or New Democrat find the policy fair and acceptable.

Table 1 summarizes fairness and acceptability results by province. Nova Scotians most find the clean electricity regulation fair and acceptable. New Brunswick residents are least inclined to find electrification policies like the clean electricity regulation fair and is tied with Alberta for lowest acceptability score.

Table 1. Fairness and Acceptable perspectives by province

Province	Very fair, Fair $p = .020$	Very acceptable, Acceptable $p = <.001$
British Columbia	30%	39%
Alberta	24%	28%
Saskatchewan	30%	34%
Manitoba	27%	30%
Ontario	32%	35%
Quebec	29%	37%
New Brunswick	22%	28%
Nova Scotia	37%	42%
Prince Edward Island	30%	35%
Newfoundland & Labrador	29%	31%

Unweighted.

Figure 7 summarizes the results for intrapersonal, interpersonal, and intergenerational fairness. The six questions formed two coherent factors in statistical analysis, with the three columns on the left representing unfairness evaluations and the three columns on the right representing fairness evaluations.

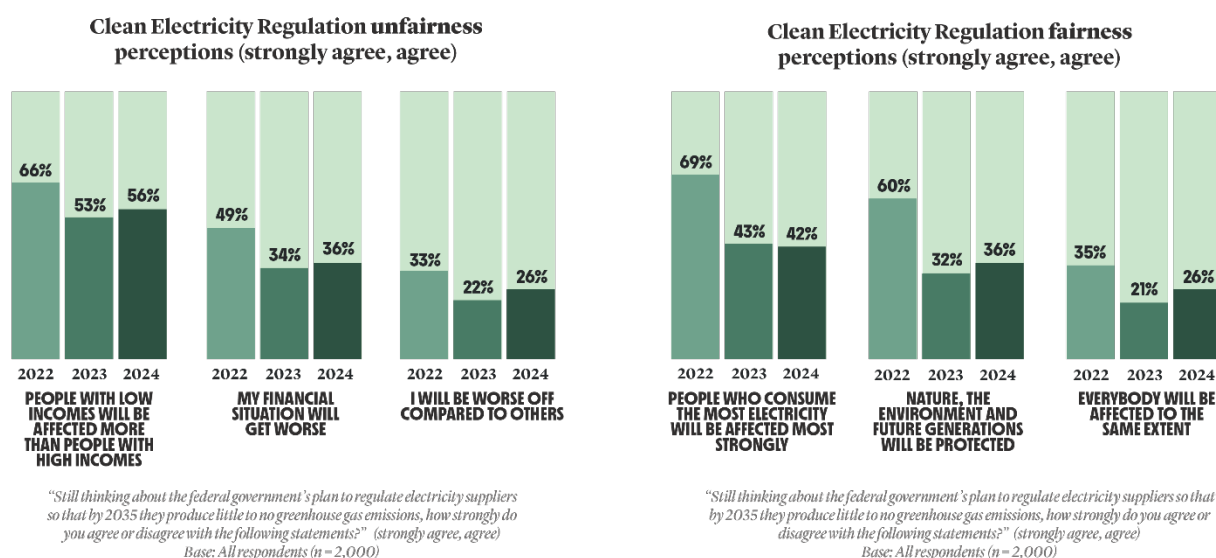


Figure 7. The first three columns represent intrapersonal and interpersonal unfairness concerns, while the three on the right represent intrapersonal and intergenerational fairness concerns. Each set of three columns represents a coherent concept identified by factor analysis.

With respect to unfairness measures, the biggest concern is that policies like the clean electricity regulation will harm low-income people more than it will harm high-income people.

- Fifty-six per cent of the sample indicate this is a concern in 2024, compared to 53 per cent in 2023, and 66 per cent in 2022.
- Next is concern about the risk to personal finances, with 36 per cent of the sample saying this is a concern, compared to 34 per cent in 2023, and 49 per cent in 2022.
- Concern that the clean electricity regulation will make me worse off compared to others (comparison across groups), ranks third at 26 per cent in 2024, 34 per cent in 2023, and 49 per cent in 2022.

From a fairness perspective (three questions, right side, Figure 7), results are more stable from 2023 to 2024 after a steep decline from 2022 to 2023.

- In 2024, 42 per cent feel people who consume the most will be affected the most, compared to 43 per cent in 2023, and 69 per cent in 2022.
- Thirty-six per cent feel that nature, the environment, and future generations will be protected from implementing the clean electricity regulation, compared to 32 per cent in 2023, and 60 per cent in 2022.
- Just over one quarter of respondents (26 per cent) feel everyone will be affected equally, compared to 21 per cent in 2023, and 35 per cent in 2022.

Rural residents, people living in Atlantic Canada or Alberta and Saskatchewan, earning less than \$60,000 a year, and those who would vote for the Conservatives and the New Democrats are most concerned about the effects of the clean electricity regulation on low-income households. Lower income, high-school graduates, females, people 45-to-64 years of age, and intending to vote Conservative, New Democrat or who live in Alberta are most convinced their financial situation will get worse because of electrification policies. Lower-income respondents and those intending to vote Conservative and New Democrat are more likely to be concerned that they will be worse off compared to others. Quebecers and people who intend to vote Liberal are most inclined to believe everybody will be affected the same by electrification policy, consistent with their assessment that the clean electricity regulation is fair.

The priority for framing and engagement is to increase perceived fairness and build efficacy, and that includes addressing the legitimate concerns of lower-income and rural households. In this next section, we will discuss framing and narratives.

Framing

Given that cost-of-living concerns remain a top priority for Canadians, what lies behind, if anything, the slightly improved fairness perceptions. One change made to the question chapeau text in 2024 was to say that with efficiency investments the clean electricity regulation will not increase power bills if efficiency measures are taken. The 2024 version said that electricity bills will decrease. a

2023

The federal clean electricity regulation requires that by 2035, utilities and electricity providers produce little to no greenhouse gas emissions while providing flexibility for emergencies. Other policies will increase the size of the overall electricity system in Canada to supply the power needed for electric vehicles, trucks, and transit systems. These policies could increase power rates, but household power bills will not increase if homes have energy efficiency upgrades, and vehicles shift from gasoline to electricity.

2024

The federal clean electricity regulation requires that, by 2035, utilities and electricity providers produce little to no greenhouse gas emissions while providing flexibility for emergencies. Other initiatives will increase the size of the overall electricity system in Canada to supply the power needed for electric vehicles, trucks, and transit systems. The result could be an increase in how much we spend on electricity, but for most households, overall energy bills will decrease if homes have energy efficiency upgrades and shift from gasoline to electric vehicles.

How fair is this policy measure to you?

While we cannot know for sure whether the word shift from “bills will not increase” to “bills will decrease” is responsible for the four per cent increase in fairness scores (there was also a four per cent shift in 2023 from 2022 with no word change), it is worth paying attention to these subtle differences.

Researchers¹⁰ investigating the effects of loss-gain framing, particularly relating to health, but increasingly, climate change¹¹, suggest that gain framing is most effective when an audience finds the information personally relevant, believes that they can execute the action, and that the proposed action will be effective (e.g., agency and efficacy). In cases with low relevance (as in our sample’s high neutral scores) and low efficacy (as in our respondents not perceiving incentives as effective and feeling they have no choice), loss framing or fear appeals can be more effective.

Adding to the complexity, the broad category of loss-gain framing can include loss, non-gain, and gain framing. Further, loss framing can be characterized as fear appeals, which research suggests work best when combined with efficacy statements, which in turn can increase hope.

What we do know is that academic researchers suggest that for highly engaged progressives, and for people who already own or engage with climate change solutions, gain framing can be most effective. Loss framing may be most effective for people less engaged, especially if combined with efficacy statements. Re.Climate will continue to focus on the issue of loss/gain framing and to investigate the conditions under which loss, non-gain, or gain framing is most suitable.

Narratives

Re.Climate developed four narratives to test in 13 focus groups. The goal of the narratives was to counter weak efficacy and rationalizations about why Canada is not an important player in cutting the carbon pollution from burning oil, gas and coal unbalancing the climate. One version of these four narratives was tested in the first 11 focus groups. Revised versions of the four narratives were tested in the two final focus groups. Re.Climate then included these four revised narratives in the national survey of 2,000 Canadians.

See the background section of this technical report for the original versions of the narratives. Table 2 summarizes the survey results (on a 7-point scale anchored by “very unconvincing” to “very convincing”).

Table 2. Narrative results (on 7-point scale anchored by “very unconvincing” to “very convincing”)

Canada is making progress Unconvincing: 11% Neutral: 53% Convincing: 36%	Keeping up with China Unconvincing: 13% Neutral: 58% Convincing: 29%
Every tonne counts Unconvincing: 13% Neutral: 52% Convincing: 35%	We’ve done this before Unconvincing: 14% Neutral: 57% Convincing: 29%

Unweighted.

The first thing to note about the narrative results is that the unconvincing scores are low (11 per cent to 14 per cent), while the neutral scores are high (52 per cent to 57 per cent). This suggests that survey respondents are unfamiliar with the arguments, but not necessarily opposed, which is consistent with focus group participant reactions. In focus groups, participants were open to receiving new information and updating their understanding based on this new information.

Further, “convincing” scores range from 36 per cent for “Canada is making progress”, 35 per cent for “Every tonne counts,” and 29 per cent for “Keeping up with China”, and “We’ve done this before.” These results suggest that while not familiar with the arguments, Canadians are open to being convinced by them.

Demographically, patterns remain consistent, with rural residents finding the narratives unconvincing, compared to urban and suburban residents, lower-income earners, compared to higher-income earners, high-school and college or apprenticeship educated, compared to university graduates, and Conservatives, compared to Liberals and New Democrats. While there are no significant differences among provinces when looking at each narrative, there are differences when comparing across the narratives.

Table 2 shows that British Columbia, Prince Edward Island, Saskatchewan, and Newfoundland and Labrador prefer “Every tonne counts” over “We’ve done this before” (by seven per cent for British Columbia, nine per cent for Saskatchewan, 20 per cent for Prince Edward Island, and 11 per cent for Newfoundland and Labrador). Alberta, Manitoba, Ontario, Quebec, New Brunswick, and Nova Scotia prefer “Canada is making progress”.

Table 3. Results for “very convincing” and “convincing”

Province	We’ve Done this Before	Keeping up with China	Canada is Making Progress	Every Tonne Counts
British Columbia	33%	37%	36%	40%
Alberta	27%	31%	33%	32%
Saskatchewan	27%	32%	35%	38%
Manitoba	28%	30%	37%	32%
Ontario	29%	29%	36%	34%
Quebec	31%	28%	37%	34%
New Brunswick	25%	20%	35%	31%
Nova Scotia	36%	33%	41%	42%
Prince Edward Island	20%	25%	35%	5%
Newfoundland & Labrador	25%	29%	27%	36%

Unweighted.

How does it all fit together?

Demographics matter. Affordability is a major concern for lower-income earners, those with a high school or college education, and those with high school or college education and those who live in rural communities. Living in Alberta or Saskatchewan influences results more negatively than does living in the Atlantic, Quebec, or British Columbia. Males are more confident in technology and the value of incentives and feel they have more choices than females.

Values matter. Left-leaning survey respondents are more positive about the prospects of electrification and the effectiveness of incentives relative to those who are right-leaning. Overall, however, while demographics and values matter, statistical analysis suggests these are weaker factors than emotions (e.g., negative versus positive), perceiving incentives as effective, and electrification policy as fair. Figure 8 summarizes the results through an agency, efficacy, and fairness lens.

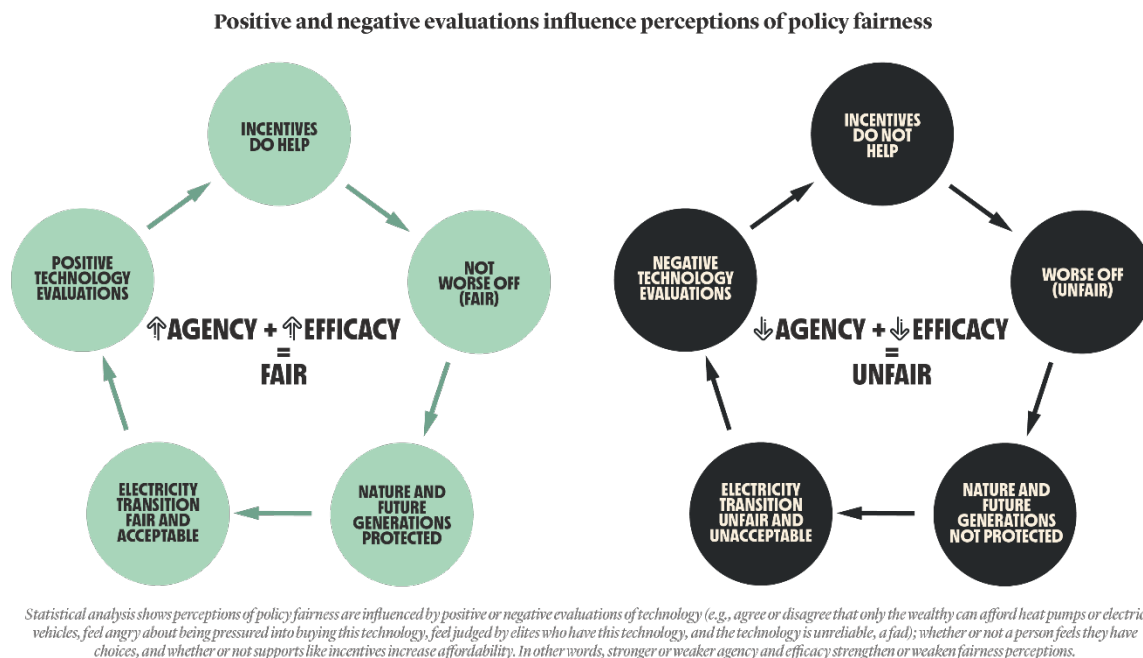


Figure 8. Positive technology evaluations, stronger perceived agency, and efficacy are associated with perceiving electrification policy as fair and acceptable and finding narratives convincing.

Positive evaluations are statistically⁴ associated with believing (or being neutral) that you will not be worse off financially or compared to others from implementation of the clean electricity regulation. A survey respondent with these perspectives (left side Figure 8) also tends to agree that everyone will be affected the same and to disagree that they have no choice but to use their existing furnace and vehicle, that the technology is unreliable, and that only the wealthy can afford the technology. This group is more likely to say they own a heat pump or electric vehicle and are saving money. These survey respondents believe the clean electricity regulation is fair and acceptable and are more likely to be more neutral about whether low-income people will be affected more than high-income people by the implementation of the clean electricity regulation. These positive evaluations extend to finding narratives more convincing than unconvincing.

Negative evaluations are statistically associated with (right side, Figure 8) agreeing that only the wealthy can afford heat pumps and electric vehicles, that you will be worse off financially or worse off compared to others, that low-income people will be affected more than high-income people, that they have no choice but to use their existing furnace and vehicle, and that heat pumps and electric vehicles are unreliable and just a passing fad. These respondents are more likely to disagree that they have a heat pump or electric vehicle and are saving money and that everyone will be affected the same by implementation of the clean electricity regulation. This group of survey respondents consistently finds the narratives unconvincing.

Summary

Re.Climate set out to better understand Canadians' perspectives on the accessibility, affordability, and effectiveness of electrification technologies like heat pumps and electric

⁴ Cluster, probabilistic and linear regression, moderation and mediation analysis

vehicles, the perceived fairness and acceptability of electrification policy, and whether narratives designed to counter arguments against taking action on climate change are convincing. Results suggest that while income, education, gender, community type, and vote intention influence results, perceived agency, efficacy, and fairness evaluations matter more. Further, focusing only on dollars and cents is unlikely to increase engagement or support for policy, particularly for less engaged segments of the population.

Our results suggest a stronger communications and engagement focus is required to strengthen perceived personal and collective agency, efficacy, and fairness evaluations. Messaging needs to align with the level of engagement, with gain messaging (makes your life more affordable) most suited to progressive, more engaged audiences and loss messaging (risks higher bills) more suited to less engaged audiences.

With respect to demographics, we need to do more to engage rural communities and conservatives, increase female confidence in solutions, and tell stories that lower-income and educated households find accessible.

Detailed recommendations

To counter weak personal and collective agency and efficacy, we need to tell stories about electrification that:

4. Build personal and collective agency: I/We can do this. At a personal level, emphasize the direct experience of users, tell their stories and show why it works for households, locally, regionally and nationally. Emphasize that we are making progress. A narrative like Canada is making progress should be further tested.
 - Canada is making progress. This narrative was most convincing and is most in line with strengthening perceived personal and collective efficacy. The narrative (below) has been adapted further since the survey and needs additional testing and ongoing refining. We need versions of Canada is making progress that better engage rural residents and less educated and lower-income Canadians. This narrative is a place to start, but we need to experiment!

[Research](#) shows Canada's greenhouse gas pollution is shrinking and investments in solutions like wind, solar, battery storage, hydro, and nuclear are growing. Our neighbours are buying plug-in hybrids and electric vehicles and installing heat pumps that work in -30C temperatures. Governments are setting rules to regulate the mining of the critical minerals we need and to ensure vehicle and battery recycling. These investments are part of a growing global trend. But the work isn't finished. We need to install more clean energy to power our communities and homes to clean up the air and water and protect our health. Say yes to clean electricity.
5. Build personal and collective efficacy: I/We can do this effectively. We need to do more to show how solution X works, how people accessed it, and why it works for the average Canadian.
 - Feature people with experience using energy technologies like heat pumps and electric vehicles; let them tell their stories.

- Do more to answer non-financial questions like how the solution or technology works and how it affects the users' quality of life. Describe what the process is like and how the person accessed the incentives.
 - Explain options in less technical ways for females less excited about the inner workings of a heat pump and an electric vehicle who may be more concerned about reliability or other attributes like comfort and ease of use.
 - Make incentive programs easier and cheaper to access (e.g., no up-front costs for people who either have little disposable income or are heavily discounting current expenditures over future savings).
6. Emphasize the benefits to nature and future generations from the energy transition and use of energy-efficient technologies like heat pumps and electric vehicles to boost fairness and acceptability evaluations.
 7. Emphasize the reliability of solutions, which is a growing concern and a priority for older people (and interestingly for residents of Quebec and those who intend to vote Liberal).
 8. Explain and emphasize why solutions and electrification policies are fair.
 9. When linking solutions to climate change, always indicate that the primary cause of climate change is the burning of fossil fuels. Too often, communicators fail to link the cause of climate change (e.g., humans burning coal, oil or gas; companies using their power to weaken regulations). We too often speak about greenhouse gas/carbon or fossil fuel emissions or pollution without saying where these emissions or pollution come from. Our survey showed that only 49 per cent of the respondents correctly identified burning fossil fuels as the primary cause of climate change.
 10. To help inoculate against arguments that Canada has little to do to help solve climate change, we need narratives that attribute responsibility like:

Every tonne counts

Some people argue that Canada should do less to solve climate change because we generate only 1.5 per cent of global greenhouse gas pollution. But one-third of the world's greenhouse gas pollution is produced by countries just like us that also emit 1.5 per cent or less. It's true that China and the United States are the world's biggest polluters, but [Canada](#) ranks 12th in total greenhouse gas pollution; we rank second per person. The hard truth is that the world needs to eliminate all greenhouse gas pollution, and quickly, if we are to avoid making extreme weather worse. Every tonne counts and that includes Canada's.

While ranking slightly less convincing than other narratives, "Keeping up with China" and "We've done this before" are not far behind. We should further refine and test narratives that aim to better engage through the lens of Canada's place in the world. These narratives are a start.

Keeping up with China

According to the [International Energy Agency](#), China installed as many solar panels in 2023 as the entire world did in 2022. China's wind turbine installations grew by 66 percent year-over-year. China is now the world's largest investor in

wind and solar, followed by the United States, Germany, and India. Canada's investments in renewable energy are growing, but not at the same speed as these countries, or at levels high enough to reach our pollution-reduction and electrification goals. Canada needs to keep up. These are worthwhile investments for future competitiveness, for the health of Canadians, and for the natural inheritance we are so proud of.

The age of electricity

Canada, and the world, is entering the Age of Electricity. Over the [next 20 years](#) or so, electricity will power 60 percent of the energy we use as we switch from natural gas to heat our homes and gasoline to power our cars. Our modern electricity system will mostly be powered by wind, solar, hydro, and nuclear rather than coal, oil, and gas. Our homes and communities will be powered by cost-saving technologies like heat pumps, and electric vehicles and transit. We've grown the electricity system before, and we can do it again to keep Canada competitive and the air clean for our kids.

Conclusion

Communicating climate solutions like electrification and technologies like heat pumps and electric vehicles is complicated. Articulating the financial savings from using these technologies or the availability of financial incentives is necessary but not sufficient. We need to make accessing technologies easier for lower-income households, people living in rural locations, and for females who are less confident about the benefits of heat pumps, electric vehicles, and electrification.

Our communications and engagement efforts must attend to the differing emotional needs of our audiences, with gain framing potentially doing more of the work when aimed at progressive audiences, who earn higher incomes and have university degrees. We need to do better than to engage this well-off segment of the Canadian population. We also want to engage other Canadians with different needs and perspectives, including through loss framing and fear appeals. A focus on easier access, both from a financial point of view (no up-front costs and/or higher incentives) and a process point of view (application assistance), is also required.

Endnotes

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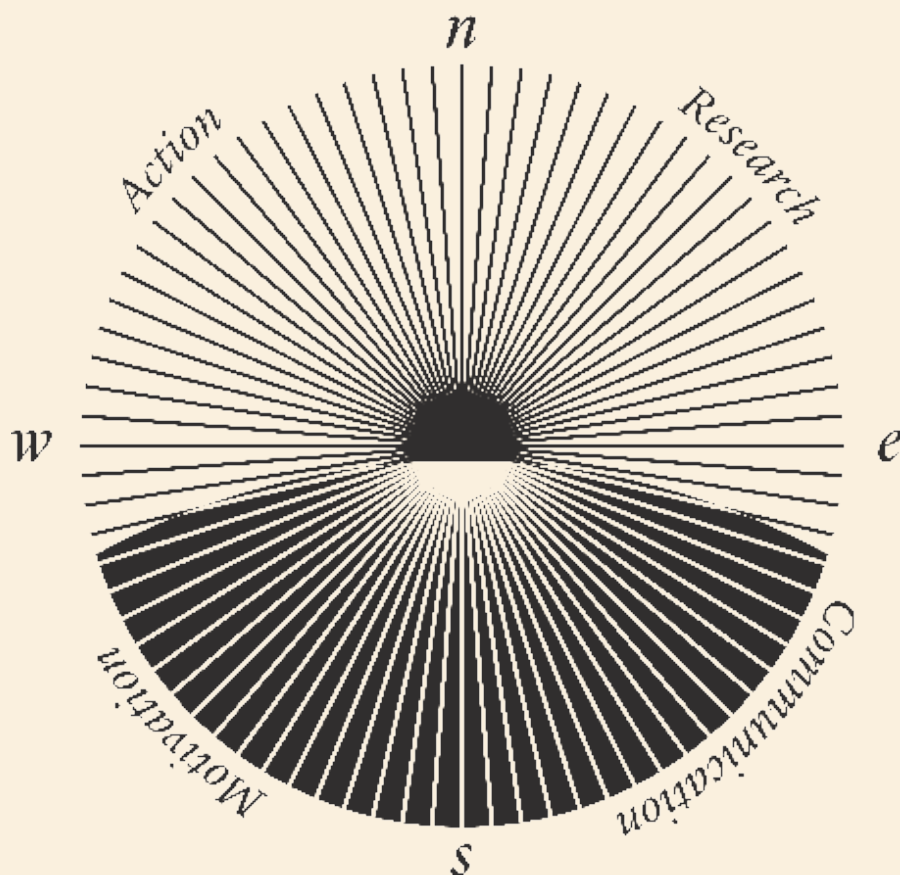
⁷ Organizations like Carbon Brief and Efficiency Canada are responding to misinformation and disinformation with myth busting fact sheets. Carbon brief: <https://www.carbonbrief.org/factcheck-21-misleading-myths-about-electric-vehicles/> and <https://www.carbonbrief.org/factcheck-18-misleading-myths-about-heat-pumps/>. Efficiency Canada: www.efficiencycanada.org

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