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National Climate Change Adaptation Survey (2023) Executive Summary

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Canada

National Climate Change Adaptation Survey (2023) Final Report

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Supplier name: Earnscliffe Strategy Group
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This public opinion research report presents the results of a telephone survey and in-depth interviews conducted by Earnscliffe Strategy Group on behalf of Natural Resources Canada. The quantitative research was conducted from November 2022 to March 2023 and the qualitative research was conducted from November 2022 to January 2023.

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National Climate Change Adaptation Survey (2023)

Executive Summary

Earnscliffe Strategy Group (Earnscliffe) is pleased to present this report to Natural Resources (NRCan) summarizing the results of quantitative and qualitative research undertaken to assess Canada's progress in addressing climate change adaptation.

In 2009, a National Climate Change Adaptation Benchmark Survey was conducted to establish a benchmark to evaluate progress on adapting to climate change and indirectly, the impact of the adaptation programming by the Government of Canada. The survey targeted government and business decision-makers and gathered information about their awareness and understanding of the potential impacts of climate change; whether and how their organizations are currently adapting; and barriers to action. This research was also used to inform federal program design.

A second research project, conducted by Earnscliffe in 2018, updated the information with a focus on communities and businesses in the natural resource sector. It examined Canada's progress in addressing climate change adaptation. Specifically, it measured changes in awareness and actions on adaptation in communities and businesses; assessed decision-making information and tools; and identified barriers to action. These results were used to support public reporting of progress on adaptation.

Building on this previous work, this project sought to update and expand on the 2018 findings with the goals of assessing progress towards addressing climate change adaptation and support public reporting on adaptation efforts. The contract value for this project was $133,063.15 including HST.

To meet the research objectives, Earnscliffe conducted a two-phased research program involving both quantitative and qualitative research that ran concurrently.

For the quantitative phase we conducted a telephone survey in collaboration with our quantitative subcontractor, Leger. The survey was conducted via telephone from Léger's centralized call-centre using state of the art Computer Aided Telephone Interviewing (CATI) system. The total sample was 361 individuals, including 152 who occupy Chief, Manager or Director of Planning positions in municipalities across Canada and 209 individuals occupying Head of Operations or Chief Risk Officer positions in natural resource industries across Canada. The survey was conducted between November 7, 2022, and March 15, 2023, and the average length of each interview was 17 minutes.

For both the municipal and business samples, stratified random sampling was used. In the case of municipalities, the final sample was weighted to match the unweighted distribution obtained in 2018 in order to make the results as comparable as possible. The aggregate municipal results can be considered accurate to within +/-7.7% at the 95% confidence level.

In the case of the business sample, since the relative sizes of the sectors in the stratified quota structure was not reflective of reality, a weight was applied by sector so that that aggregate results of the business sample results would be representative of the combined universe being studied. Due to sampling limitations, the responses from medium and large businesses were combined in all sectors except power, where only one category was possible. The aggregate business results can be considered accurate to within +/-6.7% at the 95% confidence level.

The qualitative phase consisted of 18 in-depth interviews with representatives from associations representing small businesses and commerce, as well as with companies in the oil and gas, mining, forestry, and utilities industries. Some interviews were also conducted with associations representing municipalities and representatives from municipalities in coastal regions. The purpose of the qualitative research was to gather some deeper insights from specific perspectives that may not have been explored in detail in the survey. The interviews were conducted between November 27, 2022, and January 29, 2023.

For the purposes of this report, wherever findings from the in-depth interviews are presented, it is important to note that qualitative research is a form of scientific, social, policy, and public opinion research. Qualitative research is designed to elicit the full range of ideas, attitudes, experiences, and opinions of a selected sample of participants on a defined topic. Because of the small numbers involved, the participants are not representative in a statistical sense of the larger population from which they are drawn, and findings cannot reliably be generalized beyond their number.

The key findings of this research are presented separately for each of the two samples: business and municipal.

Business Findings

Awareness and Impression of Climate Change Relevance

- In line with results for 2018, seven in ten (69%) respondents say that climate change is happening right now. Another 14% of respondents say that climate change is not happening right now, but will happen in the foreseeable future, while 11% say it is not happening now and will not happen in the foreseeable future.

- Among those who feel that climate change is not happening now but will in the future, a plurality (37%) believe climate change is likely to start impacting the regions in which their business operates in 6 to 10 years while a quarter (25%) and one fifth (19%) say the same of 20 or more years and 1 to 5 years respectively.

- Those who indicated that they feel climate change is happening, or that it will in the foreseeable future, were asked about the impact. A quarter said it would be major (24%), two in five said it would be moderate (42%), and another quarter said it would be minor (23%).

- Echoing 2018, more frequent or more severe weather events and storms was again the most likely to be selected by respondents as the most serious impact (at 18%) of a changing climate over the next 20 years. This was followed by economic effects (10%), wildfires (8%), and heat waves (7%).

- Respondents are equally split between those who say a changing climate is having an impact on the organization (37%) and those who say it is not currently having an impact but that it might in the future (37%). They are less divided on the impact. Two thirds (65%) say that a changing climate will have a mainly negative impact on their business whereas, by contrast, 15% say that it will have a mainly positive impact.

- In the in-depth interviews, all business participants had the view that climate change is already happening and easily pointed to multiple types of evidence for why they hold that impression. Typically, participants cited the extreme weather they have witnessed, or new conditions they have had to consider.

- Those who foresee a positive impact of a changing climate highlight new business opportunities (33%), warmer winters and lower energy costs (28%), and increased tourism (18%) as opportunities. Those who forecast a negative impact underscore economic loses (32%), impacts on infrastructure (18%), as well as increased heatwaves (18%) and wildfires (17%).

- One interpretive element uncovered during the in-depth interviews is that the use of the term "mitigation" was often used in reference to adaptation. Where it was used in the context of mitigating risks to climate change, responses were left verbatim, and analysis was based on the intended use of "mitigation" to refer to an adaptation action. For communications purposes, this suggests that using the term mitigation to only mean mitigating the impact on climate change, rather than reducing the impact of climate change, may not always be received with that distinction recognized. Mitigation was often used to describe how to mitigate a risk posed, which is a typical approach to developing business strategy, although in this case, policy-makers tend to reserve mitigation for a different aspect of climate change dialog.

- Respondents were evenly split between those who say that climate change is a significant challenge, if not the most serious challenge, facing their organization (43%) and those who say that it does not present a significant challenge to their organization (46%).

- While all business participants in the in-depth interviews felt that climate change would have an impact, opinion was mixed over whether that impact would be major or moderate. For those who felt it would be moderate rather than major, it was not because the climate was not going to be pose significant new challenges, but rather, their impression tended to be based upon the sense that their industry was preparing and adapting.

- Business respondents in the in-depth interviews were readily able to identify risks and impacts both general and those specific to their operations or industry. The interviews demonstrated there is a wide range of ways business are considering having to adapt, some of them causing more concern than others but, as a whole, certainly occupying the minds of many in the industries studied.

- When asked about the levels of concern among client and stakeholders, over half (52%) of all respondents say they notice that they are at least somewhat concerned. Another quarter (25%) say they appear not very concerned, while just over one in ten (14%) are not at all concerned – a decline from 22% who said the same in 2018.

- On the perspectives of their stakeholders, in-depth interview participants were more nuanced, often indicating some contrast with the participants' own perspectives. Many were able to describe specific aspects that were concerning their stakeholders, some of them being greatly concerning, while some others indicated that they have witnessed some variance in the degree of engagement of stakeholders.

Climate Change Adaptation

- In a shift from 2018 when one third of respondents said they were taking climate change adaptation measures and two thirds (66%) said they were not, respondents are now split fairly evenly with 45% saying they are and 50% saying they are not.

- In terms of climate adaptation measures, business participants interviewed in the qualitative phase all described both doing things currently as well as planning additional things to implement.

- Three in twenty (15%) respondents noted that their organization had completed or conducted a climate change risk assessment, compared with four in five (80%) who said they had not.

- When it comes to adapting to a changing climate, the most mentioned measures are emerging response and disaster planning (14%), changing infrastructure (12%), and implementing actions laid out in their plans (11%). Despite not being a climate adaptation measure, carbon footprint reduction was also mentioned by 12% of respondents.

- Consistent with 2018, a quarter (23%) of organizations surveyed have specific plans for future actions designed to adapt to the risks and opportunities provided by a changing climate.

- In a shift from 2018, the most cited plans for future adaptation actions among respondents who had plans to do so were installing natural or green infrastructure (18%) and preparing an adaptation plan (13%). One in ten (12%) also mentioned reducing their carbon footprint.

- Two thirds (65%) of respondents note that their organization has been considering a changing climate in their decision-making for at least 3 years, if not more. Only one in ten (11%) say that this has been a consideration for less than a year.

Barriers to Incorporating Climate Change Considerations

- In line with the findings in 2018, the most common source an organization uses to get information on climate change is the media, with 46% of all businesses using it.

- Identified by one third (31%) of respondents, the complexity of the policy change processes was, as with in 2018, the most likely to be identified by respondents as a significant barrier to taking climate change into account in decision-making processes. When asked in a follow-up about any additional barriers not tested in the initial question, one in ten (10%) respondents identified the associated financial costs.

- Across all industries surveyed, only 7% of respondents say that some or all of their staff have taken climate change adaptation training.

- In 2022, half (51%) of respondents say they have the resources they need to make decisions related to climate change adaptation. This is down significantly from 2018 when almost three quarters (72%) said the same.

- When asked about additional tools or resources that would be helpful, respondents noted relevant case studies of similar organization (27%), economic information on costs and benefits (26%), information on best practices (24%), and information on regional impacts (24%).

- Through the course of the in-depth interviews, participants described certain barriers that exist and comments relevant to the specific items in the subsequent section will provide more detail. The things that are driving both action and plans tend to be the evolving knowledge of what specific climate impacts to expect in very localized areas, as well as the availability of capital and personnel.

- Getting into a deeper conversation about the barriers faced to making further advancement on climate change adaptation, participants in the in-depth interviews identified a variety of barriers and often had suggestions for what would most help remove those barriers, including specific suggestions or requests of NRCan.

Municipal Findings

Awareness and Impressions of Climate Change Relevance

- Consistent with the results in 2018, eight in ten respondents say that climate change is happening now (78%). One in six respondents (16%) believe that climate change will happen in the foreseeable future, and 3% say climate change will not occur.

- All municipal participants in the qualitative phase were uniformly of the opinion that climate change is already occurring. All could easily point out reasons for their response and some were taken somewhat aback at being asked that question, given all the scientific evidence that exists and all the extreme weather events that have occurred in recent years.

- Among those respondents who feel that climate change is not happening now but will in the future, a similar number believe the impact will be noticeable in 1 to 5 years (28%), 6 to 10 years (33%), or 11 to 19 years (30%). Fewer (9%) feel that the impact of a changing climate would be seen in 20 years or more.

- Up 15 percentage points since 2018, one-quarter of respondents who believe there is a changing climate (26%) say that a changing climate will have a major impact on their community in the next 20 years. The remainder assess that impact as ‘moderate’ (52%) and one-fifth (20%) believe that a changing climate will have a minor impact on their community.

- Combining the most and next most serious impacts provided by respondents, the most common impacts, which are consistent with 2018, are more frequent or more severe weather events (29%), flooding (25%), effects on agriculture (20%), drought (17%), and forest or wildland fires (16%).

- In the in-depth interviews, municipal participants readily discussed a long list of impacts being anticipated for their community, many of them quite significant and concerning and often with evidence the changes have begun to affect the community. As with the business respondents, municipal participants were divided over whether they would describe the impacts of a changing climate on their community as being moderate or major.

- More than half of respondents (54%) believe that a changing climate is already having an impact on their organization, while 37% say it is not currently but it is possible that it will in the future. Only 6% of respondents believe a changing climate will not have an impact on their organization in the future.

- Up 16% percentage points since 2018, 86% of respondents who believe climate change has or will impact their organization believe that the impact of a changing climate will be mainly negative. Few respondents believe the impact will be mainly positive (5%) or say a changing climate will have both positive and negative impacts on their organization (3%).

- In the in-depth interviews, most municipal participants described having experienced organizational impacts including the establishment of units, mandates, and activities specifically to address the need for adaptation and put governments in a position to do the work that needs to be done.

- The most common negative impacts cited are a change in water levels or supply (39%), costs and impacts to infrastructure (38%), economic losses or the cost of adaptation (37%), and increased floods (37%) and drought (28%).

- The most common mentions of positive impacts are warmer winters or lower energy costs (79%), increased crop yields (57%) and reduced winter snow clearing costs (22%).

- As in 2018, the majority of respondents (60%) say that climate change is a significant challenge faced by their organization but is not as serious as other challenges, one-quarter (27%) say that it does not present a significant challenge, and 12% say it is one of the most significant challenges their organization faces.

- Two-thirds of respondents (65%) say that their clients or stakeholders are concerned with climate change, while one-third say their clients or stakeholders are not concerned.

- Municipal participants in the qualitative phase tended to describe communities they serve as being at least somewhat concerned with the need to adapt to a changing climate, but many described challenges with the level of understanding of what is coming, what is required, the immensity of the challenge, the costs associated with it. As a result of these factors, many noted that the public is not necessarily educated and engaged enough to accept the tough decisions that Mayors and Councils will be forced to make if they are to adopt appropriate plans.

- In the in-depth interviews, the public opinion environment was often described as being one of heightened awareness but still challenging in a variety of ways related to the lack of understanding or willingness to consider difficult trade-off choices that are inevitable.

Climate Change Adaptation

- When it comes to adaptation, over six in ten respondents (64%) say that their organization is currently taking adaptation steps, while one-third (34%) say they are not.

- All municipal participants in the in-depth interviews described both having already undertaken climate adaptation actions and having plans to do more in the future. Indeed, there was a widespread sense that turning the plans into actions is more of a problem than assigning adequate priority to implementing plans. The activities described are quite widespread, although in a small number of cases, there was conflation of mitigation initiatives with adaptation initiatives.

- As it relates specifically to risk assessments, the majority of respondents (66%) say their organization has not conducted one while one-quarter (26%) say their organization has.

- Looking toward the future, the majority of respondents (61%) say that their organization does not have any future actions planned to adapt to the risks and opportunities provided by a changing climate, while 36% say their organization does – results that mirror 2018 findings.

- The majority of respondents (62%) who indicated that their organization had specific adaptation plans for the future say their organization has been considering a changing climate in its decision-making for 1 to 5 years, which is unchanged since 2018. One quarter of respondents (26%) say their organization has considered a changing climate in its decision-making for 6 years or more, and 8% say it has only been considered within the past year.

- As in the business interviews, municipal participants in the qualitative phase were asked what is driving whether action is taken or being planned. The responses very consistently pointed to the increasing rate of extreme weather being experienced in their own community as driving action to be taken and securing the funding for implementing, or even planning, the said actions. Often, responses on this question focused more on what prevents action rather than what drives it.

Barriers to Incorporating Climate Change Considerations

- Top sources of information regarding climate change for respondents are provincial government sources (25%), the media (20%), the federal government (19%; up from 0% in 2018), industry associations (17%), and internal sources (16%).

- Among an aided list of barriers, the most significant barriers to taking climate change into account in decision-making are lack of capacity (56%), in-house expertise (48%), complexity of policy change processes (48%), and competing organizational priorities (47%) – all of which are consistent with 2018.

- On an unaided basis – that is, respondents were not prompted with a list of options beforehand – the financial cost of adaptation is the only barrier volunteered by a material proportion of respondents (42%).

- Municipal participants were remarkably consistent in describing funding as, by far, the single biggest barrier facing them when it comes to climate change adaptation. Costs of the adaptation activities required are exorbitant and participants described additional barriers relating to funding due to procedural requirements, processes that do not fit well with what a municipality is able to do, or the alignment of the timing of stages of funding applications and municipal budget approvals. The misalignment was often cited as very frustrating and unnecessarily causing a delay.

- In addition to the overwhelming funding challenges, internal capacity was often named as a challenge. Many described having a lack of capacity, even in the cases where they had sufficient access to expertise such as engineers. There was a repeated message that there are too few people with the necessary skillsets and that there is a human resource challenge that limits the volume or pace of action and would continue to do so, even if the funding challenges were solved.

- The majority of respondents (56%) are at least aware of adaptation training courses, including one quarter (26%) who say that some or all of their staff have already taken such courses. The remainder say they are not aware of any adaptation training opportunities (36%) or do not need adaptation training (7%).

- Remaining unchanged since 2018, two-thirds of respondents (66%) say they have access to the information and tools they need to make adaptation-related decisions; three in ten (30%) say they do not.

- As it relates to assisting organizations in addressing the impacts of climate change, the most common required tools or technical resources volunteered are climate data (19%), a cost/benefit analysis (17%), regulations (17%), and risk assessment methods (15%). All others are cited by fewer than 15% of respondents.

- Often discussed in the context of barriers, municipal participants identified many things that would help municipalities take more action on climate adaptation. Three of these were offered on a remarkably consistent basis: increased and accelerated access to funding; increased capacity in terms of expanding the workforce – usually in terms of expertise, but also sometimes expressed in terms of labourers or tradespeople – that will be required to develop and execute climate adaptation plans; and very geographically granular forecasting data for their specific location. Data was often described as being more accessible than ever before, but too generalized to be of value for establishing plans within a specific municipality or watershed.

- In addition to these three frequent themes, a variety of other barriers were identified that were not necessarily common to all participants, but nevertheless mentioned multiple times. These include the complexity or volume of the policy changes that need to be developed and introduced, as well as convincing the public to accept some very difficult choices – at least in terms of allocating funds.

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I hereby certify as a representative of Earnscliffe Strategy Group that the final deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leaders.

Signed: Date: March 31, 2023

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