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Carbon Talk

Getting the frame right on carbon pricing

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EXECUTIVE SUMMARY

Narratives that frame carbon pricing as a common-sense tool to make polluters pay their fair share of environmental damages, while creating incentives that unleash innovation and creativity, are favoured by New Brunswickers, conclude researchers from the University of New Brunswick and UK-based Climate Outreach.

Carbon pricing is a tool for incorporating the costs of climate change pollution into the price of products and services. The goal is to encourage consumers and businesses to choose low-carbon or low-polluting options. The Government of Canada has established a national carbon pricing framework that all provinces must comply with by 2018. Provinces can establish a carbon tax that matches a federally mandated schedule of $10/tonne, starting in 2018, and rising $10/year, until it reaches $50/tonne in 2022. Or, provinces can establish a cap-and-trade program that must set an emissions limitation target at least as stringent as Canada's 2030 target of a 30% reduction below 2005 levels. The cap-and-trade program must lower the cap year over year such that the emissions reduced are at least equal to what would have occurred through carbon pricing alone[1].

New Brunswick is analyzing options for carbon pricing, including a potential hybrid program. The expectation is that the province will announce its approach in 2017 and implement the program in late 2018 or early 2019.[2] As in other jurisdictions, the idea of carbon pricing is contested in New Brunswick, with media coverage focused on costs to consumers and businesses; companies focused on competitiveness effects; and pro-environmental activists highlighting the clean energy benefits. The public is caught in the middle with little information, concerns about the implications on their cost of living, and little trust in government to allocate carbon pricing revenue appropriately.

Communication researchers around the world, including here in Canada, have been exploring ways of talking about climate change, and solutions that price carbon to enhance, rather than undermine, public support for action. Climate Outreach, a UK-based organization, is one of the institutions researching ways to improve the effectiveness of climate change communications, including working with the University of New Brunswick to study carbon pricing frames and narratives[3].

A frame is an "idea" that triggers patterns of thinking. Narratives are a way of talking about that idea or frame (Lakoff, 2002, 2004). An example of a frame used in this research is *Put New Brunswick First.* The narrative is*: "New Brunswick needs to be part of a global transition building a low-polluting energy system to fuel our economy. This provides an opportunity for us. With cap and trade in place, New Brunswick businesses can gain experience and market advantage in less polluting technologies. Acting now puts us ahead."*

Carbon pricing implementation is a priority of Canadian and provincial governments and the focus of public debate. This current context makes our research on carbon pricing frames and narratives timely and potentially useful as a practical aid to practitioners.

[1] http://news.gc.ca/web/article-en.do?nid=1132149

[2] http://www2.gnb.ca/content/gnb/en/news/news_release.2016.12.1180.html

[3] http://climatecommunication.yale.edu/; www.climateoutreach.org; http://www.climateaccess.org/

What we did

This research builds on investigations in 2015 and 2016 in Ontario and nationally exploring general population reactions to frames and narratives positively describing carbon pricing and its variations, carbon tax and cap and trade.

The overarching objective of this ongoing research is to determine which, if any, frames/narratives on carbon pricing are supported most strongly by the centre-left and centre-right, or given the politicization of climate change beliefs (McCright & Dunlap, 2011), span the generally parallel spectrum of climate change concern (the not too concerned, somewhat concerned and concerned). The goal in 2017 was to determine, through focus groups, why participants liked or disliked different carbon pricing frames and narratives, to refine narratives, and then to test, quantitatively, refined narratives through a representative sample of New Brunswickers.

We conducted three focus groups and executed an online survey with 505 New Brunswick respondents. One English and one French focus group were hosted using Webex technology by Corporate Research Associates (CRA), and one focus group was hosted at the University of New Brunswick. The Mixed Method section describes the process of recruitment.

The nine frames and narratives used in this research tested ideas described as: Makes Sense-Pollute More-Pay More; Personal Responsibility-Companies Follow; Balance; Polluter Pay-Fair-Accountable-Responsible; Market Failure-Market Signal; Where Does the Money Go?; Honest and Simple; Government Role-Cap; and Put New Brunswick First. For the full text of the narratives, see the Introduction and Tables 11 to 19[4]. Makes Sense-Pollute More-Pay More, the frame-narrative supported by the broadest spectrum of New Brunswickers, is a common-sense-do the right thing-be rewarded frame. This frame activates a sense of fair play, combined with the potential to pay less if you pollute less, and to do so by investing in new technologies:

> ***Makes Sense-Pollute More-Pay More****: Pricing pollution makes sense. Businesses that pollute more pay more. Businesses that use energy efficiently pay less. It encourages companies to invest in solutions and to develop new technologies.*

One focus group participant said this about the Makes Sense frame: "It is a good description because I get that to save money they will come up with better ways to reduce energy so in the end everybody wins."

In addition to the nine narratives, the survey, conducted on our behalf by CRA, measured climate change concern, public understanding of the causes of climate change, the human contribution to climate change, preferences for different energy sources, and perceived benefits associated with investing in clean energy in New Brunswick. We summarize top-line results and provide recommendations in the remainder of this Executive Summary.

[4] These frames have evolved from the original set of 12 developed by Climate Outreach based on survey and focus group results in Ontario, nationally and now in New Brunswick. The New Brunswick results, therefore, are not directly comparable to the Ontario and Canadian results, although the earlier research has informed this current work. Where questions are the same as used in previous surveys, we report the comparable results.

What we found

There are six key findings from this research:

- Carefully crafted frames and narratives can be supported by a broad spectrum of the population
- Opinions on carbon pricing are not well formed, and people are vulnerable to the cost frame
- Positive priming can increase support for policies that price carbon
- Information can be polarizing
- Climate change feels distant and agency is weak
- Investing in clean energy is perceived as good for the environment and human health

We briefly summarize the top-line results for the key findings. The Introduction and Results sections provide additional detail on our findings. Appendix 1 summarizes all results. Appendix 2 provides a copy of the survey instrument.

Top-line results

1. **Carefully crafted frames and narratives can be supported by a broad spectrum of the population**: It is possible to develop frames and narratives that a broad spectrum of New Brunswickers can agree with. Three frames – Makes Sense-Polluter More-Pay More, Polluter Pay-Fair-Accountable-Responsible, and Market Signal-Market Failure – garnered more than 70% support from respondents spanning the centre-left and centre-right (3, 4, or 5 on a 7-point political orientation scale), and "somewhat concerned", "concerned", and "very concerned" on the climate change scale (somewhat and/or strongly support, Figure 1, Tables 11 to 19 and 32).

2. **Opinions on carbon pricing are not well formed, and people are vulnerable to the cost frame:** For all narratives, the "somewhat agree" category had the highest scores relative to other categories, except the Polluter Pay-Fair-Accountable-Responsible frame. In this case, 40% of respondents "strongly agree" this narrative is believable (35% somewhat agree). Respondents also are only moderately confident in the effectiveness of carbon pricing (44% somewhat support), and believe carbon pricing will raise their cost of living (80%; (Figures 5 and 11; Tables 4 and Table 20).

3. **Positive priming can increase support for policies that price carbon:** Exposure to positively framed carbon pricing narratives increase overall support (somewhat and strongly support) for carbon pricing, carbon tax, and cap and trade, compared to pre-exposure support (Figure 9 and Tables 5 to 9). Greatest improvement in support is for cap and trade, the carbon pricing instrument respondents were least aware of prior to exposure to the narratives (47% of respondents were "not sure" or indicated "I have not heard of this"). Support for carbon tax showed the least improvement in support between pre-and-post-exposure.
    a. The young, women, people "somewhat concerned" and "concerned" about climate change, and those on the centre-left and centre-right (ranking 3, 4, or 5 on a 7-point political orientation scale), were most inclined to show increased support for carbon pricing, carbon tax and cap, and trade after exposure to the various positively framed narratives (Tables 5 to 9). The shift in support was primarily from "not sure" to "somewhat support" (particularly for women), and to a lesser degree to "strongly support".

4. **Information can be polarizing**: Results show evidence of motivated reasoning, a cognitive bias process where people favour information consistent with their worldview or identity loyalties and dismiss

information contrary to their worldview or identity loyalties (Hart & Nisbet, 2012). The politicization of climate change has resulted in political orientation being a strong predictor of belief in, and concern about, climate change. Respondents in our 2017 survey sample demonstrate this process. Those respondents self-identifying as "not at all" or "not too concerned" about climate change, or "very conservative" or "very liberal", and who were "strongly opposed" to carbon pricing, carbon tax and cap and trade in pre-exposure testing, remained "strongly opposed" or even more opposed post-exposure[5].

   a. Looking at the "strongly opposed" category, "very liberal" respondents were more opposed post-exposure to carbon pricing, carbon tax, and cap and trade narratives, while "very conservative" respondents increased opposition to carbon pricing, and decreased opposition to carbon tax and cap and trade.

5. **Climate change feels distant and agency is weak:** Concern about climate change is growing, with 32% of New Brunswickers "concerned" in 2017, compared to 14% in 2016 (Figure 2). At the same time, climate change may feel too distant, with only 13% of respondents believing it could cause great personal harm, but 59% believing the same about future generations. There also appears to be a weak link to human activities and climate change. While 56% correctly identify that burning fossil fuels is the human activity most responsible for climate change, 45% believe climate change is mostly caused by natural patterns and human activities, compared to 43% who believe human activities are most responsible. There is a strong scientific consensus that human activity is the dominant cause of the global warming changing the climate[6].

6. **Investing in clean energy is perceived as good for the environment and human health**. Like other Canadians, New Brunswickers want to see more emphasis on solar and wind (79% and 80%, Figure7, Tables 25 to 30), and believe that the primary benefits of investing in clean energy are improvements to air quality and public health (37%), followed by reduced carbon pollution (22%). Forty percent of 18 to 24-year-olds believe reduced carbon pollution is the primary benefit of investing in clean energy (Figure 8, Table 31).

Demographic influence highlights

There are important demographic effects influencing the results, particularly relating to gender, age and mother tongue. Men are significantly more inclined to "strongly oppose" or "oppose" narratives and women are significantly more inclined to feel "not sure" or to "somewhat agree". Younger participants are significantly more supportive of the Polluter Pay-Fair-Accountable-Responsible frame ranking it number

[5] And as might be expected there is a strong overlap in level of concern about climate change and political orientation with 70% of respondents indicating they are "not at all concerned" about climate change rating themselves 5, 6, or 7 on a 7-point political orientation scale; 48% of respondents who are "not too concerned" about climate change rate themselves 5, 6 or 7 on the political orientation scale. Respondents rating themselves as 1, 2 or 3 on the political orientation scale (scale ranks from 1 = very liberal to 7 = very conservative swing in the opposition direction with 20% saying they are "not at all concerned" about climate change, compared to 59% being "very concerned".

[6] "GHGs and other drivers detected throughout the climate system and are ***extremely likely*** **to have been the dominant cause of the observed warming since the mid-20th century,"** (Intergovernmental Panel on Climate Change, Core Writing Team, Pachaur, & Meyer, 2014, p. 4). Extremely likely represents 95 to 100% probability

one for 18 to 24-year-olds. Respondents over 75 years of age showed the lowest level of support for almost all narratives.

Importantly, income is not a significant factor influencing beliefs about carbon pricing "raising my cost of living". Age is more important to these results, with respondents aged 55-years-old to over 75-years-old most concerned (90%, 92% and 80% respectively somewhat or strongly agree carbon pricing will raise the cost of living), compared to 67% of 18-to-24-year-olds (67% somewhat or strongly agreeing; Table 20).

To review demographic influences on study results, see Tables 1 to 32 Appendix 1.

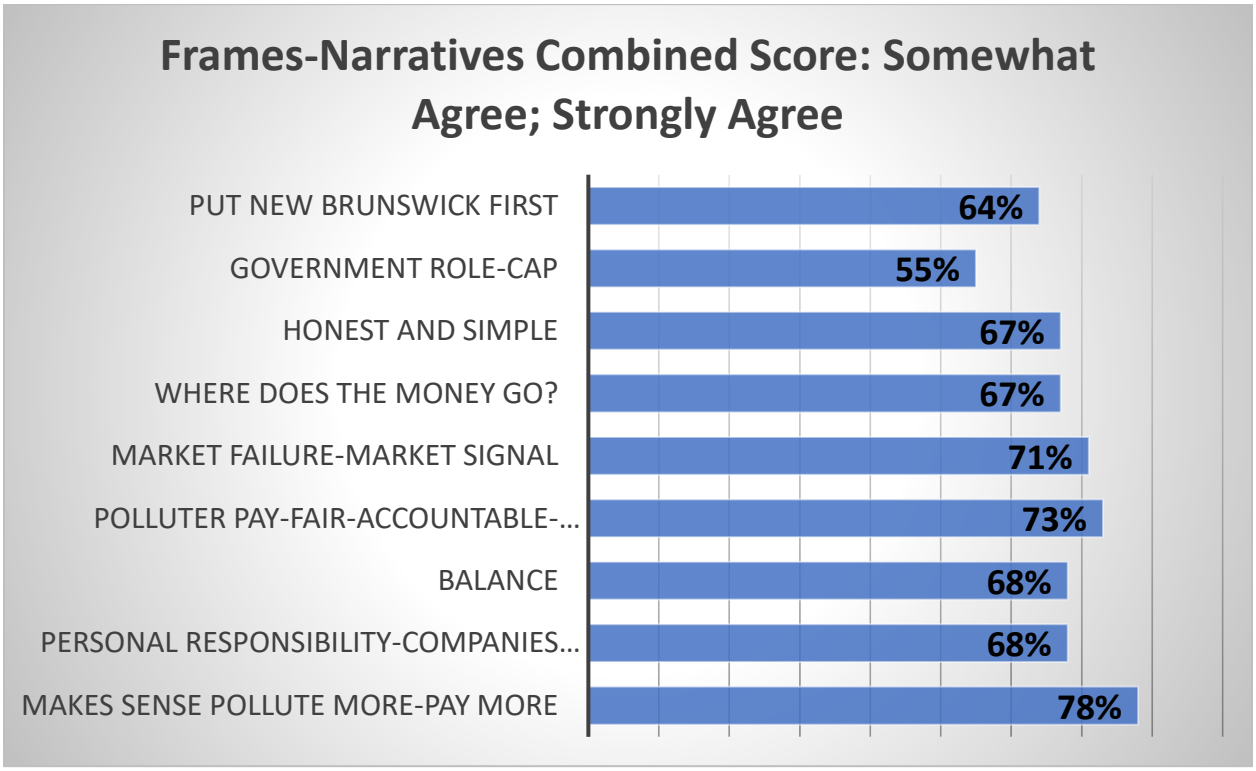

Figure 1. Combined score frames-narratives

Makes Sense-Pollute More-Pay More ranked highest with respondents, followed by Polluter Pay-Fair-Accountable-Responsible and Market Failure-Market Signal. For each frame-narrative, respondents were asked to indicate if they believed the narrative, thought it suggested effectiveness, and whether it was a good description. The somewhat agree and strongly agree results for the believability, effectiveness and description scales were tallied to create a combined score.

Recommendations

Results suggest opportunities for an integrated narrative (Figure 2) emphasizing fairness; common sense; high-level goal details, rather than policy design specifics; and shared contract (pollute more-pay more, unleash creativity, balanced responsibility) frames. These frames are embedded in the carbon pricing narratives used in this study:

- *Common sense: if you pollute more you need to do more to clean it up*
- *Smart policy, that will benefit the environment by sending clear signals that reward businesses that find solutions and pollute the least*

- *Carbon pricing is a good way to stimulate innovation and creativity*
- *A fair way to share responsibility and be accountable for the pollution going into the air we all breathe*
- *A way take to take responsibility today to lessen the environmental burden for our grandchildren*

Education and outreach about carbon pricing options, especially cap and trade are required. Older New Brunswickers clearly are concerned about the effect carbon pricing will have on their fixed incomes, regardless of what their incomes are. Women and younger respondents feel less knowledgeable about what carbon pricing is, and have demonstrated in this study that they are open to new information and willing to support policies that price carbon. Program design that addresses cost of living concerns of older New Brunswickers, combined with well-framed information campaigns targeting the needs of women and younger residents, could increase support for carbon pricing in New Brunswick.

This research also suggests the most effective way to engage citizens in supporting carbon pricing is to craft communications and engagement materials that emphasize the outcomes society is pursuing, rather than the specifics of the policy such as how a carbon tax or cap and trade program would work.

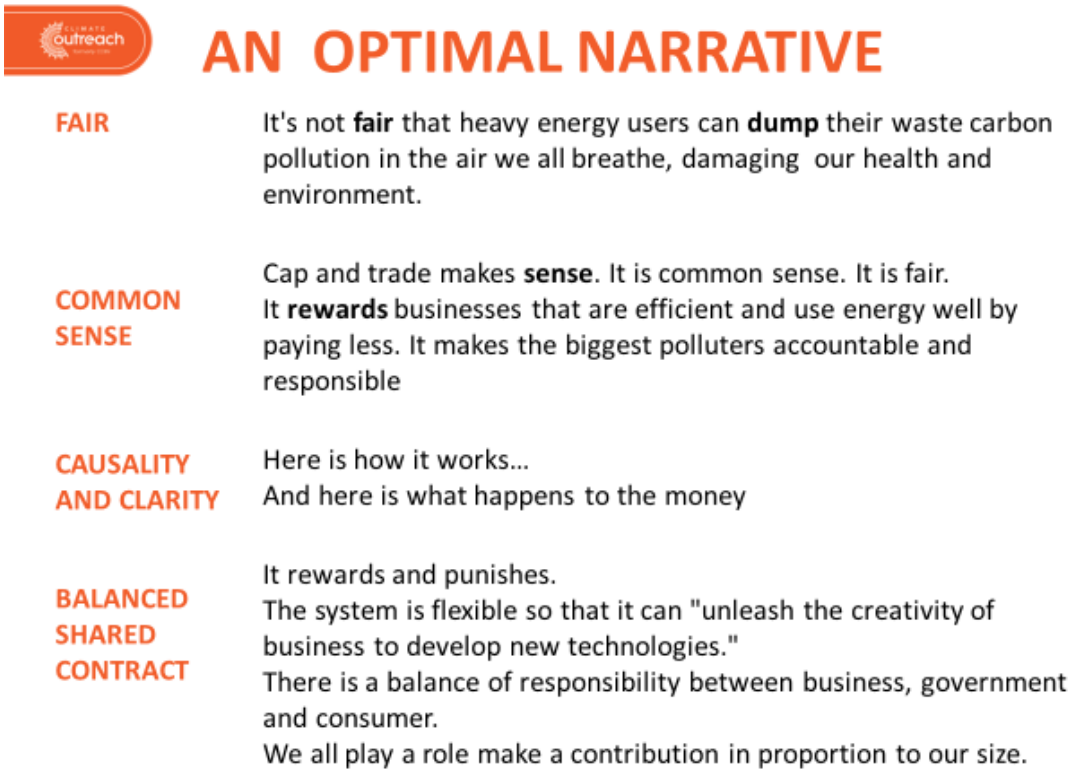

Figure 2. Optimal frames-narratives build on effective frames

The most supported carbon pricing frames emphasized fairness and common sense with narratives describing the approach at the level of desired outcomes, particularly the potential to unleash creativity and innovation.

To strengthen the link between human activity and climate change, it is critical that all climate change communications refer to the phenomenon as human-caused. The science supporting this claim is unequivocal. Equally important is the need to be specific about the causal human contribution to climate change: burning fossil fuels like oil, coal and natural gas, rather than to highlight the less direct cause: greenhouse gases or carbon dioxide. Establishing causal link between activity and effect is essential to creating a sense of agency, which in turn, is the basis for creating a sense of responsibility.

INTRODUCTION

Solving climate change requires a comprehensive toolkit of policies, regulations and incentives to redirect public and private sector choices and to redeploy capital. The goal of these policies, regulations and incentives is to reward efficiency and conserving behaviours and to renew industrial processes and the energy system. Carbon pricing is considered by economists to be the most effective instrument for achieving these goals. Carbon pricing proposals and programs, however, meet with equally strong opposition from consumers, and until recently, the private sector.

Is it possible to talk about carbon pricing in ways that open the door to broader public support? Over the past two years, starting in Ontario, then nationally, and now in New Brunswick, researchers have explored ways of talking about carbon pricing that are designed to enhance support for implementation with people spanning centre-left and centre-right worldviews. The goal of the research has been to identify carbon pricing frames and narratives that are broadly supported and to explore the reasons behind differing perspectives.

A frame is an "idea" that triggers patterns of thinking. Narratives are a way of talking about that idea (frame). Working with George Marshall of the UK-based organization, Climate Outreach, we developed 12 narratives using different frames for describing carbon pricing, carbon tax and cap and trade.

MIXED METHOD

This research deploys mixed methods for collecting qualitative and quantitative data. Focus group participants were solicited through random sample telephone polling and screened to exclude people who were very concerned or not at all concerned about climate change. As volunteers were identified, CRA also sought a balance in gender, age and region. Focus group feedback on six frames-narratives[7] resulted in some narratives being edited to improve clarity.

A third focus group, conducted at the University of New Brunswick, tested improved narratives and added two others from the original set of 12 that had ranked lowest in previous research. The participants solicited through a university-wide electronic newsletter solicitation, resulted in volunteers more concerned about climate change providing a spectrum cross-check for the frames-narratives. Based on feedback from all 20 focus group participants, nine frames-narratives were selected for testing in the online survey.

The online survey was completed by 505 New Brunswickers who were randomly solicited from the New Brunswick participants in a national general population panel of 450,000 Canadians managed by Research Now. Participants in an online panel agree to complete a small number of surveys over a limited period and receive small incentives like coupons for agreeing to participate in the panel. The panel is renewed regularly and solicitations are useful in securing samples that match national or provincial Statistics Canada proportions for gender, age, education, income, language and/or community type. Narratives take time to read and are less amenable to listening to over the telephone. An online survey can be helpful when surveys are long or questions are detailed. As with all surveys, it is important not to overgeneralize results. In this case, our results are valid for all respondents and we can make reasonable claims about how these

[7] Focus groups were limited to 1.5 hours so only six frames could be tested given these time constraints.

results reflect the views of New Brunswick residents. We cannot, however, as with national random samples executed by telephone or mail, assign a confidence level.

Frames-Narratives Results Summary

Frames and narratives used in the online survey reflect feedback from focus group participants designed to improve clarity and narratives that were least successful in Ontario were also deployed in this study to determine whether New Brunswick participants reacted similarly. This group of frames-narratives includes ideas having garnered both higher and lower scores in the Ontario and national samples. They are presented here in the order they were presented in the online survey.

Agreement or disagreement with the nine frames-narratives was measured with three questions:

- *I **believe** what this statement is saying (strongly disagree to strongly agree; not sure)*
- *This statement suggests that putting a price on pollution would help **reduce** greenhouse gases ((strongly disagree to strongly agree; not sure)*
- *This is a good way to **describe** (varied by carbon pricing, carbon tax, cap and trade to match the narrative topic (carbon pricing, carbon tax, cap and trade) (strongly disagree to strongly agree; not sure)*

These questions mirrored the question format used in the focus groups. Results are presented by scale category (strongly oppose, oppose, somewhat support, strongly support, not sure), and as a combined score for the "somewhat support" and "strongly support" categories (Tables 11 to 19 and 32). Results reported in this section use the combined score.

1. ***Makes Sense-Pollute More-Pay More**: Pricing pollution makes sense. Businesses that pollute more pay more. Businesses that use energy efficiently pay less. It encourages companies to invest in solutions and to develop new technologies.*

   Focus Group participant (English): *"[It] Is the best because of the idea of the companies being able to innovate to come up with better ways to deal with pollution. Necessity is the mother of all invention."*

   Focus group participant (French): *"The companies that pollute more, it`s logical that they'd pay more. But a lot of them have a more environmental way of thinking, thus the reduction of CO_2 which are almost null, they will still pay. It's another worthless excuse to tax. The companies that are using energies which they should be (renewables), why should they be taxed?"*

   In New Brunswick, the Makes Sense-Pollute More-Pay More frame ranked highest overall at 78% "somewhat agree" or "strongly agree". There could be an order effect in these results because this narrative was first in the set of nine and the order was not randomly changed (due to an oversight). The order was randomly changed in the focus groups and in the Ontario study.

   This results for this narrative, however, are consistent with the Ontario results, where it tied with Personal Responsibility-Companies Follow as the most favoured narrative for respondents "not too concerned" and "somewhat concerned" about climate change (Figure 11).

This frame-narrative also was favoured by the centre-left and centre-right on the political spectrum (3, 4, 5 on a 7-point scale), with 83% to 87% "somewhat" or "strongly agreeing" with the narrative. (Figure 11). With respect to climate change, this frame-narrative was supported by 63% (somewhat agree; strongly agree) of respondents "not too concerned" about climate change; 79% of respondents "somewhat concerned" about climate change; 89% of those "concerned"; and 92% of those "very concerned" about climate change.[8] Francophones particularly like this narrative (86%).

There are no significant differences by demographic variable (Table 11) except for very conservative respondents, who, as with all frames and narratives had the lowest score for "somewhat" or "strongly agree".

2. ***Personal Responsibility-Companies Follow****: We should all take personal responsibility for reducing pollution. We try to do the right thing by recycling or buying environmentally friendly products. A carbon tax is one way to make sure we all show the same level of responsibility for reducing the pollution we put into our air.*

Focus group participant (English): *"Puts [the] onus on us rather than big industry. They are putting out a lot of carbon. Yes, we should have some responsibility because we drive vehicles, but most of those we drive nowadays don't produce as much exhaust fumes as they used to. I don't like having the onus put on the average person because the average person doesn't produce as much as industries like the oil sands."*

Focus group participant (French) *"Good. Personal responsibility is good. They talk of the carbon tax and explain the results based on what must be done. It misses reasons for why it's true."*

While the most agreeable narrative in Ontario and Canada, the Personal Responsibility-Companies Follow frame ranked fourth in New Brunswick. As noted by focus group participants, residents in this province consider themselves small players in contributing to climate change, compared to industry.

Respondents with graduate degrees strongly favoured the Personal Responsibility-Companies Follow frame, with 80% "somewhat" or "strongly agreeing". Liberally oriented respondents (2 on the 7-point scale) also favoured this frame with 82% "somewhat" or "strongly agreeing". Table 12. Francophones also like this narrative (84%).

3. ***Balance****: Carbon pricing strikes the right balance. It allows us do what's right for the environment and encourages us to shift to cleaner and healthier renewable energy. Renewable energy means*

[8]Frames-narratives in this survey were not randomly displayed to respondents and Makes Sense-Pollute More-Pay More was first in the survey raising issues with question order effects. Two tests increase confidence in the results. First, this frame/narrative also ranked second highest in Ontario for respondents not too concerned and somewhat concerned about climate change and the narrative order was randomly changed. Second, results across the nine narratives show variation in results with second and third ranked frame-narratives fifth and sixth in survey order.

revitalizing New Brunswick manufacturing and careers. We can protect the environment and create jobs at the same time.

> Focus group participant: "That sounds like something the province would like to say! That's the cynic in me. The first statement is debatable, the other statements, if true, I can't disagree with. I can just deeply suspicious of it."

This frame-narrative ranked third highest in the 2015 national online survey and fourth in New Brunswick in 2017. Respondents rating themselves a 2 on the 7-point political orientation scale (so liberally oriented) rate this narrative highly with 82% "somewhat" or "strongly agreeing" (Table 13).

4. ***Polluter Pay-Fair-Accountable-Responsible****: It's not fair that heavy energy users can dump their carbon pollution in the air we all breathe. Polluters should be held accountable, and should pay for the pollution that they force all of us to live with. A carbon tax is a fair way to share responsibility for the carbon pollution that causes climate change and to reward those that are most efficient and pollute the least.*

Focus group participants (English):

> *[Like it]" because it addresses concerns that heavy polluters should be held accountable!"*
>
> *"Companies have to take the lead and make an example for everyone to follow since they pollute the most."*

Focus group participants (French): "Sure, it's more clear. It would clear things up even more to see the ideas behind this. What will it change in the end? If the big emitting companies want to pollute, they will pay and not change anything. Its more or less logical. We will award those which adapt by polluting less, it's not a material reward however. They paid to install something, that tells me the big companies will continue the status quo and pay that extra cost."

The Polluter Pay-Fair-Accountable-Responsible frame-narrative was most supported by Canadians in the 2015 national survey and it ranked second in New Brunswick in 2017. Respondents with graduate degrees and who are liberal leaning (2 on the 7-point scale) also favoured this narrative, rating with 83% and 90% respectively "somewhat" or "strongly agreeing" (Table 14).

5. ***Market Failure-Market Signal****: We need to put a price on carbon because this sends a signal to consumers and businesses that they should shift to alternatives like more efficient manufacturing equipment, vehicles, appliances, or renewable energy like wind or solar power.*

Focus group participant (English): *"The intentions are great in this one. They are trying to rectify in one statement or two or three sentences that they realize that the market has failed in getting the situation under control and that we should get together and get involved with alternative. Other types of fuels and other types of heating my home. Doing things that will help the environment. This is the consumers."*

Focus group participant (French): *"We have so much pollution and when they say they must think of solutions it's exactly what I think it must be. Finding a solution rather than taxing. It will cost less if you want to continue polluting a lot. There will be a big minimum that all must follow and in the long term, people will feel better alongside future generations."*

This frame-narrative ranked third in New Brunswick in 2017. Respondents with graduate degrees like this narrative (83%) as do Francophones (84%), and the left-leaning (91%), Table 15.

6. ***Where Does the Money Go?*** *The carbon tax that polluters pay will fund the programs the province needs to help all of us shift to alternatives: more efficient manufacturing and industrial processes, homes, vehicles, and appliances. A carbon tax puts a price on pollution so that we can pay for the programs we need for a greener, healthier quality of life.*

   Focus group participant: *"I like the way it defines what will be done with it. Here's the bad news, you will pay more, but here is the good news. Social contract. I like this."*

   This frame-narrative tied for fifth with the Balance frame. Table 16.

7. ***Honest and Simple:*** *A carbon tax is honest and efficient: the more you pollute, the more you pay. It's as simple as that. It's an old-fashioned, straightforward solution with the minimum of red tape or interference. Because it works through the existing tax system, it doesn't need any new bureaucracy. There are no loopholes or breaks for big business. For all these reasons a carbon tax is the best option: it is simple, stable, predictable, and rewards those that become most efficient and pollute the least.*

   This frame-narrative, one of the original 12 developed by George Marshall at Climate Outreach, was added for the survey. It replaced a "We're all in this together" frame which fared poorly in all focus groups. This narrative ranked second highest in the national 2015 online survey and fifth highest in New Brunswick in 2017. Table 17.

8. ***Government Role-Cap****: Cap and trade does what government does best: setting rules in the public interest. And it leaves businesses to do what they do best: making their own competitive decisions and innovating.*

   Focus group participant: *"It doesn't leave me with a lot of faith that they are addressing the issues. It says that businesses will do what it wants."*

   This frame-narrative was consistently disliked by focus group and survey respondents. Concerns raised in focus groups suggest a lack of trust in government to regulate and too much freedom for industry.

9. ***Put New Brunswick First****: New Brunswick needs to be part of a global transition building a low-polluting energy system to fuel our economy. This provides an opportunity for us. With cap and trade in place, New Brunswick businesses can gain experience and market advantage in less polluting technologies. Acting now puts us ahead.*

This frame-narrative, one of the original 12 developed by George Marshall at Climate Outreach was added for the survey as more frames could be tested than in the focus groups. It did not fare well in Ontario and ranked lower in New Brunswick as well. Respondents with a graduate degree most like this narrative as did Francophones.

Figures 3 and 4 summarizes George Marshall's analysis of why the Make Sense-Pollute More-Pay More and Polluter Pay-Fair-Accountable-Responsible frames work well with both the centre-right and centre-left. The Make Sense frame-narrative is liked by conservatives looking for common sense solutions and is also liked by liberals looking for creativity, change and innovation. It also evokes a sense of fair play which all people relate well to. The Polluter Pay frame-narrative evokes a more ethical perspective based on collective risk and justice; social ideas broadly supported by the right and left.

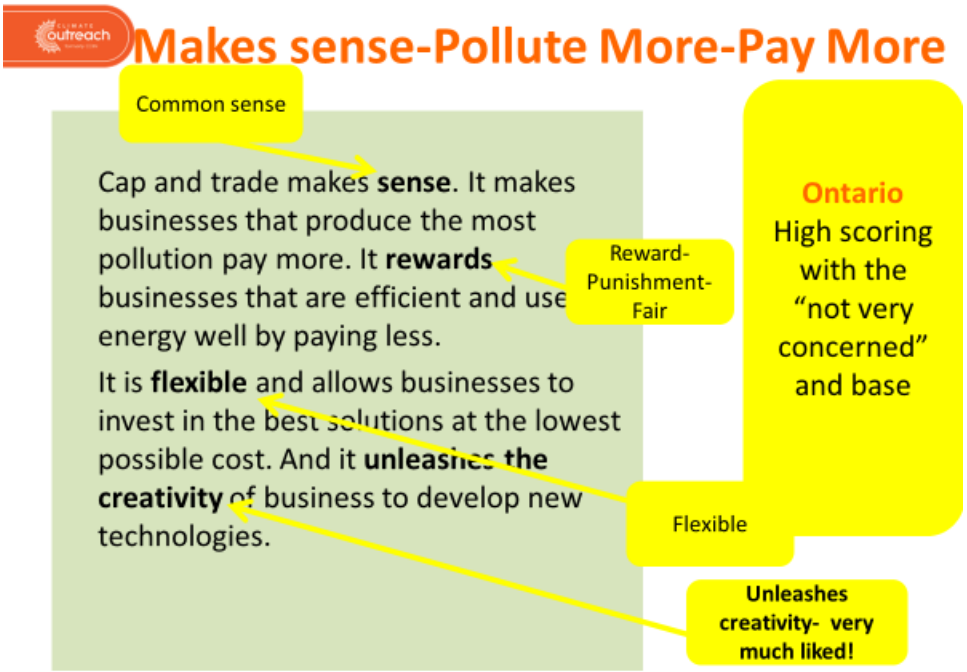

Figure 3. Climate Outreach analysis: Makes Sense-Pollute More-Pay More

Climate Outreach emphasizes that the Makes Sense-Pollute More-Pay More frame has worked well in other jurisdictions around the world. More conservative leaning people like "common sense" and "rewards and punishments" because that is fair. The potential to unleash creativity is liked as well by left-leaning people.

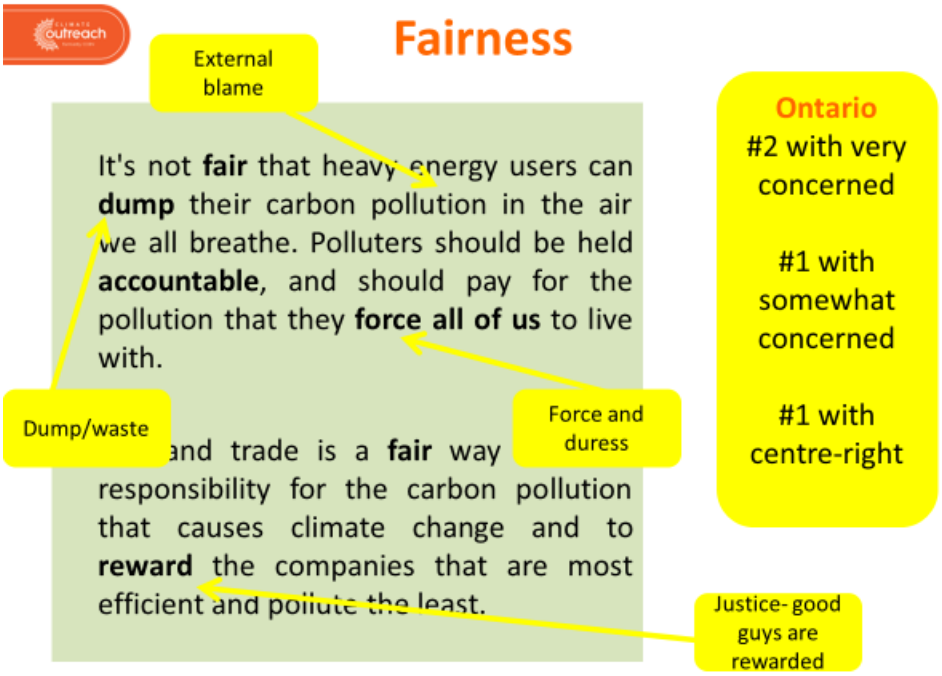

Figure 4. Climate Outreach analysis of Polluter Pay-Fair-Accountable-Responsible
The Polluter Pay-Fair-Accountable-Responsible frame is a story of collective risk and just reward.

CONTEXT SETTING RESULTS

Concern about climate change is growing, with 32% of New Brunswickers "concerned" in 2017, compared to 14% in 2016 (Figure 2). At the same time, climate change may feel too distant, with only 13% of respondents believing it could cause great personal harm, but 59% believing the same about future generations. There also appears to be a weak link to human activities and climate change. While 56% correctly identify that burning fossil fuels is the human activity most responsible for climate change, 45% believe climate change is mostly caused by natural patterns and human activities, compared to 43% who believe human activities are most responsible. There is a strong scientific consensus that human activity is the dominant cause of the global warming changing the climate[9]. Figures 5 to 9 summarize these results.

[9] "GHGs and other drivers detected throughout the climate system and are ***extremely likely*** **to have been the dominant cause of the observed warming since the mid-20th century,"** (Intergovernmental Panel on Climate Change et al., 2014, p. 4). Extremely likely represents 95 to 100% probability

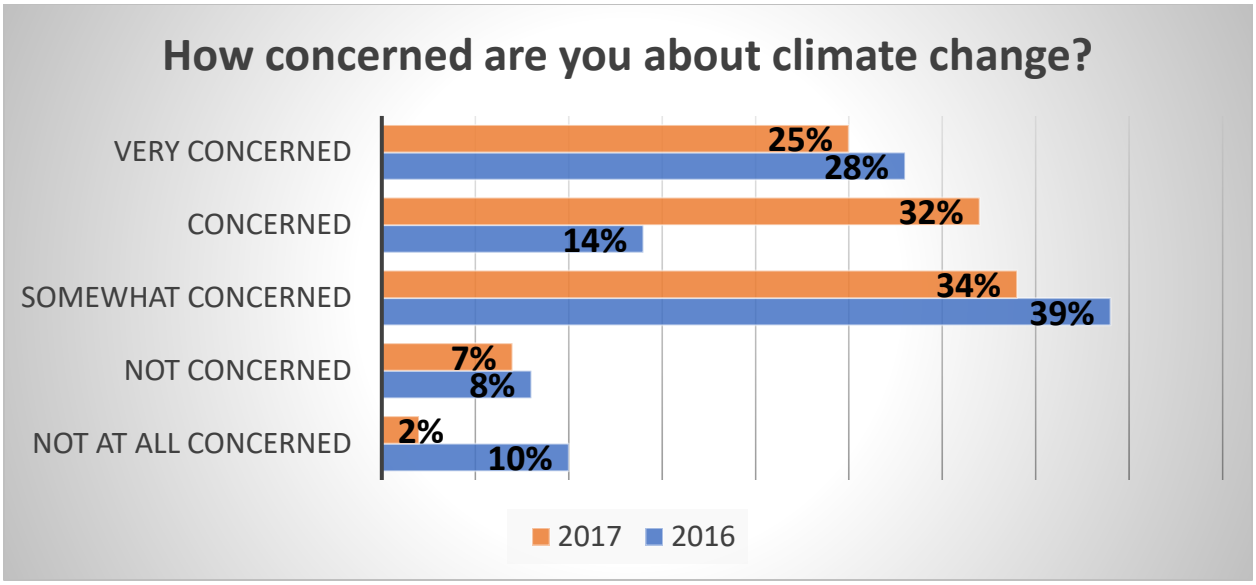

Figure 5. Climate change concern growing

Concern about climate change has grown significantly in New Brunswick over the course of 12 months. In 2017, 32% of New Brunswick respondents indicate they are concerned about climate change, compared to 14% in 2016.

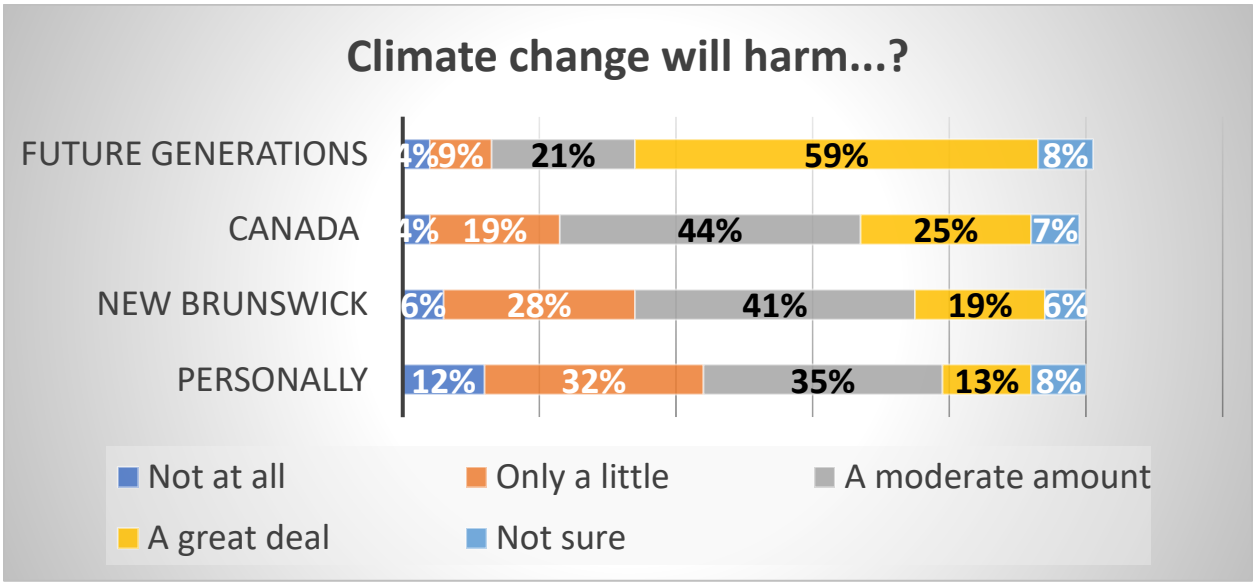

Figure 6. Climate change a distant concern

Few respondents believe that climate change is a clear and present danger with 59% believing it will harm future generations a great deal, but only 13% believing the same for them personally.

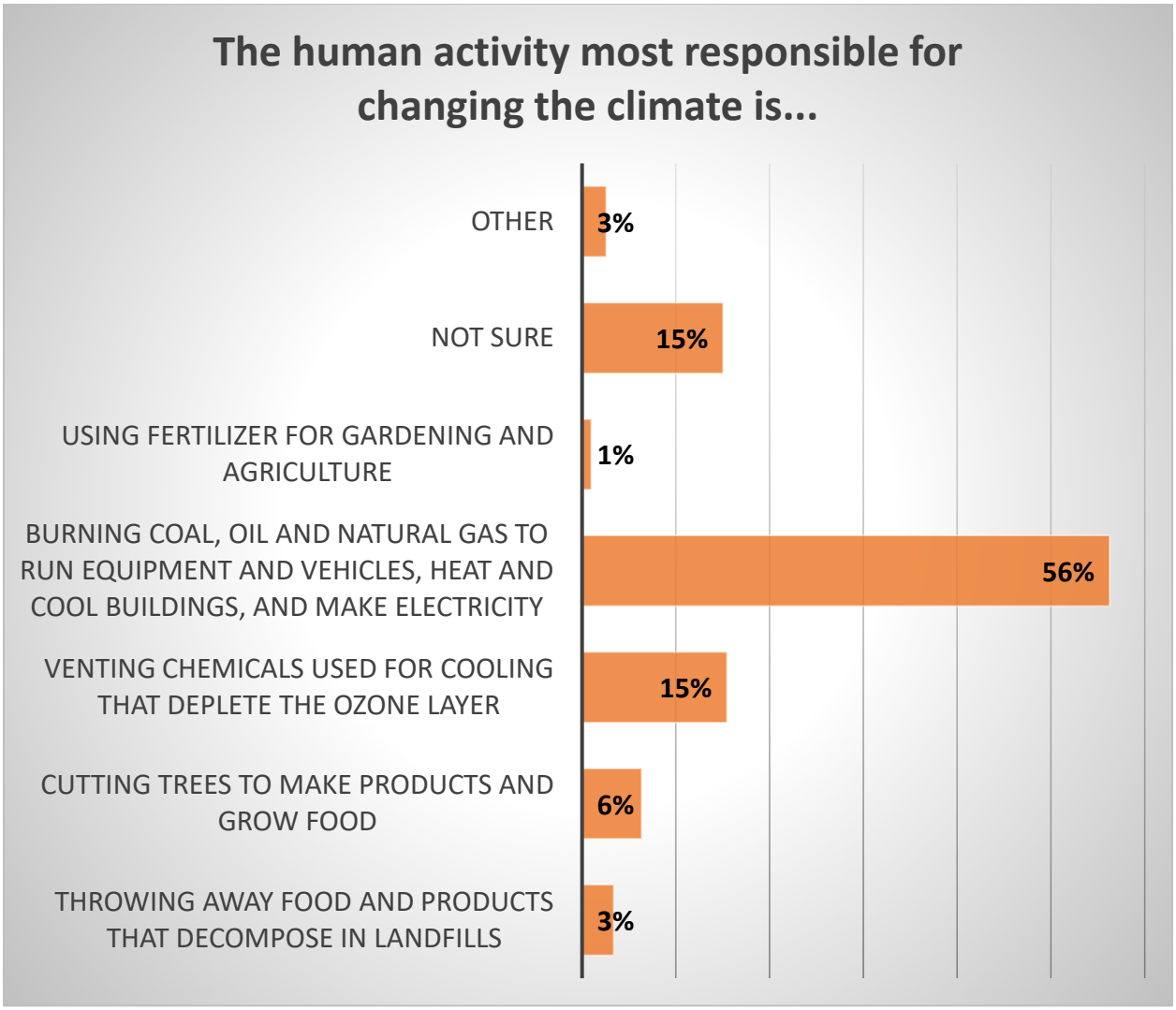

Figure 7. Human activities responsible for climate change

Fifty-six percent of survey respondents correctly identified fossil fuels as the most responsible for climate change.

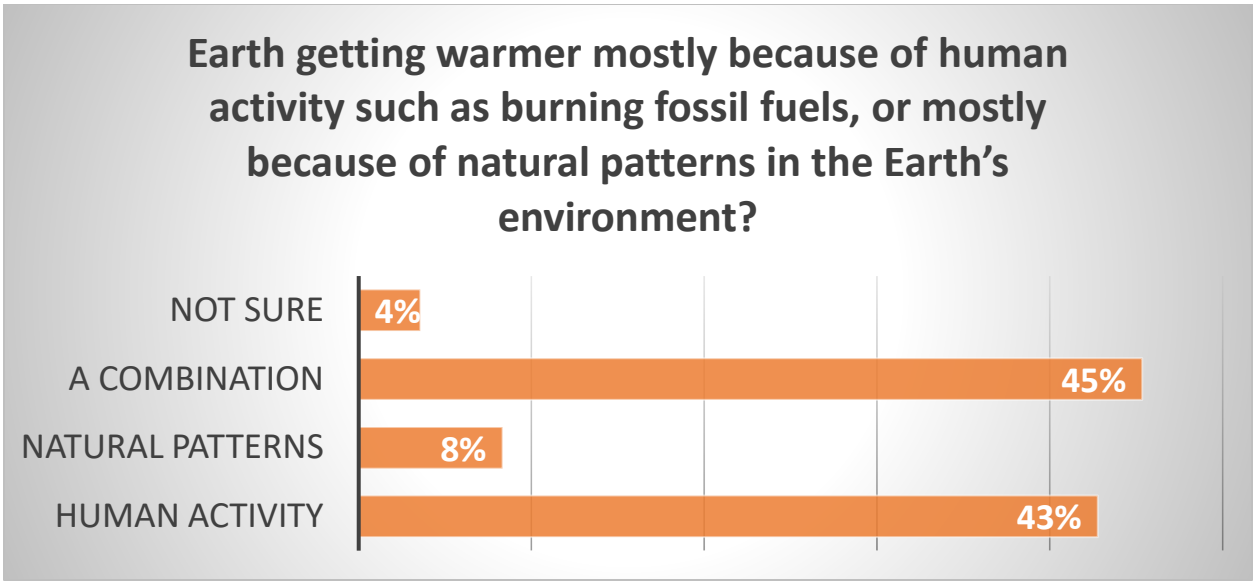

Figure 8. Human contribution to climate change

New Brunswick survey respondent are more inclined to believe climate change is caused by a combination of human and natural causes. The Intergovernmental Panel on Climate Change concludes there is a 95% to100% probability that human activities are the dominant cause of global warming.

Energy priorities and benefits

New Brunswickers clearly are looking for shifts in energy-related investments, with 76% wanting less emphasis on coal; 65% wanting less emphasis on oil; 54% wanting less emphasis on nuclear; and 40% wanting less emphasis on natural gas. Wind and solar are strongly supported. The picture for hydro is more mixed, with 44% wanting less emphasis, but 22% wanting less emphasis, and 27% wanting about the same emphasis.

There are important demographic differences in support for energy sources (Tables 25 to 30). Women are less supportive of hydro and nuclear, for example, while men are more supportive of coal. For example, 33% of women want more emphasis on hydro, compared to men (55% want more emphasis); 26% of women want less emphasis on hydro; 18% of men feel the same. With respect to nuclear, only 10% of women want more emphasis, compared to 24% of men; 59% want less emphasis, compared to 48% of men (Tables 27 and 29).

When it comes to coal, the roles switch, with 82% of men wanting less emphasis, compared to 70% of women (Figure 9 and Table 30).

The most important perceived benefit of investment in clean energy is cleaner air and improved public health (37%), followed by lower carbon pollution (22%, Table 31). Young people, aged 18-to-24-years old are most inclined to believe that the primary benefit of clean energy investments is lower carbon pollution (40%).

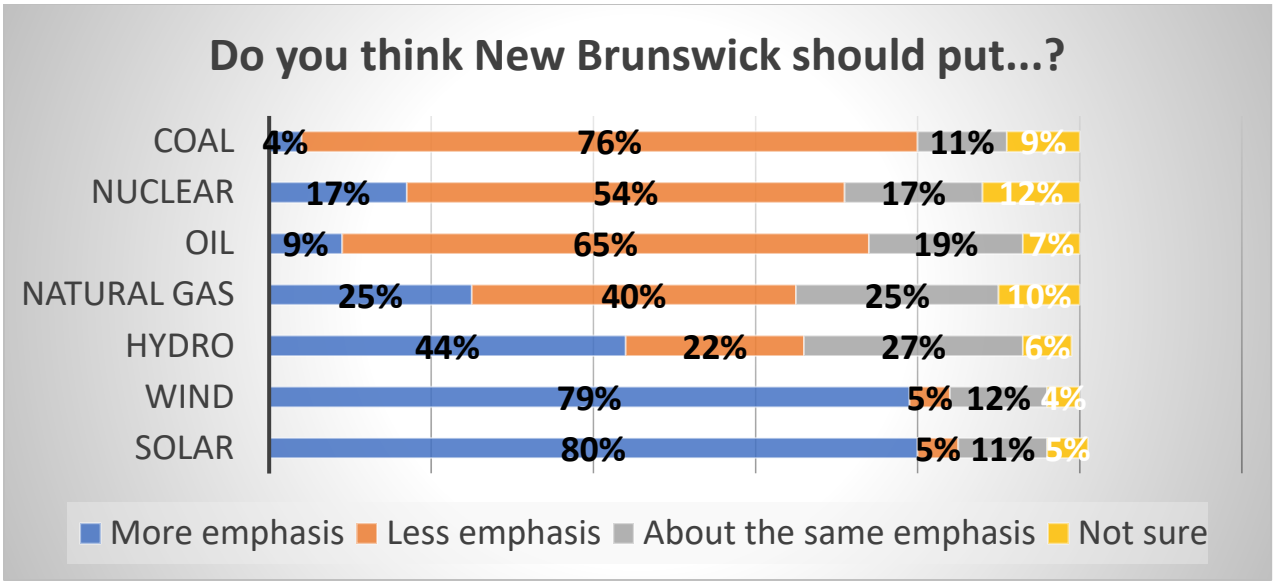

Figure 9. Emphasis on energy sources

New Brunswickers, like Canadians, want to see more emphasis on solar and wind and less emphasis on coal, oil, and nuclear.

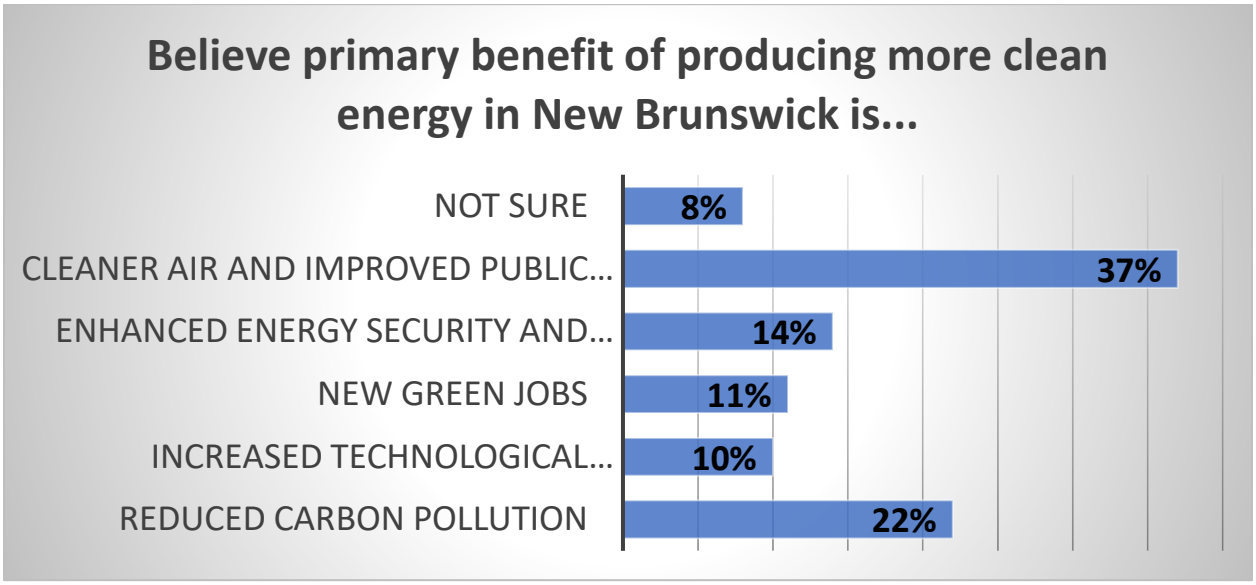

Figure 10. Benefits of clean energy

Cleaner air and improved public health are considered the primary benefit of New Brunswick investing in clean energy (37%), followed by reduced carbon pollution (22%).

Carbon pricing effectiveness and worldview effects

New Brunswickers are only modestly confident that carbon pricing is an effective way to lower greenhouse gas emissions (Figure 11), with 44% "somewhat supporting" this statement and 15% "strongly supporting".

Figures 12 to 15 summarize the effects of the priming experiment. Overall, exposure to positively framed narratives increased support for carbon pricing (14% increase in somewhat support; 8% increase in strongly support); carbon tax (11% increase in somewhat support; 6% increase in strongly support); and cap and trade (17% increase in somewhat support 11% increase in strongly support). As summarized in Tables 5 to 10, women shift more than did men, primarily because women shift to "somewhat agree" from "not sure" and "have not heard". Men were more inclined to hold their position.

Younger respondents shifted position more than older respondents:

- 18-to-24-year-olds show a 30% increase in support (somewhat/strongly) for carbon pricing and cap and trade; 20% for carbon tax
- 25-to-34-years shift 25% on carbon pricing, 29% on carbon tax, and 40% in support for cap and trade
- 35-to -44-year-olds shift somewhat less but in the 19% to 29% range for all
- 55-to-over-75-year-olds shift most on cap and trade (30% and 27% respectively).

Results also show evidence of motivated reasoning, a cognitive bias process where people favour information consistent with their worldview or identity loyalties and dismiss information contrary to their worldview or identity loyalties (Hart & Nisbet, 2012). The politicization of climate change has resulted in political orientation being a strong predictor of belief in, and concern about, climate change. Respondents in our 2017 survey sample demonstrate this process. Respondents who self-identify as "not at all" or "not too concerned" about climate change, or "very conservative" or "very liberal", and who were "strongly opposed" to carbon pricing, carbon tax and cap and trade in pre-exposure testing, remain "strongly opposed" or even more opposed post-exposure[10] (Figures 14 and 15).

Looking at the "strongly opposed" category, "very liberal" respondents were more opposed post-exposure to carbon pricing, carbon tax, and cap and trade frames-narratives, while "very conservative" respondents increased opposition to carbon pricing, and decreased opposition to carbon tax and cap and trade.

Figure 13 summarizes results for all frames-narratives through the climate change concern and political orientation lens. There are statistically significant differences for all frames except for Government Role-Cap. These differences, however, do not change the overall ranking of frames and narratives. The differences are related to lower overall scores the less concerned about climate change or conservative a person is.

Figure 16 summarizes results for the reasons people agreed or disagreed with a frame-narrative. While New Brunswickers are concerned about the effect of carbon pricing on their cost of living, they also believe

[10] And as might be expected there is a strong overlap in level of concern about climate change and political orientation with 70% of respondents indicating they are "not at all concerned" about climate change rating themselves 5, 6, or 7 on a 7-point political orientation scale; 48% of respondents who are "not too concerned" about climate change rate themselves 5, 6 or 7 on the political orientation scale. Respondents rating themselves as 1, 2 or 3 on the political orientation scale (scale ranks from 1 = very liberal to 7 = very conservative swing in the opposition direction with 20% saying they are "not at all concerned" about climate change, compared to 59% being "very concerned".

it is a smart policy that could have environmental benefits for the sake of our grandchildren. Exploratory factor analysis determined that the smart policy, take responsibility now so our grandchildren do not have to, good for the environment, cut greenhouse gases and fair plan sub-item load on to one scale, with a Cronbach's alpha of 86.3%. Combining these reasons in making the case for carbon pricing, as has been done in the frame-narratives used in this research would be most effective.

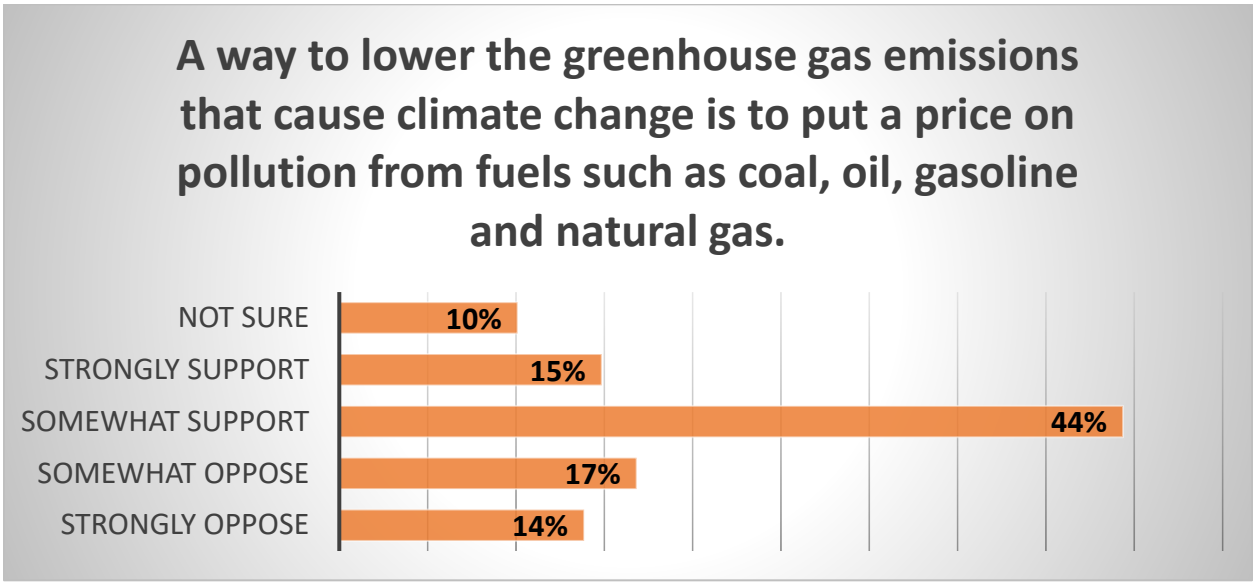

Figure 11. Pre-exposure carbon pricing effectiveness

Support for carbon pricing is moderate, with 44% somewhat supporting, 31% opposing (somewhat or strongly), and 15% strongly supporting.

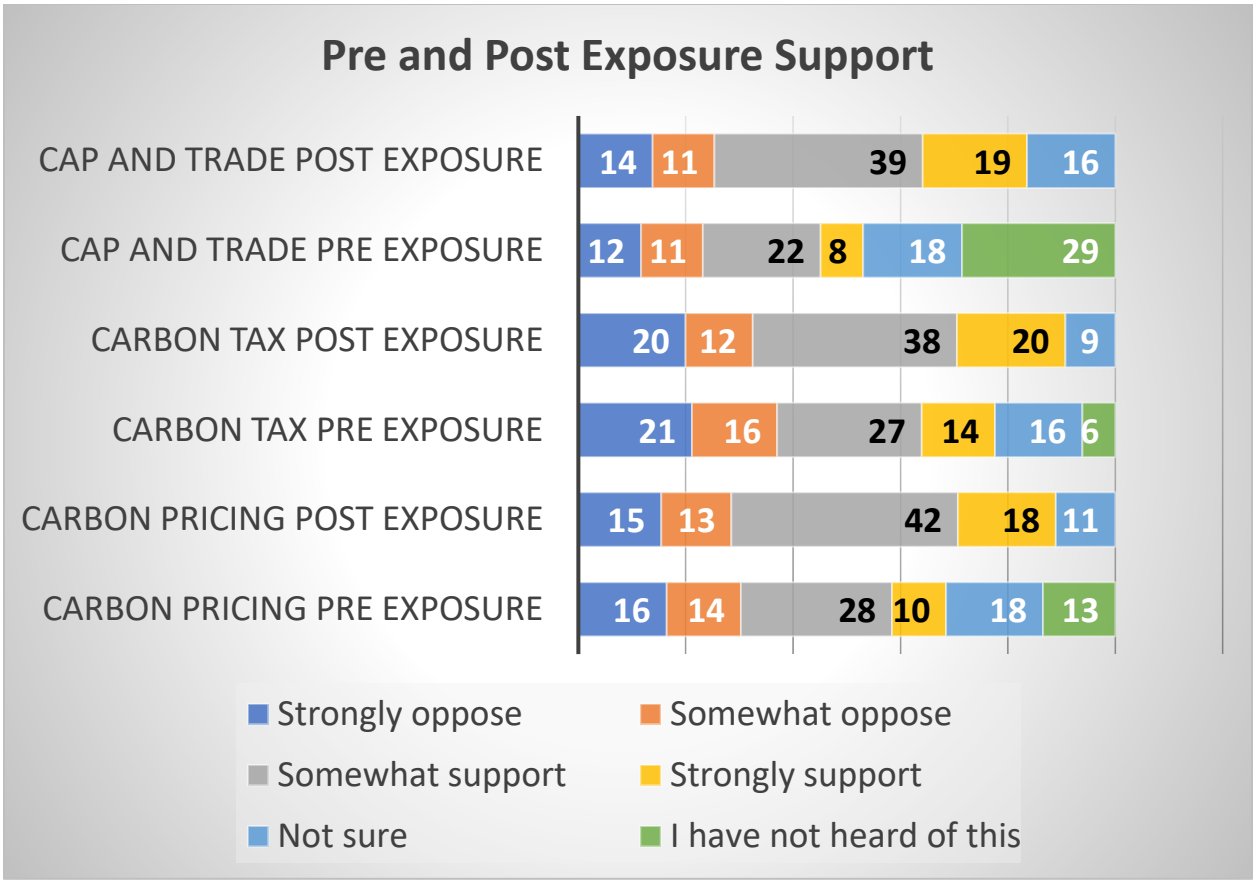

Figure 12. Pre-Post-exposure support carbon pricing

Support for all forms of carbon pricing increased post-exposure to the frames-narratives suggesting a priming effective from overall exposure. Support for cap and trade increased the most (17% in somewhat support) followed by a 14% improvement in somewhat support for carbon pricing.

	Not too concerned	Somewhat concerned	Concerned	Very concerned	Very liberal	2	3	4	5	6	Very conservative
Makes Sense-Pollute More-Pay More	**63%**	**80%**	**88%**	**91%**	**86%**	**85%**	**87%**	**83%**	**87%**	**79%**	**62%**
Personal Responsibility-Companies Follow	**63%**	**80%**	**88%**	**91%**	**74%**	**81%**	**75%**	**72%**	**64%**	**62%**	**52%**
Balance	**46%**	**63%**	**75%**	**86%**	**70%**	**79%**	**75%**	**68%**	**58%**	**60%**	**43%**
Polluter Pay-Fair-Accountable-Responsible	**46%**	**71%**	**81%**	**86%**	**77%**	**91%**	**82%**	**75%**	**72%**	**62%**	**43%**
Market Failure-Market Signal	**31%**	**63%**	**76%**	**87%**	**77%**	**85%**	**77%**	**71%**	**64%**	**50%**	**38%**
Where Does the Money Go?	**34%**	**60%**	**70%**	**79%**	**70%**	**83%**	**74%**	**62%**	**62%**	**41%**	**38%**
Honest and Efficient	**31%**	**63%**	**70%**	**77%**	**67%**	**79%**	**73%**	**64%**	**60%**	**55%**	**43%**
Government Role-Cap	29%	55%	58%	61%	58%	55%	62%	60%	53%	36%	33%
Put NB First	**43%**	**64%**	**73%**	**74%**	**81%**	**68%**	**74%**	**67%**	**66%**	**45%**	**48%**

Figure 13. Climate change concern and political orientation frames-narratives

Climate Change concern and political orientation are a significant influence (bold) for all narratives except for Government Role-Cap which was uniformly disliked by all respondents.

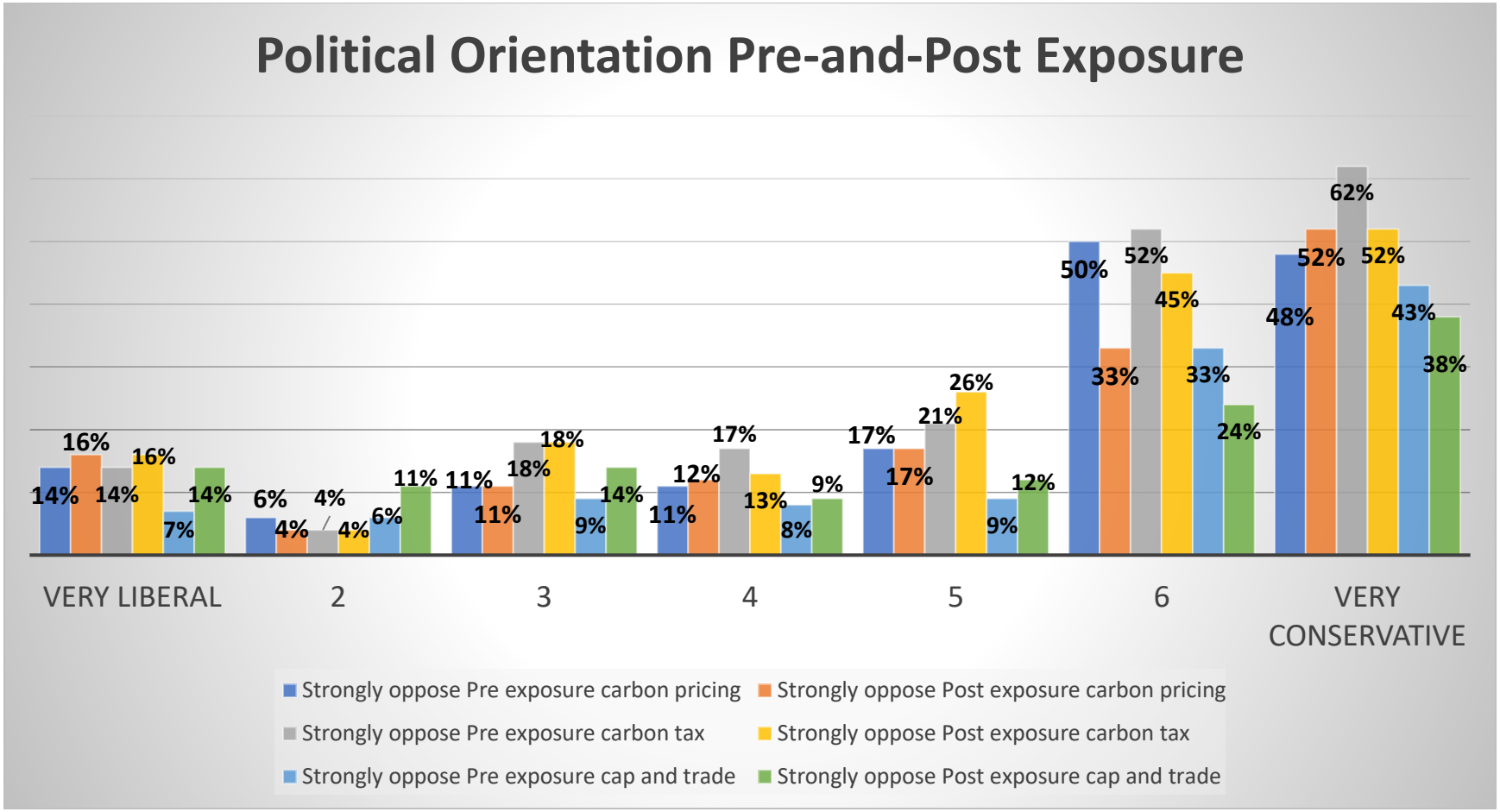

Figure 14. Political orientation influence pre-and-post exposure

Motivated reasoning is evident in the pre-and-post exposure results for political orientation. Respondents who strongly opposed carbon pricing, carbon tax and cap and trade before exposure to the positively framed narratives did not change their mind or were more opposed after exposure. More conservative respondents shifted to greater support more than liberal-orientation respondents did. Somewhat support and strongly support categories gained strength post-exposure as respondents in the "not sure" and "I have not heard of this before" categories shifted position.

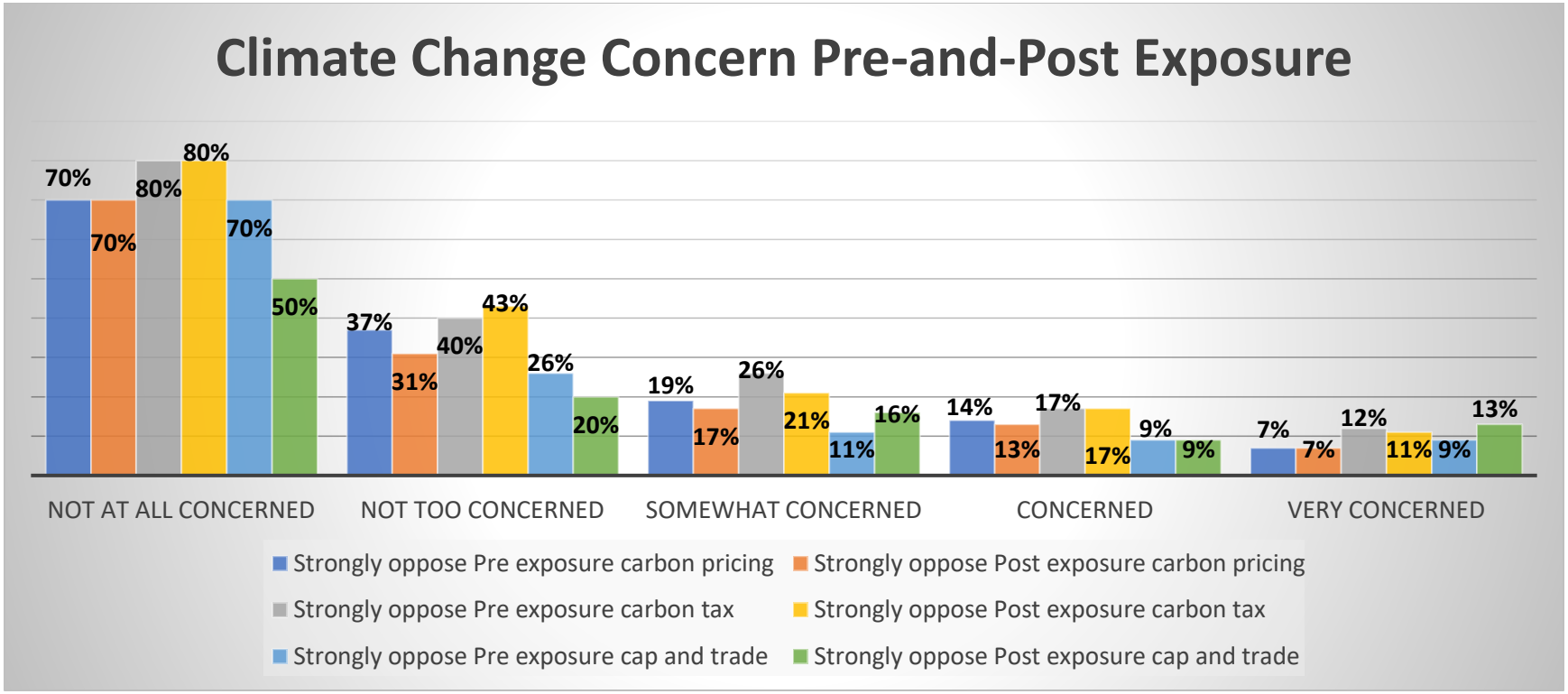

Figure 15. Climate change concern influence pre-and-post exposure

Respondents least concerned about climate change were most open to changing their views on cap and trade, while those most concerned about climate change held their position or increase opposition to cap and trade.

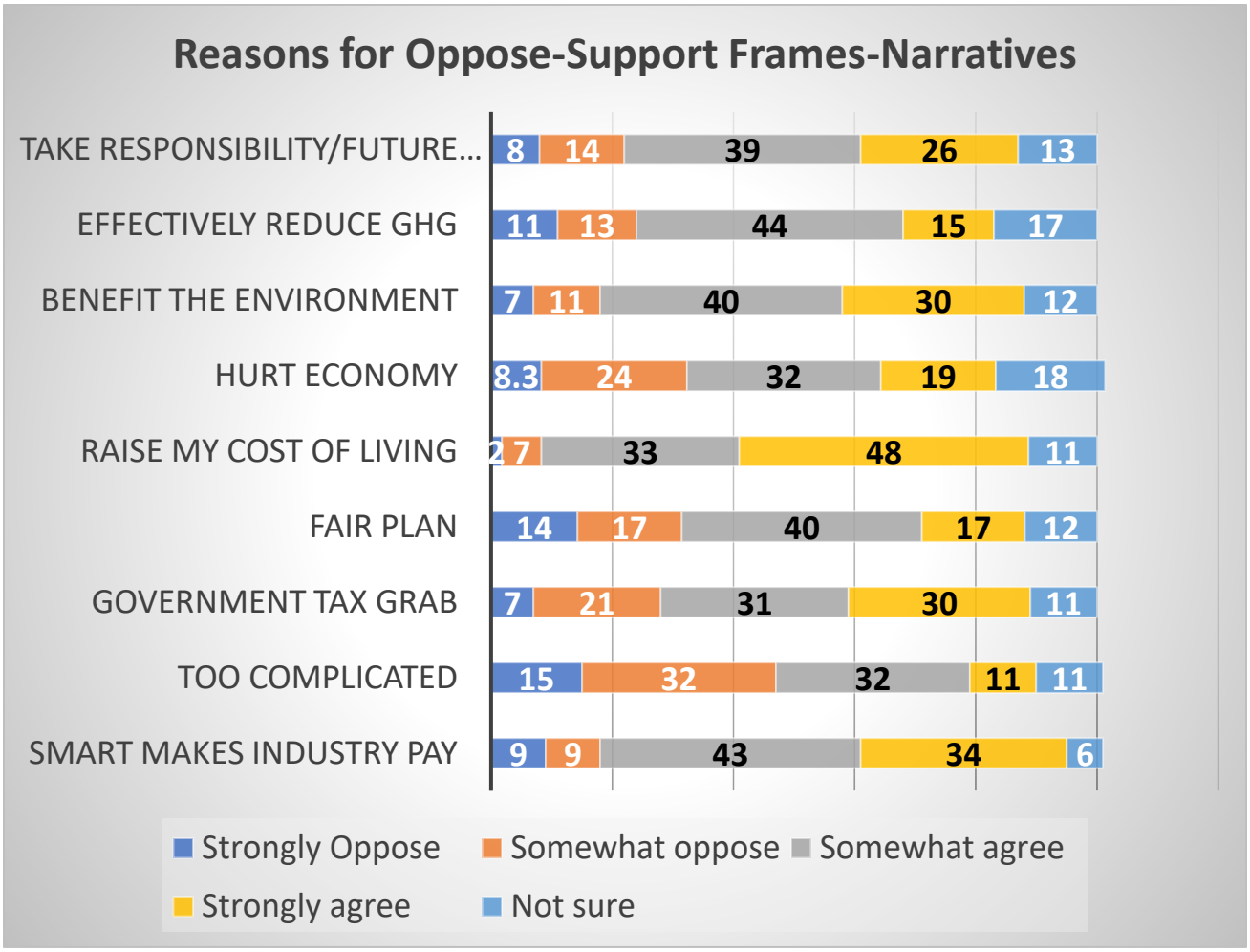

Figure 16. Reasons to Support-Oppose frames-narratives

Respondents are most concerned about the effect of carbon pricing on their cost of living (48% strongly agree), but bivariate correlation analysis shows no relationship between income and this belief. There also is the belief that carbon pricing is smart policy (34% strongly support; 43% somewhat support).

CONCLUSIONS

There are six key findings from this research:

- Carefully crafted frames and narratives can be supported by a broad spectrum of the population
- Opinions on carbon pricing are not well formed, and people are vulnerable to the cost frame
- Positive priming can increase support for policies that price carbon
- Information can be polarizing
- Climate change feels distant and agency is weak
- Investing in clean energy is perceived as good for the environment and human health

Appendix 1 summarizes all results. Appendix 2 provides a copy of the survey instrument.

Top-line results

7. **Carefully crafted frames and narratives can be supported by a broad spectrum of the population**: It is possible to develop frames and narratives that a broad spectrum of New Brunswickers can agree with. Three frames – Makes Sense-Polluter More-Pay More, Polluter Pay-Fair-Accountable-Responsible, and Market Signal-Market Failure – garnered more than 70% support from respondents spanning the centre-left and centre-right (3, 4, or 5 on a 7-point political orientation scale), and "somewhat concerned", "concerned", and "very concerned" on the climate change scale (somewhat and/or strongly support, Figure 1, Tables 11 to 19 and 32).

8. **Opinions on carbon pricing are not well formed, and people are vulnerable to the cost frame:** For all narratives, the "somewhat agree" category had the highest scores relative to other categories, except Polluter Pay-Fair-Accountable-Responsible. In this case, 40% of respondents "strongly agree" this narrative is believable (35% somewhat agree). Respondents also are only moderately confident in the effectiveness of carbon pricing (44% somewhat support), and believe carbon pricing will raise their cost of living (80%; (Figures 5 and 11; Tables 4 and Table 20).

9. **Positive priming can increase support for policies that price carbon:** Exposure to positively framed carbon pricing narratives increase overall support (somewhat and strongly support) for carbon pricing, carbon tax, and cap and trade, compared to pre-exposure support (Figure 9 and Tables 5 to 9). Greatest improvement in support is for cap and trade, the carbon pricing instrument respondents were least aware of prior to exposure to the narratives (47% of respondents were "not sure" or indicated "I have not heard of this"). Support for carbon tax showed the least improvement in support between pre-and-post-exposure.
    a. The young, women, people "somewhat concerned" and "concerned" about climate change, and those on the centre-left and centre-right (ranking 3, 4, or 5 on a 7-point political orientation scale) were most inclined to show increased support for carbon pricing, carbon tax and cap and trade after exposure to the various positively framed narratives (Tables 5 to 9). The shift in support was primarily from "not sure" to "somewhat support" (particularly for women), and to a lesser degree to "strongly support".

10. **Information can be polarizing**: Results show evidence of motivated reasoning, a cognitive bias process where people favour information consistent with their worldview or identity loyalties and dismiss information contrary to their worldview or identity loyalties (Hart & Nisbet, 2012). The politicization of climate change has resulted in political orientation being a strong predictor of belief in, and concern about, climate change. Respondents in our 2017 survey sample demonstrate this process. Those respondents self-identifying as "not at all" or "not too concerned" about climate change, or "very conservative" or "very liberal", and who were strongly opposed to carbon pricing, carbon tax and cap and trade in pre-exposure testing, remained strongly opposed or even more opposed post-exposure[11].

[11] And as might be expected there is a strong overlap in level of concern about climate change and political orientation with 70% of respondents indicating they are "not at all concerned" about climate change rating themselves 5, 6, or 7 on a 7-point political orientation scale; 48% of respondents who are "not too concerned" about climate change rate themselves 5, 6 or 7 on the political orientation scale. Respondents rating themselves as 1, 2 or 3 on the political orientation scale (scale ranks from 1 = very liberal to 7 = very conservative swing in the opposition

a. Looking at the "strongly opposed" category, "very liberal" respondents were more opposed post-exposure to carbon pricing, carbon tax, and cap and trade narratives, while "very conservative" respondents increased opposition to carbon pricing, and decreased opposition to carbon tax and cap and trade.

11. **Climate change feels distant and agency is weak:** Concern about climate change is growing, with 32% of New Brunswickers "concerned" in 2017, compared to 14% in 2016 (Figure 2). At the same time, climate change may feel too distant, with only 13% of respondents believing it could cause great personal harm, but 59% believing the same about future generations. There also appears to be a weak link to human activities and climate change. While 56% correctly identify that burning fossil fuels is the human activity most responsible for climate change, 45% believe climate change is mostly caused by natural patterns and human activities, compared to 43% who believe human activities are most responsible. There is a strong scientific consensus that human activity is the dominant cause of the global warming changing the climate[12].

12. **Investing in clean energy is perceived as good for the environment and human health**. Like other Canadians, New Brunswickers want to see more emphasis on solar and wind (79% and 80%, Figure7, Tables 25 to 30), and believe that the primary benefits of investing in clean energy are improvements to air quality and public health (37%), followed by reduced carbon pollution (22%). Forty percent of 18 to 24-year-olds believe reduced carbon pollution is the primary benefit of investing in clean energy (Figure 8, Table 31).

Demographic influence highlights

There are important demographic effects influencing the results, particularly relating to gender, age and mother tongue. Men are significantly more inclined to strongly oppose or oppose narratives and women are significantly more inclined to feel "not sure" or to "somewhat agree". Younger participants are significantly more supportive of the Polluter Pay-Fair-Accountable-Responsible frame ranking it number one for 18 to 24-year-olds. Respondents over 75-years-old show the lowest level of support for almost all narratives.

Importantly, income is not a significant factor influencing beliefs about carbon pricing "raising my cost of living". Age is more important to these results, with respondents aged 55 -years-old to over 75-years-old most concerned (90%, 92% and 80% respectively somewhat or strongly agree carbon pricing will raise the cost of living), compared to 67% of 18 to 24-year-olds (67% somewhat or strongly agreeing; Table 20).

To review demographic influences on study results, see Tables 1 to 32 Appendix 1.

direction with 20% saying they are "not at all concerned" about climate change, compared to 59% being "very concerned".

[12] "GHGs and other drivers detected throughout the climate system and are ***extremely likely*** **to have been the dominant cause of the observed warming since the mid-20th century,"** (Intergovernmental Panel on Climate Change et al., 2014, p. 4). Extremely likely represents 95 to 100% probability

Recommendations

Results suggest opportunities for an integrated narrative (Figure 2) emphasizing fairness; common sense; high-level goal details, rather than policy design specifics; and a shared contract (pollute more-pay more, unleash creativity, balanced responsibility). These themes are embedded in the carbon pricing frames and narratives used in this study:

- *Common sense: if you pollute more you need to do more to clean it up*
- *Smart policy, that will benefit the environment by sending clear signals that reward businesses that find solutions and pollute the least*
- *Carbon pricing is a good way to stimulate innovation and creativity*
- *A fair way to share responsibility and be accountable for the pollution going into the air we all breathe*
- *A way take to take responsibility today to lessen the environmental burden for our grandchildren*

Education and outreach about carbon pricing options, especially cap and trade are required. Older New Brunswickers clearly are concerned about the effect carbon pricing will have on their fixed incomes, regardless of what their incomes are. Women and younger respondents feel less knowledgeable about what carbon pricing is and have demonstrated in this study that they are open to new information and willing to support policies that price carbon. Program design that addresses cost of living concerns of older New Brunswickers, combined with well-framed information campaigns targeting the needs of women and younger residents, could support growth in support for carbon pricing as New Brunswick moves to implement the program.

This research suggests the most effective way to engage citizens in supporting carbon pricing is to craft communications and engagement materials that emphasize the outcomes society is pursuing rather than the specifics of the policy such as how a carbon tax or cap and trade program would work.

To strengthen the link between human activity and climate change, it is critical that all climate change communications refer to the phenomenon as human-caused. The science supporting this claim is unequivocal. Equally important is the need to be specific about the causal human contribution to climate change: burning fossil fuels like oil, coal and natural gas, rather than to highlight the less direct cause: greenhouse gases or carbon dioxide. Establishing causal link between activity and effect is essential to creating a sense of agency, which in turn, is the basis for creating a sense of responsibility. Messages should reflect the following elements:

- Climate change is <u>human-caused</u>
- We <u>unbalance</u> the climate <u>mostly</u> when we burn coal, oil and natural gas because we trap heat at the Earth's surface
- Climate change is <u>affecting us now</u> through warmer temperatures causing extreme weather
- We <u>experience a changing climate</u> through extreme weather like post-tropical storm Arthur, flooding, and ice storms making us less safe, displacing us from our homes, risking our health

- When we take action to cut our energy use we reduce risks and benefit from cleaner air, a safer climate, and better health for us and our grandchildren
- Solving climate change makes cleaner energy from solar and wind more affordable
- When we save energy and switch to renewable energy we help solve climate change

APPENDIX 1

Table 1: Climate change concern

Demographics	How concerned are you about climate change?						
	Not at all concerned	Not very concerned	Somewhat concerned	Concerned	Very concerned	Not Sure	Total Respondents
Total	2%	7%	33%	32%	25%	1%	505
Gender							
Male	3%	6%	29%	36%	25%	0.0%	250
Female	1%	7%	38%	28%	25%	1.2%	255
Language							
English	2%	8%	33%	**31%**	25%	1%	468
French	0%	0%	35%	**43%**	22%	0%	37
Age							
18 to 24	0%	0%	40%	27%	33%	0%	30
25 to 34	0%	5%	35%	36%	21%	2%	91
35 to 44	3%	10%	35%	34%	18%	0%	79
45 to 54	2%	4%	35%	30%	30%	0%	111
55 to 64	3%	12%	28%	28%	28%	1%	116
65 to 74	0%	5%	32%	35%	29%	0%	63
75+	13%	7%	33%	47%	0%	0%	15
Education							
Elementary/some high school	0%	16%	42%	32%	5%	5%	19
High School	4%	8%	36%	32%	19%	1%	95
Some college	2%	18%	33%	29%	18%	0%	49
College	0%	5%	36%	37%	22%	0%	119
Some university	3%	0%	32%	16%	46%	3%	37
Undergraduate	1%	6%	29%	35%	28%	0%	102

Trade-Apprentice	11%	11%	32%	14%	32%	0%	28
Graduate	0%	0%	29%	39%	32%	0%	56
Income							
<$25,000	2%	14%	29%	33%	22%	0%	51
$25,000 to $49,999	3%	6%	33%	34%	24%	1%	101
$50,000 to $74,999	3%	7%	40%	22%	27%	0%	89
$75,000 to $99,999	0%	4%	28%	43%	24%	0%	90
$100,000 to $149,999	3%	5%	34%	30%	28%	0%	74
$150,000 +	0%	3%	27%	33%	33%	3%	83
Prefer not to say	1%	10%	37%	28%	21%	1%	67
Community							
City/large urban	0%	10%	28%	31%	29%	1%	109
Suburb	3%	4%	41%	32%	21%	0%	76
Small regional city	4%	2%	37%	32%	23%	1%	99
Small town	1%	8%	34%	37%	19%	1%	98
Rural	3%	8%	29%	29%	31%	0%	120
Remote	0%	33%	33%	33%	0%	0%	3
Political Views							
Very liberal	0%	2%	**16%**	32%	**44%**	0%	43
2	0%	6%	**11%**	36%	**45%**	2%	53
3	2%	6%	31%	32%	29%	0%	112
4	1%	5%	40%	34%	20%	1%	149
5	2%	5%	45%	33%	**15%**	0%	85
6	**7%**	**12%**	43%	26%	**12%**	0%	42
Very conservative	**10%**	**38%**	**19%**	**10%**	**19%**	5%	21

Note: Bold indicates significant, p = <.05

Table 2: Process warming Earth

Demographics	In your opinion, is the Earth getting warmer mostly because of human activity such as burning fossil fuels, or mostly because of natural patterns in the Earth's environment?				
	Human activity	Natural patterns	A combination	Not sure	Total Respondents
Total	42.8%	8.3%	45.3%	3.6%	505
Gender					
Male	**46.4%**	9.2%	**43.2%**	1.2%	250
Female	**39.2%**	7.5%	**47.5%**	5.9%	255
Language					
English	43%	9%	46%	3%	468
French	46%	5%	43%	5%	37
Age					
18 to 24	50%	3%	47%	0%	30
25 to 34	48%	7%	38%	7%	91
35 to 44	42%	8%	48%	3%	79
45 to 54	38%	7%	51%	4%	111
55 to 64	40%	10%	47%	3%	116
65 to 74	48%	6%	44%	2%	63
75+	40%	33%	20%	7%	15
Education					
Elementary/some high school	**32%**	**16%**	47%	5%	19
High School	40%	6%	45%	8%	95
Some college	**29%**	12%	**57%**	2%	49
College	43%	5%	48%	4%	119
Some university	41%	3%	51%	5%	37
Undergraduate	49%	5%	45%	1%	102
Trade-Apprentice	39%	**36%**	**25%**	0%	28

Graduate		**55%**	9%	**36%**	0%	56
Income						
<$25,000		45%	8%	43%	4%	51
$25,000 to $49,999		45%	6%	44%	6%	101
$50,000 to $74,999		35%	13%	51%	1%	89
$75,000 to $99,999		50%	3%	43%	3%	90
$100,000 to $149,999		53%	9%	38%	0%	74
$150,000 +		52%	6%	36%	6%	83
Prefer not to say		24%	12%	58%	6%	67
Community						
City/large urban		42%	6%	43%	8%	109
Suburb		41%	8%	50%	1%	76
Small regional city		43%	7%	45%	4%	99
Small town		44%	6%	48%	2%	98
Rural		43%	13%	43%	2%	120
Remote		33%	33%	33%	0%	3
Political Views						
Very liberal		40%	7%	51%	2%	43
	2	**64%**	2%	**26%**	8%	53
	3	48%	5%	46%	0%	112
	4	42%	7%	48%	3%	149
	5	35%	5%	53%	7%	85
	6	38%	**21%**	38%	2%	42
Very conservative		**14%**	**38%**	43%	5%	21

Note: Bold indicates significant, p = <.05

Table 3: Human activity most responsible for climate change

Demographics	The human activity most responsible for changing the climate is:							
	Throwing away food and products that decompose in landfills	Cutting trees to make products and grow food	Venting chemicals used for cooling that deplete the ozone layer	Burning coal, oil and natural gas to run equipment and vehicles, heat and cool buildings, and make electricity	Using fertilizer for gardening and agriculture	Not sure	Other	Total Respondents
Total	3%	6%	15%	56%	1%	15%	3%	505
Gender								
Male	1%	6%	10%	67%	1%	10%	4%	250
Female	5%	7%	20%	45%	1%	20%	1%	255
Language								
English	3%	6%	15%	57%	1%	15%	3%	468
French	5%	5%	19%	49%	3%	19%	0%	37
Age								
18 to 24	7%	13%	20%	53%	3%	0%	3%	30
25 to 34	4%	4%	14%	54%	0%	22%	1%	91
35 to 44	5%	6%	19%	53%	1%	13%	3%	79
45 to 54	5%	6%	17%	59%	0%	11%	3%	111
55 to 64	1%	5%	13%	58%	2%	18%	3%	116
65 to 74	0%	8%	13%	60%	2%	16%	2%	63
75+	7%	7%	13%	47%	0%	20%	7%	15
Education								
Elementary/some high school	5%	16%	16%	21%	0%	37%	5%	19
High School	7%	7%	17%	46%	2%	17%	3%	95
Some college	4%	6%	14%	61%	0%	14%	0%	49
College	4%	4%	24%	47%	1%	18%	1%	119

Some university	0%	8%	11%	62%	3%	11%	5%	37
Undergraduate	0%	10%	9%	69%	1%	10%	2%	102
Trade-Apprentice	0%	4%	21%	57%	0%	7%	11%	28
Graduate	4%	0%	7%	73%	0%	14%	2%	56
Income								
<$25,000	8%	12%	18%	41%	0%	16%	6%	51
$25,000 to $49,999	4%	6%	15%	59%	1%	12%	3%	101
$50,000 to $74,999	2%	4%	16%	64%	2%	10%	1%	89
$75,000 to $99,999	7%	7%	17%	58%	0%	12%	0%	90
$100,000 to $149,999	1%	3%	15%	59%	0%	19%	3%	74
$150,000 +	0%	0%	6%	67%	3%	18%	6%	83
Prefer not to say	0%	12%	18%	42%	1%	24%	3%	67
Community								
City/large urban	3%	6%	15%	61%	1%	13%	1%	109
Suburb	4%	5%	12%	64%	0%	11%	4%	76
Small regional city	2%	6%	11%	59%	1%	19%	2%	99
Small town	5%	5%	18%	52%	2%	16%	1%	98
Rural	3%	8%	19%	48%	1%	15%	5%	120
Remote	0%	0%	33%	33%	0%	33%	0%	3
Political Views								
Very liberal	2%	2%	19%	58%	5%	12%	2%	43
2	0%	4%	11%	66%	2%	17%	0%	53
3	5%	8%	11%	60%	1%	10%	5%	112
4	5%	6%	15%	53%	1%	20%	1%	149
5	1%	6%	22%	58%	0%	11%	2%	85
6	2%	7%	19%	50%	0%	14%	7%	42
Very conservative	5%	14%	14%	38%	0%	29%	0%	21

Note: Bold indicates significant, p = <.05

Table 4: Carbon pricing effectiveness

Demographics	A way to lower the greenhouse gas emissions that cause climate change is to put a price on pollution from fuels such as coal, oil, gasoline and natural gas.					
	Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure	Total Respondents
Total	14%	17%	44%	15%	10%	505
Gender						
Male	**20%**	17%	40%	18%	5%	250
Female	7%	16%	**49%**	12%	15%	255
Language						
English	15%	17%	44%	14%	10%	468
French	0%	14%	51%	22%	14%	37
Age						
18 to 24	**0%**	17%	**60%**	10%	13%	30
25 to 34	**2%**	12%	**53%**	14%	19%	91
35 to 44	15%	11%	48%	16%	9%	79
45 to 54	15%	**23%**	38%	17%	7%	111
55 to 64	22%	18%	41%	12%	7%	116
65 to 74	13%	19%	44%	16%	8%	63
75+	**33%**	13%	**20%**	20%	13%	15
Education						
Elementary/some high school	11%	21%	26%	11%	32%	19
High School	17%	17%	38%	14%	15%	95
Some college	18%	14%	43%	10%	14%	49
College	8%	21%	49%	12%	11%	119
Some university	14%	16%	35%	24%	11%	37

Undergraduate	14%	18%	48%	17%	4%	102
Trade-Apprentice	36%	18%	36%	11%	0%	28
Graduate	9%	7%	57%	21%	5%	56
Income						
<$25,000	12%	18%	37%	20%	14%	51
$25,000 to $49,999	11%	11%	52%	13%	13%	101
$50,000 to $74,999	21%	17%	34%	17%	11%	89
$75,000 to $99,999	9%	19%	51%	14%	7%	90
$100,000 to $149,999	12%	20%	47%	12%	8%	74
$150,000 +	9%	15%	36%	30%	9%	83
Prefer not to say	21%	19%	43%	7%	9%	67
Community						
City/large urban	9%	12%	48%	20%	11%	109
Suburb	12%	21%	45%	17%	5%	76
Small regional city	10%	14%	46%	16%	13%	99
Small town	12%	21%	45%	**9%**	12%	98
Rural	**24%**	16%	39%	13%	8%	120
Remote	0%	67%	33%	0%	0%	3
Political Views						
Very liberal	16%	**5%**	42%	**26%**	12%	43
2	**2%**	**8%**	**60%**	**23%**	8%	53
3	10%	14%	**54%**	15%	7%	112
4	10%	22%	44%	11%	13%	149
5	13%	25%	39%	13%	11%	85
6	**40%**	10%	**31%**	17%	2%	42
Very conservative	**40%**	10%	**31%**	17%	2%	21

Note: Bold indicates significant, p = <.05

Table 5: Pre-exposure support carbon pricing

Demographics	"Carbon tax" and "cap and trade" are two regulatory ways to put a price on the pollution causing climate change. Based on what you know would you say that you …carbon pricing					
	Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure	Total Respondents
Total	16%	14%	28%	10%	18%	505
Gender						
Male	**24%**	16%	29%	14%	12%	250
Female	9%	12%	27%	6%	**24%**	255
Language						
English	18%	14%	28%	10%	18%	468
French	**0%**	16%	30%	14%	**24%**	37
Age						
18 to 24	**10%**	13%	30%	13%	17%	30
25 to 34	**4%**	8%	32%	10%	23%	91
35 to 44	19%	11%	28%	9%	15%	79
45 to 54	15%	21%	31%	9%	16%	111
55 to 64	23%	15%	24%	12%	17%	116
65 to 74	21%	13%	29%	8%	17%	63
75+	**27%**	13%	**13%**	13%	**27%**	15
Education						
Elementary/some high school	5%	16%	26%	0%	32%	19
High School	24%	15%	18%	8%	21%	95
Some college	24%	12%	33%	4%	16%	49
College	11%	15%	25%	10%	22%	119
Some university	11%	11%	41%	14%	16%	37
Undergraduate	13%	19%	29%	14%	14%	102
Trade-Apprentice	36%	7%	25%	14%	7%	28

Graduate	13%	7%	39%	11%	16%	56
Income						
<$25,000	14%	10%	18%	16%	25%	51
$25,000 to $49,999	15%	15%	24%	11%	18%	101
$50,000 to $74,999	20%	10%	36%	10%	12%	89
$75,000 to $99,999	8%	17%	34%	6%	24%	90
$100,000 to $149,999	16%	22%	30%	11%	12%	74
$150,000 +	15%	9%	30%	21%	9%	83
Prefer not to say	28%	10%	21%	4%	22%	67
Community						
City/large urban	14%	16%	32%	11%	13%	109
Suburb	17%	16%	30%	12%	16%	76
Small regional city	18%	7%	31%	13%	18%	99
Small town	14%	16%	19%	8%	30%	98
Rural	18%	15%	28%	8%	15%	120
Remote	33%	0%	33%	0%	0%	3
Political Views						
Very liberal	14%	9%	37%	14%	9%	43
2	6%	6%	32%	**26%**	25%	53
3	11%	15%	35%	13%	13%	112
4	11%	17%	26%	7%	24%	149
5	16%	15%	24%	7%	20%	85
6	**50%**	14%	21%	0%	7%	42
Very conservative	**48%**	10%	**10%**	5%	14%	21

Note: Bold indicates significant, p = <.05

Table 6: Post-exposure support carbon pricing

Demographics	Now that you have read various statements please tell us if you strongly oppose, somewhat oppose, somewhat support or strongly - Carbon pricing					
	Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure	Total Respondents
Total	15%	13%	42%	18%	11%	505
Gender						
Male	**24%**	12%	**36%**	**22%**	**7%**	250
Female	**7%**	15%	**49%**	**15%**	**15%**	255
Language						
English	17%	13%	42%	18%	11%	468
French	**0%**	11%	**49%**	**27%**	14%	37
Age						
18 to 24	**3%**	13%	47%	**27%**	10%	30
25 to 34	**5%**	15%	47%	20%	12%	91
35 to 44	16%	11%	42%	20%	10%	79
45 to 54	15%	10%	44%	20%	11%	111
55 to 64	22%	14%	39%	14%	12%	116
65 to 74	19%	16%	41%	16%	8%	63
75+	**33%**	13%	**20%**	**13%**	**20%**	15
Education						
Elementary/some high school	16%	5%	53%	11%	16%	19
High School	17%	13%	32%	21%	18%	95
Some college	24%	18%	37%	8%	12%	49
College	11%	12%	48%	17%	13%	119
Some university	8%	16%	41%	30%	5%	37
Undergraduate	17%	14%	45%	18%	7%	102

Trade-Apprentice	25%	18%	29%	21%	7%	28
Graduate	13%	9%	52%	20%	7%	56
Income						
<$25,000	12%	12%	29%	33%	14%	51
$25,000 to $49,999	14%	17%	42%	20%	8%	101
$50,000 to $74,999	19%	11%	44%	15%	11%	89
$75,000 to $99,999	10%	17%	46%	16%	12%	90
$100,000 to $149,999	14%	11%	49%	23%	4%	74
$150,000 +	12%	12%	36%	24%	15%	83
Prefer not to say	27%	9%	42%	4%	18%	67
Community						
City/large urban	16%	8%	38%	28%	11%	109
Suburb	16%	21%	45%	12%	7%	76
Small regional city	18%	10%	43%	21%	7%	99
Small town	11%	12%	49%	14%	13%	98
Rural	16%	15%	38%	15%	16%	120
Remote	33%	33%	33%	0%	0%	3
Political Views						
Very liberal	16%	**2%**	35%	**30%**	16%	43
2	4%	8%	**47%**	**30%**	11%	53
3	11%	12%	**49%**	23%	**5%**	112
4	12%	15%	**41%**	15%	17%	149
5	16%	15%	**48%**	13%	7%	85
6	**33%**	**26%**	29%	5%	7%	42
Very conservative	**52%**	**5%**	**19%**	10%	14%	21

Note: Bold indicates significant, p = <.05

Table 7: Pre-exposure support carbon tax

Demographics	"Carbon tax" and "cap and trade" are two regulatory ways to put a price on the pollution causing climate change. Based on what you know would you say that you …carbon tax						
	Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure	I have not heard of this	Total Respondents
Total	21%	16%	27%	14%	16%	6%	505
Gender							
Male	**30%**	16%	29%	15%	9%	1%	250
Female	**13%**	16%	25%	12%	**24%**	11%	255
Language							
English	23%	16%	26%	13%	16%	6%	468
French	**3%**	14%	32%	16%	22%	**14%**	37
Age							
18 to 24	**3%**	20%	**40%**	17%	10%	10%	30
25 to 34	**7%**	14%	27%	12%	**29%**	11%	91
35 to 44	25%	13%	23%	15%	15%	9%	79
45 to 54	22%	18%	27%	14%	14%	5%	111
55 to 64	28%	18%	23%	15%	12%	3%	116
65 to 74	24%	14%	33%	10%	16%	3%	63
75+	**53%**	**7%**	20%	13%	7%	0%	15
Education							
Elementary/some high school	5%	16%	26%	0%	32%	21%	19
High School	33%	18%	24%	4%	14%	6%	95
Some college	33%	18%	24%	4%	14%	6%	49
College	15%	19%	21%	14%	21%	9%	119
Some university	11%	14%	35%	19%	22%	0%	37
Undergraduate	24%	16%	33%	15%	12%	1%	102

Trade-Apprentice	43%	14%	29%	11%	4%	0%	28
Graduate	13%	5%	39%	23%	14%	5%	56
Income							
<$25,000	12%	18%	18%	14%	25%	14%	51
$25,000 to $49,999	18%	22%	24%	16%	11%	10%	101
$50,000 to $74,999	33%	11%	33%	10%	10%	3%	89
$75,000 to $99,999	16%	11%	38%	10%	21%	4%	90
$100,000 to $149,999	16%	26%	20%	16%	18%	4%	74
$150,000 +	15%	6%	39%	27%	9%	3%	83
Prefer not to say	34%	12%	18%	10%	21%	4%	67
Community							
City/large urban	20%	14%	29%	17%	10%	9%	109
Suburb	28%	16%	28%	14%	14%	0%	76
Small regional city	19%	13%	32%	14%	15%	6%	99
Small town	17%	16%	29%	9%	23%	5%	98
Rural	23%	19%	18%	13%	18%	8%	120
Remote	0%	33%	33%	0%	0%	33%	3
Political Views							
Very liberal	14%	9%	30%	23%	16%	7%	43
2	4%	19%	36%	26%	11%	4%	53
3	18%	14%	32%	20%	12%	4%	112
4	17%	18%	27%	7%	23%	7%	149
5	21%	20%	21%	11%	20%	7%	85
6	**52%**	12%	21%	**5%**	**5%**	5%	42
Very conservative	**62%**	**5%**	**5%**	**5%**	14%	10%	21

Note: Bold indicates significant, p = <.05

Table 8: Post-exposure support carbon tax

Demographics	Now that you have read various statements please tell us if you strongly oppose, somewhat oppose, somewhat support or strongly - Carbon tax					
	Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure	Total Respondents
Total	20%	12%	38%	20%	9%	505
Gender						
Male	**30%**	11%	**32%**	21%	**5%**	250
Female	**10%**	14%	**44%**	19%	**13%**	255
Language						
English	22%	12%	37%	20%	9%	468
French	**0%**	14%	**49%**	24%	**14%**	37
Age						
18 to 24	**7%**	7%	**50%**	**27%**	10%	30
25 to 34	8%	11%	45%	24%	12%	91
35 to 44	19%	11%	43%	18%	9%	79
45 to 54	20%	11%	36%	23%	10%	111
55 to 64	28%	17%	31%	16%	9%	116
65 to 74	25%	13%	35%	19%	8%	63
75+	**47%**	13%	**27%**	**13%**	**0%**	15
Education						
Elementary/some high school	16%	0%	53%	16%	16%	19
High School	21%	15%	24%	23%	17%	95
Some college	37%	10%	31%	10%	12%	49
College	16%	13%	41%	21%	9%	119
Some university	8%	14%	43%	30%	5%	37
Undergraduate	22%	18%	38%	19%	4%	102
Trade-Apprentice	32%	4%	43%	14%	7%	28

Graduate	13%	9%	50%	23%	5%	56
Income						
<$25,000	12%	12%	25%	39%	12%	51
$25,000 to $49,999	19%	13%	37%	25%	7%	101
$50,000 to $74,999	29%	11%	38%	12%	9%	89
$75,000 to $99,999	11%	13%	48%	17%	11%	90
$100,000 to $149,999	16%	16%	41%	23%	4%	74
$150,000 +	12%	12%	36%	27%	12%	83
Prefer not to say	36%	9%	34%	7%	13%	67
Community						
City/large urban	20%	8%	34%	28%	9%	109
Suburb	21%	20%	37%	16%	7%	76
Small regional city	21%	8%	42%	22%	6%	99
Small town	16%	17%	38%	19%	9%	98
Rural	22%	10%	39%	15%	14%	120
Remote	0%	67%	33%	0%	0%	3
Political Views						
Very liberal	16%	9%	33%	28%	14%	43
2	**4%**	8%	40%	**36%**	13%	53
3	18%	6%	**50%**	23%	3%	112
4	13%	**21%**	37%	15%	14%	149
5	26%	13%	40%	18%	4%	85
6	**45%**	12%	**26%**	10%	7%	42
Very conservative	**52%**	**5%**	**5%**	19%	**19%**	21

Note: Bold indicates significant, p = <.05

Table 9: Pre-exposure support cap and trade

Demographics	"Carbon tax" and "cap and trade" are two regulatory ways to put a price on the pollution causing climate change. Based on what you know would you say that you …cap and trade						
	Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure	I have not heard of this	Total Respondents
Total	12%	11%	22%	8%	18%	29%	505
Gender							
Male	**20%**	13%	26%	8%	16%	17%	250
Female	4%	10%	18%	8%	21%	**40%**	255
Language							
English	12%	12%	22%	8%	18%	28%	468
French	5%	11%	24%	3%	24%	32%	37
Age							
18 to 24	3%	13%	23%	10%	3%	**47%**	30
25 to 34	3%	5%	22%	3%	**27%**	**38%**	91
35 to 44	11%	11%	20%	9%	11%	**37%**	79
45 to 54	11%	15%	25%	7%	20%	22%	111
55 to 64	18%	10%	22%	12%	16%	22%	116
65 to 74	16%	13%	22%	6%	24%	19%	63
75+	**20%**	**20%**	**7%**	7%	20%	27%	15
Education							
Elementary/some high school	5%	16%	16%	0%	32%	32%	19
High School	14%	12%	21%	6%	16%	32%	95
Some college	16%	16%	16%	8%	18%	24%	49
College	7%	7%	23%	8%	20%	35%	119
Some university	11%	8%	19%	8%	27%	27%	37
Undergraduate	12%	14%	24%	10%	16%	25%	102

Trade-Apprentice	25%	11%	21%	4%	11%	29%	28
Graduate	11%	14%	29%	11%	18%	18%	56
Income							
<$25,000	8%	8%	20%	10%	24%	31%	51
$25,000 to $49,999	11%	14%	21%	4%	20%	31%	101
$50,000 to $74,999	17%	11%	24%	9%	16%	24%	89
$75,000 to $99,999	7%	10%	27%	9%	28%	20%	90
$100,000 to $149,999	12%	14%	27%	9%	8%	30%	74
$150,000 +	18%	15%	18%	9%	15%	24%	83
Prefer not to say	12%	9%	13%	7%	16%	42%	67
Community							
City/large urban	11%	14%	25%	8%	16%	27%	109
Suburb	12%	9%	30%	9%	17%	22%	76
Small regional city	14%	12%	17%	11%	22%	23%	99
Small town	6%	11%	22%	6%	20%	34%	98
Rural	15%	10%	18%	6%	18%	33%	120
Remote	0%	33%	0%	0%	0%	67%	3
Political Views							
Very liberal	7%	9%	26%	7%	21%	30%	43
2	6%	15%	23%	9%	21%	26%	53
3	9%	13%	25%	8%	18%	28%	112
4	8%	9%	22%	6%	19%	35%	149
5	9%	14%	18%	12%	22%	25%	85
6	**33%**	10%	24%	5%	7%	21%	42
Very conservative	**43%**	10%	**10%**	10%	10%	**19%**	21

Note: Bold indicates significant, p = <.05

Table 10: Post-exposure support cap and trade

Demographics	Now that you have read various statements please tell us if you strongly oppose, somewhat oppose, somewhat support or strongly - Cap and Trade					
	Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure	Total Respondents
Total	14%	11%	39%	19%	16%	505
Gender						
Male	**20%**	12%	38%	**16%**	14%	250
Female	**8%**	11%	40%	**22%**	19%	255
Language						
English	15%	12%	38%	19%	16%	468
French	5%	8%	43%	22%	22%	37
Age						
18 to 24	7%	13%	33%	30%	17%	30
25 to 34	5%	14%	40%	25%	15%	91
35 to 44	18%	9%	37%	16%	20%	79
45 to 54	14%	10%	45%	16%	14%	111
55 to 64	17%	10%	38%	18%	16%	116
65 to 74	14%	14%	37%	19%	16%	63
75+	27%	13%	27%	13%	20%	15
Education						
Elementary/some high school	21%	5%	26%	21%	26%	19
High School	15%	11%	38%	15%	22%	95
Some college	16%	16%	35%	14%	18%	49
College	9%	11%	43%	18%	19%	119
Some university	14%	16%	32%	32%	5%	37
Undergraduate	14%	15%	41%	21%	10%	102
Trade-Apprentice	18%	4%	50%	7%	21%	28

Graduate	16%	7%	34%	30%	13%	56
Income						
<$25,000	12%	14%	25%	27%	22%	51
$25,000 to $49,999	10%	12%	46%	15%	18%	101
$50,000 to $74,999	13%	17%	38%	16%	16%	89
$75,000 to $99,999	10%	11%	38%	23%	18%	90
$100,000 to $149,999	12%	11%	50%	19%	8%	74
$150,000 +	27%	9%	18%	33%	12%	83
Prefer not to say	22%	4%	39%	13%	21%	67
Community						
City/large urban	16%	9%	33%	27%	16%	109
Suburb	12%	16%	42%	18%	12%	76
Small regional city	13%	13%	39%	19%	15%	99
Small town	12%	15%	37%	18%	17%	98
Rural	16%	7%	43%	13%	21%	120
Remote	0%	0%	33%	67%	0%	3
Political Views						
Very liberal	14%	**0%**	33%	**26%**	**28%**	43
2	11%	9%	43%	21%	15%	53
3	14%	13%	39%	21%	13%	112
4	9%	11%	40%	17%	21%	149
5	12%	16%	45%	20%	7%	85
6	**24%**	14%	31%	17%	14%	42
Very conservative	**38%**	**5%**	**19%**	14%	24%	21

Note: Bold indicates significant, p = <.05

Table 11: Makes Sense-Pollute More-Pay More

Demographics	Pricing pollution makes sense. Businesses that pollute more pay more. Businesses that use energy efficiently pay less. It encourages companies to invest in solutions and to develop new technologies.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	84%	75%	75%	78%	505
Gender					
Male	84%	76%	74%	78%	250
Female	83%	75%	76%	78%	255
Language					
English	83%	75%	74%	77%	468
French	87%	84%	87%	86%	37
Age					
18 to 24	77%	73%	80%	77%	30
25 to 34	77%	75%	70%	74%	91
35 to 44	86%	73%	77%	79%	79
45 to 54	87%	77%	78%	81%	111
55 to 64	79%	74%	73%	75%	116
65 to 74	94%	79%	78%	84%	63
75+	87%	80%	60%	76%	15
Education					
Elementary/some high school	79%	68%	63%	70%	19
High School	78%	72%	71%	74%	95
Some college	80%	67%	76%	74%	49
College	86%	77%	74%	79%	119

Some university	84%	78%	78%	80%	37
Undergraduate	85%	75%	79%	80%	102
Trade-Apprentice	86%	82%	75%	81%	28
Graduate	89%	84%	79%	84%	56
Income					
<$25,000	76%	73%	73%	74%	51
$25,000 to $49,999	84%	78%	78%	80%	101
$50,000 to $74,999	81%	75%	81%	79%	89
$75,000 to $99,999	88%	72%	77%	79%	90
$100,000 to $149,999	86%	81%	80%	82%	74
$150,000 +	91%	85%	70%	82%	83
Prefer not to say	79%	67%	60%	69%	67
Community					
City/large urban	85%	72%	74%	77%	109
Suburb	86%	75%	75%	79%	76
Small regional city	88%	78%	80%	82%	99
Small town	83%	77%	76%	79%	98
Rural	78%	76%	71%	75%	120
Remote	67%	67%	100%	77%	3
Political Views					
Very liberal	86%	77%	81%	81%	43
2	85%	83%	85%	84%	53
3	87%	75%	79%	80%	112
4	83%	79%	77%	80%	149
5	87%	76%	71%	78%	85
6	79%	67%	62%	69%	42
Very conservative	62%	**48%**	**48%**	**53%**	21

Note: Bold indicates significant, p = <.05

Table 12: Personal Responsibility-Companies Follow

Demographics	We should all take personal responsibility for reducing pollution. We try to do the right thing by recycling or buying environmentally friendly products. A carbon tax is one way to make sure we all show the same level of responsibility for reducing the pollution we put into our air.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	67%	71%	70%	68%	505
Gender					
Male	**64%**	**67%**	71%	**67%**	250
Female	**71%**	**74%**	70%	**72%**	255
Language					
English	66%	70%	69%	68%	468
French	**81%**	**84%**	**87%**	**84%**	37
Age					
18 to 24	**80%**	77%	73%	77%	30
25 to 34	71%	74%	66%	70%	91
35 to 44	68%	58%	66%	64%	79
45 to 54	68%	77%	78%	74%	111
55 to 64	59%	69%	66%	65%	116
65 to 74	73%	76%	79%	76%	63
75+	**40%**	**47%**	**47%**	**45%**	15
Education					
Elementary/some high school	**58%**	68%	**58%**	61%	19
High School	60%	61%	66%	62%	95
Some college	**53%**	**59%**	**59%**	**57%**	49
College	73%	77%	77%	76%	119

Some university	73%	76%	70%	73%	37
Undergraduate	67%	71%	72%	70%	102
Trade-Apprentice	54%	68%	75%	66%	28
Graduate	**86%**	**82%**	71%	**80%**	56
Income					
<$25,000	71%	69%	65%	68%	51
$25,000 to $49,999	71%	72%	74%	72%	101
$50,000 to $74,999	63%	64%	70%	66%	89
$75,000 to $99,999	72%	76%	69%	72%	90
$100,000 to $149,999	65%	74%	74%	71%	74
$150,000 +	73%	76%	61%	70%	83
Prefer not to say	**57%**	66%	72%	65%	67
Community					
City/large urban	72%	75%	74%	74%	109
Suburb	62%	70%	71%	68%	76
Small regional city	69%	70%	74%	71%	99
Small town	69%	65%	61%	65%	98
Rural	63%	73%	71%	69%	120
Remote	67%	67%	67%	67%	3
Political Views					
Very liberal	70%	74%	70%	71%	43
2	**85%**	**81%**	**81%**	**82%**	53
3	74%	75%	71%	73%	112
4	68%	72%	74%	71%	149
5	62%	64%	66%	64%	85
6	43%	62%	60%	**55%**	42
Very conservative	**43%**	**52%**	**52%**	**49%**	21

Note: Bold indicates significant, p = <.05

Table 13: Balance

Demographics	Carbon pricing strikes the right balance. It allows us do what's right for the environment and encourages us to shift to cleaner and healthier renewable energy. Renewable energy means revitalizing New Brunswick manufacturing and careers. We can protect the environment and create jobs at the same time.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	67%	67%	66%	68%	505
Gender					
Male	65%	68%	69%	65%	250
Female	70%	66%	64%	67%	255
Language					
English	66%	67%	66%	66%	468
French	**78%**	73%	70%	74%	37
Age					
18 to 24	70%	77%	73%	73%	30
25 to 34	71%	64%	59%	65%	91
35 to 44	67%	68%	70%	68%	79
45 to 54	68%	68%	69%	68%	111
55 to 64	65%	75%	62%	67%	116
65 to 74	71%	**53%**	78%	67%	63
75+	**33%**	**53%**	**33%**	**40%**	15
Education					
Elementary/some high school	58%	**58%**	**47%**	**54%**	19
High School	64%	61%	68%	64%	95
Some college	**53%**	**55%**	**55%**	**54%**	49

College	71%	69%	66%	69%	119
Some university	73%	76%	68%	72%	37
Undergraduate	71%	69%	71%	70%	102
Trade-Apprentice	71%	68%	68%	69%	28
Graduate	70%	79%	70%	73%	56
Income					
<$25,000	63%	63%	63%	63%	51
$25,000 to $49,999	75%	73%	72%	73%	101
$50,000 to $74,999	69%	66%	61%	65%	89
$75,000 to $99,999	67%	66%	68%	67%	90
$100,000 to $149,999	70%	78%	76%	75%	74
$150,000 +	70%	73%	67%	70%	83
Prefer not to say	**54%**	**49%**	**54%**	**52%**	67
Community					
City/large urban	72%	68%	68%	69%	109
Suburb	66%	64%	59%	63%	76
Small regional city	68%	71%	71%	70%	99
Small town	67%	67%	68%	67%	98
Rural	65%	64%	64%	64%	120
Remote	33%	100%	33%	55%	3
Political Views					
Very liberal	70%	70%	60%	67%	43
2	79%	**85%**	83%	**82%**	53
3	75%	71%	72%	73%	112
4	68%	65%	65%	66%	149
5	58%	61%	58%	**59%**	85
6	**60%**	67%	62%	63%	42
Very conservative	**43%**	**33%**	52%	**43%**	21

Note: Bold indicates significant, p = <.05

Table 14: Polluter Pay-Fair-Accountable-Responsible

Demographics	It's not fair that heavy energy users can dump their carbon pollution in the air we all breathe. Polluters should be held accountable, and should pay for the pollution that they force all of us to live with. A carbon tax is a fair way to share responsibility for the carbon pollution that causes climate change and to reward those that are most efficient and pollute the least.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	75%	71%	72%	73%	505
Gender					
Male	73%	69%	73%	72%	250
Female	78%	73%	71%	74%	255
Language					
English	75%	71%	72%	73%	468
French	78%	76%	78%	77%	37
Age					
18 to 24	83%	80%	80%	81%	30
25 to 34	74%	67%	69%	70%	91
35 to 44	82%	70%	70%	74%	79
45 to 54	71%	74%	75%	73%	111
55 to 64	72%	72%	70%	71%	116
65 to 74	81%	73%	79%	78%	63
75+	**60%**	**53%**	**53%**	**55%**	15
Education					
Elementary/some high school	63%	63%	68%	65%	19
High School	68%	68%	71%	69%	95

Some college	65%	61%	61%	62%	49
College	76%	71%	71%	73%	119
Some university	78%	70%	73%	74%	37
Undergraduate	81%	74%	75%	77%	102
Trade-Apprentice	71%	71%	68%	70%	28
Graduate	86%	82%	82%	83%	56
Income					
<$25,000	75%	78%	69%	75%	51
$25,000 to $49,999	74%	70%	71%	72%	101
$50,000 to $74,999	72%	65%	70%	69%	89
$75,000 to $99,999	79%	72%	74%	75%	90
$100,000 to $149,999	80%	77%	81%	79%	74
$150,000 +	88%	82%	82%	84%	83
Prefer not to say	66%	61%	61%	63%	67
Community					
City/large urban	70%	73%	69%	71%	109
Suburb	67%	68%	70%	68%	76
Small regional city	75%	76%	70%	74%	99
Small town	74%	73%	71%	73%	98
Rural	69%	69%	69%	69%	120
Remote	67%	67%	67%	67%	3
Political Views					
Very liberal	77%	70%	67%	71%	43
2	**91%**	**89%**	**89%**	**90%**	53
3	82%	78%	77%	79%	112
4	74%	70%	74%	73%	149
5	72%	66%	65%	68%	85
6	**62%**	62%	64%	63%	42
Very conservative	**43%**	**38%**	**48%**	**43%**	21

Note: Bold indicates significant, p = <.05

Table 15: Market Failure-Market Signal

Demographics	We need to put a price on carbon because this sends a signal to consumers and businesses that they should shift to alternatives like more efficient manufacturing equipment, vehicles, appliances, or renewable energy like wind or solar power.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	71%	71%	71%	71%	505
Gender					
Male	70%	70%	69%	70%	250
Female	73%	73%	74%	73%	255
Language					
English	71%	71%	70%	71%	468
French	**84%**	**84%**	**84%**	**84%**	37
Age					
18 to 24	83%	83%	63%	76%	30
25 to 34	77%	77%	77%	77%	91
35 to 44	67%	67%	71%	68%	79
45 to 54	74%	74%	76%	75%	111
55 to 64	64%	64%	64%	64%	116
65 to 74	76%	76%	78%	77%	63
75+	60%	60%	53%	58%	15
Education					
Elementary/some high school	**58%**	**58%**	58%	58%	19
High School	66%	66%	67%	66%	95
Some college	63%	63%	59%	62%	49
College	71%	71%	70%	71%	119

Some university	78%	78%	78%	78%	37
Undergraduate	75%	75%	73%	74%	102
Trade-Apprentice	75%	75%	79%	76%	28
Graduate	**82%**	**82%**	**86%**	**83%**	56
Income					
<$25,000	73%	73%	67%	71%	51
$25,000 to $49,999	74%	74%	77%	75%	101
$50,000 to $74,999	69%	69%	70%	69%	89
$75,000 to $99,999	72%	72%	73%	72%	90
$100,000 to $149,999	84%	84%	82%	83%	74
$150,000 +	73%	73%	70%	72%	83
Prefer not to say	**55%**	**55%**	**54%**	**55%**	67
Community					
City/large urban	74%	74%	66%	71%	109
Suburb	74%	74%	66%	71%	76
Small regional city	68%	68%	69%	68%	99
Small town	71%	71%	66%	69%	98
Rural	70%	**70%**	58%	66%	120
Remote	67%	67%	100%	78%	3
Political Views					
Very liberal	**81%**	**81%**	74%	79%	43
2	**92%**	**92%**	**89%**	**91%**	53
3	75%	75%	72%	74%	112
4	69%	69%	74%	71%	149
5	67%	67%	65%	66%	85
6	62%	**62%**	57%	60%	42
Very conservative	**33%**	**33%**	48%	**38%**	21

Note: Bold indicates significant, p = <.05

Table 16: Where Does the Money Go?

Demographics	The carbon tax that polluters pay will fund the programs the province needs to help all of us shift to alternatives: more efficient manufacturing and industrial processes, homes, vehicles, and appliances. A carbon tax puts a price on pollution so that we can pay for the programs we need for a greener, healthier quality of life.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	65%	68%	68%	67%	505
Gender					
Male	59%	66%	67%	64%	250
Female	71%	69%	68%	69%	255
Language					
English	64%	67%	67%	66%	468
French	76%	**78%**	73%	**76%**	37
Age					
18 to 24	83%	57%	73%	71%	30
25 to 34	71%	74%	71%	72%	91
35 to 44	67%	69%	66%	67%	79
45 to 54	62%	69%	69%	67%	111
55 to 64	58%	65%	60%	61%	116
65 to 74	67%	73%	71%	70%	63
75+	**47%**	**53%**	67%	**56%**	15
Education					
Elementary/some high school	63%	53%	**58%**	**58%**	19
High School	67%	64%	69%	67%	95

Some college	53%	61%	61%	58%	49
College	66%	69%	64%	66%	119
Some university	62%	76%	73%	70%	37
Undergraduate	65%	68%	71%	68%	102
Trade-Apprentice	64%	77%	68%	70%	28
Graduate	71%	77%	71%	73%	56
Income					
<$25,000	76%	73%	71%	73%	51
$25,000 to $49,999	69%	72%	69%	70%	101
$50,000 to $74,999	62%	69%	64%	65%	89
$75,000 to $99,999	66%	69%	71%	69%	90
$100,000 to $149,999	62%	73%	76%	70%	74
$150,000 +	76%	67%	67%	70%	83
Prefer not to say	**51%**	**49%**	54%	**51%**	67
Community					
City/large urban	69%	66%	66%	67%	109
Suburb	68%	70%	63%	67%	76
Small regional city	68%	69%	74%	70%	99
Small town	69%	65%	65%	66%	98
Rural	66%	68%	61%	65%	120
Remote	33%	100%	67%	**46%**	3
Political Views					
Very liberal	70%	70%	72%	71%	43
2	**83%**	**83%**	87%	**84%**	53
3	74%	74%	73%	74%	112
4	62%	66%	66%	65%	149
5	62%	65%	61%	63%	85
6	**40%**	**55%**	**50%**	**48%**	42
Very conservative	**38%**	**38%**	**52%**	**43%**	21

Note: Bold indicates significant, p = <.05

Table 17: Honest and Simple

Demographics	A carbon tax is honest and efficient: the more you pollute, the more you pay. It's as simple as that. It's an old-fashioned, straightforward solution with the minimum of red tape or interference. Because it works through the existing tax system, it doesn't need any new bureaucracy. There are no loopholes or breaks for big business. For all these reasons a carbon tax is the best option: it is simple, stable, predictable, and rewards those that become most efficient and pollute the least.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	66%	69%	67%	67%	505
Gender					
Male	60%	64%	64%	63%	250
Female	72%	73%	70%	72%	255
Language					
English	64%	68%	66%	66%	468
French	84%	**81%**	78%	**81%**	37
Age					
18 to 24	70%	73%	60%	68%	30
25 to 34	77%	75%	70%	74%	91
35 to 44	62%	66%	65%	64%	79
45 to 54	63%	68%	68%	66%	111
55 to 64	61%	66%	67%	65%	116
65 to 74	70%	70%	70%	70%	63
75+	**47%**	60%	53%	**53%**	15
Education					
Elementary/some high school	58%	58%	47%	54%	19

High School	69%	66%	65%	67%	95
Some college	55%	65%	57%	59%	49
College	69%	71%	72%	71%	119
Some university	59%	70%	68%	66%	37
Undergraduate	62%	62%	65%	63%	102
Trade-Apprentice	64%	68%	71%	68%	28
Graduate	77%	**84%**	77%	**79%**	56
Income					
<$25,000	71%	73%	63%	69%	51
$25,000 to $49,999	65%	68%	67%	67%	101
$50,000 to $74,999	64%	70%	71%	68%	89
$75,000 to $99,999	68%	68%	68%	68%	90
$100,000 to $149,999	70%	74%	74%	62%	74
$150,000 +	70%	70%	67%	69%	83
Prefer not to say	55%	58%	57%	57%	67
Community					
City/large urban	66%	66%	70%	67%	109
Suburb	70%	70%	62%	67%	76
Small regional city	73%	73%	71%	72%	99
Small town	69%	69%	68%	69%	98
Rural	65%	65%	64%	65%	120
Remote	100%	100%	67%	**89%**	3
Political Views					
Very liberal	67%	72%	72%	70%	43
2	79%	85%	83%	82%	53
3	73%	74%	70%	72%	112
4	64%	70%	68%	67%	149
5	60%	58%	59%	59%	85
6	**55%**	62%	55%	**57%**	42
Very conservative	**43%**	**33%**	52%	**43%**	21

Note: Bold indicates significant, p = <.05

Table 18: Government Role-Set Cap

Demographics	Cap and trade does what government does best: setting rules in the public interest. And it leaves businesses to do what they do best: making their own competitive decisions and innovating.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	55%	51%	60%	55%	505
Gender					
Male	55%	52%	61%	56%	250
Female	56%	49%	59%	55%	255
Language					
English	53%	49%	59%	54%	468
French	78%	**76%**	78%	**77%**	37
Age					
18 to 24	67%	57%	60%	61%	30
25 to 34	64%	53%	62%	60%	91
35 to 44	52%	46%	63%	54%	79
45 to 54	55%	49%	57%	44%	111
55 to 64	51%	47%	55%	51%	116
65 to 74	57%	70%	73%	66%	63
75+	27%	27%	47%	**34%**	15
Education					
Elementary/some high school	42%	**37%**	37%	**39%**	19
High School	48%	48%	54%	50%	95
Some college	45%	43%	55%	48%	49
College	58%	44%	55%	52%	119
Some university	57%	54%	65%	59%	37

Undergraduate	63%	59%	70%	64%	102
Trade-Apprentice	50%	57%	64%	57%	28
Graduate	63%	**63%**	73%	66%	56
Income					
<$25,000	53%	55%	67%	58%	51
$25,000 to $49,999	55%	48%	55%	53%	101
$50,000 to $74,999	56%	53%	62%	57%	89
$75,000 to $99,999	61%	57%	67%	62%	90
$100,000 to $149,999	62%	58%	65%	62%	74
$150,000 +	48%	48%	52%	49%	83
Prefer not to say	43%	36%	51%	43%	67
Community					
City/large urban	59%	54%	61%	58%	109
Suburb	53%	49%	57%	53%	76
Small regional city	59%	54%	69%	61%	99
Small town	56%	50%	56%	54%	98
Rural	50%	48%	58%	52%	120
Remote	67%	**67%**	100%	**78%**	3
Political Views					
Very liberal	58%	51%	56%	55%	43
2	55%	60%	64%	60%	53
3	62%	50%	62%	58%	112
4	60%	54%	65%	60%	149
5	53%	48%	61%	54%	85
6	**36%**	45%	40%	**40%**	42
Very conservative	**33%**	**29%**	52%	**38%**	21

Note: Bold indicates significant, p = <.05

Table 19: Put New Brunswick First

Demographics	New Brunswick needs to be part of a global transition building a low-polluting energy system to fuel our economy. This provides an opportunity for us. With cap and trade in place, New Brunswick businesses can gain experience and market advantage in less polluting technologies. Acting now puts us ahead.				
	Somewhat support; Strongly support				
	Believe	Effective	Describe	Combined Score	Total Respondents
Total	67%	63%	63%	64%	505
Gender					
Male	65%	62%	62%	63%	250
Female	69%	64%	64%	66%	255
Language					
English	66%	62%	62%	63%	468
French	84%	**84%**	84%	**84%**	37
Age					
18 to 24	83%	53%	53%	63%	30
25 to 34	71%	69%	69%	69%	91
35 to 44	72%	63%	63%	66%	79
45 to 54	65%	63%	63%	64%	111
55 to 64	61%	58%	58%	59%	116
65 to 74	67%	71%	71%	70%	63
75+	47%	53%	53%	51%	15
Education					
Elementary/some high school	53%	**42%**	42%	**46%**	19
High School	68%	61%	61%	63%	95
Some college	59%	61%	61%	60%	49
College	71%	68%	68%	69%	119

Some university	73%	73%	73%	73%	37
Undergraduate	66%	56%	56%	59%	102
Trade-Apprentice	64%	57%	57%	59%	28
Graduate	68%	**75%**	75%	73%	56
Income					
<$25,000	71%	61%	61%	64%	51
$25,000 to $49,999	71%	66%	66%	68%	101
$50,000 to $74,999	62%	63%	63%	63%	89
$75,000 to $99,999	71%	66%	66%	68%	90
$100,000 to $149,999	73%	70%	70%	71%	74
$150,000 +	61%	61%	61%	61%	83
Prefer not to say	57%	51%	51%	53%	67
Community					
City/large urban	72%	65%	65%	67%	109
Suburb	64%	64%	64%	64%	76
Small regional city	67%	63%	63%	64%	99
Small town	62%	61%	61%	61%	98
Rural	68%	63%	63%	64%	120
Remote	67%	**33%**	33%	**44%**	3
Political Views					
Very liberal	81%	72%	72%	75%	43
2	68%	70%	70%	67%	53
3	74%	69%	69%	71%	112
4	67%	62%	62%	64%	149
5	66%	61%	61%	63%	85
6	**45%**	52%	52%	**50%**	42
Very conservative	**48%**	**33%**	33%	**38%**	21

Note: Bold indicates significant, p = <.05

Table 20: Carbon Pricing Beliefs

Demographics	Somewhat agree; Strongly agree									
	This is smart because it makes polluters pay for their contribution to climate change	This sounds too complicated to administer	This looks like a tax grab for government	This is a fair plan for society	This will raise my cost of living	This will hurt the economy	This will benefit the environment	This will effectively reduce greenhouse gases	This is a way for us to take responsibility now for our carbon pollution so our grandchildren won't have to	Total Respondents
Total	77%	42%	61%	57%	80%	50%	70%	59%	59%	505
Gender										
Male	73%	46%	65%	54%	83%	54%	**67%**	57%	**57%**	250
Female	**82%**	39%	57%	44%	78%	46%	**73%**	62%	**62%**	255
Language										
English	76%	42%	63%	55%	82%	52%	69%	58%	63%	468
French	**86%**	46%	43%	**76%**	59%	30%	**81%**	**73%**	**81%**	37
Age										
18 to 24	**87%**	33%	53%	63%	67%	30%	67%	**70%**	77%	30
25 to 34	79%	26%	58%	63%	75%	45%	79%	**68%**	66%	91
35 to 44	78%	51%	59%	59%	73%	51%	73%	59%	65%	79
45 to 54	75%	42%	68%	56%	77%	57%	71%	63%	67%	111
55 to 64	73%	47%	59%	55%	90%	57%	65%	50%	60%	116
65 to 74	84%	48%	62%	52%	92%	53%	70%	60%	67%	63
75+	**60%**	**60%**	67%	**27%**	80%	51%	**40%**	**27%**	**40%**	15
Education										
Elementary/some high school	79%	32%	68%	53%	68%	53%	63%	53%	58%	19
High School	74%	40%	60%	52%	68%	52%	63%	55%	58%	95

Some college	61%	51%	71%	39%	80%	47%	61%	51%	55%	49
College	82%	40%	62%	61%	77%	55%	75%	61%	66%	119
Some university	86%	35%	54%	65%	73%	51%	76%	59%	78%	37
Undergraduate	79%	44%	54%	60%	81%	41%	72%	66%	68%	102
Trade-Apprentice	71%	**61%**	**75%**	50%	96%	64%	68%	54%	61%	28
Graduate	80%	39%	61%	64%	89%	50%	77%	66%	73%	56
Income										
<$25,000	71%	37%	57%	53%	69%	49%	69%	61%	61%	51
$25,000 to $49,999	71%	43%	54%	59%	79%	41%	74%	62%	71%	101
$50,000 to $74,999	62%	49%	71%	54%	84%	61%	63%	58%	58%	89
$75,000 to $99,999	7`%	41%	58%	63%	82%	48%	76%	66%	76%	90
$100,000 to $149,999	73%	39%	57%	64%	80%	51%	73%	58%	68%	74
$150,000 +	61%	33%	55%	64%	79%	45%	82%	79%	67%	83
Prefer not to say	57%	46%	75%	**39%**	85%	57%	58%	39%	**48%**	67
Community										
City/large urban	78%	34%	53%	61%	79%	44%	73%	66%	72%	109
Suburb	75%	43%	67%	51%	79%	53%	70%	57%	59%	76
Small regional city	76%	48%	58%	58%	80%	51%	73%	62%	69%	99
Small town	82%	43%	64%	57%	86%	52%	70%	57%	64%	98
Rural	76%	44%	65%	55%	79%	53%	65%	55%	60%	120
Remote	67%	33%	67%	**33%**	67%	67%	67%	67%	**33%**	3
Political Views										
Very liberal	81%	47%	58%	63%	88%	49%	67%	63%	70%	43
2	85%	32%	40%	**74%**	64%	21%	**75%**	**74%**	**81%**	53
3	79%	37%	55%	65%	83%	46%	**78%**	**66%**	**72%**	112
4	79%	40%	60%	58%	79%	55%	72%	56%	62%	149
5	76%	52%	69%	45%	81%	55%	71%	60%	62%	85
6	62%	55%	81%	40%	**86%**	62%	55%	48%	50%	42
Very conservative	**57%**	43%	**86%**	**24%**	**86%**	71%	**38%**	29%	**33%**	21

Note: Bold indicates significant, p = <.05

Table 21: Climate Harm: Personal

Demographics	How much do you think climate change will harm… - You personally?					
	Not at all	Only a little	A moderate amount	A great deal	Not sure	Total Respondents
Total	12%	32%	35%	13%	8%	505
Gender						
Male	**16%**	**36%**	**31%**	12%	**4%**	250
Female	**8%**	**28%**	**39%**	14%	**11%**	255
Language						
English	13%	33%	34%	12%	8%	468
French	**5%**	**19%**	**51%**	**19%**	5%	37
Age						
18 to 24	3%	37%	50%	7%	3%	30
25 to 34	7%	34%	37%	11%	11%	91
35 to 44	14%	25%	39%	13%	9%	79
45 to 54	11%	39%	27%	18%	5%	111
55 to 64	18%	28%	34%	15%	4%	116
65 to 74	10%	38%	35%	10%	8%	63
75+	33%	7%	33%	0%	27%	15
Education						
Elementary/some high school	16%	**5%**	42%	16%	**21%**	19
High School	6%	38%	**26%**	19%	11%	95
Some college	18%	31%	39%	**2%**	10%	49
College	9%	32%	35%	13%	10%	119
Some university	8%	**19%**	**54%**	16%	3%	37
Undergraduate	14%	39%	36%	9%	2%	102

Trade-Apprentice	**25%**	29%	29%	14%	4%	28
Graduate	16%	32%	32%	14%	5%	56
Income						
<$25,000	**6%**	37%	**20%**	**25%**	12%	51
$25,000 to $49,999	**7%**	32%	37%	18%	7%	101
$50,000 to $74,999	**15%**	36%	34%	9%	7%	89
$75,000 to $99,999	**7%**	31%	42%	12%	8%	90
$100,000 to $149,999	**20%**	36%	32%	9%	**1%**	74
$150,000 +	12%	27%	48%	**3%**	9%	83
Prefer not to say	**21%**	**24%**	33%	10%	12%	67
Community						
City/large urban	11%	30%	35%	16%	8%	109
Suburb	18%	36%	28%	13%	5%	76
Small regional city	12%	28%	39%	10%	10%	99
Small town	10%	35%	34%	14%	7%	98
Rural	11%	33%	38%	11%	7%	120
Remote	33%	33%	0%	33%	0%	3
Political Views						
Very liberal	5%	26%	35%	**30%**	5%	43
2	4%	36%	49%	8%	4%	53
3	6%	40%	36%	12%	6%	112
4	12%	27%	38%	14%	9%	149
5	16%	33%	34%	7%	9%	85
6	**29%**	33%	**17%**	12%	10%	42
Very conservative	**33%**	29%	**14%**	14%	10%	21

Note: Bold indicates significant, p = <.05

Table 22: Climate Harm: New Brunswick

Demographics	How much do you think climate change will harm… - People in New Brunswick					
	Not at all	Only a little	A moderate amount	A great deal	Not sure	Total Respondents
Total	6%	28%	41%	19%	6%	505
Gender						
Male	**8%**	**31%**	40%	18%	**3%**	250
Female	**4%**	**25%**	42%	20%	**9%**	255
Language						
English	6%	28%	40%	19%	6%	468
French	0%	22%	49%	24%	5%	37
Age						
18 to 24	3%	23%	53%	17%	3%	30
25 to 34	3%	29%	43%	18%	8%	91
35 to 44	6%	25%	44%	16%	8%	79
45 to 54	5%	30%	36%	24%	5%	111
55 to 64	8%	28%	41%	20%	3%	116
65 to 74	5%	32%	41%	16%	6%	63
75+	20%	13%	27%	13%	27%	15
Education						
Elementary/some high school	11%	5%	53%	11%	21%	19
High School	5%	27%	31%	28%	8%	95
Some college	12%	35%	39%	8%	6%	49
College	3%	27%	43%	18%	9%	119
Some university	3%	19%	49%	27%	3%	37
Undergraduate	2%	35%	45%	17%	1%	102

Trade-Apprentice	21%	32%	25%	18%	4%	28
Graduate	7%	23%	48%	18%	4%	56
Income						
<$25,000	4%	22%	**29%**	**35%**	10%	51
$25,000 to $49,999	4%	27%	43%	23%	4%	101
$50,000 to $74,999	10%	30%	38%	15%	7%	89
$75,000 to $99,999	3%	24%	48%	19%	6%	90
$100,000 to $149,999	5%	34%	43%	18%	**0%**	74
$150,000 +	3%	33%	42%	12%	9%	83
Prefer not to say	10%	27%	39%	12%	12%	67
Community						
City/large urban	6%	22%	43%	22%	6%	109
Suburb	7%	34%	39%	16%	4%	76
Small regional city	5%	27%	42%	17%	8%	99
Small town	6%	29%	41%	19%	5%	98
Rural	4%	30%	40%	19%	7%	120
Remote	67%	0%	0%	33%	0%	3
Political Views						
Very liberal	2%	21%	42%	**30%**	5%	43
2	2%	21%	49%	25%	4%	53
3	3%	31%	43%	17%	6%	112
4	3%	28%	41%	21%	8%	149
5	7%	33%	45%	**9%**	6%	85
6	**19%**	29%	**31%**	17%	5%	42
Very conservative	**33%**	24%	**14%**	24%	5%	21

Note: Bold indicates significant, p = <.05

Table 23: Climate Harm: Canada

Demographics	How much do you think climate change will harm… - People in Canada					
	Not at all	Only a little	A moderate amount	A great deal	Not sure	Total Respondents
Total	4%	19%	44%	25%	7%	505
Gender						
Male	6%	**23%**	**40%**	27%	**4%**	250
Female	2%	**15%**	**49%**	24%	**10%**	255
Language						
English	5%	19%	44%	25%	7%	468
French	0%	16%	49%	27%	8%	37
Age						
18 to 24	3%	13%	47%	33%	3%	30
25 to 34	2%	11%	56%	21%	10%	91
35 to 44	3%	19%	44%	28%	6%	79
45 to 54	5%	23%	41%	27%	5%	111
55 to 64	7%	22%	38%	27%	6%	116
65 to 74	2%	21%	48%	22%	8%	63
75+	13%	13%	33%	13%	27%	15
Education						
Elementary/some high school	5%	**11%**	47%	21%	**16%**	19
High School	5%	18%	36%	31%	11%	95
Some college	8%	20%	45%	20%	6%	49
College	2%	16%	45%	27%	11%	119
Some university	3%	**8%**	57%	30%	3%	37
Undergraduate	2%	26%	47%	24%	1%	102

Trade-Apprentice	**18%**	21%	**25%**	25%	11%	28
Graduate	4%	20%	**54%**	20%	4%	56
Income						
<$25,000	2%	14%	**33%**	**41%**	10%	51
$25,000 to $49,999	5%	12%	44%	34%	6%	101
$50,000 to $74,999	6%	27%	39%	20%	8%	89
$75,000 to $99,999	2%	16%	**52%**	24%	6%	90
$100,000 to $149,999	4%	24%	49%	22%	1%	74
$150,000 +	3%	24%	48%	**15%**	9%	83
Prefer not to say	7%	18%	43%	**18%**	13%	67
Community						
City/large urban	4%	12%	50%	27%	8%	109
Suburb	5%	24%	45%	20%	7%	76
Small regional city	5%	17%	43%	27%	7%	99
Small town	4%	20%	43%	27%	6%	98
Rural	4%	23%	41%	25%	8%	120
Remote	0%	0%	67%	33%	0%	3
Political Views						
Very liberal	0%	16%	40%	**40%**	5%	43
2	2%	11%	53%	28%	6%	53
3	3%	17%	49%	25%	6%	112
4	3%	13%	48%	28%	9%	149
5	5%	**31%**	44%	**15%**	6%	85
6	**12%**	**29%**	**26%**	24%	10%	42
Very conservative	**24%**	**24%**	**24%**	19%	10%	21

Note: Bold indicates significant, p = <.05

Table 24: Climate Harm: Future Generations

Demographics	How much do you think climate change will harm… - Future Generations					
	Not at all	Only a little	A moderate amount	A great deal	Not sure	Total Respondents
Total	4%	9%	21%	59%	8%	505
Gender						
Male	**6%**	11%	22%	57%	**4%**	250
Female	**2%**	7%	19%	62%	**11%**	255
Language						
English	4%	9%	21%	59%	8%	468
French	4%	9%	21%	59%	8%	37
Age						
18 to 24	3%	13%	10%	70%	3%	30
25 to 34	4%	2%	16%	68%	9%	91
35 to 44	1%	4%	25%	63%	6%	79
45 to 54	5%	12%	22%	58%	5%	111
55 to 64	3%	13%	21%	53%	10%	116
65 to 74	2%	8%	24%	59%	8%	63
75+	13%	20%	20%	33%	13%	15
Education						
Elementary/some high school	5%	16%	5%	58%	16%	19
High School	3%	14%	21%	52%	11%	95
Some college	2%	16%	37%	39%	6%	49
College	3%	8%	17%	62%	10%	119
Some university	5%	0%	11%	81%	3%	37
Undergraduate	1%	8%	22%	66%	4%	102

Trade-Apprentice	11%	7%	32%	39%	11%	28
Graduate	5%	4%	18%	70%	4%	56
Income						
<$25,000	4%	10%	14%	63%	10%	51
$25,000 to $49,999	4%	9%	19%	62%	6%	101
$50,000 to $74,999	6%	13%	22%	52%	7%	89
$75,000 to $99,999	1%	4%	21%	67%	7%	90
$100,000 to $149,999	1%	8%	23%	65%	3%	74
$150,000 +	3%	6%	18%	61%	12%	83
Prefer not to say	6%	10%	24%	46%	13%	67
Community						
City/large urban	6%	6%	17%	64%	6%	109
Suburb	0%	11%	20%	64%	5%	76
Small regional city	4%	5%	23%	59%	9%	99
Small town	3%	12%	19%	58%	7%	98
Rural	4%	9%	23%	54%	9%	120
Remote	0%	67%	0%	33%	0%	3
Political Views						
Very liberal	2%	7%	**12%**	**77%**	2%	43
2	0%	6%	15%	**70%**	9%	53
3	3%	8%	19%	64%	6%	112
4	3%	5%	22%	62%	7%	149
5	4%	13%	25%	51%	8%	85
6	**12%**	12%	24%	**40%**	12%	42
Very conservative	**10%**	**29%**	29%	**24%**	10%	21

Note: Bold indicates significant, p = <.05

Table 25: Emphasis Solar

Demographics	Solar power				
	More emphasis	Less emphasis	About the same emphasis	Not sure	Total Respondents
Total	80%	5%	11%	5%	505
Gender					
Male	80%	6%	12%	2%	250
Female	79%	4%	10%	7%	255
Language					
English	80%	5%	11%	4%	468
French	78%	3%	11%	8%	37
Age					
18 to 24	60%	17%	17%	7%	30
25 to 34	76%	5%	9%	10%	91
35 to 44	81%	5%	6%	8%	79
45 to 54	87%	3%	9%	1%	111
55 to 64	79%	3%	14%	4%	116
65 to 74	81%	3%	16%	0%	63
75+	80%	13%	7%	0%	15
Education					
Elementary/some high school	**47%**	**16%**	**26%**	**11%**	19
High School	77%	4%	9%	9%	95
Some college	82%	4%	10%	4%	49
College	79%	4%	12%	5%	119
Some university	86%	3%	8%	3%	37

Undergraduate	81%	5%	12%	2%	102
Trade-Apprentice	89%	4%	7%	0%	28
Graduate	84%	5%	9%	2%	56
Income					
<$25,000	73%	10%	6%	12%	51
$25,000 to $49,999	86%	2%	7%	5%	101
$50,000 to $74,999	81%	3%	12%	3%	89
$75,000 to $99,999	83%	6%	8%	3%	90
$100,000 to $149,999	78%	4%	16%	1%	74
$150,000 +	73%	3%	18%	6%	83
Prefer not to say	75%	7%	13%	4%	67
Community					
City/large urban	83%	3%	8%	6%	109
Suburb	76%	7%	17%	0%	76
Small regional city	75%	6%	15%	4%	99
Small town	81%	5%	7%	7%	98
Rural	83%	4%	8%	4%	120
Remote	67%	0%	33%	0%	3
Political Views					
Very liberal	91%	2%	**2%**	5%	43
2	81%	2%	11%	6%	53
3	88%	4%	8%	1%	112
4	79%	5%	11%	5%	149
5	69%	6%	19%	6%	85
6	83%	5%	10%	2%	42
Very conservative	**57%**	**14%**	14%	**14%**	21

Note: Bold indicates significant, p = <.05

Table 26: Emphasis Wind

Demographics	Wind				
	More emphasis	Less emphasis	About the same emphasis	Not sure	Total Respondents
Total	79%	5%	12%	4%	505
Gender					
Male	82%	5%	12%	1%	250
Female	76%	5%	12%	7%	255
Language					
English	79%	5%	12%	4%	468
French	73%	0%	19%	8%	37
Age					
18 to 24	**57%**	**17%**	**20%**	7%	30
25 to 34	77%	2%	12%	9%	91
35 to 44	80%	6%	6%	8%	79
45 to 54	81%	4%	14%	1%	111
55 to 64	84%	3%	12%	2%	116
65 to 74	81%	5%	14%	0%	63
75+	73%	**20%**	**0%**	7%	15
Education					
Elementary/some high school	**37%**	**11%**	**37%**	**16%**	19
High School	74%	5%	14%	7%	95
Some college	86%	0%	10%	4%	49
College	82%	4%	11%	3%	119
Some university	89%	5%	3%	3%	37
Undergraduate	81%	7%	11%	1%	102
Trade-Apprentice	89%	4%	4%	4%	28

Graduate	75%	5%	18%	2%	56
Income					
<$25,000	69%	10%	10%	12%	51
$25,000 to $49,999	80%	3%	12%	5%	101
$50,000 to $74,999	85%	3%	10%	1%	89
$75,000 to $99,999	84%	6%	7%	3%	90
$100,000 to $149,999	80%	4%	16%	0%	74
$150,000 +	64%	6%	24%	6%	83
Prefer not to say	76%	6%	13%	4%	67
Community					
City/large urban	88%	2%	6%	5%	109
Suburb	76%	7%	16%	1%	76
Small regional city	76%	7%	15%	2%	99
Small town	73%	7%	12%	7%	98
Rural	80%	3%	13%	4%	120
Remote	67%	33%	0%	0%	3
Political Views					
Very liberal	84%	5%	9%	2%	43
2	77%	6%	9%	8%	53
3	86%	4%	10%	0%	112
4	79%	2%	15%	4%	149
5	73%	8%	14%	5%	85
6	79%	5%	12%	5%	42
Very conservative	67%	14%	5%	14%	21

Note: Bold indicates significant, p = <.05

Table 27: Emphasis Hydro

Demographics	Hydro				
	More emphasis	Less emphasis	About the same emphasis	Not sure	Total Respondents
Total	44%	22%	27%	6%	505
Gender					
Male	**55%**	**18%**	**25%**	**2%**	250
Female	**33%**	**26%**	**30%**	**11%**	255
Language					
English	45%	23%	27%	6%	468
French	38%	14%	35%	14%	37
Age					
18 to 24	47%	20%	27%	7%	30
25 to 34	37%	23%	29%	11%	91
35 to 44	44%	22%	25%	9%	79
45 to 54	42%	23%	31%	4%	111
55 to 64	48%	22%	22%	7%	116
65 to 74	48%	16%	35%	2%	63
75+	47%	40%	13%	0%	15
Education					
Elementary/some high school	**26%**	**32%**	32%	11%	19
High School	38%	20%	31%	12%	95
Some college	45%	29%	24%	2%	49
College	42%	23%	24%	11%	119
Some university	**57%**	19%	22%	**3%**	37
Undergraduate	**53%**	20%	25%	**2%**	102
Trade-Apprentice	46%	25%	29%	**0%**	28

Graduate	39%	21%	**36%**	**4%**	56
Income					
<$25,000	43%	22%	24%	12%	51
$25,000 to $49,999	45%	24%	26%	6%	101
$50,000 to $74,999	48%	18%	31%	2%	89
$75,000 to $99,999	37%	24%	29%	10%	90
$100,000 to $149,999	53%	16%	31%	0%	74
$150,000 +	45%	21%	24%	9%	83
Prefer not to say	39%	30%	22%	9%	67
Community					
City/large urban	49%	18%	26%	7%	109
Suburb	45%	28%	28%	0%	76
Small regional city	49%	21%	25%	4%	99
Small town	36%	23%	29%	12%	98
Rural	43%	22%	28%	7%	120
Remote	0%	33%	67%	0%	3
Political Views					
Very liberal	44%	19%	21%	16%	43
2	42%	15%	34%	9%	53
3	41%	29%	29%	2%	112
4	45%	21%	29%	5%	149
5	51%	20%	21%	8%	85
6	43%	24%	31%	2%	42
Very conservative	38%	29%	24%	10%	21

Note: Bold indicates significant, p = <.05

Table 28: Emphasis Oil

Demographics	Oil				
	More emphasis	Less emphasis	About the same emphasis	Not sure	Total Respondents
Total	9%	65%	19%	7%	505
Gender					
Male	**11%**	**68%**	18%	*3%*	250
Female	**7%**	**62%**	20%	*11%*	255
Language					
English	9%	66%	19%	6%	468
French	11%	57%	16%	16%	37
Age					
18 to 24	13%	53%	23%	10%	30
25 to 34	5%	68%	13%	13%	91
35 to 44	10%	62%	22%	6%	79
45 to 54	12%	68%	19%	2%	111
55 to 64	8%	68%	19%	5%	116
65 to 74	8%	60%	22%	10%	63
75+	13%	67%	13%	7%	15
Education					
Elementary/some high school	21%	26%	26%	26%	19
High School	11%	58%	20%	12%	95
Some college	14%	49%	29%	8%	49
College	7%	71%	15%	7%	119
Some university	5%	81%	5%	8%	37
Undergraduate	11%	65%	24%	1%	102
Trade-Apprentice	11%	75%	7%	7%	28

Graduate	2%	77%	20%	2%	56
Income					
<$25,000	18%	51%	18%	14%	51
$25,000 to $49,999	6%	67%	19%	8%	101
$50,000 to $74,999	9%	61%	21%	9%	89
$75,000 to $99,999	12%	68%	14%	6%	90
$100,000 to $149,999	5%	70%	23%	1%	74
$150,000 +	9%	73%	12%	6%	83
Prefer not to say	7%	66%	21%	6%	67
Community					
City/large urban	4%	69%	16%	12%	109
Suburb	11%	61%	26%	3%	76
Small regional city	10%	65%	19%	6%	99
Small town	12%	62%	18%	7%	98
Rural	9%	68%	18%	6%	120
Remote	33%	67%	0%	0%	3
Political Views					
Very liberal	7%	65%	14%	14%	43
2	4%	75%	17%	4%	53
3	5%	74%	18%	3%	112
4	9%	66%	19%	7%	149
5	12%	58%	20%	11%	85
6	17%	50%	26%	7%	42
Very conservative	24%	48%	19%	10%	21

Note: Bold indicates significant, p = <.05

Table 29: Emphasis Nuclear

Demographics	Nuclear				
	More emphasis	Less emphasis	About the same emphasis	Not sure	Total Respondents
Total	17%	54%	17%	12%	505
Gender					
Male	**24%**	**48%**	**21%**	**6%**	250
Female	**10%**	**59%**	**14%**	**17%**	255
Language					
English	18%	53%	18%	11%	468
French	11%	59%	8%	22%	37
Age					
18 to 24	17%	53%	10%	20%	30
25 to 34	13%	55%	13%	19%	91
35 to 44	10%	57%	16%	16%	79
45 to 54	18%	55%	22%	5%	111
55 to 64	26%	53%	13%	8%	116
65 to 74	14%	51%	24%	11%	63
75+	13%	40%	33%	13%	15
Education					
Elementary/some high school	0%	47%	16%	37%	19
High School	14%	59%	12%	16%	95
Some college	29%	39%	22%	10%	49
College	12%	60%	17%	12%	119
Some university	22%	54%	16%	8%	37
Undergraduate	22%	52%	18%	9%	102
Trade-Apprentice	11%	68%	11%	11%	28

Graduate	21%	45%	27%	7%	56
Income					
<$25,000	14%	63%	12%	12%	51
$25,000 to $49,999	13%	55%	15%	17%	101
$50,000 to $74,999	19%	54%	18%	9%	89
$75,000 to $99,999	13%	59%	19%	9%	90
$100,000 to $149,999	20%	46%	20%	14%	74
$150,000 +	33%	39%	15%	12%	83
Prefer not to say	16%	54%	19%	10%	67
Community					
City/large urban	12%	54%	17%	17%	109
Suburb	28%	45%	18%	9%	76
Small regional city	12%	59%	16%	13%	99
Small town	14%	50%	21%	14%	98
Rural	22%	59%	13%	7%	120
Remote	0%	33%	67%	0%	3
Political Views					
Very liberal	14%	65%	9%	12%	43
2	9%	45%	32%	13%	53
3	26%	51%	15%	8%	112
4	11%	62%	15%	11%	149
5	21%	47%	14%	18%	85
6	19%	48%	21%	12%	42
Very conservative	14%	48%	24%	14%	21

Note: Bold indicates significant, p = <.05

Table 30: Emphasis Coal

Demographics	Coal				
	More emphasis	Less emphasis	About the same emphasis	Not sure	Total Respondents
Total	4%	76%	11%	9%	505
Gender					
Male	4%	**82%**	10%	**4%**	250
Female	5%	**70%**	11%	**14%**	255
Language					
English	4%	76%	11%	9%	468
French	8%	70%	8%	14%	37
Age					
18 to 24	3%	**60%**	**23%**	**13%**	30
25 to 34	4%	**67%**	12%	**16%**	91
35 to 44	6%	72%	6%	**15%**	79
45 to 54	5%	80%	10%	5%	111
55 to 64	3%	83%	10%	4%	116
65 to 74	3%	83%	8%	6%	63
75+	7%	73%	**20%**	**0%**	15
Education					
Elementary/some high school	0%	**47%**	**26%**	**26%**	19
High School	7%	65%	14%	14%	95
Some college	10%	71%	12%	6%	49
College	3%	77%	8%	12%	119
Some university	3%	86%	3%	8%	37
Undergraduate	4%	83%	10%	3%	102
Trade-Apprentice	4%	79%	11%	7%	28

Graduate	0%	84%	13%	4%	56
Income					
<$25,000	14%	57%	14%	16%	51
$25,000 to $49,999	4%	72%	16%	8%	101
$50,000 to $74,999	3%	85%	4%	7%	89
$75,000 to $99,999	2%	79%	12%	7%	90
$100,000 to $149,999	4%	80%	8%	8%	74
$150,000 +	6%	82%	3%	9%	83
Prefer not to say	1%	73%	13%	12%	67
Community					
City/large urban	5%	73%	10%	12%	109
Suburb	3%	86%	5%	7%	76
Small regional city	4%	73%	13%	10%	99
Small town	3%	72%	13%	11%	98
Rural	7%	78%	11%	5%	120
Remote	0%	100%	0%	0%	3
Political Views					
Very liberal	7%	70%	12%	12%	43
2	0%	89%	6%	6%	53
3	4%	81%	10%	4%	112
4	4%	76%	11%	9%	149
5	5%	73%	8%	14%	85
6	7%	74%	12%	7%	42
Very conservative	5%	48%	33%	14%	21

Note: Bold indicates significant, p = <.05

Table 31: Clean Energy Benefits

Demographics	Which of the following do you believe is the primary benefit of producing more clean energy in New Brunswick?						
	Reduced carbon pollution	Increased technological innovation	New green jobs	Enhanced energy security and stable energy prices	Cleaner air and improved public health	Not sure	Total Respondents
Total	22%	10%	10%	14%	37%	8%	505
Gender							
Male	23%	**12%**	10%	14%	**35%**	6%	250
Female	20%	**7%**	11%	13%	**38%**	11%	255
Language							
English	22%	10%	10%	14%	35%	8%	468
French	14%	8%	14%	8%	51%	5%	37
Age							
18 to 24	40%	7%	20%	7%	23%	3%	30
25 to 34	11%	9%	14%	12%	37%	16%	91
35 to 44	22%	6%	14%	8%	41%	10%	79
45 to 54	27%	8%	14%	16%	31%	4%	111
55 to 64	19%	12%	5%	18%	39%	7%	116
65 to 74	21%	14%	2%	16%	43%	5%	63
75+	33%	7%	0%	7%	40%	13%	15
Education							
Elementary/some high school	11%	21%	5%	0%	37%	26%	19
High School	21%	7%	6%	13%	44%	8%	95
Some college	16%	12%	18%	12%	31%	10%	49
College	24%	3%	13%	13%	42%	6%	119
Some university	32%	14%	5%	16%	24%	8%	37
Undergraduate	21%	16%	10%	21%	28%	5%	102

Trade-Apprentice	25%	7%	4%	11%	43%	11%	28
Graduate	20%	9%	14%	11%	38%	9%	56
Income							
<$25,000	20%	10%	18%	4%	35%	14%	51
$25,000 to $49,999	19%	9%	6%	18%	42%	7%	101
$50,000 to $74,999	16%	12%	13%	19%	34%	6%	89
$75,000 to $99,999	26%	4%	12%	12%	39%	7%	90
$100,000 to $149,999	30%	8%	12%	14%	30%	7%	74
$150,000 +	15%	18%	9%	6%	42%	9%	83
Prefer not to say	24%	10%	4%	13%	36%	12%	67
Community							
City/large urban	19%	5%	6%	18%	42%	9%	109
Suburb	21%	11%	5%	16%	43%	4%	76
Small regional city	23%	9%	16%	5%	38%	8%	99
Small town	27%	7%	11%	16%	31%	8%	98
Rural	19%	16%	13%	13%	30%	10%	120
Remote	0%	0%	0%	33%	67%	0%	3
Political Views							
Very liberal	28%	0%	16%	12%	35%	9%	43
2	13%	15%	11%	15%	42%	4%	53
3	32%	13%	9%	11%	29%	5%	112
4	18%	7%	9%	13%	42%	11%	149
5	18%	8%	9%	21%	38%	6%	85
6	21%	12%	17%	10%	33%	7%	42
Very conservative	14%	10%	10%	14%	33%	19%	21

Note: Bold indicates significant, p = <.05

Table 32: Combined Score: Frames-Narratives

Demographics	Makes Sense-Pollute More-Pay More	Personal Responsibility-Companies Follow	Balance	Polluter Pay-Fair-Accountable-Responsible	Market Failure-Market Signal	Where Does the Money Go?	Honest and Efficient	Government Role-Cap	Put New Brunswic First
	Combined Score Somewhat Agree; Strongly Agree								
Total	78%	68%	68%	73%	71%	67%	67%	55%	64%
Gender									
Male	78%	67%	65%	72%	70%	64%	63%	56%	63%
Female	78%	72%	67%	74%	73%	69%	72%	55%	66%
Language									
English	77%	68%	66%	73%	71%	66%	66%	54%	63%
French	**86%**	**84%**	74%	77%	**84%**	**76%**	**81%**	**77%**	**84%**
Age									
18 to 24	77%	77%	73%	81%	76%	71%	68%	61%	63%
25 to 34	74%	70%	65%	70%	77%	72%	74%	60%	69%
35 to 44	79%	64%	68%	74%	68%	67%	64%	54%	66%
45 to 54	81%	74%	68%	73%	75%	67%	66%	44%	64%
55 to 64	75%	65%	67%	71%	64%	61%	65%	51%	59%
65 to 74	84%	76%	67%	78%	77%	70%	70%	66%	70%
75+	76%	**45%**	**40%**	**55%**	**58%**	**56%**	**53%**	**34%**	**51%**
Education									
Elementary/some high school	70%	61%	**54%**	65%	**58%**	**58%**	54%	**39%**	**46%**
High School	74%	62%	64%	69%	66%	67%	67%	50%	63%
Some college	74%	**57%**	**54%**	62%	62%	58%	59%	48%	60%
College	79%	76%	69%	73%	71%	66%	71%	52%	69%
Some university	80%	73%	72%	74%	78%	70%	66%	59%	73%

Undergraduate	80%	70%	70%	77%	74%	68%	63%	64%	59%
Trade-Apprentice	81%	66%	69%	70%	76%	70%	68%	57%	59%
Graduate	84%	**80%**	73%	**83%**	**83%**	73%	**79%**	**66%**	**73%**
Income									
<$25,000	74%	68%	63%	75%	71%	73%	69%	58%	64%
$25,000 to $49,999	80%	72%	73%	72%	75%	70%	67%	53%	68%
$50,000 to $74,999	79%	66%	65%	69%	69%	65%	68%	57%	63%
$75,000 to $99,999	79%	72%	67%	75%	72%	69%	68%	62%	68%
$100,000 to $149,999	82%	71%	75%	79%	83%	70%	62%	62%	71%
$150,000 +	82%	70%	70%	84%	72%	70%	69%	49%	61%
Prefer not to say	69%	65%	**52%**	63%	**55%**	**51%**	57%	43%	53%
Community									
City/large urban	77%	74%	69%	71%	71%	67%	67%	58%	67%
Suburb	79%	68%	63%	68%	71%	67%	67%	53%	64%
Small regional city	82%	71%	70%	74%	68%	70%	72%	61%	64%
Small town	79%	65%	67%	73%	69%	66%	69%	54%	61%
Rural	75%	69%	64%	69%	66%	65%	65%	52%	64%
Remote	77%	67%	55%	67%	78%	**46%**	**89%**	**78%**	**44%**
Political Views									
Very liberal	81%	71%	67%	71%	79%	71%	70%	55%	75%
2	84%	**82%**	**82%**	**90%**	**91%**	**84%**	82%	60%	67%
3	80%	73%	73%	79%	74%	74%	72%	58%	71%
4	80%	71%	66%	73%	71%	65%	67%	60%	64%
5	78%	64%	**59%**	68%	66%	63%	59%	54%	63%
6	69%	**55%**	63%	63%	60%	**48%**	**57%**	**40%**	**50%**
Very conservative	**53%**	**49%**	**43%**	**43%**	**38%**	**43%**	**43%**	**38%**	**38%**

APPENDIX 2

SURVEY CARBON PRICING FRAMES-NARRATIVES

1. In what province or territory do you reside?

Drop down list of provinces/territory

TERMINATE IF NOT IN NEW BRUNSWICK

2. Your gender.

1- Male	2- Female
○	○

3. Your age.

	Select one only
0 – Under 18	○
1- 18 to 24	○
2- 25 to 34	○
3- 35 to 44	○
4- 45 to 54	○
5- 55 to 64	○
6- 65 to 74	○
7- 75 or older	○

THANK AND TERMINATE IF UNDER 18

Communications Research Consent

Thank you for taking the time to complete this survey. Researchers at the University of New Brunswick (UNB) want to learn more about what motivates people to support or oppose solutions to environmental challenges. In this case, UNB researchers are exploring the most effective ways to talk about environmental solutions.

Your participation is completely voluntary and you can stop answering questions at any time. Completing the survey will take about 15 minutes. The University of New Brunswick will keep your responses confidential meaning that none of the information you provide will ever be attributed to you by researchers. We are interested in the results as a whole, rather than individual views.

Your contribution is critical to our ability to better understand how to communicate solutions to environmental issues. If you have any concerns or have questions you may also contact the project research supervisor, Thomas M. Beckley, at Beckley@unb.ca or by calling 506 238 5451. If you have concerns about the project and wish to contact the researchers' supervisor, call Dean Van Lantz at 453-4501. This project has been reviewed by the Research Ethics Board of UNB and is on file as REB #2016-097.

Sincerely,

Louise Comeau

Honorary Research Associate

Introduction

Thank you for taking the time to complete this survey. We will be asking about policies that respond to climate change. Completing the survey will take about 15 minutes of your time.

4. How concerned are you about climate change? **[ALLOW ONE RESPONSE ONLY]**

    1 Not concerned at all
    2 Not too concerned
    3 Somewhat concerned
    4 Concerned
    5 Very concerned
    6 Not Sure

5. The human activity most responsible for changing the climate is: **[ALLOW ONE RESPONSE ONLY]**

    1 Throwing away food and products that decompose in landfills
    2 Cutting trees to make products and grow food
    3 Making cement
    4 Venting chemicals used for cooling that deplete the ozone layer
    5 Burning coal, oil and natural gas to run equipment and vehicles, heat and cool buildings, and make electricity
    6 Using fertilizer for gardening and agriculture
    7 Not sure

6. In your opinion, is the Earth getting warmer mostly because of human activity such as burning fossil fuels, or mostly because of natural patterns in the Earth's environment? **[ALLOW ONE RESPONSE ONLY]**
    1 Human activity
    2 Natural patterns
    3 A combination
    4 Not Sure

7. Please indicate whether you strongly oppose, somewhat oppose, somewhat support or strongly support the following approach to controlling pollution. **[ALLOW ONE RESPONSE ONLY]**

A way to lower the greenhouse gas emissions that cause climate change is to put a price on pollution from fuels such as coal, oil, gasoline and natural gas.

    1 Strongly oppose
    2 Somewhat oppose
    3 Somewhat support
    4 Strongly support
    5 Not sure

8. "Carbon tax" and "cap and trade" are two regulatory ways to put a price on the pollution causing climate change. Based on what you know would you say that you strongly oppose, somewhat oppose, somewhat support or strongly support each? If you are unsure you may select that option. If you have never heard of either you may select that option.

a. Carbon pricing

1 Strongly oppose
2 Somewhat oppose
3 Somewhat support
4 Strongly support
5 Not sure
6 I have not heard of this

b. Carbon tax

1 Strongly oppose
2 Somewhat oppose
3 Somewhat support
4 Strongly support
5 Not sure
6 I have not heard of this

c. Cap and trade

1 Strongly oppose
2 Somewhat oppose
3 Somewhat support
4 Strongly support
5 Not sure
6 I have not heard of this

SECTION B

In this next section you will read a series of statements talking about different ways to put a price on carbon. "Carbon tax" and "cap and trade" are two regulatory ways to put a price on the pollution causing climate change.

A **carbon tax** is a levy or fee added to the price of energy and other products based on how much carbon pollution it generates.

Cap and trade is a form of carbon pricing that sets an overall limit on carbon pollution and then allows businesses to decide the best way of meeting the limit, including trading allowances with each other. The cap is the upper limit on how much carbon pollution a polluter can put into the air. A polluter pays for all their pollution, and if they go over their cap they pay a penalty.

PROGRAMMER NOTE – ON EACH OF THE SCREENS FOR Q6-Q14, SHOW THE DESCRIPTION ABOVE AFTER EACH QUESTION.

9. **Please read the following:** *Pricing pollution makes sense. Businesses that pollute more pay more. Businesses that use energy efficiently pay less. It encourages companies to invest in solutions and to develop new technologies.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewhat agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
b. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
c. This is a good way to describe **carbon pricing**	○	○	○	○	○

10. **Please read the following:** *We should all take personal responsibility for reducing pollution. We try to do the right thing by recycling or buying environmentally friendly products. A carbon tax is one way to make sure we all show the same level of responsibility for reducing the pollution we put into our air.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewhat agree	4- Strongly agree	5 – Not sure

a. I believe what this statement is saying	○	○	○	○	○
b. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
c. This is a good way to describe a **carbon tax**	○	○	○	○	○

11. **Please read the following:** *Carbon pricing strikes the right balance. It allows us do what's right for the environment and encourages us to shift to cleaner and healthier renewable energy. Renewable energy means revitalizing New Brunswick manufacturing and careers. We can protect the environment and create jobs at the same time.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewha t agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
b. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
c. This is a good way to describe **carbon pricing**	○	○	○	○	○

12. **Please read the following:** *It's not fair that heavy energy users can dump their carbon pollution in the air we all breathe. Polluters should be held accountable, and should pay for the pollution that they force all of us to live with. A carbon tax is a fair way to share responsibility for the carbon pollution that causes climate change and to reward those that are most efficient and pollute the least.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewha t agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
b. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○

c. This is a good way to describe a **carbon tax**	○	○	○	○	○

13. **Please read the following**: *We need to put a price on carbon because this sends a signal to consumers and businesses that they should shift to alternatives like more efficient manufacturing equipment, vehicles, appliances, or renewable energy like wind or solar power.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewhat agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
c. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
d. This is a good way to describe **carbon pricing**	○	○	○	○	○

14. **Please read the following**: *The carbon tax that polluters pay will fund the programs the province needs to help all of us shift to alternatives: more efficient manufacturing and industrial processes, homes, vehicles, and appliances. A carbon tax puts a price on pollution so that we can pay for the programs we need for a greener, healthier quality of life.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewhat agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
b. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
c. This is a good way to describe a **carbon tax**	○	○	○	○	○

15. **Please read the following**: *A carbon tax is honest and efficient: the more you pollute, the more you pay. It's as simple as that. It's an old-fashioned, straightforward solution with the minimum of red tape or interference. Because it works through the existing tax system, it doesn't need any new bureaucracy. There are no loopholes or breaks for big business. For all these reasons a carbon tax is the best option: it is simple, stable, predictable, and rewards those that become most efficient and pollute the least.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewha t agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
c. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
d. This is a good way to describe **a carbon tax**	○	○	○	○	○

16. **Please read the following**: *Cap and trade does what government does best: setting rules in the public interest. And it leaves businesses to do what they do best: making their own competitive decisions and innovating.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewha t agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
c. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
d. This is a good way to describe **cap and trade**	○	○	○	○	○

17. **Please read the following**: *New Brunswick needs to be part of a global transition building a low-polluting energy system to fuel our economy. This provides an opportunity for us. With cap and trade in place, New Brunswick businesses can gain experience and market advantage in less polluting technologies. Acting now puts us ahead.*

	1 – Strongly disagree	2 – Somewhat disagree	3 – Somewha t agree	4- Strongly agree	5 – Not sure
a. I believe what this statement is saying	○	○	○	○	○
c. This statement suggests that putting a price on pollution would help reduce greenhouse gases	○	○	○	○	○
d. This is a good way to describe **cap and trade**	○	○	○	○	○

18. Do you strongly disagree, somewhat disagree, somewhat agree or strongly agree with the following statements about **carbon pricing and its variations (carbon tax or cap and trade)**?

	1- Strongly disagree	2 – Somewhat disagree	3 – somewhat agree	4 – strongly agree	5 – Not sure
a. This is smart because it makes polluters pay for their contribution to climate change	○	○	○	○	○
b. This sounds too complicated to administer	○	○	○	○	○
c. This looks like a tax grab for government	○	○	○	○	○
d. This is a fair plan for society	○	○	○	○	○
e. This will raise my cost of living	○	○	○	○	○
f. This will hurt the economy	○	○	○	○	○
g. This will benefit the environment	○	○	○	○	○
h. This will effectively reduce greenhouse gases	○	○	○	○	○
i. This is a way for us to take responsibility now for our carbon pollution so our grandchildren won't have to	○	○	○	○	○

19. Now that you have read various statements please tell us if you strongly oppose, somewhat oppose, somewhat support or strongly support each of the following.

a. Carbon pricing

1 Strongly oppose
2 Somewhat oppose
3 Somewhat support
4 Strongly support
5 Not sure

b. Carbon tax

1 Strongly oppose
2 Somewhat oppose
3 Somewhat support
4 Strongly support
5 Not sure

c. Cap and trade

1 Strongly oppose
2 Somewhat oppose
3 Somewhat support
4 Strongly support
5 Not sure

20. How much do you think climate change will harm…

	1- Not at all	2 – Only a little	3 – a moderate amount	4 – a great deal	5 – Not sure
You personally?	○	○	○	○	○
People living in New Brunswick?	○	○	○	○	○
People in Canada?	○	○	○	○	○
Future generations?	○	○	○	○	○

21. Now thinking about the way energy is generated in the country, do you think New Brunswick should put more emphasis, less emphasis, or about the same emphasis as it does now on producing domestic energy from each of the following sources:

	1- More emphasis	2 - Less emphasis	3 – about the same emphasis	5 – Not sure
a. Solar power	○	○	○	○
b. Wind	○	○	○	○
c. Hydro	○	○	○	○
d. Natural gas	○	○	○	○
e. Oil	○	○	○	○
f. Nuclear	○	○	○	○
g. Coal	○	○	○	○

22. Which of the following do you believe is the primary benefit of producing more clean energy in New Brunswick? **[ALLOW ONE RESPONSE ONLY]**
    1 Reduced carbon pollution
    2 Increased technological innovation
    3 New green jobs
    4 Enhanced energy security and stable energy prices
    5 Cleaner air and improved public health
    6 Not Sure

23. Do you have anything else you'd like add regarding carbon pricing? **[VERBATIM BOX]**
    98 Nothing to add

24. How would you describe your political views? [CIRCLE ONE ANSWER BELOW]

	1 Very liberal	2	3	4	5	6	7 Very conservative
Political views	☐	☐	☐	☐	☐	☐	☐

And now a few questions to help us analyze the results of our survey.

25. Would you describe the community in which you live as:

1 Urban
2 Suburban
3 Rural
4 Not sure

26. Please indicate your highest level of education attained.

	Select one only
1- Elementary/ some high school	○
2- High school graduate/ GED	○
3- Some college	○
4- College graduate	○
7- Trade-apprenticeship	○
5- Some university	○
6- Undergraduate completed	○
8- Graduate degree	○

27. Your annual household income **last year was** approximately… [ALLOW ONE RESPONSE]
1 Under $25,000
2 $25,000 - $49,999
3 $50,000 - $74,999
4 $75,000 - $99,999
5 $100,000 - $149,999
6 $150,000 or higher
7 Prefer not to say

28. What is your postal code _ _ _ _ _ _

REFERENCES

Hart, P. S., & Nisbet, E. C. (2012). Boomerange effects in science communication: How motivated reasoning and identity cues amplify opinion polarization about climate change mitigation policies. *Communications Research, 39*(6), 701-723.

Intergovernmental Panel on Climate Change, Core Writing Team, Pachaur, R. K., & Meyer, L. A. (Eds.). (2014). *Climate change 2014 synthesis report: Summary for policymakers*. Geneva: Intergovernmental Panel on Climate Change (IPCC).

Lakoff, G. (2002). *Moral politics: How liberals and conservatives think* (Second ed.). Chicago: The University of Chicago Press.

Lakoff, G. (2004). *Don't think of an elephant: Know your values and frame the debate*. White River Junction, VT: Chelsea Green Publishing Company.

McCright, A. M., & Dunlap, R. E. (2011). The politicization of climate change and polarization in the American public's views of global warming. *Sociological Quarterly, 52*, 155-194.