

Shifting perceptions, influential values and the power of trust

Analytical report on the
2018 Panoramic Survey

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Note on survey fielding and sample

The Panoramic Survey was conducted online with 3,000 Canadians, aged 18 and over, between May 25th and June 7th, 2018, by Elemental Data Collection.

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Executive Summary

We set out in the 2018 Panoramic Survey to track change over time in public concern about the environment and to better understand how values, beliefs, trust, and norms (feelings of personal obligation) affect environmental engagement and behaviours. We see substantial changes since 2017, with increases in the number of people who believe that environmental health is improving and worry about environmental issues decreasing. While differences in survey design may have played some role, there is substantial evidence that Canadian attitudes are evolving to reflect changing perceptions. We speculate that Canadian attitudes may reflect changing perceptions of government performance on the environment. The public may be downgrading its concern with environmental issues at a time when environmental policy activity is perceived to be high. Consistent with this view, we find the greatest decline in environmental concern or believing that governments, corporations and citizens are doing enough to protect the environment is among Liberals. British Columbia shows the greatest increase in believing governments are doing about the right amount to protect the environment. This shift may reflect the recent change in government to one with a strong environmental agenda and, perhaps, public reaction to Kinder Morgan pipeline tensions.

“ Increasing numbers of Canadians believe environmental health is improving and are worrying less about environmental issues

We find that an egalitarian worldview and values (orientation toward collective/ social perspective) are associated with having an environmental identity and feeling obligated to do something about environmental issues (pro-environmental norms). We also find that norms are most associated with engaging in pro-environmental behaviours. Most Canadians, however, are largely unengaged on environmental issues, and pro-environmental norms are not activated. Trust in the competence and skills of environmental groups also predicts behaviours such as talking to neighbours and friends about environmental issues, seeking information on environmentally friendly behaviours, and voting in support of environmental protection.

We believe results suggest that Canadians need to be reminded that not enough action is being taken to reduce society's impact on water resources, climate change, plastics pollution of oceans, etc. Our results also show that Canadians believe environmental groups have skills and expertise to provide information on issues about which they know little but are worried. Environmental groups have opportunities to engage more people by emphasizing their competence in issues they worry about. The important work of nurturing environmental values and making Canadians aware of the environmental consequences of their behaviours (social, political, personal) is critical to activating pro-environmental norms. Future EcoAnalytics research funded by the Social Sciences and Humanities Research Council (SSHRC) will explore these important predictors of environmental support and action.

This paper is divided into two parts: the first summarizes year-over-year results; the second summarizes results for worldviews/values, identity, trust, beliefs, and environmental norms and behaviours, and closes with discussion and a conclusion.

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Part I: Changes revealed in the 2018 Tracking Module

Introduction

Panoramic Survey tracking modules allow us to monitor change over time. Comparisons between the 2018 and 2017 surveys show significant changes year-over-year in worry about the state of environmental health in Canada and citizens' concerns about environmental issues. Compared to 2017, Canadians in 2018 are more inclined to believe that the health of the environment has stayed the same or improved. There are substantial declines in concern about the accumulation of plastics in the ocean, climate change, oil spills, and contaminants in drinking water, and a strong shift to believing that governments, corporations and citizens are doing about the right amount to protect the environment. These trends are generally consistent across the country and across political party affiliation. Relative to 2017, we also find polarization occurring with respect to trust in government, corporations, environmental groups, and scientists, with larger segments of the population both trusting and distrusting these groups, with an associated decline in neutral responses.

Health of the environment, 2018

Canadians are feeling more optimistic in 2018 about the health of the environment than in 2017. This year's survey results show a 5% increase in Canadians who believe that compared to 10 years ago, the health of Canada's environment has improved (17% in 2018; 12% in 2017). Forty percent say environmental health has worsened, a 9% drop from 2017; and 5% more Canadians say environmental health has stayed about the same (37% in 2018; 32% in 2017). This positive perspective is reflected even more strongly in the regional results.

Table 1 breaks out health of the environment results by province or region. Fourteen percent fewer Quebecers feel in 2018 that environmental health has worsened, compared to 2017 (38% in 2018; 52% in 2017). Ontarians and Atlantic residents are also more optimistic, with 10% fewer respondents in both these provinces believing environmental health has worsened (40% in 2018, compared to 50%

in 2017 in Ontario; 46% in 2018, compared to 56% in 2017 in the Atlantic). Residents in Ontario, Quebec and the Atlantic region are, in 2018, more inclined to say that environmental health has improved or stayed about the same (up 6% to 8% in these regions for these two categories, compared to 2017).

Table 1. Compared to ten years ago, do you think the health of Canada’s environment has improved, worsened or stayed about the same?

(n = 500 to 502 in both years)

	Improved		Stayed about the same		Worsened	
	2018	2017	2018	2017	2018	2017
British Columbia	15%	15%	37%	29%	41%	48%
Alberta	20%	17%	39%	37%	36%	41%
Saskatchewan/Manitoba	12%	13%	38%	37%	45%	44%
Ontario	18%	10%	35%	31%	40%	50%
Quebec	16%	10%	40%	33%	38%	52%
Atlantic	19%	13%	30%	27%	46%	56%

Totals may not equal 100 due to rounding; “not sure” responses removed

Men and women are also feeling more optimistic, compared to 2017 (up 5% for both genders in 2018). Women, however, continue to feel less optimistic compared to men, with fewer women seeing improvement in environmental health (14%, compared to 21% of men), and more believing environmental health has worsened (44%, compared to men, 36%). Ten percent more Liberals say they believe environmental health has improved over the last 10 years, compared to 2017 (27% in 2018; 17% in 2017); 6% fewer Liberals believe environmental health has worsened, and 7% more say environmental health is about the same. Results for other political party preferences have stayed about the same.

“ Fewer women than men see improvement in the health of Canada’s environment

Environmental performance, 2018

Another interpretation of the state of the environment results is that Canadians could be responding to changes in perceived government performance on the environmental file or could be reaching their limit in terms of support on policies to protect the environment. Focus groups are required to better understand the basis of these year-over-year changes. In line with the first view, however, we speculate that Canadians may be responding (like a thermostat) to perceived changes in government attention and policy toward to the environment, and greater attention to environmental issues by the Trudeau government, and more activist provincial governments (like the BC NDP) might have an *appeasement* effect on the public. In other words, optimism may be symptomatic of a process of rationalizing beliefs that government, corporations and citizens have gone far enough in protecting the environment. In response to the question asking survey respondents if they feel that the federal government, provinces and territories, corporations and industries, as well as citizens have done too much, the right amount or not enough to the protect the environment, results show strong shifts in 2018, compared to 2017 (Table 2).

There is also some increase in the number of Canadians who think governments, industry and citizens are doing too much to protect the environment. There is a larger increase in beliefs that Canadians are doing the right amount (up 12%), and a steep drop in the belief that not enough is being done to protect the environment by the federal government (down 8%), and by provinces, corporations and citizens (down 15%).

Table 2. In your opinion, is each of the following doing too much/not enough to protect the environment.

(Sample size both years $n = 500$ to 502)

	Too much		Right amount		Not enough	
	2018	2017	2018	2017	2018	2017
Federal government	10%	6%	32%	20%	58%	66%
Provincial/territorial government	9%	6%	33%	21%	50%	65%
Corporations/industry	4%	2%	23%	13%	66%	81%
Citizens	4%	1%	33%	21%	57%	72%

Totals may not equal 100 due to rounding; “not sure” responses removed

The 2018 Panoramic Survey also asked whether environmental groups were doing too much, about the right amount or not enough to protect the environment allowing us to track change over time in future surveys. For 2018, 18% of Canadians feel environmental groups are doing too much to protect the environment, 49% say environmental groups are doing the about the right amount, and 24% say they are not doing enough.

Regional results

Tables 3 and 4 summarize the regional results for believing that about the right amount and not enough are being done to protect the environment. The biggest change is in British Columbia, possibly reflecting a change in government with a stronger environmental agenda and confrontations over the Kinder Morgan pipeline. There is a 13% increase over 2017 in the number of British Columbians who believe that the federal government is doing too much to protect the environment. There is a 19% increase from 2017 in the number of British Columbians who say the federal government is doing about the right amount (Table 3), and there is a 26% drop in the number of British Columbians who think the federal government is not doing enough to protect the environment (Table 4).

“ Results show a 26% drop in the number of British Columbians who think the federal government is not doing enough for the environment

British Columbians are also more inclined to say their province is doing too much to protect the environment. There is a 15% increase in the proportion of BC residents believing the province is doing about the right amount, and a 27% decline in the number of British Columbians who think their province is not doing enough to protect the environment. There is also increasing sympathy for corporations and industry, with 12% more British Columbians saying they are doing about the right amount to protect the environment, and 14% fewer residents saying they are not doing enough. Survey respondents also feel citizens are doing enough to protect the environment, with an 11% increase, and a 13% decline in the number of British Columbians who believe citizens are not doing enough.

Table 3. In your opinion, which of the following is doing too much, about the right amount, or not enough to protect the environment?

(Sample size both years $n = 500$ to 501)

	Doing about the right amount to protect the environment							
	Federal		Province		Corporations		Citizens	
	2018	2017	2018	2017	2018	2017	2018	2018
British Columbia	39%	20%	35%	20%	25%	13%	34%	23%
Alberta	33%	24%	41%	26%	34%	22%	40%	29%
Saskatchewan/ Manitoba	28%	24%	34%	28%	21%	17%	31%	23%
Ontario	33%	23%	33%	21%	23%	13%	35%	18%
Quebec	28%	15%	29%	18%	20%	9%	30%	20%
Atlantic	33%	17%	30%	16%	17%	8%	25%	21%

Totals may not equal 100 due to rounding; “not sure” responses removed

Ontario residents who faced an imminent election when the Panoramic Survey was conducted and who now have a Conservative government committed to dismantling its cap and trade system, are only somewhat more inclined to think the federal government is doing too much to protect the environment in 2018, compared to 2017. Nonetheless, 10% more Ontarians feel the federal government is doing about the right amount, and there is a 7% decline in the number of Ontarians who say the federal government is not doing enough.

“ There was little change in the number of Ontarians who feel the federal government is doing too much to protect the environment, despite the imminent election

Ontarians are about as inclined as last year to believe that their province is doing too much to protect the environment, but 12% more residents believe the province is doing about the right amount, and there has been a 13% decline in the number of people who think the province is not doing enough. There is a 10% increase in the number of Ontarians who think corporations and industry are doing their fair share to protect the environment, and a 15% drop in the number of residents who believe they are not doing enough. Relative to 2017, about 17% more Ontarians believe citizens are doing about the right amount to protect the environment in 2018.

Table 4. In your opinion, which of the following is doing too much, about the right amount, or not enough to protect the environment?

Province (Sample size both years $n = 500$ to 502)

Not doing enough to protect the environment								
	Federal		Province		Corporations		Citizens	
	2018	2017	2018	2017	2018	2017	2018	2018
British Columbia	44%	70%	44%	71%	66%	80%	56%	69%
Alberta	58%	52%	34%	48%	55%	69%	50%	65%
Saskatchewan/ Manitoba	54%	57%	55%	58%	72%	73%	62%	68%
Ontario	56%	63%	49%	62%	65%	80%	53%	73%
Quebec	66%	75%	60%	72%	70%	87%	61%	75%
Atlantic	62%	72%	59%	75%	72%	86%	67%	75%

Totals may not equal 100 due to rounding; “not sure” responses removed

The trend is the same in Quebec and the Atlantic region, where there is a slight increase in thinking that the federal government is doing too much and strong increases in 2018 over 2017 in thinking the federal government is doing about the right amount (up 13% in Quebec and 14% in the Atlantic). At the same time, we see a decline of 9% in Quebec, and 10% decline in the Atlantic, in the number of people who say that the federal government is not doing enough. Quebec and New Brunswick face provincial elections the fall of 2018.

Provincial trends in eastern regions show 11% more Quebecers say their province is doing about the right amount to protect the environment, and 12% fewer citizens believe their province is not doing enough. Atlantic residents feel similarly about their provincial governments, with 14% more feeling their governments are doing about the right amount, and a 14% drop in thinking their provinces are not doing enough. Quebecers are 11% more inclined to feel corporations and industry are doing about the right amount to protect the environment, and results show a 17% drop in the number of Quebecers who say they are not doing enough. Once again,

Atlantic Canadians feel the same way, with a 9% increase in those believing corporations and industry are doing about the right amount to protect the environment, and 14% fewer residents saying that they are not doing enough. There is a 10% increase, year-over-year, in Quebecers who believe citizens are doing about the right amount to protect the environment.

Trends are similar in Alberta, Saskatchewan and Manitoba, with one exception. Compared with the previous year, in 2018 fewer Albertans think that the federal government is doing too much to protect the environment; otherwise, western residents are more inclined to think the federal government is doing the right amount in 2018 than in 2017, with increases in Saskatchewan/Manitoba and Alberta respectively), and fewer residents think the federal government is not doing enough (3% to 6% year-over-year in Saskatchewan/Manitoba and Alberta respectively). Albertans increasingly believe their province is doing about the right amount to protect the environment (up 15%), and there is a 14% drop in the number of people who think their province is not doing enough.

Changes year-over-year are more modest in Saskatchewan and Manitoba (up 6% in thinking their provinces are doing the right amount; down 3% in thinking their provinces are doing too much). There is a 12% increase in the number of Albertans who say that corporations and industry are doing about the right amount to protect the environment, and 14% fewer residents say they are not doing enough. Albertans are also more inclined to think citizens are doing about the right amount to protect the environment. In Saskatchewan and Manitoba, the trend is the same but not as large, with an 8% increase in the number of residents who believe citizens are doing about the right amount, and 6% fewer survey respondents thinking citizens are not doing enough.

Voting intention, 2018

The broad decline in social consensus regarding environmental protection is evident in political orientation results. The largest year-over-year drop in support for increased environmental protection is among committed Liberals. Tables 5 and 6 summarize results for believing that about the right amount is being done to protect the environment and not enough is being done to protect the environment. Believing that too much is being done to protect the environment is also up, but the increases are small (ranging from 1% to 5% in 2018, compared to 2017).

Our results (Table 5) show a 19% increase in Liberals who believe the federal government is doing about the right amount to protect the environment, compared to last year, and there is a 17% decline in Liberals who think the federal government is not doing enough. More Conservative and New Democrats also believe governments are doing about the right amount, with increases year-over-year of 6% and 8% respectively when thinking about the federal government, and 10% and 11% when thinking about provincial governments.

“ The largest drop in support for increased environmental protection is among supporters of the federal Liberals

There is a 14% increase among Liberals and a 10% increase among Conservatives and New Democrats since 2017 in believing that corporations and industry are doing the right amount to protect the environment. As Table 6 shows, New Democrats lead the decline in believing that corporations and industry are not doing enough to protect the environment, followed by Conservatives, and Liberals who show a 14% decline.

Significantly more Liberals and New Democrats believe in 2018 that citizens are doing about the right amount to protect the environment (up 16% from the previous year); the number of Conservatives who feel this way also increased 13% in 2018. There has been a 16% (Conservatives) to 18% (New Democrats) decline year-over-year in the belief that not enough is being done to protect the environment (Table 6).

Table 5. In your opinion, is each of the following doing too much, about the right amount, or not doing enough to protect the environment?

Political party. (Sample size, Liberals, 2018: $n = 708$; 2017, $n = 786$; Conservatives, 2018, $n = 659$; 2017, $n = 641$; New Democrats, 2018: $n = 402$; 2017, $n = 387$)

Doing about the right amount to protect the environment								
	Federal		Province		Corporations		Citizens	
	2018	2017	2018	2017	2018	2017	2018	2018
Liberals	44%	25%	43%	26%	25%	11%	36%	20%
Conservatives	33%	27%	37%	26%	38%	28%	44%	31%
New Democratic Party	22%	14%	30%	19%	16%	6%	32%	16%

Totals may not equal 100 due to rounding; “not sure” responses removed

Table 6. In your opinion, is each of the following doing too much, about the right amount, or not doing enough to protect the environment?

Political party. (Sample size, Liberals, 2018: $n = 708$; 2017, $n = 786$; Conservatives, 2018, $n = 659$; 2017, $n = 641$; New Democrats, 2018: $n = 402$; 2017, $n = 387$)

Not doing enough to protect the environment								
	Federal		Province		Corporations		Citizens	
	2018	2017	2018	2017	2018	2017	2018	2018
Liberals	49%	66%	46%	65%	69%	83%	58%	75%
Conservatives	44%	51%	37%	51%	51%	66%	46%	62%
New Democratic Party	73%	77%	59%	70%	75%	91%	59%	77%

Totals may not equal 100 due to rounding; “not sure” responses removed

Worry battery and environmental issues of most concern, 2018

Worry about environmental issues also declined from 2017 to 2018, with minor increases in the number of people not at all worried about a range of environmental issues and decreases in the number of people extremely worried, ranging from 12% (genetically modified food) to 20 to 21% (contaminants in drinking water and oil spills). As would be expected from these two trends, the number of moderately worried people increased in 2018, compared to 2017, ranging from 19% for contaminants in drinking water and oil spills to 14% for climate change, depleted fish stocks, pesticides and genetically modified foods (Table 7, items measured on a scale of 0 to 10, with 0 to 1 = strongly or not at all worried; 2 to 8 = moderately worried; 9 to 10 = extremely or strongly worried. (The worry descriptors differed somewhat from 2017 to 2018.)

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Table 7. Please indicate how worried you are about the following issues.

(Sample size 2018, $n = 3,000$; 2017; $n = 3005$)

	Not at all/ Strongly not worried (0–1)		Moderate/ neutral (2–8)		Extremely/ Strongly worried (9–10)	
	2018	2017	2018	2017	2018	2017
Accumulation of plastics in the ocean	3%	1%	58%	43%	39%	54%
Pollution of rivers and streams	3%	1%	63%	47%	33%	52%
Contamination of drinking water	4%	2%	61%	42%	35%	55%
Air pollution	3%	1%	67%	54%	29%	44%
Climate Change	6%	4%	66%	52%	28%	43%
Oil spills	6%	1%	69%	50%	26%	47%
Depleted fish stocks	5%	1%	68%	54%	28%	43%
Pesticides in agriculture	5%	2%	68%	52%	29%	44%
Toxics in consumer products	3%	1%	63%	46%	33%	50%
Genetically modified foods	7%	5%	70%	56%	23%	35%

Totals may not equal 100 due to rounding; “not sure” responses removed

In the 2017 Panoramic Survey, we found significant differences in responses to the worry battery from respondents contacted by telephone and online for all items except toxics in consumer products and genetically modified foods. In all cases, answers provided over the telephone were higher than for answers provided online. We compared the 2017 online results to the 2018 online results and the trends remain much the same, with responses differing, for declines in the “strongly worried” category, for example, by less than 2% to 4% (i.e., still declining but by 2% to 4% less than for the 2017 sample as a whole).

In 2017, we tracked worries about “loss of natural habitat”, but in 2018 changed this descriptor to worry about “species extinction and loss of biodiversity”. As a result, these items are not directly comparable. In 2017, 1% of survey respondents were strongly not worried about loss of natural habitat; 54% were moderately worried, and 44% strongly worried. In 2018, 4% are not at all worried about species extinction and biodiversity loss, 67% are moderately worried and 29% are extremely worried.

In 2018, we also tracked some items specific to climate change impacts: wildfires, floods and heat waves. Some 4% of survey respondents are not at all worried about wildfires, while 7% feel the same way about floods and heatwaves. Between 71% and 75% are moderately worried about these extreme events. Twenty-three percent of Canadians surveyed are extremely worried about wildfires, 17% feel the same about floods, and 19% are extremely worried about heat waves.

Salience of concerns

When asked to identify the most important issue facing Canada today, 16% of respondents answered with economic concerns. Environment was mentioned by a mere 4% of respondents. Collective concerns about Canada’s renegotiation of the North American Free Trade Agreement (NAFTA), US-Canada relations and the effects on competitiveness from implementation of greenhouse-gas related regulation may all be influencing the 2018 results.

Turning specifically to environmental issues, the 2018 Panoramic provides more leverage in terms of identifying which of the environmental issues examined are most worrisome for Canadians. We asked survey respondents to rank their top three environmental concerns from the list of issues provided. Understanding the most worrisome issue depends on whether we look at first mention or total mentions. When the data is sorted by first mention, 32% of respondents identify plastics in the ocean as their top worry, the highest response. The three issues most frequently cited in the first mention all deal with water (plastics in oceans, contaminated water, and pollution of rivers and lakes). This is consistent with findings from 2017, when the same three issues garnered the highest mean level of concern. Climate change and air pollution come in second, with all other issues barely registering first mentions.¹

When we sort the data by total mentions, the picture changes. Contaminated water and climate change are now the greatest sources of worry, followed by plastics

accumulation in oceans. Some 36% of respondents mention climate change in their top three worries. Roughly 25% of respondents point to air pollution and toxics, and 20% identify pollution in lakes and rivers and pesticides. Relatively few people identify oil spills, floods, genetically modified foods, and heatwaves in their top list of worries (Table 8).

Table 8. Most worried about: Ranked mentions and total mentions 2018

Issue	1st mention (n = 3000)	2nd mention (n = 2642)	3rd mention (n = 2474)	Total mentions (n = 3000)
Oil spills	1%	4%	6%	9%
Floods	1%	6%	5%	10%
GMOs	1%	2%	10%	10%
Heat waves	1%	4%	7%	11%
Depleted fish stocks	1%	6%	6%	11%
Wildfires	4%	8%	4%	14%
Species extinction & loss of biodiversity	1%	1%	17%	15%
Pesticides in agriculture	2%	9%	9%	17%
Pollution of rivers & lakes	14%	7%	-	20%
Toxics in consumer products	1%	6%	22%	25%
Air pollution	10%	14%	3%	25%
Plastics in oceans	32%	-	-	32%
Climate change	10%	21%	9%	36%
Contaminated drinking water	22%	13%	3%	36%

Totals may not equal 100 due to rounding; “not sure” responses removed

Worry battery by issue familiarity

Self-reports about worry can be inflated because people feel social pressure to conform with norms about environmental concern. This kind of acquiescence bias can be explored through additional measures exploring whether people expend energy in learning about or paying attention to an issue, which we tracked in 2018. People who indicated they had heard nothing at all about specific environmental issues ranged from a low of 5% for climate change to a high of 18% for genetically modified foods (Table 9). Among people who had heard a great deal about an environmental issue, the highest proportion was for climate change at 29%, the lowest was for depleted fish stocks, and genetically modified foods, at 11%.

“ *When we sort the data by total mentions, contaminated water and climate change are the greatest sources of worry* ”

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Table 9. Please indicate if you have heard or read about the following issues (n = 3,000)

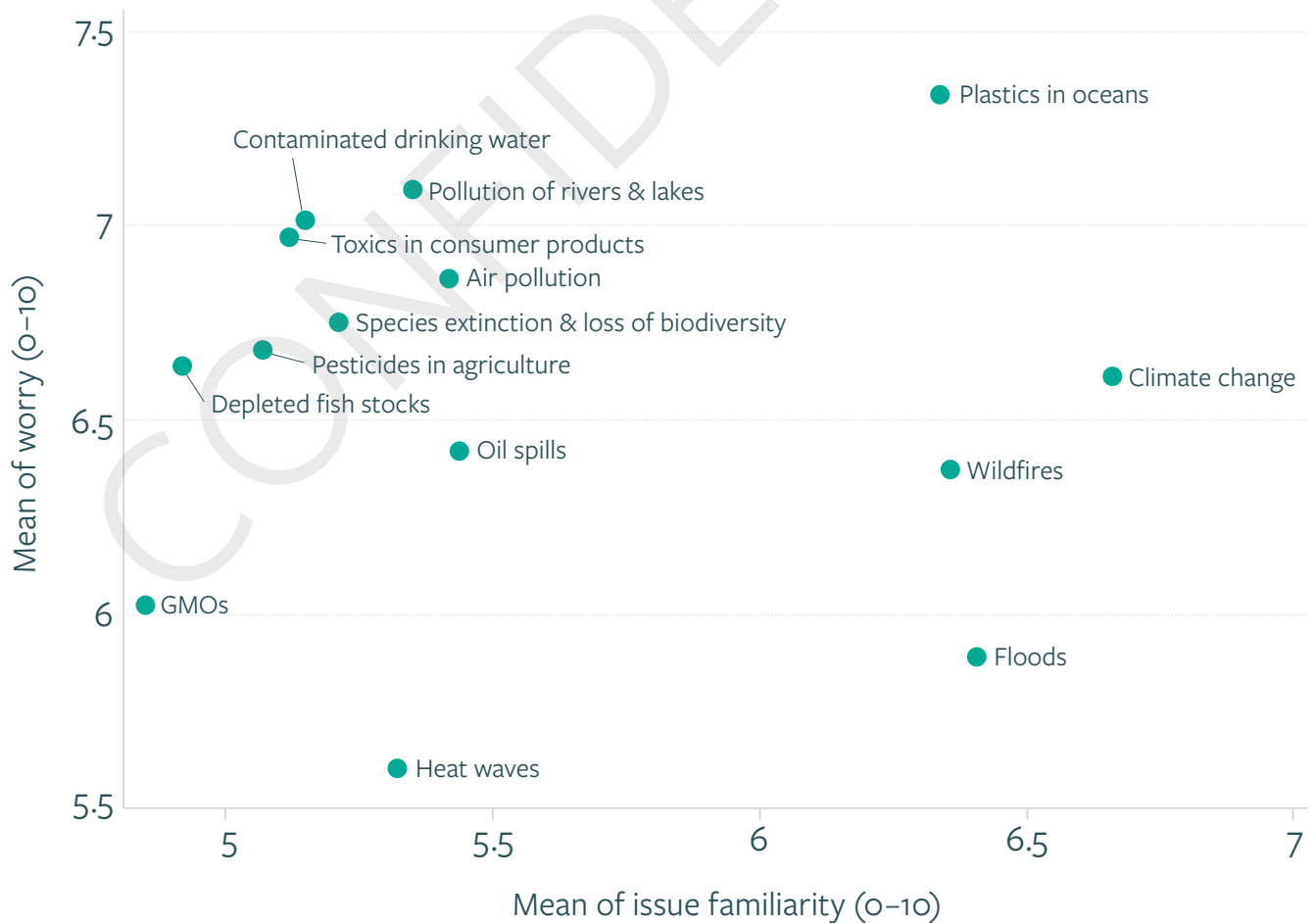
	Heard nothing at all (0-1)	Heard something about (2-8)	Heard a great deal about (9-10)
Accumulation of plastics in the ocean	9%	64%	26%
Pollution of rivers and streams	12%	74%	13%
Contamination of drinking water	15%	72%	13%
Air pollution	12%	72%	14%
Climate Change	5%	66%	29%
Wildfires	7%	67%	25%
Floods	8%	65%	27%
Heatwaves	14%	72%	14%
Oil spills	13%	70%	16%
Depleted fish stocks	17%	72%	11%
Pesticides in agriculture	16%	74%	12%
Toxics in consumer products	16%	70%	13%
Genetically modified foods	18%	64%	11%

Totals may not equal 100 due to rounding; “not sure” responses removed

The proportion of survey respondents saying they had heard something about specific environmental issues ranged from a low of 64% for accumulation of plastics in the ocean and genetically modified foods to a high of 74% for pollution in rivers and streams and pesticides in agriculture. Plotting issue familiarity against issue worry shows there is a weak relationship between worry and familiarity (Figure 1). Familiarity appears to be informed by a media agenda-setting effect with accumulation of plastic in the oceans, climate change, floods, and wildfires ranking high, consistent with media coverage at the time of fielding our survey.

Familiarity with an environmental issue, however, does not necessarily mean people are more worried about that environmental issue. We see, for example, familiarity with wildfires and floods, but low levels of worry. This result may reflect a person’s assessment of personal risk or lack of personal experience with these kinds of events. Plastics, on the other hand, ranks high in worry and familiarity (albeit at lower levels of worry than in 2017). Plastics is something all people in our consumerist society have experience with and given that almost all Canadians shop and recycle, plastics are something people deal with daily. There is also a cluster of issues in the left quadrant of Figure 1 telling us that the issues people are most worried about are also those about which they have read or heard little. These results suggest an important opportunity for environmental groups to provide information to Canadians on issues about which they know little but are nevertheless concerned.

Figure 1. Plot showing environmental issue worry against familiarity. Left top quadrant shows worry is not associated with familiarity and bottom right quadrant shows familiarity is not associated with worry.



Trust

Consistent with trends so far, we see evidence of polarization in the Panoramic Survey general trust results. In 2018, we asked people to indicate how much trust they had in groups and institutions to provide energy-related solutions. In contrast, the focus in 2017 was on trust to solve environmental problems. In 2017, we used a 5-point scale (strongly not trust, somewhat not trust, neutral, somewhat trust, strongly trust) In 2018, we used a 7-point scale (1 equalled no trust at all and 7 equalled a great deal of trust). To compare year-over-year, strongly not trust (2017) and not trust at all and 1 to 2 ratings (2018) are compared; somewhat not trust, neutral and somewhat trust (2017) and 3 to 5 ratings (2018) are compared; and strongly trust (2017) and ratings 6 to 7 (a great deal of trust, 2018) are compared.

Table 10 summarizes these results. For the categories we tracked in both 2017 and 2018, we see the following: feeling neutral about environmental groups is down 17% year-over-year, with having no trust at all in environmental groups up 9% and having a great deal of trust in environmental groups also up at 5%. The same pattern holds for corporations and industry (neutrality down 18%, having no trust at all up 8%, and having a great deal of trust up 8%).

We have a more complicated picture with government because we combined federal/provincial in 2017 and separated these two orders of government in 2018. When considered together (i.e., in 2017) and comparing results in 2018, we see people having no trust at all in government is up 13% to 15%, feeling neutral is down 25% to 29%, and having a great deal of trust is up 11% to 12%. Trust in university scientists remains strong, but with the same pattern: no trust at all is up 4%, feeling neutral toward university scientists is down 19%, and having a great deal of trust in scientists is up 12%, compared to 2017. We tracked trust in Aboriginal Peoples, local government, local utility, and economists but not in 2017 and 2018. Results are in Table 10.

“ *Feeling neutral about environmental groups is down 17% since 2017* ”

Table 10. 2018: Please indicate how much you trust each of the following to evaluate problems and propose solutions related to Canada’s energy system? 2017: How much do you trust each of the following on matters pertaining to environmental problems and solutions?

(Sample size 2018, *n* = 3,000; 2017, *n* = 3005)

	No trust at all (1–2)		Neutral/Moderate (3–5)		Great deal of trust (6–7)	
	2018	2017	2018	2017	2018	2017
Environmental groups	15%	6%	55%	72%	25%	20%
Federal/provincial governments	-	12%	-	82%	-	3%
Federal government	27%	-	53%	-	15%	-
Provincial government	25%	-	57%	-	14%	-
Corporations/industry	30%	22%	55%	73%	10%	2%
University scientists	7%	3%	48%	67%	39%	27%
Aboriginal Peoples	-	7%	-	69%	-	19%
Local government	-	11%	-	83%	-	3%
Local utility	19%	-	58%	-	15%	-
Economists	17%	-	60%	-	16%	-

Totals may not equal 100 due to rounding; “not sure” responses removed

When we ask people whether they trust a person, institution or group, we don’t know what aspects of trust they are thinking about. A regression model predicted trust in environmental groups is most associated with holding egalitarian values, identifying with the environmental movement, being a Green Party voter, and being foreign born. Trust in environmental groups is negatively associated with a person intending to vote Conservative. For a more detailed analysis of trust in environmental groups, see Part 2, Section: Trust in environmental groups. In Part 2, we explore the values, beliefs, identity and trust factors influencing our results.

Part 2: Values, identity, beliefs, trust, norms and behaviour

In Part 2, we summarize results for a battery of questions designed to measure Canadians worldviews or values, identity, beliefs about environmental and energy issues, trust, pro-environmental norms, and environmental behaviours. Worldviews and values shape how we interpret the world around us, whom we trust, our beliefs, and behaviours. We first summarize worldview results, followed by identity (Canadian and environmental), trust in environmental groups, pro-environmental norms, and then results for environmental behaviours. We close with a discussion and conclusion.

Values/worldview

A large body of academic work has established a robust link between people's perception of environmental risk and their cultural worldviews². We explored Canadians' orientation toward hierarchical, egalitarian and market-individualism values in the 2018 Panoramic Survey. Table 11 summarizes the frequency results for nine questions measuring worldview orientation. Items 3, 6 and 9 represent hierarchical worldviews; items 1, 4 and 7, egalitarian worldviews, and items 2, 5, and 8 represent market-individualism worldviews. The first thing to notice is the tendency toward neither disagree/agree, with softest opinion towards market-individualism measures. Strongest support is for egalitarian values. Responses were measured on a 7-point scale, with 1 and 2 coded as strongly disagree/disagree; 3, 4, 5 as neutral; and 6 and 7, agree/strongly agree.

Table 11. Cultural worldview orientation

	Disagree 1-2	Moderate/Neither disagree/agree 3-4-5	Agree 6-7
1. We need to dramatically reduce inequalities between the rich and the poor. (<i>n</i> = 2967)	5%	41%	55%
2. Free markets — not governments programs — are the best way to supply people with the things they need. (<i>n</i> = 2799)	11%	62%	29%
3. Society has gone too far in granting gays and lesbians equal rights. (<i>n</i> = 2962)	45%	38%	18%
4. Government should provide a decent standard of living for everyone. (<i>n</i> = 2966)	8%	39%	53%
5. Stricter environmental laws and regulations cost too many jobs and hurt the economy. (<i>n</i> = 2892)	24%	55%	20%
6. We have gone too far in pushing minority rights in this country. (<i>n</i> = 2942)	24%	45%	32%
7. We need to do more to reduce inequalities between men and women. (<i>n</i> = 2959)	5%	38%	57%
8. Most corporations make a fair and reasonable amount of profit. (<i>n</i> = 2894)	19%	47%	34%
9. A lot of problems in our society come from the decline of the traditional family. (<i>n</i> = 2922)	19%	45%	36%

Totals may not equal 100 due to rounding; “not sure” responses removed

Combining these items into hierarchical, egalitarian and market-individualism scales confirms these observations, with the sample more oriented toward egalitarian values, followed by market-individualism, and hierarchical value orientation. What this means is that people in our sample are more inclined to strongly agree (score

of 6 or 7) with the egalitarian items (1, 4 and 7, reduce inequality, decent standard of living for all, reduce gender inequality) than they are the other items. Egalitarian values are positively associated with holding environmental attitudes and pro-environmental norms, as well as willingness to engage in environmentally-focused behaviours, while market-individualism values tend to be negatively associated with these factors. Hierarchical values had no significant influence on environmental attitudes.

“Egalitarian values, the most widely expressed in our sample, are associated with a willingness to adopt behaviour that protects the environment”

Identity

Canadian identity

In addition to values or worldviews, we also explored respondents' understanding of their Canadian identity as it relates to solving environmental problems and managing natural resources. Canadians most identify with Canada being moderately good at developing natural resources like oil and gas, with 31% of respondents saying Canadians are extremely or very good at this (score of 6 or 7), followed by developing new clean technologies, at 23%. It is notable that most Canadians ranked the country as moderately or neutrally good at these items (Table 12).

Table 12. Please rate the extent to which Canadians are very good at, or not very good at, each of the following.

	Extremely/bad at this (1-2)	Moderate/Neither good nor bad at this (3-5)	Extremely/good at this (6-7)
Finding solutions to environmental problems (n = 2841)	12%	69%	19%
Managing change so that no one is left behind (n = 2804)	18%	67%	15%
Managing natural resources in a responsible manner (n = 2833)	15%	65%	20%
Developing new clean technologies (n = 2838)	12%	66%	23%
Developing natural resources like oil and gas (n = 2811)	10%	59%	31%
<i>Totals may not equal 100 due to rounding; "not sure" responses removed</i>			

Regionally, it comes as no surprise that Albertans feel Canada is especially good at managing natural resources like oil and gas, followed by Saskatchewan and Manitoba (Table 14). Also note, however, that most Canadians, regardless of where they live, are feeling mostly neutral about this aspect of Canadian identity. Liberals and Conservatives agree Canadians are good at developing oil and gas resources with 35% and 36% rating us extremely good at this (a 6 or 7 on a 7-point scale).

Table 13. Managing natural resources like oil and gas.

	Extremely/bad at this (1–2)	Moderate/Neither good nor bad at this (3–5)	Extremely/good at this (6–7)
British Columbia (n = 476)	12%	61%	26%
Alberta (n = 468)	10%	46%	45%
Saskatchewan-Manitoba (n = 468)	10%	55%	37%
Ontario (n = 466)	9%	62%	29%
Quebec (n = 468)	11%	60%	23%
Atlantic (n = 465)	12%	65%	24%

Totals may not equal 100 due to rounding; “not sure” responses removed

Canadians are even more neutral about our ability to develop new clean energy technologies, with about two-thirds of the respondents feeling moderate or neutral. Quebecers are most inclined to believe Canadians are very good at this (31%), while 16% to 24% of respondents in the remaining provinces and regions rank Canadians as very good at this. Liberals are more inclined to say Canadians are good at developing clean energy technologies (34%), compared to Conservatives (22%), and New Democrats (20%).

“Most of us, regardless of where we live, are feeling neutral about Canada’s expertise in developing its oil and gas resources

Environmental identity

In the 2018 Panoramic Survey, we measured how closely Canadians identify with the environmental movement. A person with stronger feelings of obligation to protect the environment (pro-environmental norms) is also a person more likely to say they identify with the environmental movement. Ten percent of respondents say they are an active participant in the environmental movement; 38% say they are sympathetic

towards the environmental movement, but not active; 38% say they are neutral; 7% say they are unsympathetic to the environmental movement. In future, we will add a category for active opponents of the environmental movement to have a more balanced scale.

There is a strong association between environmental identity and feeling obligated to behave in ways conducive to environmental protection. Forty-seven percent of the people who strongly disagree that they feel a personal obligation to do their part to prevent climate change say they are unsympathetic towards the environmental movement. Twenty-five percent of the people who strongly feel obligated to do their part to prevent climate change say they are active in the environmental movement, and 51% say they are sympathetic towards the environmental movement.

Thirty-four percent of the people who strongly agree with not feeling obligated to change their lifestyle for the sake of the environment say they are neutral about identifying with the environmental movement; 25% say they are unsympathetic to the environmental movement. Responses to other pro-environmental norm measures give us a sense of how unengaged people are on environmental issues, even among people sympathetic to environmental goals. When asked to disagree/agree with the statement “I feel guilty when using my car”, 40% of those respondents who say they are active in the environmental movement strongly agree; 36% of people who feel sympathetic felt the same. Forty-seven percent of people who strongly disagree are neutral toward the environmental movement, 24% are sympathetic, and 23% unsympathetic.

There is general agreement with the statement “I don’t feel obligated to change my lifestyle for the sake of the environment,” with 19% of respondents who say they are active in the environmental movement agreeing with this statement; 22% of sympathizers, 34% of those who say they are neutral toward the environmental movement, and 25% of those who say they are unsympathetic to the environmental movement.

One extension of environmental identity is engagement with environmental groups. When we ask respondents to indicate their involvement with environmental groups, 73% say not sure, while 13% say they are friends with someone in the environmental movement, 8% say they are followers of an environmental group, 7% said they donate to an environmental group, 4% say they are members of an environmental group, 4% say they volunteer for a group, and 1% say they are employees of an environmental group.

Trust in environmental groups

Values and worldviews influence our beliefs about who to trust³. When we ask people whether they trust a person, institution or group, we don't know what aspects of trust they are thinking about. As noted, a regression model based on our sample predicts general trust in environmental groups is most associated with holding egalitarian values, identifying with the environmental movement, being a Green Party voter, and being foreign born. Trust in environmental groups is negatively associated with a person intending to vote Conservative.

Trust is a multi-dimensional concept that can cover ideas relating to whether a person believes a group or institution is competent or has integrity and/or is aligned with their personal values. To better explore this more nuanced understanding of trust, we asked a series of questions in the 2018 Panoramic survey covering competence and integrity assessments of environmental groups, with a focus on their capacity to educate, manage and/or provide solutions to energy issues, including the transition to renewable energy. Table 14 summarizes these results (1 to 2 strongly disagree/agree, 3 to 5, moderate/neutral, 6 to 7, agree/strongly agree). Generally, most Canadians neither trust nor distrust environmental groups on competency or integrity dimensions.

Respondents think about six of the items similarly (all but the two items about environmental groups distorting facts and being too influenced by radical environmental groups). These items combined ideas of competence and integrity but most of the variation in these trust item results is associated with competence and skills. This suggests that the roots of trust in environmental groups has to do with perceived expertise, while distrust of environmental groups is most associated with negative perceptions relating to being too radical or distorting the facts.

Table 14. As a whole I think environmental groups... (n = 3,000)

	Disagree	Moderate/ Neither agree/ disagree	Agree
... are competent to educate Canadians about the energy transition (n = 2,819)	12%	56%	27%
... have the skilled people needed to advocate for a less polluting energy system (n = 2,788)	10%	56%	26%
... distort facts about the environmental effects of fossil fuels (e.g. oil and gas) in their favour (n = 2,824)	14%	51%	28%
... are too influenced by radical environmental interests (n = 2,814)	10%	53%	31%
... are acting in the public interest when it comes to environmental protection (n = 2,866)	10%	54%	32%
... listen to what ordinary people like me think about our current energy system (n = 2,816)	18%	56%	21%
... generally know what they are talking about when it comes to energy (n = 2,839)	10%	56%	28%
... usually try to help people use energy more efficiently (n = 2,851)	8%	53%	34%

Totals may not equal 100 due to rounding; “not sure” responses removed

Statistical analysis (regression modeling) shows that holding egalitarian values, trusting environmental groups, worrying about their impact on the environment, taking environmentally friendly transportation, donating to environmental groups, voting with the environment in mind are all associated with having confidence in the expertise of environmental groups. Younger respondents (aged 18 to 34 years old) and higher educated people (with graduate degrees) are also significantly more inclined to trust the competence of environmental groups.

Holding skeptical views about the integrity of environmental groups is most associated with holding hierarchical and market-individualistic values, being conservative, and not feeling obligated to change their lifestyle or help society reduce environmental impacts. Importantly, holding these views does not prevent these individuals from worrying about their environmental impact, recycling or being willing to buy locally grown food.

“ *Canadians’ trust in ENGOs is rooted in positive perceptions of their competence, while distrust is rooted in negative perceptions of them being too radical* ”

Beliefs about energy and environmental issues

Attitudes include our cognitive (thinking/reasoning) and affective (emotion-based) evaluations of issues, people and objects we encounter⁴. Table 15 summarizes results exploring attitudes toward environmental and energy issues (Scale 1 to 2 strongly disagree/disagree; 3 to 5, neutral, 6 to 7, agree; strongly agree). Once again, we see that about half our sample is not particularly engaged with environmental and energy issues, with moderate to neutral scores ranging from 44% to 51%, except for a very general question about protecting nature being good for the economy, where 60% of respondents strongly agreed, and 34% were neutral. Other questions, such as banning single-use plastics and getting oil to market, reflect recent social and mass media coverage and social discussions around solutions to plastics accumulating in our oceans. Forty-seven percent of respondents strongly agree that governments should act quickly to ban single-use plastics. The strongest opposition, at 24% of the sample strongly disagreeing, is with the statement that pesticides used in agriculture pose a limited risk to human health.

Table 15. Environmental and energy beliefs

	Disagree (1–2)	Moderate/ Neither disagree/ agree (3–5)	Agree (6–7)
Federal and provincial governments should do everything in their power to build energy infrastructure like the Kinder Morgan pipeline in British Columbia to help get Canadian oil and gas to market. (n = 2,771)	13%	44%	35%
Pesticides used in agriculture pose a limited risk to human health. (n = 2,829)	24%	45%	25%
Over the next 10 years, Canada should completely phase-out fossil fuel production to meet its climate change targets. (n = 2,764)	17%	47%	28%
Governments should work quickly to ban single-use plastics such as plastic bags, straws, and bottles, even if neighbouring jurisdictions fail to act. (n = 2,882)	7%	41%	47%
When deciding whether a proposed energy project should move forward, national interests should take priority over the local concerns of affected communities. (n = 2,797)	14%	49%	30%
Major energy projects in the country should be approved only if they are consistent with Canada’s climate change commitments. (n = 2,831)	6%	47%	42%
Canada’s environmental laws are too weak and ineffective. (n = 2,765)	9%	51%	32%
By respecting the rights of Canada’s indigenous communities we also protect our environment. (n = 2,835)	12%	50%	33%
Given the rising demand for oil and gas, it makes little sense for Canada to keep its resources in the ground. (n = 2,790)	11%	49%	33%
Acts of civil disobedience (protests, blockades, occupying offices and other spaces) have no place in our democracy. (n = 2,858)	21%	49%	26%
Protecting nature is important for the health of Canada’s economy. (n = 2,902)	2%	34%	60%

Totals may not equal 100 due to rounding; “not sure” responses removed

Pro-environmental norms

Pro-environmental norms, (feelings of obligation to act in ways that reduce environmental harm), are important predictors of support for environmental policies and intention to behave in ways that avoid or minimize negative environmental effects⁵. The general model of environmental behaviour holds that environmental values motivate attention to environmental issues and learning about environmental challenges and opportunities. A person who is aware of the environmental consequences of actions (socially or personally) is then more likely to develop personal norms of environmental behaviour. These pro-environmental norms are, in turn, associated with greater intention to behave in environmentally friendly ways⁶. While a host of barriers can prevent an action from occurring, such as lack of information, money, time or infrastructure, people with pro-environmental norms and who feel able to execute the behaviours are more likely to adopt the behaviour. Table 16 summarizes results for five items we included in the Panoramic survey to measure how activated personal pro-environmental norms are in Canadians (1–2 strongly disagree/disagree; 3–5 neutral; 6–7 agree/strongly agree).

Once again, we see about half the population is neutral about these questions, suggesting that pro-environmental norms are not activated. Four out of ten respondents strongly disagree that they don't feel obligated to change their lifestyle for the sake of the environment and about the same proportion strongly disagree that they don't feel obligated to help society reduce its environmental impact. Almost just as many people, however, strongly disagree that they feel guilty when using their car. The most activated personal norm, with 41% of people strongly agreeing, relates to feeling obligated to do their part to prevent climate change. Linking car use to climate change could enhance understanding of the links between fossil fuel and car use and people's belief they should do their fair share to help solve this problem.

“ *Linking car use to climate change could boost the belief we should do our fair share to solve this problem* ”

Regionally, Quebecers are most inclined to strongly agree that they feel obligated to do their part to prevent climate change and the remaining provinces/regions are between 37% (Alberta) and 46% (Atlantic). Fifty-one percent of Liberals strongly

agree, 29% of Conservatives, and 43% of New Democrats. Atlantic Canadians and Quebecers are also most inclined to strongly disagree that they don't feel obligated to change their lifestyle for the sake of the environment (43% and 42% respectively), with the remaining provinces and regions ranging from 30% to 39%.

Thirty-six percent of Liberals strongly disagree with this statement, 28% of Conservatives, and 40% of New Democrats. Residents of Saskatchewan and Manitoba are most inclined to strongly disagree that they feel guilty when they use their car (49%), with Quebec lowest at 29%, and the remaining provinces/regions between 33% to 34%). Thirty-two percent of Liberals, 51% of Conservatives and 20% of New Democrats strongly disagree with this statement.

Table 16. Pro-environmental norms

	Disagree (1-2)	Moderate/ Neither disagree/ agree (3-5)	Agree (6-7)
I feel a personal obligation to do my part to prevent climate change. (n = 2,941)	8%	49%	41%
I don't feel obligated to change my lifestyle for the sake of the environment. (n = 2,942)	37%	51%	12%
I feel guilty when I use my car. (n = 2,898)	35%	42%	10%
I worry about my impact on the environment. (n = 2,946)	11%	52%	34%
I don't feel obligated to help society reduce its environmental impact. (n = 2,941)	42%	45%	11%

Totals may not equal 100 due to rounding; "not sure" responses removed

When it comes to worrying about their impact on the environment, 51% of Quebecers strongly agree, with the rest of the provinces/regions falling between 25% and 31%. Forty-one percent of Liberals strongly agree, 24% of Conservatives and 35% of New Democrats. Finally, Atlantic Canadians are most inclined to strongly disagree that they don't feel obligated to help society reduce its environmental impact, with the rest of the provinces/regions coming in at between 37% and 46%.

Pro-environmental behaviours

Participating in pro-environmental behaviours and environmental practice (a mix of environmental behaviours consistent with an environmental identity) is influenced by values, beliefs and norms, but also the ability to execute the behaviour because one's social context and surrounding infrastructure can support or make it difficult to execute the behaviours⁷. We can see from Table 17, that recycling represents one of those behaviours that is socially supported through municipal infrastructure. As a result, 79% of Canadians report almost always recycling.

Almost half the population say they reduce and re-use (48%). Donating to an environmental group and taking environmentally friendly forms of transportation are the least practiced environmental behaviours (22% and 54% respectively say they never do these activities). We asked in 2017 and 2018 whether people talked to their friends and family about environmental issues. In 2017, 32% of respondents said they almost always did, while in 2018 24% of respondents said they almost always did. Most Canadians only sometimes talk to friends and family about environmental issues (55% in 2018, 63% in 2017), and 19% say in 2018 that they never do, compared to 4% in 2017.

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Table 17. Environmental Behaviours (n = 3,000)

	Never	Sometimes	Almost always
Recycling	2%	19%	79%
Buy food raised locally	5%	60%	32%
Reduce and re-use instead of recycling	5%	44%	48%
Use environmentally friendly forms of transportation (cycling, public transport, carsharing)	22%	48%	28%
Discuss environmental issues with family and friends	19%	55%	24%
Seek out information on environmentally-friendly behaviours	19%	56%	22%
Donate money to an environmental group	54%	33%	10%
Vote for a government/leaders prioritizing environmentally-oriented policies	19%	48%	24%
<i>Totals may not equal 100 due to rounding; "not sure" responses removed</i>			

“ Most Canadians do not talk to friends and family about environmental issues

Egalitarian values are generally positively associated with environmental behaviours such as recycling, seeking out information, talking about environmental issues, donating to environmental groups and voting with the environment in mind. Hierarchical and market-individualistic values also predict buying local food and donating to environmental groups. These results are very important because they suggest that a way to broaden public engagement is through a focus on locally produced food and that people of all value orientations are open to donating to environmental groups. People who orient toward hierarchy (ordered society), also report practicing re-use and reduce behaviours, suggesting a conserver lifestyle may be part of their identity and worth further exploration.

While values and beliefs are important influences on behaviour intentions, pro-environmental norms and trusting environmental group competence and skills that are more critical to people reporting pro-environmental behaviours. Our statistical analysis (regression modelling) shows that pro-environmental norms like feeling obligated to do their part to solve climate change, feeling guilty when using their car, and worrying about their impact on the environment, most influence self-reports of environmental behaviours like recycling, buying local food, reduce/re-use, seeking out information on environmentally friendly behaviours, discussing environmental issues with friends and family, and voting with the environment in mind. Importantly, trusting environmental group competence and skills most influences whether someone talks to friends and family about environmental issues, seeks out information about environmentally friendly behaviours, donates to environmental groups, and votes based on environmental concerns. As might be expected, taking environmentally friendly forms of transportation is most associated with feeling guilty about car use, followed by trusting in competence and skills of environmental groups. Worrying about your environmental impact also has a modest influence.

“ Egalitarian values predict recycling, but not buying local food

Trusting environmental group competence is most predictive of whether a person talks to friends and family about environmental issues and whether they seek out information on environmental issues. This is a key finding given the important work environmental groups do to engage and educate Canadians and suggests the value of recruitment strategies that emphasize environmental group expertise. Worrying about environmental issues also is strongly predictive of talking about environmental issues, followed by feeling obligated to do something about climate change. Again, feeling obligated to do something about climate change and feeling guilty about car use are also strongly predictive of these behaviours.

Trusting environmental group competence and skills is most predictive of donating to environmental groups. Critically, trust in the competence and skills of environmental groups is also most predictive of voting based on environmental concerns, followed by pro-environmental norms such as feeling guilty when using a car and feeling obligated to do something about climate change.

Not feeling obligated to change their lifestyle for the sake of the environment is negatively associated with voting with the environment in mind and seeking out information on environmentally friendly behaviours. Not feeling obligated to help society reduce its impact on the environment is a negative influence on recycling, buying local food, reduce/re-use, and donating to environmental groups. Skepticism about the integrity of environmental groups (owing to a perception that they distort facts, or are too influenced by radicals, etc.), also has a negative influence especially relating to seeking out information on environmentally friendly behaviours, discussing environmental issues with friends and family, using environmentally friendly forms of transportation, reduce/re-use, buying local food and recycling.

These results point to the importance of activating pro-environmental norms and the important role and influence of environmental groups. We also see with these results, the potential to engage a broad spectrum of Canadian society, opportunities to better understand environmental behaviours as a coherent part of a person's identity and environmental practice, and the need to identify which behaviours spill over into other behaviours, and which do not⁸. These findings will be a focus of further exploration in upcoming surveys.

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Discussion

We set out in the 2018 Panoramic survey to track change over time and to better understand how values, beliefs, trust and norms affect environmental engagement and behaviours. Different results from one year to the next can reflect true changes in public opinion but can also be influenced by differences in question ordering and data collection method. The inaugural Panoramic survey included a battery of environmental values questions at the front-end, which may have primed more pessimistic responses in 2017. The 2018 Panoramic survey opted for more general values-based questions, which might explain some of the observed dip in environmental concern, as respondents in 2018 were not similarly primed to think about environmental issues before answering substantive questions. Moreover, the most recent survey was fielded with Research Now SSI (Survey Sampling International) using an Internet-based panel to solicit 3,000 survey respondents. In contrast, the 2017 survey used a mixed-mode hybrid design that included an Internet panel (non-random) and random digit dialing telephone sample to solicit 3,005 respondents. To some extent, these differences in survey mode might account for another portion of the difference. If we compare 2018 and 2017 results using the total sample from 2018 and looking only at the 2017 online sample, however, we find the trends remain the same: increases in believing the health of the environment has improved or stayed the same and declines in worry about environmental issues, and increases in believing governments, corporations and citizens are doing about the right amount to protect the environment. There are minor differences when comparing 2017 online and we note them where they occur, but we believe the differences we see between 2018 and 2017 are not the result of data collection mode.

In contrast, there is substantial evidence to suggest that the observed changes are not artifacts of survey methodology. To the extent that the observed changes are real, we might speculate that Canadian attitudes have evolved to reflect changing perceptions of government performance on the environment. It's no secret that the Trudeau government (and many provincial governments at the time of the survey) have tried to position themselves as more active on the environment, with high profile policies and campaigns garnering substantial media attention. In line with “thermostatic” theories of public opinion⁹, in which the public, like a thermostat, demands less (more) policy when governments pay greater (less) attention to issues, the public may simply be downgrading its concern with environmental issues at a time when environmental policy activity is perceived to be relatively high.

Consistent with this view, we find that the greatest declines in environmental concern or believing that governments, corporations and citizens are doing enough to protect the environment is among Liberals. British Columbians, for example, show the highest increase in believing governments are doing about the right amount to protect the environment. This shift could reflect the change in government to one with a strong environmental agenda and, perhaps, public reaction to Kinder Morgan pipeline debate.

We find that egalitarian worldview/values are associated with environmental identity and feeling obligated to act in environmentally friendly ways. Most Canadians, however, are largely unengaged on environmental issues, and pro-environmental norms are not activated. Where pro-environmental norms are activated, we see a strong association with environmental behaviours. If environmental values, identity and norms are weak, Canadians' commitment to environmental behaviours and policies will be vulnerable to changes in political and/or economic conditions. The long-game requires investing in nurturing environment values and identity, as well as the social conditions required to facilitate environmental behaviours and support for environmental policies.

“ Where pro-environmental norms are activated, we see a strong association with environmental behaviour

Conclusion

We clearly see a dampening in environmental concern in 2018, compared to 2017. We can only speculate whether these results are driven by reactions to perceived government action, saturation from exposure to mass media or social media coverage, or distraction caused by other crowding out because of growing concerns relating to trade and the economy. Whatever the combination of factors, we may be seeing cognitive dissonance in action where Canadians rationalize environmental conditions are improving or staying the same (contrary to scientific fact), and this belief helps rationalize support for slowing environmental regulation because governments, corporations and citizens are doing all they should. Without focus groups to explore all the factors that may be in play, we are left to speculate.

Regardless of the “why”, however, we know the “what” and the Panoramic survey experiment on how to frame energy transition may be helpful (more detail in Energy Deep Dive). A health frame supported by frames focused on Canadians’ capacity for innovation and ingenuity and economic opportunity could be helpful. This may not be the time to further trigger selfish concerns through messages highlighting ‘transition’ or ‘decline’. Rather, it may be important now to emphasize collective concerns (i.e., current energy system is bad for our collective health; renewable energy is good for our well-being), and to build confidence and a sense of agency in Canadians’ ability to diversify the Canadian economy. We also see how important activated pro-environmental norms, trusting environmental groups (especially competence and skills), and values are to self-reporting of environmental behaviours.

Based on the 2018 Panoramic survey results, we recommend that Canadians need to be reminded that not enough action is being taken to reduce society’s impact on water resources, climate change and accumulation of plastic pollution of oceans, and other environmental issues. Environmental groups have important opportunities to pursue in terms of public engagement by emphasizing their skills and expertise and providing information to Canadians on issues about which they know little but are worried. The important work of nurturing environmental values and making Canadians aware of the environmental consequences of their behaviours (social, political, personal) is critical to activating pro-environmental norms. Future EcoAnalytics research funded by the Social Sciences and Humanities Research Council (SSHRC) will explore these important predictors of environmental support and action.

Notes

- 1 These results could be an artifact of having these water-related items as the first three items on the worry battery pull-down list. We will randomly assign items in future to avoid possible first exposure bias.
- 2 Douglas, M., & Wildavsky, A. (1982). How Can We Know the Risks We Face? Why Risk Selection Is a Social Process. *Risk Analysis*, 2(2), 49–58. doi:doi:10.1111/j.1539-6924.1982.tb01365.x.; Kahan, D. M., Jenkins Smith, H., & Braman, D. (2011). Cultural cognition of scientific consensus. *Journal of Risk Research*, 14(2), 147–174. doi:10.1080/13669877.2010.511246; Wildavsky, A., & Dake, K. (1990). Theories of Risk Perception: Who Fears What and Why? *Daedalus*, 119(4), 41–60.
- 3 Hoffman, A. J. (2015). *How culture shapes the climate change debate*. Stanford, CA: Stanford University Press.
- 4 Jiga-Boy, G. M., Maio, G. R., Haddock, G., & Tapper, K. (2016). Values and behavior. In T. Brosch & D. Sander (Eds.), *Handbook of Value: Perspectives from Economics, Neuroscience, Philosophy, Psychology, and Sociology* (pp. 243–262). Oxford: Oxford University Press.
- 5 Steg, L. (2016). Values, Norms, and Intrinsic Motivation to Act Proenvironmentally. *Annual Review of Environment and Resources*, 41, 277–292.
- 6 Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(3), 407–424.
- 7 Chng, S., Abraham, C., White, M. P., Hoffmann, C., & Skippon, S. (2018). Psychological theories of car use: An integrative review and conceptual framework. *Journal of Environmental Psychology*, 55, 23–33. doi:https://doi.org/10.1016/j.jenvp.2017.10.009
- 8 Comeau, L. A. (2014). Exploring the ethical orientations of environmental lifestyle practitioners: A mixed-method study. Dissertation. Forestry and Environmental Management. University of New Brunswick. Fredericton, NB.; Truelove, H. B., Carrico, A. R., Weber, E. U., Raimi, K. T., & Vandenberg, M. P. (2014). Positive and negative spillover of pro-environmental behavior: An integrative review and theoretical framework. *Global Environmental Change*, 29, 127–138. doi:https://doi.org/10.1016/j.gloenvcha.2014.09.004

- 9 Soroka, S. N., & Wlezien, C. (2004). Opinion Representation and Policy Feedback: Canada in Comparative Perspective. *Canadian Journal of Political Science*, 37(3), 531–559. doi:10.1017/S0008423904030860; Soroka, S. N., & Wlezien, C. (2010). Public opinion and public policy. In J. C. Courtney & D. E. Smith (Eds.), *The Oxford Handbook of Canadian Politics*. Retrieved from <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195335354.001.0001/oxfordhb-9780195335354>

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