



Natural Resources Canada  
Ressources naturelles Canada

# ***Natural Resource Issues in a Low-Carbon Economy, 2023***

## **Executive Summary**

**Prepared for Natural Resources Canada**

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**Canada** 

## **Natural Resource Issues in a Low-Carbon Economy, 2023**

Prepared for Natural Resources Canada by Nanos Research

June 2023

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# Executive summary

## Background and objectives

Natural Resources Canada (NRCan) is prioritizing legislation and action to create sustainable jobs and ensure support for communities to create more economic opportunities for workers and families now and in the future across Canada. This involves working with partners to develop and implement various strategies to decarbonize regional electricity systems, increase the market for clean fuels and to transform Canada's existing building stock. Part of this included the development of a Critical Minerals Strategy, led by NRCan, which looks to ensure Canada's natural resources are developed in a sustainable, competitive and inclusive manner.

NRCan previously conducted opinion research on natural resource issues and the low-carbon economy in the Winter of 2021, which built upon previous waves in 2019 and 2018. The department is seeking a clear and current understanding of Canadian public opinion on a wide range of natural resource issues, including forestry, mining, energy, clean technology, climate change, government science and nuclear energy.

To that end, NRCan conducted another wave of this research to see how Canadians view traditional natural resource sectors, as well as what they understand about the challenges and opportunities for these sectors when moving towards a low-carbon economy.

The results will influence planning and development of departmental planning, policies and communications moving forward.

The specific research objectives are as follows:

- Provide an understanding of how Canadians situate traditional natural resource sectors;
- Determine the understanding Canadians have of the challenges and opportunities for these sectors in moving towards a low-carbon economy, measuring changes from the previous waves (where possible);
- Gauge the views of Canadians on relevant issues, e.g., small modular reactors, nuclear waste management, critical minerals; forest bioeconomy; and,
- Provide fundamental public environment information for program, policy and communications planning across NRCan and the government at large.

## Methodology

### Qualitative phase

Nanos conducted 20 online focus groups between March 1<sup>st</sup> and 28<sup>th</sup>, 2023 among 112 Canadians, 18 years of age and older, among residents of eleven communities across Canada as identified by NRCan.

The eleven communities were the following:

- Vancouver, BC (2 groups)
- Calgary, AB (2 groups)
- Toronto, ON (2 groups)
- Regina, AB (2 groups)
- Montréal, QC (2 groups)
- Fredericton, NB (2 groups)
- Rural British Columbia (2 groups)
- The Territories (1 group)
- Rural Québec (2 groups)
- Rural Nova Scotia (2 group)
- Atlantic Canada (1 group)

Sixteen (16) of the online groups were conducted in English and the four (4) online groups with residents of Quebec were conducted in French.

For groups with residents of Vancouver, Calgary, Toronto, Regina, Montreal, Fredericton, Rural British Columbia, Rural Quebec, and Rural Nova Scotia, the groups were split by income, with one group including higher income individuals and one group with lower to middle income individuals. For groups with residents of the Territories and Atlantic Canada, one online group, each, was conducted and included a mix of low, medium, and higher income individuals.

Lower to middle income was defined as households with no more than one person over the age of 18, with a household income of less than \$75,000 or households with more than one person over the age of 18, with a household income of less than \$100,000, all others fell into the higher income group. Across all groups, 163 participants were recruited and 112 participated. Participants received a \$100 honorarium. Focus group sessions were about 90 minutes in duration.

Readers should note that focus group research is qualitative and directional in nature and must not be used to estimate the numeric proportion or number of individuals in the population who hold a particular opinion. The focus group research allowed Natural Resources Canada to gauge the views and gather in-depth insights from their specific communities and profiles of interest.

Please see Appendix A for the detailed methodology.

### Quantitative phase

The survey is comprised of 3593 Canadians, 18 years of age and older. The survey was conducted across Canada in each province and territory between March 31<sup>st</sup> and June 9<sup>th</sup>, 2023.

The sample was drawn from two sources:

- 1) The Nanos Probability Panel, which contains about 50,000 Canadians who were randomly recruited to join the panel by land- and cell-lines with live agents.

2) Random recruitment by land-and cell-lines and administered the survey online.

The resulting sample contains Canadians who were all randomly recruited by telephone, thus allowing a margin of error to be associated with the research. 3,518 individuals were recruited from the Nanos Probability Panel, with 75 individuals in the Territories recruited by land- and cell-lines.

The randomly recruited probability sample has a margin of error of +/-1.6% at a 95% confidence interval.

Results are weighted to population proportions for region, age, and gender from the 2021 Census.

All respondents self-administered the survey online.

## **Key findings**

### **Qualitative Research**

#### **Module A – General Views on Net-zero and Low-carbon Economy**

##### ***Awareness of low-carbon economy concept***

Overall, participants reported low familiarity with the term “low-carbon economy”. Indeed, many of them associate it with personal reduction of their production of greenhouse gases or their carbon footprint, while others mentioned supporting industries that have a smaller carbon footprint or having an economy that is based on services and products that have a lower carbon footprint. Positive impacts on the environment are mentioned by most participants as positive things that come to mind related to a “low-carbon economy”. In addition, very few participants raised negative aspects linked to this term; those that could, often mentioned increased costs and having to make personal changes to their lifestyle to achieve this goal.

##### ***Awareness of net-zero emissions concept***

Conversely, a majority of participants were familiar with the term “net-zero” and have some idea of what the concept means, however many remain unsure as to its exact definition. Regarding the goal for Canada to achieve “net-zero emissions” by 2050, participants had mixed reactions with some saying that they don’t believe it to be achievable, while others mentioned it wasn’t ambitious enough. Lack of infrastructure to support such a transition and increased costs to the average Canadian were the main concerns about this goal.

#### **Module B – Impacts/implications of a low-carbon economy**

##### ***Impact on health***

At the individual level, a healthier environment and better health for current and future generations are seen as personal benefits to shifting to a low-carbon economy. Cost was seen both as the main drawback for this shift, but also as a benefit by some citing personal cost savings coming from shifting to a more minimal lifestyle that includes using public transit instead of driving, and a decrease in overall consumption.

##### ***Impact on workplace and local jobs***

When it comes to a low-carbon economy impacting workplaces or local jobs, most of the participants mentioned they are expecting to see a change in sectors related to oil and gas (such as oil and gas extraction and gasoline vehicle manufacturing) and mining, but that new jobs could be created in agriculture, forestry, parks and recreation, innovation and renewable energies. Participants who lived in rural areas were more likely to say that they would be seeing job losses in their regions.

##### ***Impact on economy***

When prompted on the impact of a shift to a low-carbon economy on the Canadian economy overall, most participants agree that the impact will be significant although there are mixed views on the type of impact shifting to a low-carbon economy will have. Some believed the impact would be greater at the beginning of the transition, or that it would be different across Canada, with the impact being bigger in the provinces that have an economy based on the oil and gas sector such as the Prairies. Others mentioned it would be an opportunity for Canada to become a world leader in this sector. To help with the transition, participants suggested the

government should have a clear plan that is cohesive across provinces so that all Canadians understand why this shift is needed and that includes support for businesses and workers to remain strong economically.

## **Module C: Roles of key industries in the shift to low-carbon economy**

### ***Hydroelectricity and natural gas are seen as cleaner***

In terms of specific sectors or types of energies being included in the shift to a low-carbon economy, participants showed more positive views for hydroelectricity, especially in Quebec, and natural gas. Hydroelectricity was often viewed as a clean and renewable source of energy and most agree that it should be a part of Canada's shift to a low-carbon economy, while natural gas is seen as a "cleaner" alternative to oil, although there are some environmental concerns related to the extraction process of natural gas, specifically "fracking".

### ***Divergence of views on oil sector***

The oil sector was not often viewed as energy that should be included in a shift to a low-carbon economy as many viewed including it in a low-carbon economy as a contradiction given its association with high carbon emissions. However, many said that they think oil will still be a part of our economy in the next 20 to 30 years out of necessity and doubt that Canada will be able to completely stop using it in this timeframe, if at all.

### ***Forest biomass***

Most participants did not view forest biomass as a type of energy that should be included in a shift to a low-carbon economy. The main reasons for this were that forests played an important role in the capture and storage of carbon and, when burned for fuel, release that carbon back into the atmosphere. Other concerns related to forest biomass were the destruction of forests and replacing them with monocultures of trees. Some participants did see forest biomass as a better option to energy sources like oil and gas.

### ***Concerns about nuclear energy and hydrogen fuel***

When it comes to nuclear energy and hydrogen fuel cells being part of a low-carbon economy, participants showed concern over the safety aspects of these sources of energies but were more likely to agree that hydrogen fuel cells should be part of Canada's shift to a low-carbon economy than they were for nuclear energy. The safety concerns for nuclear energy revolved around the environmental impact of the nuclear waste produced by nuclear plants, whereas safety concerns for hydrogen fuel cells revolved around the flammability, explosiveness and safe usage of hydrogen cells, which many said could be overcome with further research and would likely be resolved in the future.

### ***Carbon capture and storage concept is not a familiar concept***

Participants reported a limited understanding of carbon capture and storage, and some participants felt that they didn't know enough and would need more information to be able to decide whether they would support or oppose it. They expressed concern over the potential impacts on the environment of storing carbon underground, with many viewing it as a short-term solution. They would rather focus on reducing carbon emissions rather than storing them.

### ***Mixed views on critical minerals mining***

Participants had mixed views about including critical mineral mining in a low-carbon economy, with negative impressions revolving around more generalized concerns about the environmental impact of mining on communities. Those that agreed that critical mineral mining should be included in a low-carbon economy mentioned that it would be a good source of jobs, that it could help the economy as those minerals will be in demand for newer technologies such as batteries for electric cars, and that it could help Canada avoid becoming reliant on other countries for these minerals.

### **Module D: Communications**

#### ***More key messages***

Participants most often say the Government of Canada should focus its key messages on educating Canadians on the impacts of climate change, encouraging individuals to take action in the shift to a low-carbon economy, and identifying the kinds of individual actions they can take.

Many participants mentioned key messages that focus on the positives of transitioning to a low-carbon economy and the impact of individual and collective actions to help with this. Some participants also mentioned including key messaging on the emotional piece of the transition, such as taking action for their children, grandchildren and the future generation(s).

A couple of participants mentioned that it would be important for Government of Canada messaging to communicate that ‘no one would get left behind’ in the transition to a low-carbon economy, including those that work in high emissions sectors such as oil and gas. Some participants suggested messages needed to highlight financial incentives available as a means of motivating Canadians to take action.

#### ***Targeting all generations with new and old platforms***

When it comes to how or on what platforms messages should be shared, many participants said that information on transitioning to a low-carbon economy and climate change should be part of school curriculums in order to educate children and youth. Social media, TV ads, radio, and newspapers were also mentioned by most participants, with some adding that the mode of sharing the messages should be determined by which demographic the Government is looking to target.

## **Quantitative Research**

### ***Most important natural resource issues for Canadians***

When asked to name the single biggest issue facing natural resources, Canadians most often mention making sure Canada has enough resources for future generations/sustainability (11%, 18% in 2021 and 14% in 2019), pollution from extracting and distributing natural resources (9%; 17% in 2021 and 8% in 2019), and government intervention/politics working against the resource development/oil industry (9%).

### ***Federal government's performance***

The proportion of positive ratings (scores of 7-10 out of 10) of the federal government's performance on natural resource issues continue to trend down compared to 2021 and 2019 on promoting the economic growth of natural resource industries (2023: 28%; 2021: 30%; 2019: 35%), making sure natural resources are developed in a way that respects the environment (26%; 2021: 29%; 2019: 37%) and striking a balance between environmental and economic considerations (19%; 2021: 24%; 2019: 31%). In all three areas, a greater proportion of Canadians rate the federal government's performance as poor (scores of 1-4 out of 10) as opposed to good (scores of 7-10), with the largest margin observed for striking a balance between environmental and economic considerations (19% good vs 50% poor).

### ***Most environmentally friendly energy sources***

Consistent with findings from 2021, most Canadians agree that solar (90% strongly/somewhat agree), wind (86%), and hydroelectric dams (83%) are environmentally friendly, and a similar proportion of respondents would support energy development projects of that type (solar: 91%; wind: 86%; hydroelectric: 85%). An increasing majority of Canadians agree that nuclear energy (62%; 43% in 2021) and hydrogen fuel (61%; 57% in 2021) are environmentally friendly with less consensus surrounding biodiesel and ethanol fuel (44% strongly/somewhat agree) or firewood and wood pellets (36% strongly/somewhat agree). Around one in four Canadians agree that offshore oil and gas (26%) as well as the oil sands (25%) are environmentally friendly (about one in three would support energy development projects involving oil (offshore oil: 36%; oil sands: 37%).

### ***Climate change impacts***

A great majority of Canadians feel a number of potential climate change impacts will have a significant or moderate incidence on their community in the next 30 years, in particular increased energy costs (87%) and increased insurance costs (85%), followed by more extreme or unpredictable weather events (82%), more extreme heat (81%) and more crop failures leading to higher food prices (81%). Also, most of Canadians foresee impacts in their community from more flooding or more severe flooding (75%), increased property damage or loss (75%) and more air pollution or lower air quality (73%).

### ***Importance of oil energy***

More than half of Canadians (56%) believe oil will be very or somewhat important as a source of energy for Canadian households and business 30 years from now, while about four in ten think it will be either not very important or not important at all (42%).

### ***Importance of nuclear energy***

Seven in ten Canadians agree that nuclear energy should be part of Canada's energy mix (70%; a 15-percentage point increase from 55% in 2019) and three in four feel the same about small nuclear energy reactors (76%; another significant increase from 58% in 2019).

## ***Energy cost***

More than eight in ten Canadians are somewhat or very concerned about the price they pay for gasoline and diesel (84%) or electricity (84%), and 79% expect their energy costs will be a larger proportion of their total household budget in 2030 compared to now. When asked what actions they have taken to lessen the impact of energy prices, they most often report having adjusted the thermostat to reduce heating and cooling (68%) or reducing electricity use during peak hours (55%). Four in ten Canadians say the federal government is the most responsible governmental institution for making sure energy is affordable for the average household, one third (34%) say all levels have equal responsibility, and about three in four (73%) think governments are not doing enough to make sure lower income households have access to reliable and affordable energy.

## ***Affordability of energy efficient technologies***

Affordability is seen by Canadians as key to increasing their use of energy efficient technologies. They rank increased affordability of energy efficient equipment (23%) and government rebates or grants (20%) first as the most helpful for their household to use more energy efficient technologies. This is followed by increased affordability of zero-emission vehicles (14%), financing programs allowing households to spread costs of these technologies over a longer period of time (8%) and more minimum efficiency standards for products and buildings (8%). Affordability is also the top unprompted barrier to Canadians using more energy efficient technologies in their homes, mentioned by 80%.

## ***Critical minerals mining***

Most of Canadians agree that mining/critical minerals have a positive impact on Canadian economy. More than eight in ten strongly or somewhat agree that critical minerals and metals mining are essential to Canada's economy (86%; 78% in 2021) and around three in four agree that the minerals industry can have a positive impact on regional communities in Canada (76%) or that the minerals industry provides good quality jobs to Canadians (75%). Fewer agree that the minerals industry is an important employer of Indigenous peoples (44%) or that Canada uses innovative technology to reduce the impact of mining on the environment (38%; and 11 percentage point decrease from 2021). Canadians are much more likely to say that the environmental footprint from mining activity in Canada is better (43%) than other countries rather than worse (9%) than other countries.

## ***Supporting Canadians in the transition to a low-carbon economy***

Canadians increasingly feel it is important for the federal government to support initiatives to ease the transition to a low-carbon economy, such as education and skill development programs to train or re-train workers for emerging job opportunities (91%; 82% in 2021), helping communities that depend on carbon-intensive industries to develop a more diverse economy (90%; 83% in 2021) and ensuring that new jobs created in the low-carbon economy are well-paying, high-quality jobs that can support workers and their families (91%). There is also increasing importance seen in engaging in meaningful consultations with Indigenous communities on natural resource projects that affect them (85%; 77% in 2021).

## ***Agreement scores by sources of energy***

In terms of statements about low carbon economies, Canadians have the highest net agreement (strongly agree or somewhat agree) with the statement that 'Canada's forest industry can continue to harvest trees in a low-carbon economy' (65% strongly agree or somewhat agree), followed by 'Canada's transition to a low-carbon economy will provide good quality jobs for Canadians' (60%). The lowest net agreement is given to 'It is possible to develop Canada's oil sands and maintain Canada's commitment to reduce greenhouse gas emissions', with just under four in ten (39%) who strongly or somewhat agree with this statement. These findings are consistent with the benchmark results from 2021.

### ***Shifting commercial and industrial vehicles***

Consistent with benchmark results from 2021, Canadians see the biggest net impact on reducing climate change impacts from shifting industrial and commercial vehicles (78% significant or moderate impact) and industrial and commercial heating processes (78% net impact) to electricity or other low-carbon fuels. Around seven in ten say there would be a significant or moderate impact on reducing climate change if the switch was made for personal vehicles (70%) or home heating processes (68%).

### ***Forest industry and forest bioeconomy***

Canadians are more than twice as likely to have a positive (scores of 7-10) (50%) rather than a negative (scores of 1-4) (19%) view of Canada's forest industry, and there is strong agreement that it produces high quality products such as lumber, pulp and paper (80%; 86% in 2021) and that it provides economic benefits for local rural, forest-based communities (70%; 75% in 2021), with net agreement with both statements declining since 2021. Six in ten Canadians agree that the forest industry provides a lot of jobs for Canadians (60%), a considerable drop of nearly 20 percentage points from 2021 (79%). In terms of the forest bioeconomy, more than eight in ten Canadians strongly or somewhat agree that this is an area in which Canada should try to be a world leader (83%), while a slight majority also agree the bioeconomy is environmentally friendly (65%), and that Canada's bioeconomy contributes to the transition to a net-zero carbon emissions economy (58%; a slight decline from 66% in 2021).

### ***Role of Government of Canada in forest industry***

Overall, Canadians are divided with regards to the Government of Canada's performance when it comes to Canada's forests, which is consistent with findings from 2021. About one in three Canadians each say the Government is doing a good job of promoting the economic growth of Canada's forest industry (33%), using science-based sustainable forest management practices to conserve and protect Canada's forests (31%), working with provinces and territories to make sure Canada's forests are managed in a way that respects the environment (29%) and working with provinces and territories to make sure Canada's forests are managed in a way that respects local rural, forest-based communities (28%).

### ***Awareness of energy concepts***

Familiarity with topics related to energy has increased since the 2021 survey. Indeed, around three in four Canadians say they are at least somewhat familiar with the net-zero emissions topic (79%; 61% in 2021), the low-carbon economy topic (72%; 57% in 2021), and the Paris Agreement on Climate Change (70%; 54% in 2021). Moreover, about two in ten Canadians answered being very familiar with these topics compared to one in ten Canadians in 2021. Just over one in three Canadians say they are very or somewhat familiar with a circular economy (38%).

### ***Circular economy***

Those who are somewhat familiar with a circular economy say that repurposing, recycling and reusing resources is what comes to mind for them when thinking of the term (35%). Around two in three Canadians each strongly or somewhat agree that a circular economy will enable Canada to tackle climate change while allowing for economic growth and development (69%), a circular economy will transform the natural resources sector (68%), and that a circular economy will transform the Canadian economy (66%).

## Contract value

The contract value was \$175,413.06 (HST included).

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## Political neutrality statement and contact information

This certification is to be submitted with the final report submitted to the Project Authority.

I hereby certify, as a Representative of Nanos Research, that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Government of Canada's Policy on Communications and Federal Identity and Directive on the Management of Communications. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, party standings with the electorate, or ratings of the performance of a political party or its leaders.



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