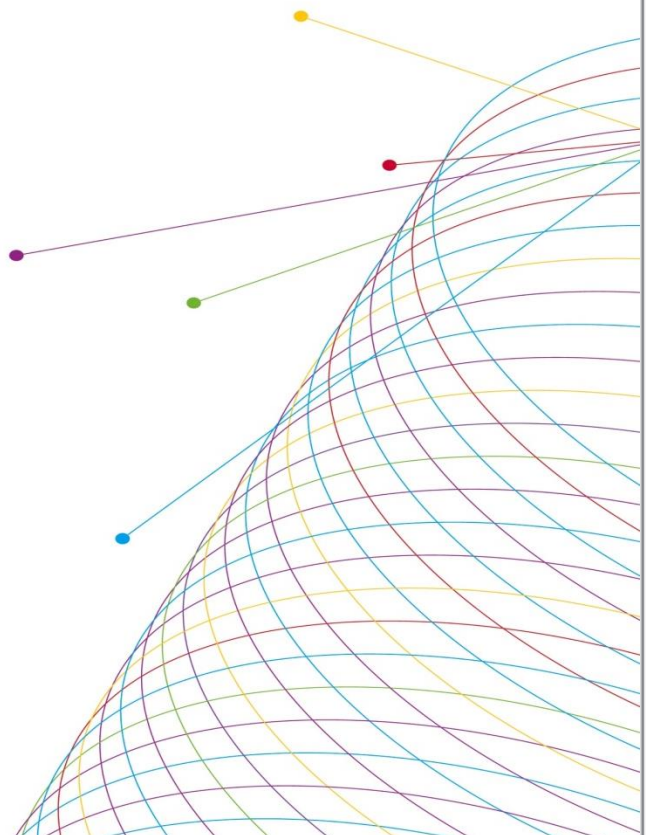


# TRANS MOUNTAIN EXPANSION PROJECT

## -FINAL REPORT-

**PREPARED FOR: NATURAL RESOURCES CANADA**  
**PREPARED BY: NIELSEN, DELANEY + ASSOCIATES AND PUBLIVATE**

**NOVEMBER 1, 2016**



# TABLE OF CONTENTS

Executive Summary.....	1
Background .....	1
Methodology .....	1
Key Findings .....	2
Snapshot of Participants .....	3
General Overview .....	5
Background .....	5
Methodology .....	5
Reporting Notes .....	7
Detailed Findings .....	8
Views on the TMX project.....	8
Views about potential impacts that were not addressed in the NEB review process or the ECCC’s assessment of upstream greenhouse gases .....	12
Views about potential impacts that were not addressed in the NEB review process or ECCC’s assessment of upstream greenhouse gases by Category .....	16
Profile of Participants .....	25
Familiarity of Participants with the Trans Mountain Expansion Project .....	27
Sources of Information .....	34

# EXECUTIVE SUMMARY

## Background

On December 16, 2013, Trans Mountain ULC, a wholly owned subsidiary of Kinder Morgan, filed an application with the National Energy Board (NEB) to twin the existing Trans Mountain oil pipeline and expand the Westridge Marine Terminal. The existing pipeline, built in 1953, runs from Edmonton, AB, to the Westridge Marine Terminal and the Chevron refinery in Burnaby, BC. The pipeline continues on to four refineries in Puget Sound, Washington, and is currently the only pipeline that provides west coast access to Alberta oil producers.

If the proposed Trans Mountain Expansion Project (the TMX project) is approved, 980 kilometres of new pipeline would be built between Edmonton, AB, and Burnaby, BC, increasing the existing pipeline's capacity from 300,000 barrels/day to 890,000 barrels/day. The Westridge Marine Terminal would also be expanded. New pipeline segments would be added between Edmonton, AB, and Hinton, AB, and Hargreaves, BC, and Darfield, BC, and Black Pines, BC, and Burnaby, BC. Some existing, but currently deactivated pipeline segments, totalling 193 kilometres, would be reactivated.

In line with the interim measures for pipeline reviews announced in January 2016 and as a complement to the NEB review process, an online questionnaire was made available to allow Canadians, including Indigenous peoples and affected communities, to provide their input.

The Government's final decision is expected on or before December 19, 2016, and will take into consideration the NEB recommendation report, Crown consultations with Indigenous peoples, the assessment of upstream greenhouse gas emissions and public input from the Ministerial Panel on TMX, who will be informed by the online questionnaire results presented in this report.

## Methodology

### OVERVIEW AND SAMPLING

The research covered in this report consisted of a national questionnaire focused on the TMX Project. The questionnaire was made available on Natural Resources Canada's website in both official languages to Canadians from June 30 to September 30, 2016.

Findings are not statistically projectable to a broader population and no estimates of sampling error can be calculated. The questionnaire included questions for classification, such as demographic questions with yes/no answers, and open-ended responses. Questionnaire participants were self-selected, inviting any Canadians with an interest to choose to take part on their own accord.

In total, 35,258 people responded to the online questionnaire, 27,616 of which completed it. The questionnaire took an average of 6 minutes and 44 seconds to complete.

## Key Findings

One third of participants (35%) noted explicitly their support for the TMX project and indicated they have no concerns with the expansion project. These participants did not substantiate their views and limited their responses to general statements of support, approval of oil transportation by pipeline and suggestions to proceed immediately with the project.

Of those participants that expressed substantiated views regarding the TMX project, 77% were positive submissions, while 21% were negative. Positive submissions (77%) mention the positive impact of the TMX project on the economy (78%), pipelines as a safe mode of transporting oil (53%) and the need to export oil (51%). Negative submissions (21%) mention concerns around safety (73%), general opposition to the project (29%) and recommend that the TMX project be rejected in favour of a focus on green energy (24%). Participants living outside of Alberta and British Columbia (84%) were more inclined to provide positive submissions than those directly affected by the pipeline, similar to industry members (87%) and business members (83%).

Similarly, of those participants that expressed substantiated views regarding issues related to potential project impacts not addressed in the National Energy Board review process or Environment and Climate Change Canada's assessment, 24% were negative submissions, while 75% were positive. Positive submissions (75%) mention environmental concerns being overrated (36%), and the safeness of pipelines (22%). Negative submissions (24%) mention concerns around safety (45%) and lack of confidence in the project proponent and the National Energy Board review process. Participants living outside of Alberta and British Columbia (86%) were more inclined to provide positive submissions than those directly affected by the pipeline, similar to industry members (87%) and NGOs (83%).

Furthermore, of those participants that expressed substantiated views regarding potential impacts from the TMX project to their land or community, 57% were positive submissions, while 43% were negative. Positive submissions (57%) mention that pipelines are a safe mode of transportation (40%) and foster job creation (30%). Negative submissions (43%) mention tanker traffic damaging water ways and marine life (51%) and negative environmental impacts (23%). Participants living outside of British Columbia and Alberta (65%) were slightly more inclined to provide positive submissions than those directly affected by the pipeline, as were industry members (80%) and business members (74%).

While there was notable support for the project in both provinces, there were also some key differences in opinion from participants located in Alberta versus those located in British Columbia, with Alberta more likely to provide positive submissions throughout the questionnaire when asked about views on the TMX project, potential impacts that were not addressed in the NEB review process or Environment and Climate Change Canada's assessment of upstream greenhouse gases and views related to potential project impacts to the land or community.

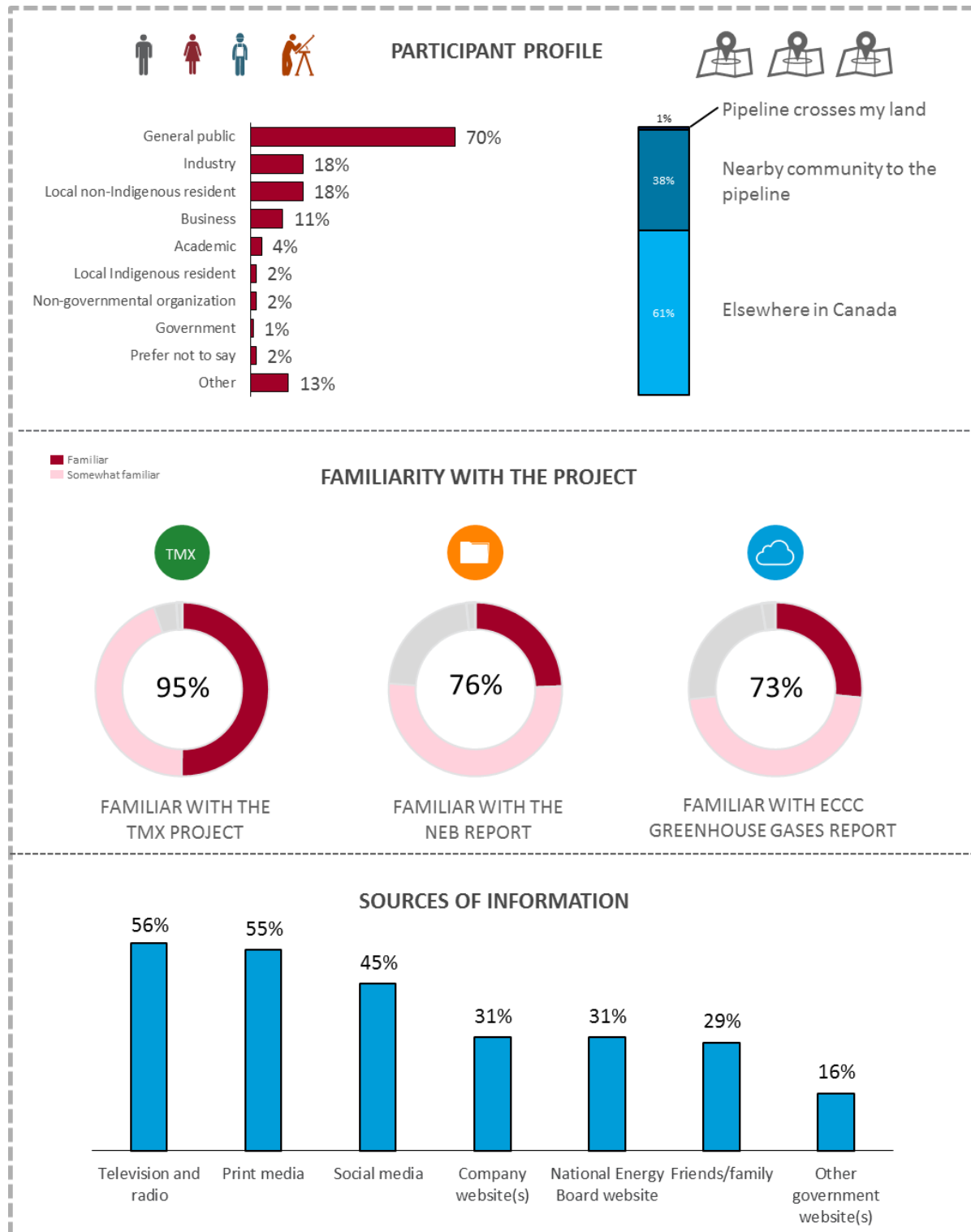
is report also includes a qualitative analysis of themes mentioned by questionnaire respondents. With regards to the economy, questionnaire respondents viewed the pipeline as a boost to the economy by generating revenue and creating jobs, while also considering the negative impact that an increase in tanker traffic might have. Concerns surrounding public safety, health risks and dangers to the environment were mentioned by respondents, who also considered pipelines as a safer, less disruptive and more environmentally friendly mode of oil transportation. Similarly, there was mention of concerns surrounding marine life, wildlife and environmental damage. Participants viewed green energy as a necessary focus (moving away from fossil fuels), and noted the overall need to export oil to new markets to avoid being landlocked or bottlenecked. Both confidence and distrust in the pipeline proponent were noted.

The majority of participants identified themselves as part of the general public (70%), followed by industry members (18%), local non-Indigenous residents (18%) and business persons (11%), with two in five living in areas directly affected by the TMX project.

Familiarity with the Trans Mountain Expansion Project is high (with nine in ten familiar), with higher familiarity among those living close to the pipeline. In comparison, familiarity with Environment and Climate Change Canada's assessment is slightly lower (73%). In all cases, familiarity is higher among those living near the pipeline.

The primary sources used to find information on the project cited by participants are television and radio (56%), closely followed by print media (55%) and social media (45%). Proximity to the pipeline did not alter these most frequently mentioned sources of information. For most groups of participants, print media, television and radio, and social media were the primary sources of information. Business persons and industry members also used company websites as a primary source to find information, while government used the NEB website in addition to print media, social media, television and radio as primary sources of information.

# SNAPSHOT OF PARTICIPANTS



# GENERAL OVERVIEW

## Background

On December 16, 2013, Trans Mountain ULC, a wholly owned subsidiary of Kinder Morgan, filed an application with the National Energy Board (NEB) to twin the existing Trans Mountain oil pipeline and expand the Westridge Marine Terminal. The existing pipeline, built in 1953, runs from Edmonton, AB, to the Westridge Marine Terminal and the Chevron refinery in Burnaby, BC. The existing pipeline continues on to four refineries in Puget Sound, Washington, and is currently the only pipeline that provides west coast access to Alberta oil producers.

If the proposed Trans Mountain Expansion Project (the TMX project) is approved, 980 kilometres of new pipeline would be built between Edmonton and Burnaby increasing the existing pipeline's capacity from 300,000 barrels/day to 890,000 barrels/day. The Westridge Marine Terminal would also be expanded. New pipeline segments would be added between Edmonton, AB and Hinton, AB, and Hargreaves, BC, and Darfield, BC and Black Pines, BC, and Burnaby. Some existing, but currently deactivated pipeline segments, totalling 193 kilometres, would be reactivated.

In line with the interim measures for pipeline reviews announced in January 2016 and as a complement to the NEB review process, an online questionnaire was made available to Canadians, including Indigenous peoples and affected communities, to provide their input.

The Government's final decision is expected on or before December 19, 2016, and will take into consideration the NEB recommendation report, Crown consultations with Indigenous peoples, comments received on the draft assessment of upstream greenhouse gas emissions and public input from the Ministerial Panel, who will be informed by the online questionnaire results presented in this report.

## Methodology

### OVERVIEW

This research consisted of a national questionnaire for the TMX project, which was fielded from June 30 to September 30, 2016. The questionnaire was made available to Canadians on Natural Resources Canada's website during the aforementioned period. This report aggregates and analyses input obtained through this online questionnaire on the TMX project.

### SAMPLE DESIGN AND SELECTION

Findings are not statistically projectable to a broader population and no estimates of sampling error can be calculated. The sample of questionnaire responses included questions for classification, such as demographic questions with yes/no answers, and open-ended responses. Questionnaire participants were self-selected, inviting any interested Canadian to choose to take part on their own accord.

In total, more than 35,000 Canadians responded to the online questionnaire with 35,258 participants starting the questionnaire and 27,616 completing it.

## QUESTIONNAIRE DESIGN

Natural Resources Canada designed the questionnaire in both official languages.

## QUESTIONNAIRE ADMINISTRATION

Canadians were invited to complete the TMX project questionnaire online from June 30 to September 30, 2016. The questionnaire took an average of 6 minutes and 44 seconds to complete.<sup>1</sup>

Natural Resources Canada informed Canadians participating in the questionnaire of the purpose of the questionnaire and how their information would be used and protected under the *Privacy Act*.

## DATA ANALYSIS

Upon completion of data collection, Natural Resources Canada provided Nielsen with final CSV file for the TMX questionnaire. Nielsen cleaned and prepared the data file as necessary. Nielsen's data analysis procedures are outlined below:

**Data Validity and Integrity Checks:** Nielsen's custom system immediately identifies cases where the response length is unrealistically short. As a result, Nielsen can determine whether a case should be excluded from the final qualitative analysis if necessary. All of these checks are performed manually and cleaned out of the data in the back end of the project. Nielsen uses a checklist to ensure all data that is delivered to the client has gone through a rigorous quality control process.

**Data Analysis:** Nielsen prepared an analysis plan that included key banner breaks as required. Once the questionnaire data was collected and cleaned, Nielsen ran a series of data tables that provided results for all questions in the questionnaire, both overall and broken down by selected "banners." This permitted the comparison of qualitative results from various sub-group segments of interest based on demographic questions. The analysis plan included banners for the key demographic segments asked in the questionnaire, such as region, rural/urban divisions, etc.

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<sup>1</sup> Some participants took a substantially long time to complete the survey (1 hour and longer), which increased the average completion time to 21 minutes and 47 seconds. After removing the outliers, the average completion time was 6 minutes and 44 seconds.



## Reporting Notes

Views analysed throughout this report were collected through an online public consultation. This approach maximizes the participation of Canadians nationally. However, there are some implications inherent of conducting an online public consultation that should be taken into account when reading this report:

- Given that no quotas to balance the composition of the sample were set, and that those participating opted to provide their opinion based on their levels of awareness, engagement, and personal interest, the results cannot be interpreted as being representative of the Canadian population;
- No sampling margin of error or statistical inferences can be calculated on the data of this public consultation;
- The questionnaire included open-ended questions where participants could express their opinions and views without any set parameters. Therefore, many of the responses provided do not directly address the topic presented in each question; and,
- While the data has been checked to detect multiple submissions from an individual, it is still possible that the data may include multiple responses from the same participant.

Taking this information into account, the reader of this report should note the following:

- Percentages reported should be interpreted with caution. They are presented as guidelines of the magnitude of opinions received, but should not be interpreted as being representative of the total population;
- In regards to the qualitative analysis of themes mentioned by questionnaire respondents, responses have been reported within themes, and not by question order;
- All responses have been coded and analysed by Nielsen's coding department. No software was used to determine whether a response was positive or negative;
- Some differences and similarities across regions have been noted throughout the report. For this analysis, participants were assigned a region based on the survey platform's recognition of their province based on their IP address. If available, a postal code was utilized in the absence of an IP address. The system provides information only at a provincial level and therefore the privacy of participants is respected; and,
- The report includes some verbatim responses. These responses have been selected given that they reflect the views of a majority of participants addressing the theme reported.

## DETAILED FINDINGS

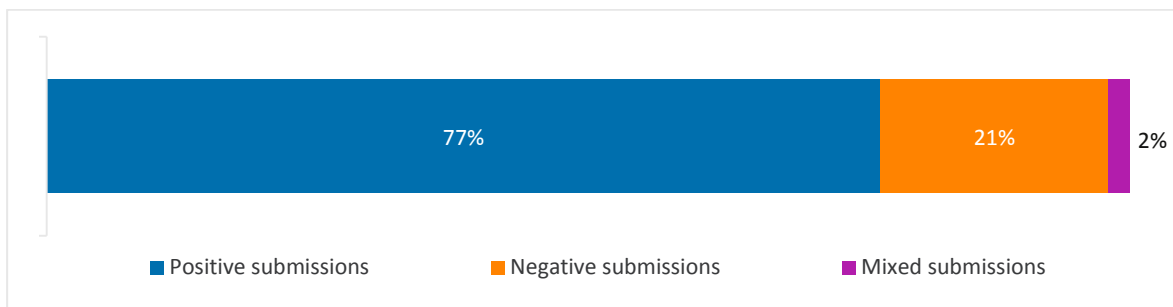
The following sections summarize in detail the response of participants to the Trans Mountain Expansion Project consultation. Responses are also analyzed by different sub-groups, such as region and category, to identify similarities and differences in views.

### Views on the TMX project

#### Q3. Do you have any views about the Trans Mountain Expansion Project, based on what you've read, seen or heard?

When asked about their views about the TMX project, one third of participants (35%) noted explicitly their support. These participants did not substantiate their views and limited their responses to general statements of support, approval of oil transportation by pipeline and suggestions to proceed immediately with the project.

Among the remaining 65% of participants that expressed substantiated views to this question, 77% provided a positive submission, 21% provided a negative submission, and 2% provided a mixed (both positive and negative) submission.



Q3. Do you have any views about the Trans Mountain Expansion project, based on what you've read, seen or heard?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

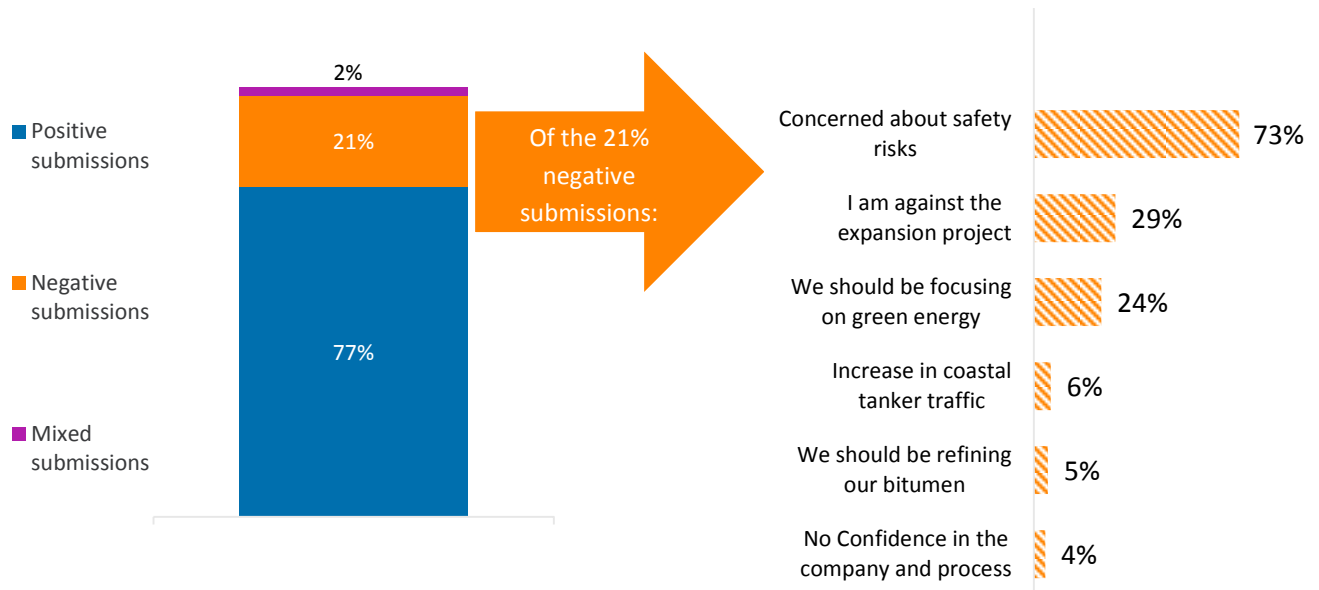
#### NEGATIVE SUBMISSIONS ON THE TMX PROJECT

When looking specifically at the 21% of participants who provided a negative submission to this question, the majority of negative submissions (73%) mentioned concern about safety risks. Almost one third of participants who provided negative submissions expressed their opposition to pipelines in general, including the TMX project. Other respondents believe Canada should be focusing on green, renewable energy instead of investing in fossil fuels (24%). Some participants expressed concern in an increase in coastal tanker traffic (6%), believe Canada should be refining its own bitumen instead of

transporting or selling it (5%) or expressed a lack of confidence in the proponent, the TMX project and the National Energy Board and its review process (4%).

Participants who expressed passionate opposition against the project or oil pipelines mentioned a range of reasons for opposing the TMX project, including general lack of support and opposition for the project, feeling that the project is unnecessary and unwanted, as well as concerns surrounding public safety and the unnecessarily lengthy approval process.

### Negative submissions about the TMX project



Q3. Do you have any views about the Trans Mountain Expansion Project, based on what you've read, seen or heard?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

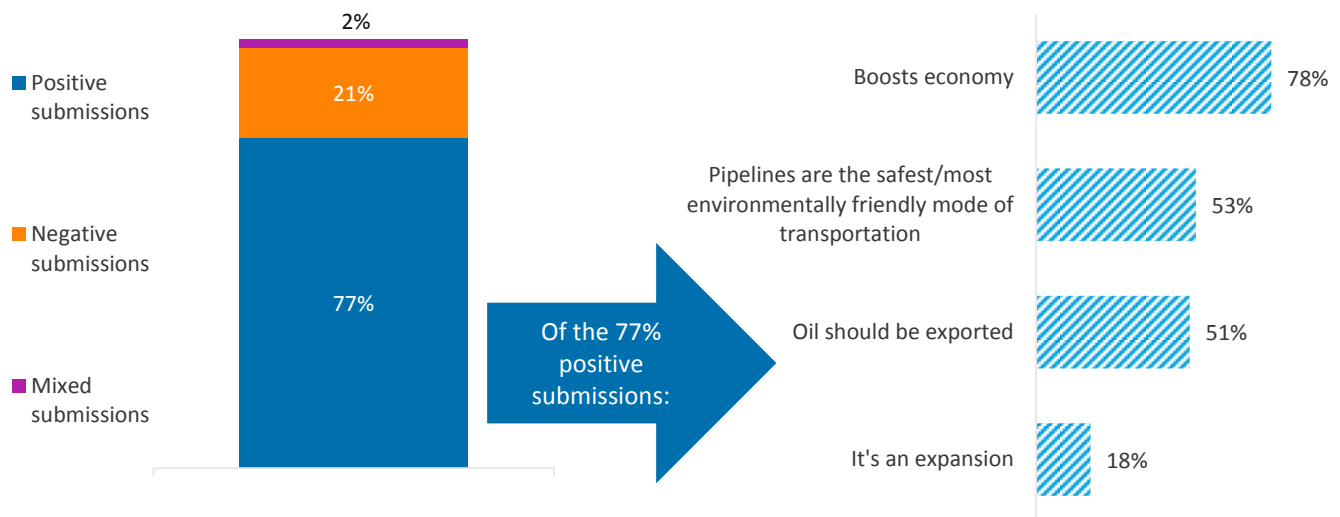
### POSITIVE SUBMISSIONS ON THE TMX PROJECT

When looking specifically at the 77% of participants who provided a positive submission when asked about their views on the TMX project, the majority mentioned that the pipeline project would boost the economy (78%). Half of the positive submissions mentioned that pipelines are the safest and most economical mode of transporting oil (53%) or that oil should be exported (51%).

More than three quarters of participants with positive submissions about the TMX project mentioned that it will boost the economy, create jobs and generate revenue. Others positive submissions included improving Canada's competitiveness in the oil market as well as reaching new markets, being the safest mode of transporting oil and the need to expand the current pipeline capacity. Some participants who provided positive submissions (14%) believe that the matter has been politicized and that the bias faced by the pipeline is unjust.

Other positive submissions to this question take into account the safety of new pipelines, confidence in the project proponent and the original Trans Mountain project, the need for upgrades and new technology on the original pipeline, and the overstatement of greenhouse gas (GHG) emissions.

### Positive submissions about the TMX project

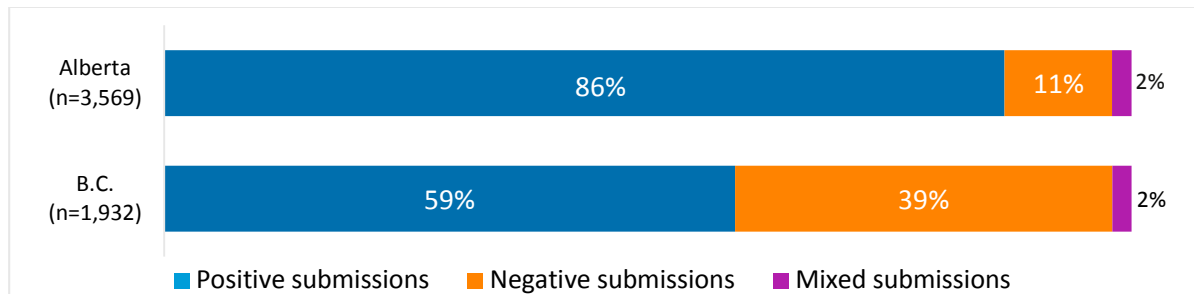


Q3. Do you have any views about the Trans Mountain Expansion project, based on what you've read, seen or heard?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

### VIEWS ABOUT THE TRANS MOUNTAIN EXPANSION PROJECT BY RELATIVE PROXIMITY TO THE PIPELINE

Regarding views about the TMX project by relative proximity to the pipeline, participants from both Alberta and British Columbia provided both negative and positive submissions. More negative submissions were provided by participants in British Columbia (39%) than Alberta (11%). More positive submissions were provided by participants in Alberta (86%) than British Columbia (59%).



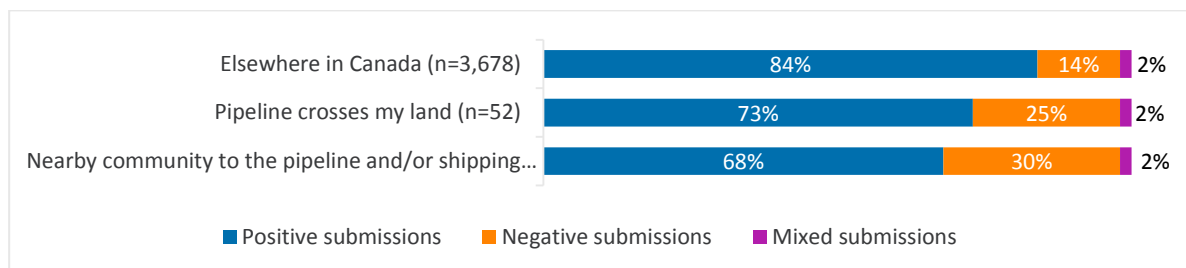
Q3. Do you have any views about the Trans Mountain Expansion project, based on what you've read, seen or heard?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

Participants living elsewhere in Canada provided more positive submissions (84%) than those who live on land, crossed by the pipeline (73%) and those living in a nearby community, and/or shipping routes (68%).

The majority of participants with negative submissions with the pipeline crossing their land are concerned with the risks that the project poses to the environment and their community. Among these respondents, there is a lack of trust in the project proponent, the NEB and the NEB review process. Some also think Canada should be moving away from fossil fuels. Additionally, participants with negative submissions are also concerned about the increase in coastal tanker traffic.

Participants living in nearby communities or shipping routes have a similar view compared to those living in areas crossed by the pipelines.



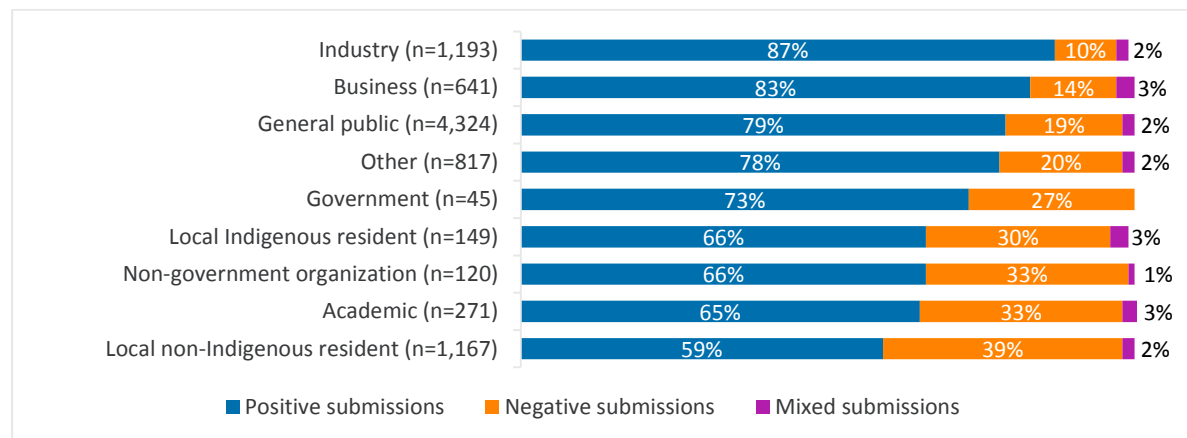
Q3. Do you have any views about the Trans Mountain Expansion project, based on what you've read, seen or heard?

Q8. Please identify where you live in relation to the proposed project?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

## VIEWS ABOUT THE TRANS MOUNTAIN EXPANSION PROJECT BY CATEGORY

Generally, views about the TMX project varied by category of respondents. Positive submissions were lower among local non-Indigenous residents (59%), who are concerned about safety risks and the potential dangers to their local community and the environment. Positive submissions among other categories ranged from a low of 65% among academics to a high of 87% among industry members.



Q3. Do you have any views about the Trans Mountain Expansion project, based on what you've read, seen or heard?

Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

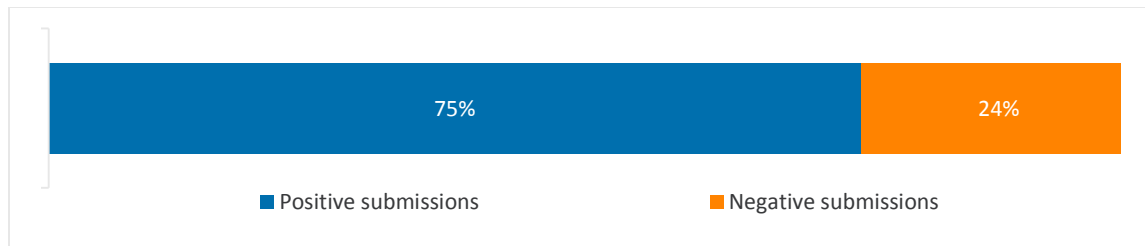
\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

## Views about potential impacts that were not addressed in the NEB review process or ECCC's assessment of upstream greenhouse gases

**Q7. Do you have views related to potential project impacts that you feel were not addressed in the NEB review process, recommendation report and/or ECCC's assessment of upstream greenhouse gases related to this project?**

In responding to this question, a large portion of participants mentioned they had no views or that the NEB report was comprehensive (68%), but did not substantiate their views.

Among those participants that expressed substantiated views regarding issues related to potential project impacts not addressed in the NEB review process or ECCC's assessment, 75% were positive submissions, while 24% were negative.



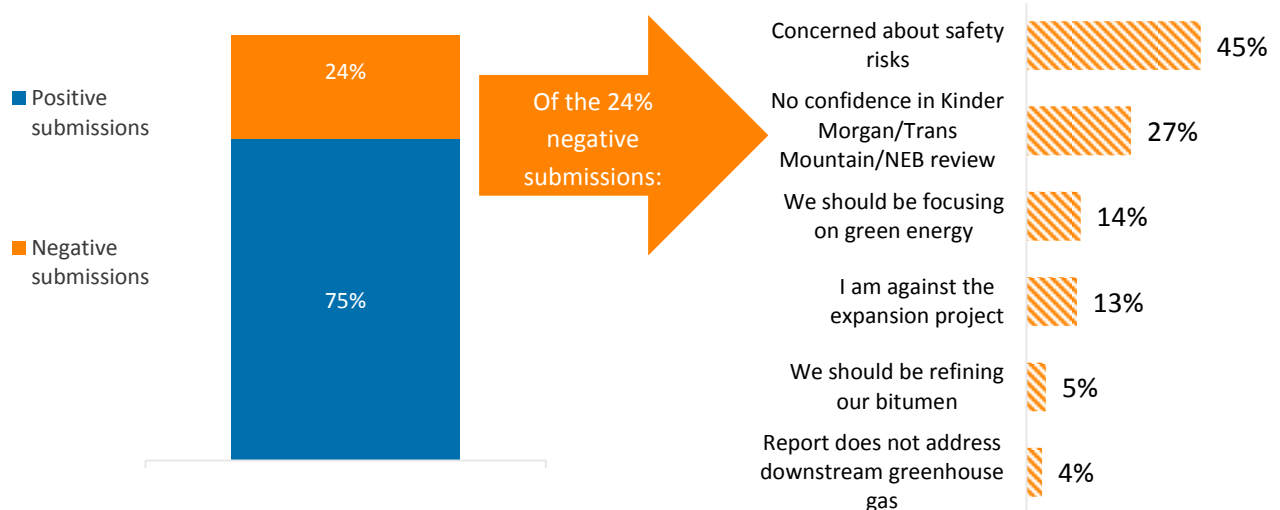
Q7. Do you have views related to potential project impacts that you feel were not addressed in the NEB review process, recommendation report and/or ECCC's assessment of upstream greenhouse gases related to this project?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

### NEGATIVE SUBMISSIONS ABOUT POTENTIAL IMPACTS THAT WERE NOT ADDRESSED IN THE NEB REVIEW PROCESS OR ECCC'S ASSESSMENT OF UPSTREAM GREENHOUSE GASES

Of participants who provided negative submissions about the project (24%), the biggest concerns are safety risks to communities around the pipeline and to the environment (45%). Almost three in ten say they lack confidence in the project proponent and the original pipeline, as well as the National Energy Board and its review process (27%). Some think Canada should be focusing in green energy and that the report does not address the impact of downstream GHG emissions (14%).

#### Negative submissions about unaddressed potential impacts



Q7. Do you have views related to potential project impacts that you feel were not addressed in the NEB review process, recommendation report and/or ECCC assessment of upstream greenhouse gases related to this project?

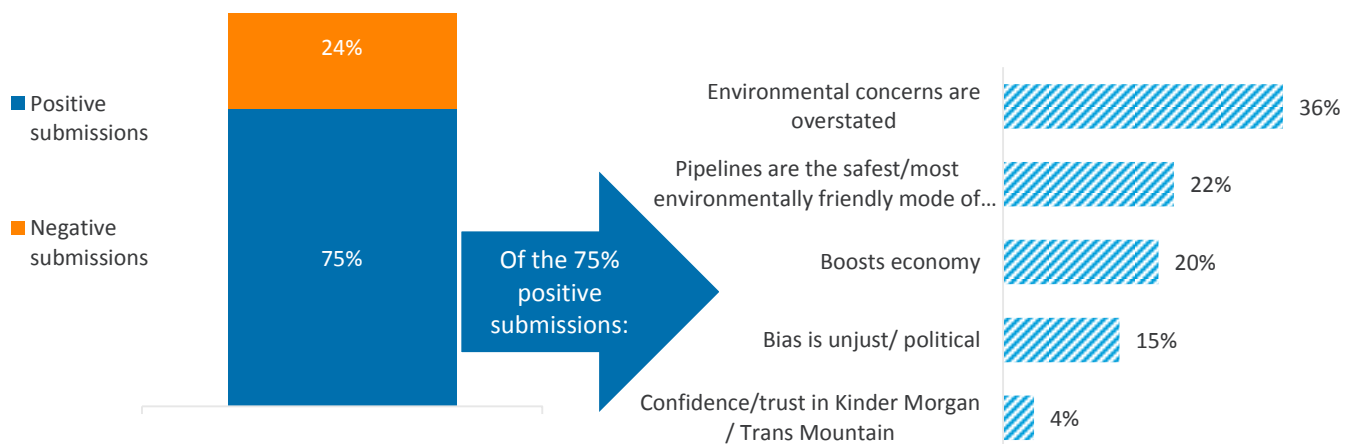
\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

## POSITIVE SUBMISSIONS ABOUT POTENTIAL IMPACTS THAT WERE NOT ADDRESSED IN THE NEB REVIEW PROCESS OR ECCC'S ASSESSMENT OF UPSTREAM GREENHOUSE GASES

When looking specifically at the 75% of participants who provided a positive submission to this question, the majority of positive submissions mentioned that GHGs or environmental concerns are overstated (36%). One in five mentioned pipelines are the safest, most environmentally friendly mode of transporting oil (22%) and that pipelines boost the economy, generate revenue and create jobs (20%).

Other positive submissions include the economic benefits of the pipeline and confidence in the project proponent and the original Trans Mountain pipeline.

### Positive submissions about unaddressed potential impacts



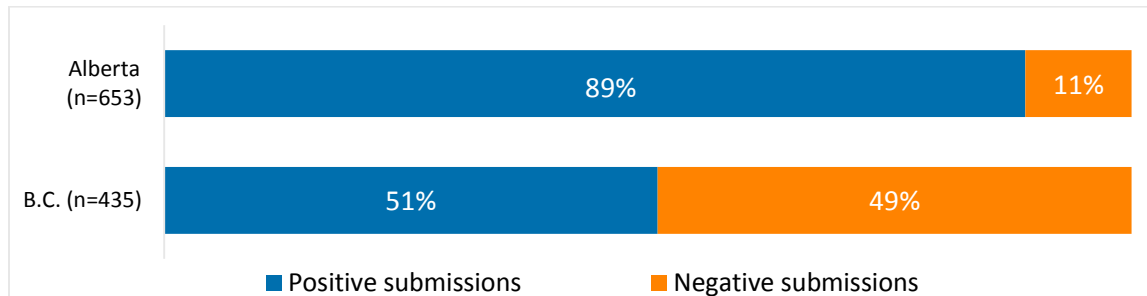
Q7. Do you have views related to potential project impacts that you feel were not addressed in the NEB review process, recommendation report and/or the ECCC assessment of upstream greenhouse gases related to this project?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.



## VIEWS ABOUT POTENTIAL IMPACTS THAT WERE NOT ADDRESSED IN THE NEB REVIEW PROCESS OR ECCC'S ASSESSMENT OF UPSTREAM GREENHOUSE GASES BY RELATIVE PROXIMITY TO THE PIPELINE

When responding to this question, participants from both Alberta and British Columbia provided positive submissions, however, more positive submissions were provided by participants who reside in Alberta (89%) as compared to British Columbia (51%). Similarly, while participants from both Alberta and British Columbia provided negative submissions, more negative submissions were provided by participants in British Columbia (49%) than Alberta (11%).



Q7. Do you have views related to potential project impacts that you feel were not addressed in the NEB review process, recommendation report and/or the ECCC assessment of upstream greenhouse gases related to this project?

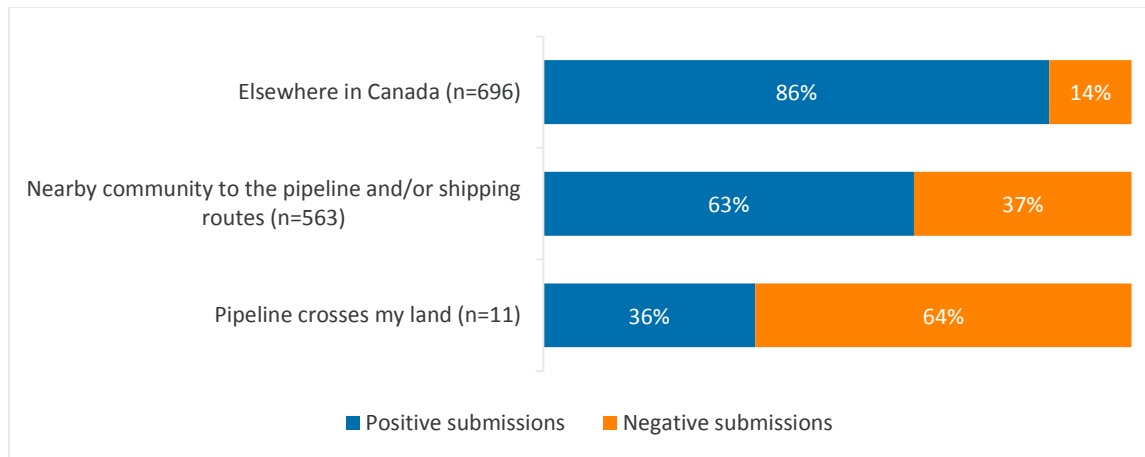
\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

Views on this question vary greatly depending on relative proximity to the pipeline.

Residents living in areas crossed by the pipeline are the most likely to provide negative submissions about potential impacts missing from the NEB review process, recommendation report and ECCC's assessment of upstream GHGs (64%), followed by those living in nearby communities or shipping routes (37%). Compared to the other two groups, participants living in areas crossed by the pipeline do not say as often that GHG emissions and environmental concerns are overstated.

Although the majority of all groups presented positive submissions to this question, among respondents living elsewhere in Canada, nearly all participants provided positive submissions (86%).

It is important to note that, in all three groups, between 68% and 76% of all participants said that the report is comprehensive and did not identify any issues that were not addressed in the NEB review process. These participants are not included in the positive/negative analysis of submissions, leaving a very small base size for participants living in areas crossed by the pipeline. Results from the table below should be interpreted with caution.



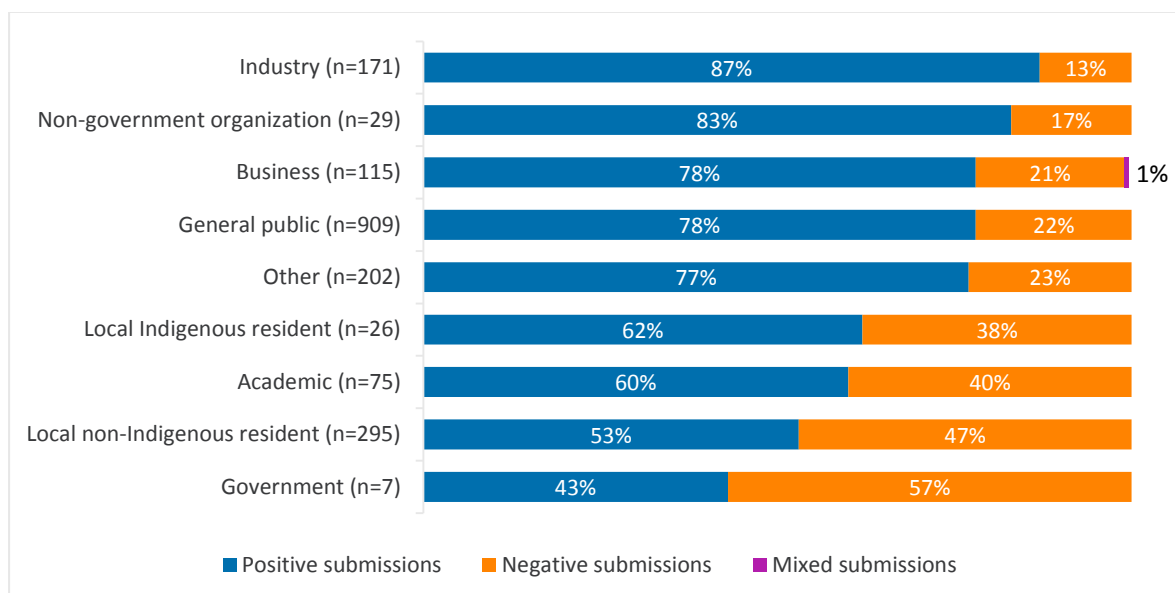
Q7. Do you have views related to potential project impacts that you feel were not addressed in the NEB review process, recommendation report and/or ECCC assessment of upstream greenhouse gases related to this project?

Q8. Please identify where you live in relation to the proposed project?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

### VIEWS ABOUT POTENTIAL IMPACTS THAT WERE NOT ADDRESSED IN THE NEB REVIEW PROCESS OR ECCC'S ASSESSMENT OF UPSTREAM GREENHOUSE GASES BY CATEGORY

Generally, all categories of participants had similar views on this question, with a few differences. Government members (57%), local non-Indigenous residents (47%) and academics (40%) provided negative submissions more often than other categories. Industry members (87%), NGOs (83%), business persons (78%), and the general public (78%) provided positive submissions more often than other groups.



Q7. Do you have views related to potential project impacts that you feel were not addressed in the NEB review process, recommendation report and/or the ECCC assessment of upstream greenhouse gases related to this project?

Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

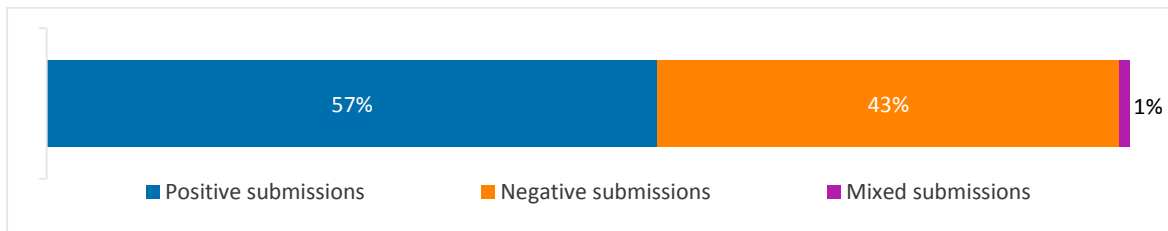
\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

## Views related to potential project impacts to your land or community

### Q10. Do you have views related to potential project impacts to your land or community?

Participants were asked for their views related to potential project impacts to their land or community. Over one third of participants (34%) expressed that they have no concerns about the TMX project. These participants did not substantiate their views and limited their responses to general statements of support, approval of oil transportation by pipeline and suggestions to proceed immediately with the project.

Of those participants that expressed substantiated views to this question, 57% were positive submissions, while 43% were negative.



Q10. Do you have views related to potential project impacts to your land or community?

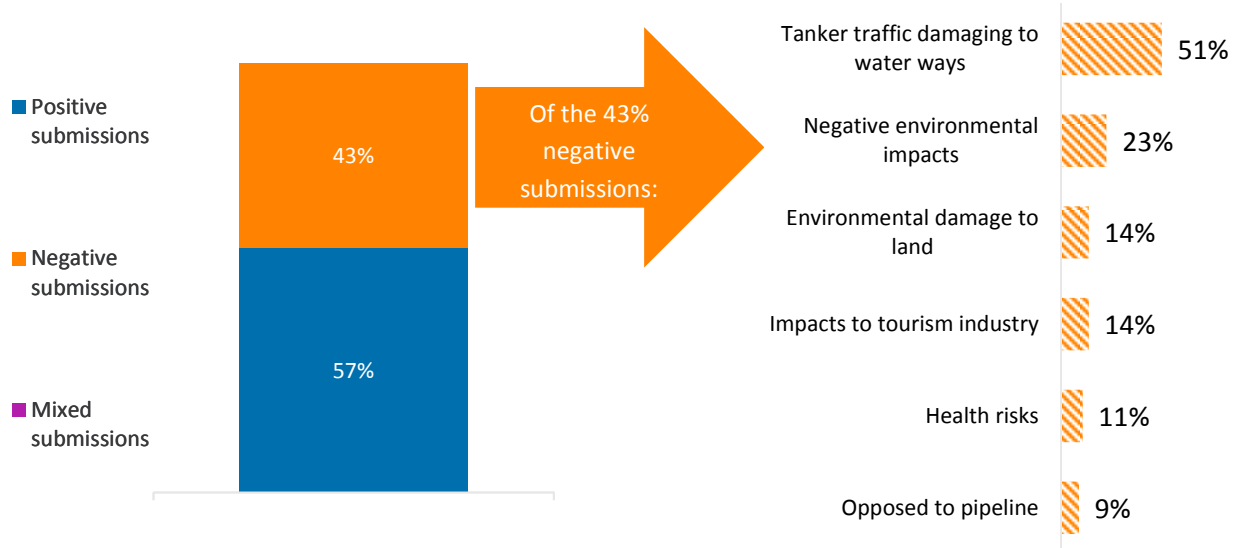
\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

### NEGATIVE SUBMISSIONS ABOUT VIEWS RELATED TO POTENTIAL PROJECT IMPACTS TO YOUR LAND OR COMMUNITY

In contrast, four out of ten participants (43%) provided negative submissions related to potential project impacts to their land or community. Of those with negative views, one half mentioned that tanker traffic and a potential oil spill would damage water ways and marine life (51%), while one in five mentioned negative environmental impacts (23%). Fewer than 15% of negative submissions also included environmental damage to land and impacts to the local economy and tourism industry (14% each), agriculture and wildlife, health risks (11%), general opposition to pipelines (9%), inadequacy of

emergency responses and clean up procedures in place in the event of a spill (8%), focus should be on green/renewable energy and moving away from fossil fuels (6%) and air quality or air pollution (4%).

### Negative submissions related to impact on land



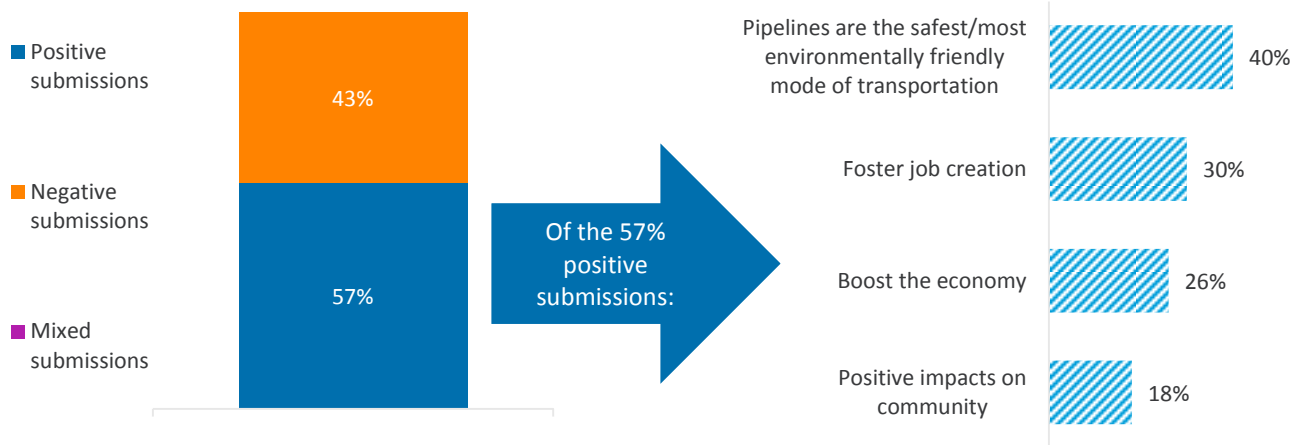
Q10. Do you have views related to potential project impacts to your land or community?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

### POSITIVE SUBMISSIONS ABOUT VIEWS RELATED TO POTENTIAL PROJECT IMPACTS TO YOUR LAND OR COMMUNITY

Of those with positive views, two in five expressed that pipelines as the safest or least disruptive, most environmentally friendly mode of transporting oil (40%), while approximately one third mentioned the project will foster job creation (30%) and one quarter mentioned the project will lead to economic growth and will increase local revenue (26%). Eighteen percent of positive submissions also mentioned unspecified positive impacts on the community. Fewer than 10% who provided positive submissions indicated trust in the government and industry standards to ensure minimal impact of the project; positive impressions and support to the community; rehabilitation of the land/left in better condition than before the pipeline; improved engineering, technology and equipment used in pipeline construction; oil needs to be exported to expand into new markets; and it's an expansion of an existing right-of-way.

## Positive submissions related to impact on land

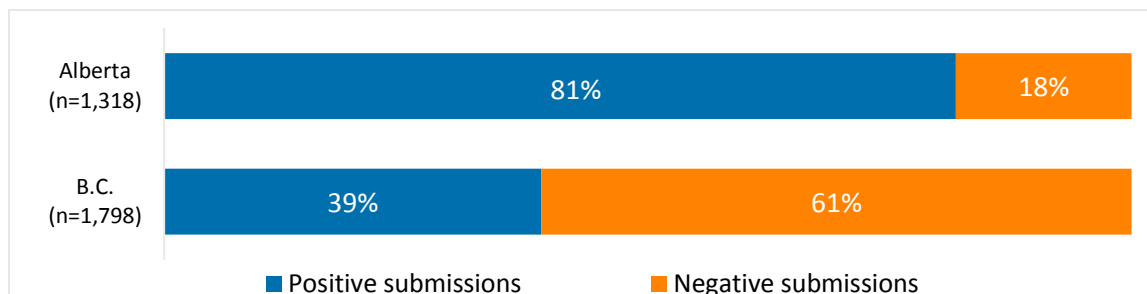


Q10. Do you have views related to potential project impacts to your land or community?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

## VIEWS RELATED TO POTENTIAL PROJECT IMPACTS TO YOUR LAND OR COMMUNITY BY RESIDENCY RELATIVE TO THE PIPELINE

Regarding views about potential impacts to the land or community, while participants from both Alberta and British Columbia provided negative submissions, more negative submissions were provided by participants in British Columbia (61%) than Alberta (18%). Participants from both Alberta and British Columbia provided positive submissions, however, more positive submissions were provided by participants who reside in Alberta (81%) as compared to British Columbia (39%).

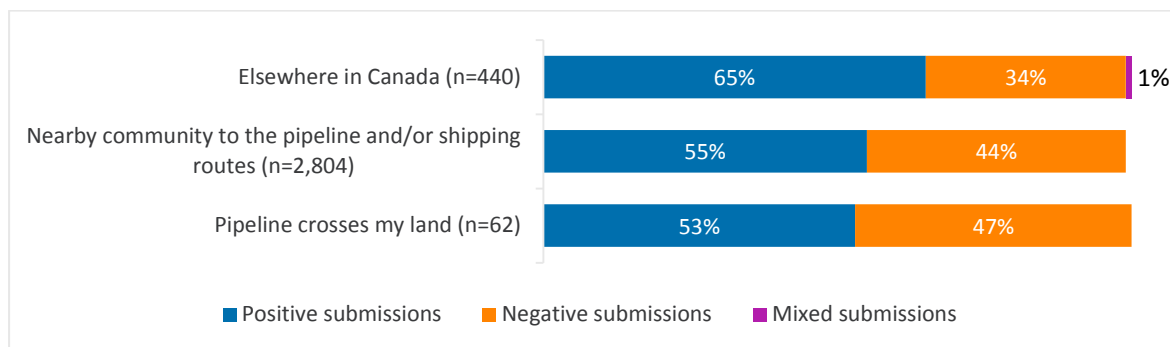


Q10. Do you have views related to potential project impacts to your land or community?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

Participant views were similar, regardless of proximity to the pipeline. Participants living elsewhere in Canada are more likely to provide a positive submission related to potential project impacts to the land or community (65%). On the other hand, participants living on land crossed by the pipeline (53%) or living in nearby communities (55%) are less likely to provide a positive submission.

One third of participants who live on land crossed by the pipeline mentioned no views related to potential project impacts to their land or community (32%). Participants who live in communities near the pipeline and/or shipping routes, as well as participants from elsewhere in Canada, also had one third of participants who mentioned no views related to potential project impacts to their land or community (34% each).



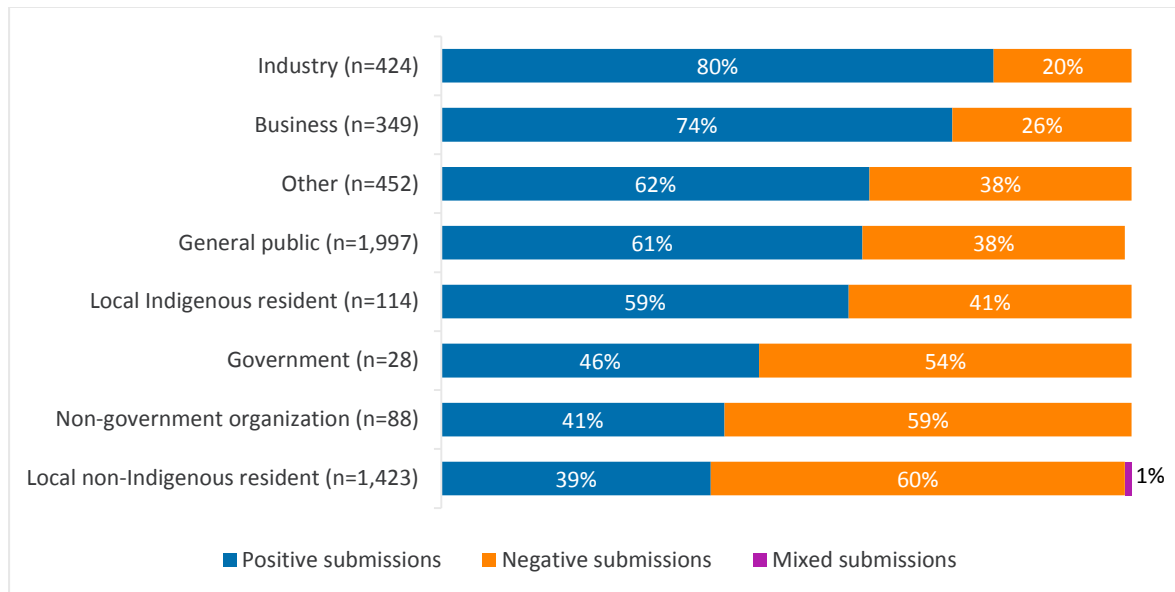
Q10. Do you have views related to potential project impacts to your land or community?

Q8. Please identify where you live in relation to the proposed project?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

## VIEWS RELATED TO POTENTIAL PROJECT IMPACTS TO YOUR LAND OR COMMUNITY BY CATEGORY

Local non-Indigenous residents (39%), NGOs (41%) and government (46%) had a more even split between providing positive and negative submissions. Participants in the industry (80%) and business person (74%) categories were more inclined to provide a positive submission related to potential project impacts to the land or community.



Q10. Do you have views related to potential project impacts to your land or community?

Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

\* This graph captures specific positive and negative views of the TMX project. It excludes the response submissions who explicitly support the project, but do not elaborate on their rationale.

## Analysis of themes mentioned by questionnaire respondents

The following section presents a qualitative analysis of responses based on common and relevant themes identified within the responses to the questionnaire. This qualitative analysis combines responses to the three main open-ended questions:

- Q3. Do you have any views about the Trans Mountain Expansion project, based on what you've read, seen or heard?
- Q7. Do you have views related to potential project impacts that you feel were not addressed in the National Energy Board review process, recommendation report and/or the Environment and Climate Change Canada assessment of upstream greenhouse gases related to this project?
- Q10. Do you have views related to potential project impacts to your land or community?

Given the qualitative nature of the analysis and the combination of responses from three different questions, descriptors such as many, some, and few have been used throughout the write-up instead of percentages. For these descriptors, the following parameters can be used as a guideline to understand the incidence of responses:

- **Many:** 15 to 25% of total submissions
- **Some:** 5 to 14% of total submissions
- **A few:** 1 to 4% of total submissions
- **Fewer/lesser mentioned:** Less than 1% of total submissions

## VIEWS SURROUNDING THE TMX PROJECT AND THE ECONOMY

While some participants strongly opposed an increase in tanker traffic, a few noted that shipping is an integral aspect of the economy. Many participants mentioned that, based on their general knowledge of the issue, the TMX pipeline would benefit the economy by boosting or generating revenue, creating jobs and prosperity.

*“This is an important project for all Canadians and will provide business opportunities not only for the oil & gas industry but for other industries such as transportation, ship builders, engineering, etc.”*

*“It is vital to all Canadians economically”*

Fewer participants mention other economic benefits of the pipeline to their community, which include the TMX project leading to economic growth and an increase to local tax revenue, as well as job creation and the resulting loss of jobs if the pipeline was cancelled. While much less prominent, a few participants also mentioned the TMX project would promote cost savings within their community, but did not provide details on how the pipeline will promote savings.

*“Projects of this nature create employment”*

*“...the pipeline has created employment and revenue to our community”*

Other lesser mentioned economic benefits described by participants included domestic sourcing with less reliance on foreign sourcing, that Canadian oil is used to displace corrupt foreign sourcing, that oil and pipelines are a necessary resource, that pipelines are economical and an effective oil delivery system.

While there were some economic benefits mentioned by participants, there was also mention of the economic impacts of the TMX project on the tourism industry by a few participants. Many views surrounding impacts on the tourism industry were negative, and included general concerns over impacts to the local economy or tourism industry.

*“An oil spill will kill the tourism industry on the west coast”*

## VIEWS SURROUNDING THE TMX PROJECT AND PUBLIC SAFETY

While public safety was noted as a concern for many participants, there was an overall perception that pipelines are a safer, less disruptive and more environmentally friendly mode of oil transportation. However, concerns surrounding increased tanker traffic and oil spills damaging waterways and marine life were also mentioned by some participants. Public safety risks and dangers to the environment or local community were mentioned by a few participants. Similarly, a few mentioned negative impacts on their community or opposition to the pipeline, concerns surrounding health risks and the general safety of the local population, the environmental damage to land, agriculture and wildlife, as well as air quality and air pollution.

*“It is way safer compared to rail and other means of oil transport”*



*“It needs to be built in a safe and environmentally [friendly] way”*

### **VIEWS ON THE USE OF FOSSIL FUELS**

A few participants made mention of their preference for moving away from the use of fossil fuels. These participants mentioned negative environmental impacts or dangers surrounding potential oil spills, and that a focus should be placed on green or renewable energy and moving away from fossil fuels.

*“Canada needs to move on from fossil fuel”*

*“In the midst of a climate crisis we need to pivot to renewables”*

### **VIEWS SURROUNDING ACCESS TO WORLD MARKETS THROUGH THE TMX PROJECT**

Many participants mentioned the overall need to export oil and expand to new markets to avoid being landlocked or bottlenecked. However, fewer participants mentioned that Canada should be allowed to be competitive on the world market and that Canadian oil should be allowed to be sold at market value.

*“It is important to get our resources to market”*

*“Our country needs pipelines to sell our products to the global market”*

### **VIEWS SURROUNDING CONFIDENCE IN THE TMX PROJECT RISK MITIGATION**

Many participants expressed no concerns or views regarding the TMX project, the NEB review process, the NEB recommendation report, ECCC’s assessment of upstream GHGs or project impacts to their land or community. Many participants expressed a general confidence in the safeness of pipelines.

A few participants mentioned positive impressions of the project proponent as trustworthy, reputable and supportive to the community and trust that the government and industry regulations have put safeguards in place to minimize the impact of the TMX project.

*“Pipelines in Canada are safe”*

On the other hand, a few other participants mentioned a distrust or lack of confidence in the project proponent and felt that this was not addressed in the NEB process, NEB recommendation report and/or the Environment and Climate Change assessment of upstream greenhouse gases. Responses mention suspicion and a lack of trust, regardless of the provided contingencies, reassurances, explanations or general information regarding the TMX project.

*“Based on everything I know about this project - and Kinder Morgan - I have no question that the expansion should not be allowed to proceed. It is NOT in the interest of our province or our country”*

### **VIEWS ON MARINE AND ENVIRONMENTAL IMPACTS CAUSED BY THE TMX PROJECT**

Some participants mentioned concerns surrounding tanker traffic potentially resulting in oil spills, which would be damaging to the waterways and marine life, with specific regard to the project impacts on

their community. In addition, a few participants also mentioned concerns about environmental damage to the land, to agriculture and to wildlife, and the overall potential risks and impacts of increased tanker traffic. Not only were there concerns about public safety, but also about the safety of and impact on local communities, local water and wildlife in the event of a spill.

*“...the pipeline expansion and increased tanker traffic will directly impact the quality of my community's life.”*

*“Risk to marine life, animal life, human health”*

Other concerns raised by fewer participants with respect to the environment included concerns about safety risks and dangers to the environment and local communities, general negative environmental impacts or dangers of oil spills, environmental damage to land, agriculture or wildlife, air quality or air pollution and health risks or safety of the local population. A few participants mentioned that GHG emissions or environmental concerns are overstated.

*“An oil spill would damage land, parks and shorelines in Vancouver and Burnaby”*

*“I am concerned about the threat to our wildlife”*

## **OTHER VIEWS SURROUNDING THE TMX PROJECT**

As mentioned above, many submissions expressed either support or no concerns for the TMX project. This was mentioned by over one third of participants with regards to the TMX project in general (35%) or the potential impacts of the project on their community (34%).

*“It should be built”*

*“Fully supportive of the expansion”*

Other views regarding the TMX project mentioned by a few participants included the TMX project being an expansion or twinning of an existing right-of-way, that the project is facing unjust bias and foreign-funded opposition or that pipelines are being politicized. Fewer participants mentioned improved technology, equipment or engineering techniques used in the pipeline construction. A few other participants mentioned that tanker design was not addressed in the NEB review process, NEB recommendation report and/or ECCC's assessment of upstream GHGs. Similarly, fewer participants mentioned that the fact that the rehabilitation of the land would leave the land in a better condition than before was also not addressed in the above mentioned reports or processes.

*“There is already a right of way. Expansion will not be encroaching on new territory”*

*“The project is just a twinning of an existing pipeline”*

## Profile of Participants

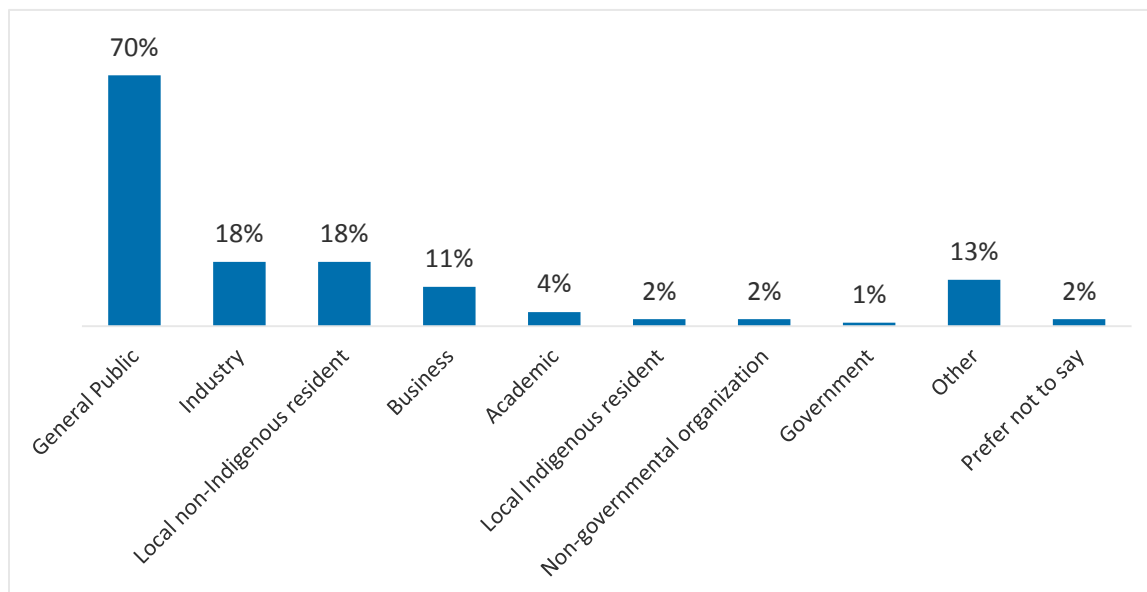
This section reports the profile composition of participants.

### PARTICIPANT CATEGORY

Participants were asked to identify themselves with the category best describing them, namely: local Indigenous resident; local non-Indigenous resident; business person; NGO; industry members; government; general public; academic and other. Participants were allowed to choose multiple categories or none of them.

The largest group, which seven out of ten participants identified themselves with, was the general public (70%); they were followed by industry members and local non-Indigenous residents (18% each), business persons (11%), academics (4%), local Indigenous residents (2%), non-governmental organization (2%) and government (1%). Other types of participants formed 13% of the audience and included, among others, wildlife and environment activists, professionals working on the oil and gas industry, professionals working in farming and agriculture and concerned citizens.

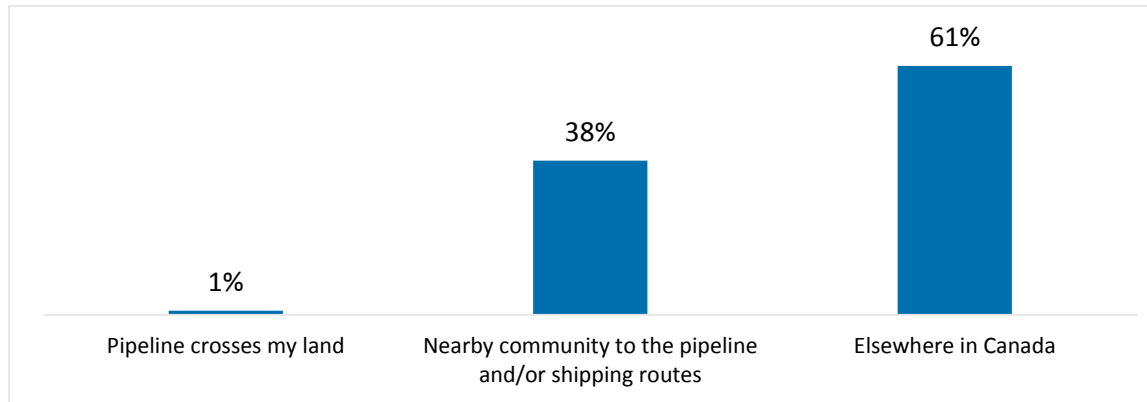
The chart below shows the distribution of the participants according to the category best describing them.



Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

## PARTICIPANT BY RELATIVE PROXIMITY TO THE PIPELINE

Participants were asked to indicate where they live relative to the pipeline. Nearly four in ten participants live in areas directly affected by the pipeline, including 1% living in a land crossed by the pipeline and 38% in nearby communities to the pipeline and/or shipping routes. The remaining 61% of the participants live elsewhere in Canada.



Q8. Please identify where you live in relation to the proposed project?

## REGION OF PARTICIPANT

Primarily, participants were mostly located in Alberta and British Columbia, with others located in Ontario and Saskatchewan. Other participants reside in Manitoba, Atlantic Canada and the territories.<sup>2</sup>



<sup>2</sup> The participants' location was based on IP address. Each participant was also asked for the three first letters of their postal code, but not every participant provided an answer. If location was not available, postal code was used, if available. This map does not account for all submissions; it only identifies participants located within Canada.

In addition, participants also provided their feedback from the following locations:

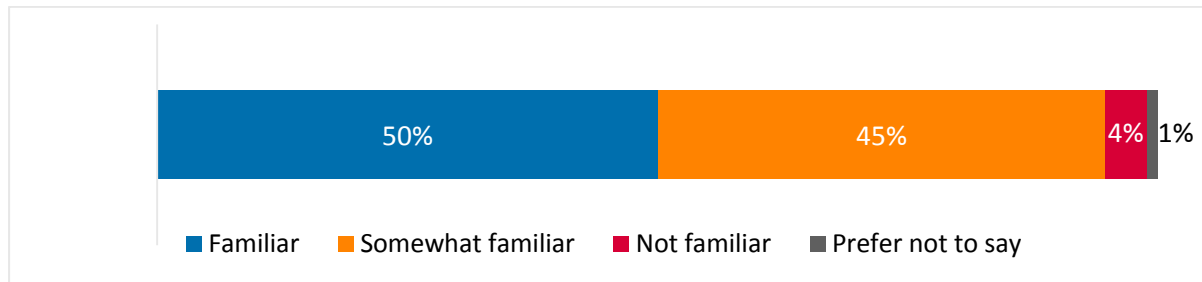
Location	Count
Africa	8
Asia	21
Australia	13
Bermuda	1
China	3
Dominican Republic	4
Europe	130
Guadeloupe	1
Hong Kong	2
India	2
Japan	11
New Zealand	5
Mexico	24
Middle East	20
Russia	3
South America	22
United Kingdom	49
United States of America	542
Venezuela	2
Unknown	2,294

## Familiarity of Participants with the Trans Mountain Expansion Project

This section summarizes the levels of familiarity of participants with the project.

### FAMILIARITY WITH THE TRANS MOUNTAIN EXPANSION PROJECT

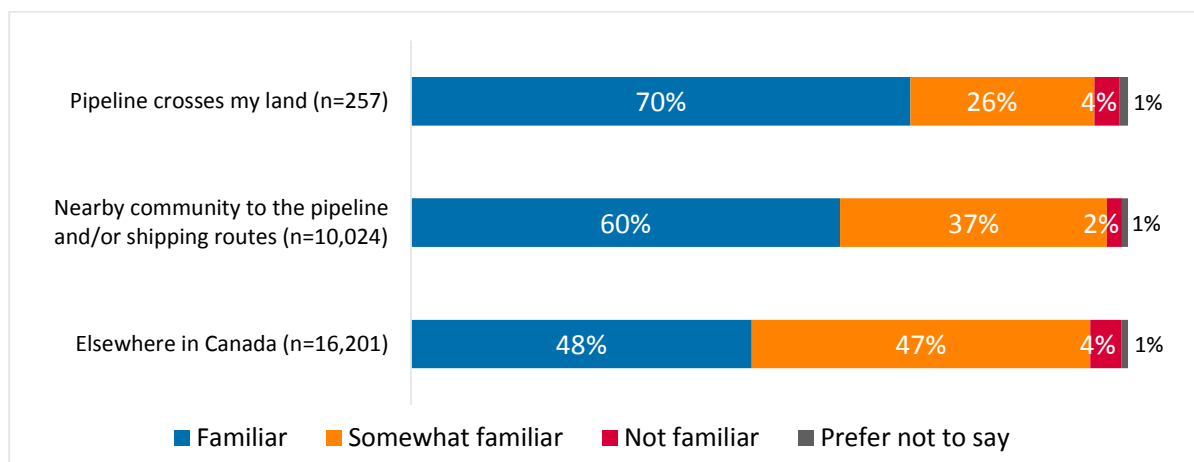
The majority of participants (95%) are familiar with the TMX project, with half indicating they are familiar (50%) and slightly less than half indicating they are somewhat familiar (45%). Only 4% are not familiar with the project and 1% declined to answer.



Q1. How familiar are you with the Trans Mountain Expansion project?

### FAMILIARITY WITH THE TRANS MOUNTAIN EXPANSION PROJECT BY RELATIVE PROXIMITY TO THE PIPELINE

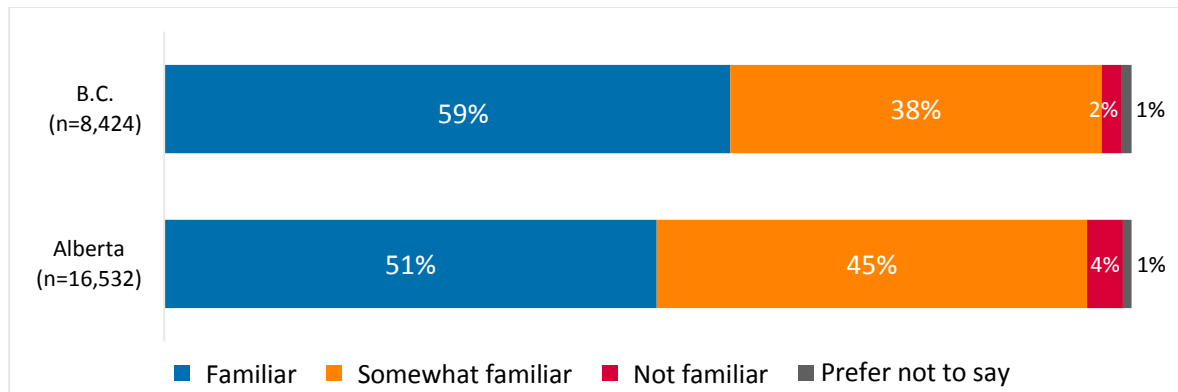
Familiarity with the TMX project is higher the closer the participant lives relative to the pipeline. Although overall familiarity among groups is similar, of those living in lands that are crossed by the pipeline, 70% are familiar and 26% are somewhat familiar with the project. Among participants living in communities near the pipeline or in shipping routes, 60% are familiar with the project, while 37% are somewhat familiar. Of participants living elsewhere in Canada, nearly half are familiar (48%) and the same proportion somewhat familiar (47%) with the TMX project.



Q1. How familiar are you with the Trans Mountain Expansion project?

Q8. Please identify where you live in relation to the proposed project?

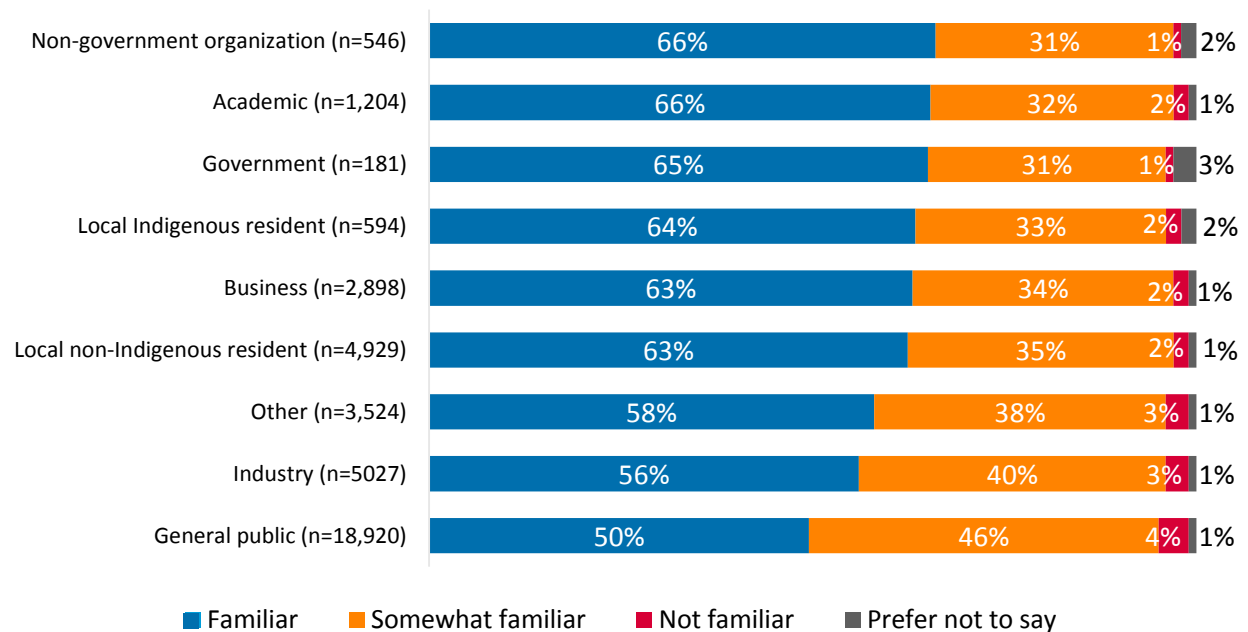
Participants who reside in Alberta and British Columbia suggest a very similar level of familiarity with the TMX project.



Q1. How familiar are you with the Trans Mountain Expansion project?

### FAMILIARITY WITH THE TRANS MOUNTAIN EXPANSION PROJECT BY CATEGORY

Familiarity with the project is similar among most categories of participants, ranging from 63% to 66%, and slightly lower among the general public, industry members and others (50%, 56% and 58% respectively). There is little variance in overall familiarity (familiar and somewhat familiar).

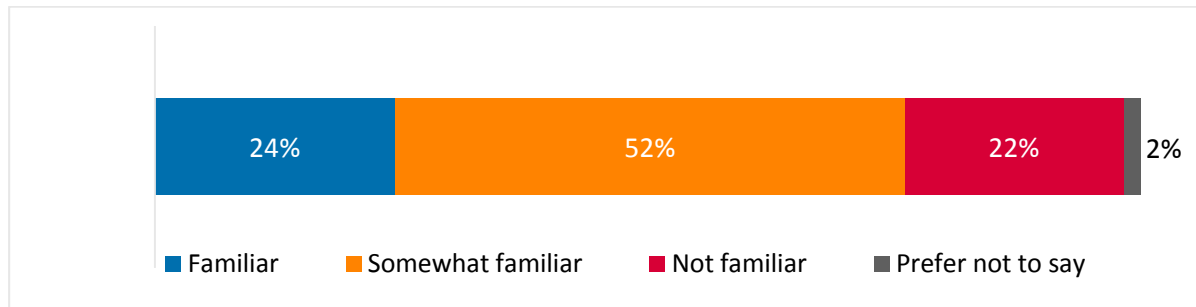


Q1. How familiar are you with the Trans Mountain Expansion project?

Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

### FAMILIARITY WITH THE NATIONAL ENERGY BOARD'S RECOMMENDATION REPORT

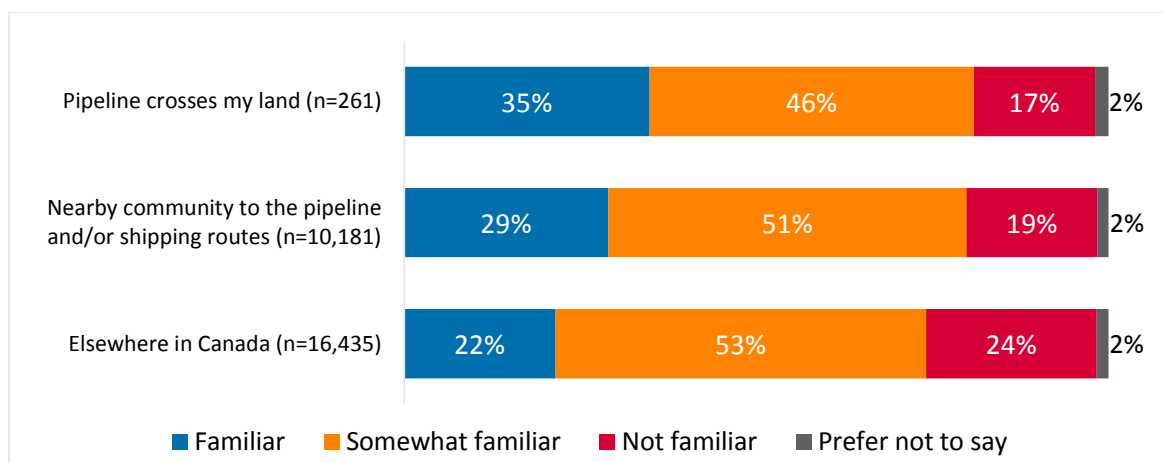
Three quarters of participants were familiar with the National Energy Board's recommendation report related to the TMX project, with one quarter familiar (24%) and one half somewhat familiar (52%), while 22% were not familiar and 2% declined to answer. Familiarity with the report is lower compared to familiarity with the project itself.



Q4. How familiar are you with the National Energy Board's recommendation report related to this project?

### FAMILIARITY WITH THE NATIONAL ENERGY BOARD'S RECOMMENDATION REPORT BY RELATIVE PROXIMITY TO THE PIPELINE

Consistent with familiarity with the TMX project itself, participants living in areas crossed by the pipeline are also more familiar with the NEB report related to the project when compared to those living in communities near the pipeline and/or shipping routes and those living elsewhere in Canada (35% are familiar and 46% somewhat familiar). Among participants who live in communities near the pipeline, familiarity is lower; 29% are familiar and 51% somewhat familiar. Of those living elsewhere in Canada only 22% are familiar with the report while 53% are somewhat familiar.

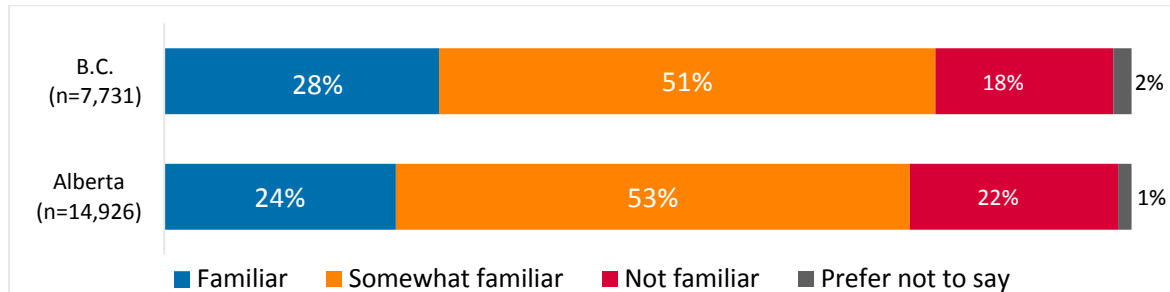


Q4. How familiar are you with the National Energy Board's recommendation report related to this project?

Q8. Please identify where you live in relation to the proposed project?



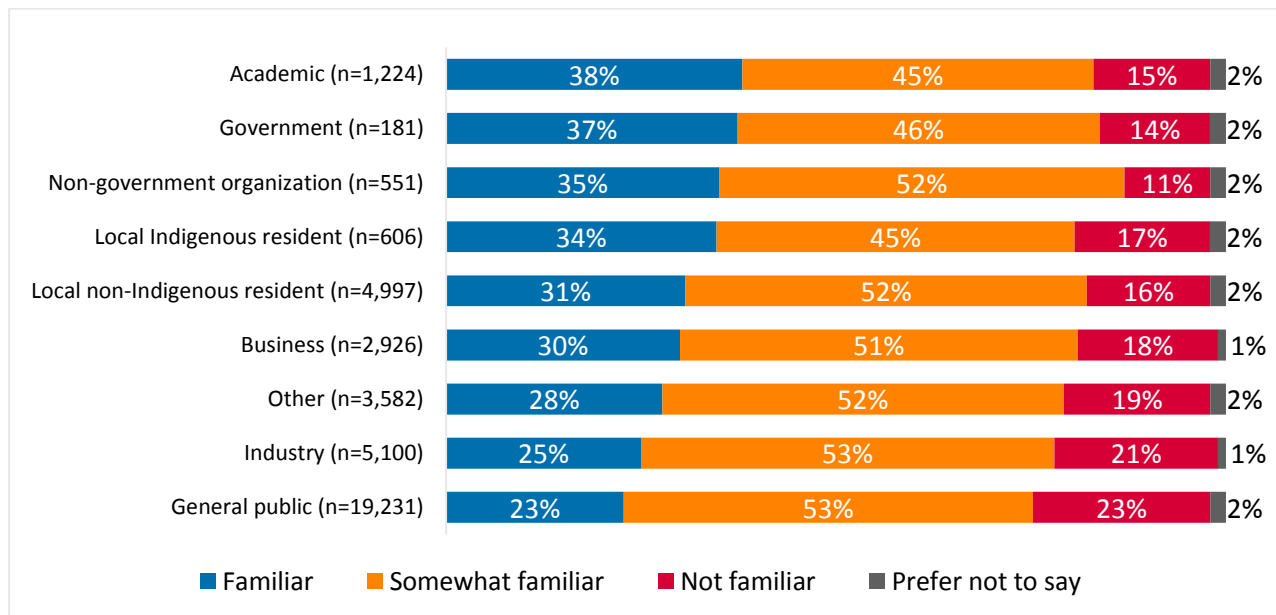
Participants who reside in Alberta and British Columbia are familiar with the NEB recommendation report related to the TMX project, however, regardless of region, familiarity with the report is lower compared to familiarity with the project itself.



Q4. How familiar are you with the National Energy Board's recommendation report related to this project?

### FAMILIARITY WITH THE NATIONAL ENERGY BOARD'S RECOMMENDATION REPORT BY CATEGORY

Familiarity with the NEB's recommendation report is similar among most groups, ranging from 30% to 38% and lower among the general public, industry members and other participants (23%, 25% and 28%, respectively), which is consistent with familiarity with the project itself. Among all groups, non-governmental organizations, the government and academics have the highest overall familiarity with the report, consistent with their position and interests.

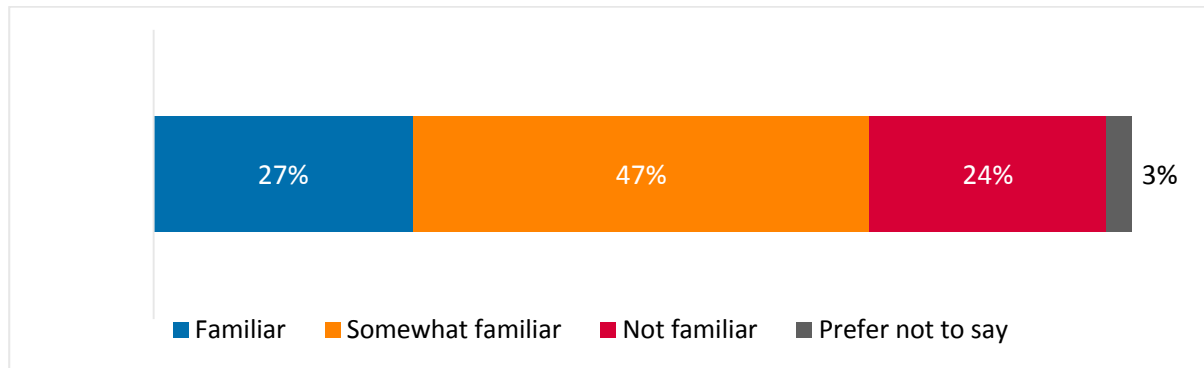


Q4. How familiar are you with the National Energy Board's recommendation report related to this project?

Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

### FAMILIARITY WITH ENVIRONMENT AND CLIMATE CHANGE CANADA'S ASSESSMENT

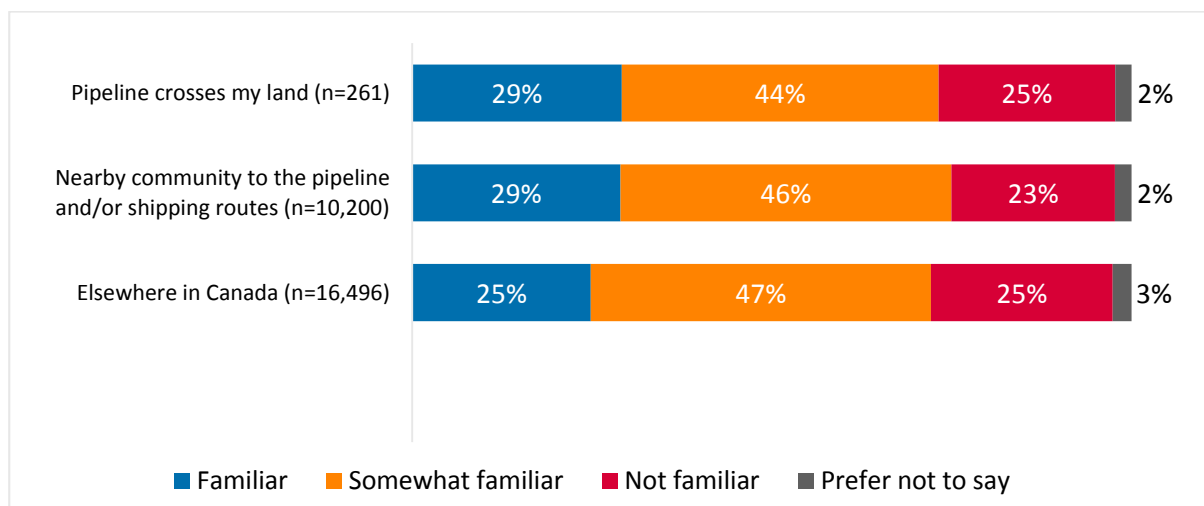
Three quarters of participants are familiar with Environment and Climate Change Canada's assessment of upstream GHGs related to the TMX project, with 27% familiar and 47% somewhat familiar. One quarter are not familiar with this assessment (24%) and 3% declined to answer. This is consistent with noted familiarity of the NEB report.



Q5. How familiar are you with Environment and Climate Change Canada's assessment of upstream greenhouse gases related to this project?

### FAMILIARITY WITH ENVIRONMENT AND CLIMATE CHANGE CANADA'S ASSESSMENT BY RELATIVE PROXIMITY TO THE PIPELINE

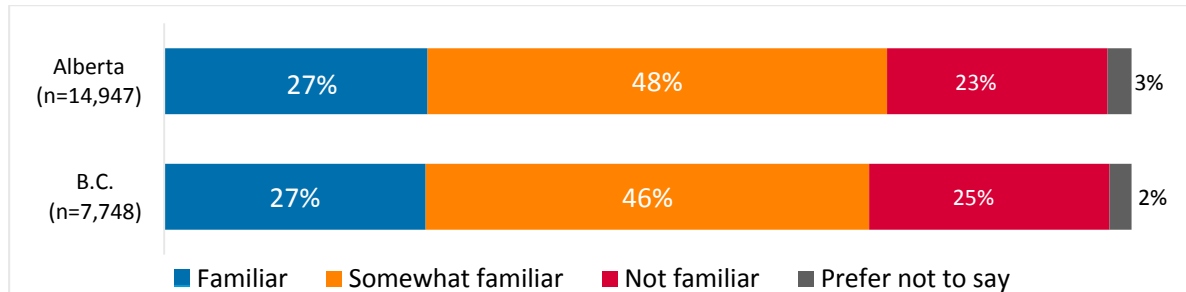
Unlike what was observed with familiarity with the TMX project and the NEB report, familiarity with ECCC's assessment does not increase with proximity of residence to the pipeline. Familiarity ranged from 25% to 29% and overall familiarity range from 70% to 75% among all groups.



Q5. How familiar are you with Environment and Climate Change Canada's assessment of upstream greenhouse gases related to this project?

Q8. Please identify where you live in relation to the proposed project?

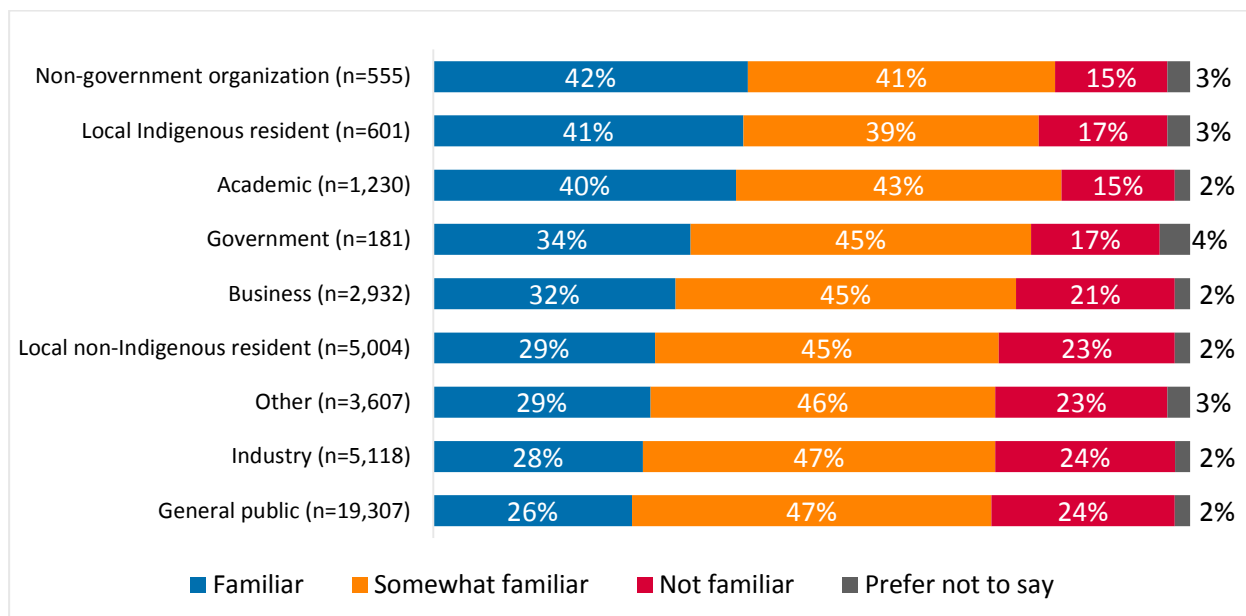
Participants who reside in Alberta and British Columbia are familiar with ECCC's assessment of upstream GHGs related to the TMX project. Again, this is consistent with noted familiarity of the NEB report, regardless of region.



Q5. How familiar are you with Environment and Climate Change Canada's assessment of upstream greenhouse gases related to this project?

### FAMILIARITY WITH ENVIRONMENT AND CLIMATE CHANGE CANADA'S ASSESSMENT BY CATEGORY

Familiarity with ECCC's assessment was slightly higher among local Indigenous residents, non-governmental organizations, and academics (ranging from 40% to 42%). Familiarity and overall familiarity were similar among all other groups; familiarity was lower among the general public (26%) and higher among government members, at 34%.

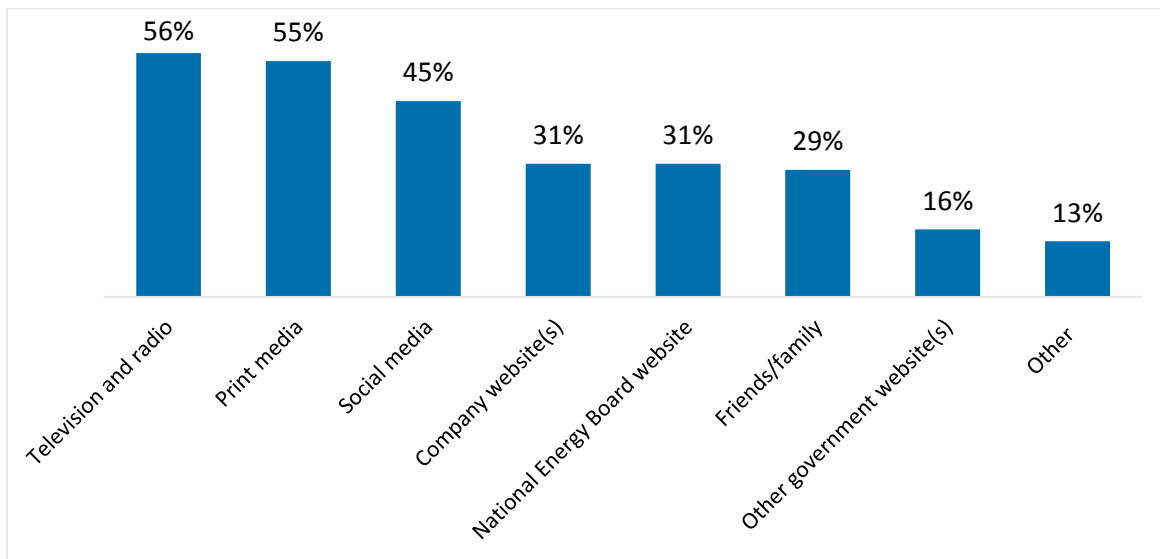


Q5. How familiar are you with Environment and Climate Change Canada's assessment of upstream greenhouse gases related to this project?

Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

## Sources of Information

Participants were asked for their primary source of information about the project and were allowed to choose more than one source. For the majority of participants, television and radio and print media were the primary sources of information (56% and 55%, respectively). Social media was also an important source, used by 45% of participants, followed by the company and the NEB websites (31% each), friends and family (29%) and other government websites (16%). Some participants cited other sources of information (13%), which included, among others, Internet newsfeed and personal research, industry associations and industry relations, NGO websites, and previous experience, particularly in the oil industry.



Q2. What is your primary source of information about the project?

## SOURCES OF INFORMATION BY RELATIVE PROXIMITY TO THE PIPELINE

All participants mentioned a broad range of sources used to get information about the project, with the three most-used sources for all groups, regardless of residence proximity to the pipeline, being print media, television and radio, and social media. Other sources of information were mentioned more often by residents living in a land crossed by the pipeline or in communities near the pipeline or shipping routes. Participants living in Alberta or British Columbia mentioned a similar range of sources as shown above, with print media and television and radio in their top mentions. There were no differences between sources of information with regards to the two regions.

	NEB website	Other government website(s)	Company website(s)	Print media	TV and Radio	Social media	Friends/family	Other
Pipeline crosses my land	35%	19%	35%	46%	50%	48%	35%	31%
Communities near the pipeline and/or shipping routes	33%	19%	34%	60%	59%	47%	33%	17%
Elsewhere in Canada	30%	14%	31%	54%	56%	43%	27%	11%

Q2. What is your primary source of information about the project?

Q8. Please identify where you live in relation to proposed Trans Mountain Expansion project?

## SOURCES OF INFORMATION BY CATEGORY

Print media and television and radio were among the most frequently mentioned sources used to get information about the project for all categories of participants. Social media was also included in the top three most-used sources of information for all categories excluding business persons and industry members, for whom the company websites were more important. For government members, the NEB website was equally important. Other government websites tended to be more important for NGOs, government members and academics.

	NEB website	Other government website(s)	Company website(s)	Print media	TV and radio	Social media	Friends/family	Other
Local Indigenous resident	40%	23%	39%	52%	60%	55%	38%	15%
Local non-Indigenous resident	36%	23%	34%	67%	62%	52%	37%	20%
Business	39%	19%	48%	56%	58%	43%	35%	20%
Non-government organization	48%	32%	45%	60%	61%	58%	42%	25%
Industry	37%	16%	47%	51%	54%	41%	31%	17%
Government	51%	36%	49%	57%	51%	54%	34%	24%
General public	31%	16%	30%	58%	60%	47%	30%	12%
Academic	46%	31%	39%	62%	57%	55%	39%	23%
Other	32%	17%	35%	57%	55%	44%	32%	30%

Q2. What is your primary source of information about the project?

Q9. Which category describes you and why you are interested in the proposed Trans Mountain Expansion project?

