

Canada's Non-Profit Foundation Committed to Independent Research

Canadians view marine shipping as increasingly important amid trade and pipeline debates

More than nine-in-ten say shipping is generally 'safe', but many have reservations about shipping oil

December 6, 2018 – The vast majority of Canadians believe transporting goods by sea is safe, and most say marine shipping is growing in importance in this era of heightened trade uncertainty between Canada and the United States.

These are some of the key findings of a new study conducted by the Angus Reid Institute in partnership with the Clear Seas Centre for Responsible Marine Shipping. The new public opinion poll builds on a benchmark study on public attitudes about the shipping industry first conducted in March 2016.

Today, the Canadian public places a higher degree of importance on marine shipping than it did back then. Greater numbers now say the industry is "critically important" to the Canadian economy, Canada's access to imported goods, and Canada's ability to access export markets than did so in 2016.

As they were in 2016, however, Canadians remain concerned about the prospect of oil and fuel spills, even as they express confidence that shipping is generally safe and well-regulated.

British Columbians tend to be most worried about the safety of shipping oil and gas in Canadian waters, while Albertans and those in Atlantic Canada – likely reflecting the prominence of petroleum industries in their provinces – are most confident.

Has marine shipping been growing or shrinking in importance over the past 15-20 years or so? 43% 47% 31% 10% 2016 2018 Growing importance Staying about the same

METHODOLOGY:

The Angus Reid Institute conducted an online survey from October 19 – 29, 2018, among a representative randomized sample of 2,250 Canadian adults who are members of Angus Reid Forum. The sample plan included large oversamples in British Columbia and Atlantic Canada, which were then weighted back to provide a national snapshot. For comparison purposes only, a probability sample of this size with this sample plan would carry a margin of error of +/- 2.5 percentage points, 19 times out of 20. Discrepancies in or between totals are due to rounding. The survey was conducted in partnership with Clear Seas Centre for Responsible Marine Shipping and paid for jointly by ARI and Clear Seas. Detailed tables are found at the end of this release.

More Key Findings:

- An overwhelming majority of Canadians (94%) say marine shipping is either "very safe" (30%) or "generally safe" (64%).
- A significantly lower number though still a majority say they are "very" (18%) or "somewhat" (43%) confident in the safety of shipping petroleum products (61% overall).

CONTACT:



Page 2 of 20

- Oil spills are still a top-of-mind concern, with more than half (54%) of Canadians mentioning the potential for such an incident as a major risk associated with the shipping industry.
- This concern may reflect an overestimation of the number of oil spills Canada has experienced in the last decade. When given the official definition of a "major spill" (one in which 700 tonnes of petroleum or more are spilled – roughly equivalent to 1/3 of the volume of an Olympic swimming pool), most Canadians (68%) guess that there have been at least three in the last 10 years. In fact, there have been zero (only 11% of Canadians correctly guess this).
- Three-quarters (75%) of Canadians say they are confident in the rules and regulations governing marine shipping safety in Canada today. This is a 10-point increase from 2016.
- However, many Canadians feel their provincial and federal governments pay too little attention to shipping safety (46% say this) or oversight and enforcement (45%).

INDEX:

Part 1: The importance of shipping

- Canadians see the industry as growing in significance
- . General impressions of shipping remain fairly consistent

Part 2: Perceptions of marine shipping safety

- Overwhelming majority of Canadians believe shipping to be safe
- Spills top the list of safety concerns
- Economic contribution vs. environmental risk
- Confidence in shipping oil remains high

Part 3: Perceptions of shipping regulation and oversight

- · High marks for regulators
- Still more to be done?

Part 1: The importance of shipping

Canadians see the industry as growing in significance

When the Angus Reid Institute (ARI) and Clear Seas Centre for Responsible Marine Shipping (Clear Seas) asked Canadians in 2016 whether marine shipping had been growing or shrinking in importance in Canada over the last 15 to 20 years, the response was rather ambivalent. Some four-in-ten (43%) said the industry had been growing more important, while nearly half (47%) said it had been "staying about the same."

Fast forward two-and-a-half years, and responses to this same question are quite different. A full majority (55%) now say shipping has become more important in Canada over the last two decades, while fewer than one-in-three (31%) now say the industry's relevance has been staying about the same.

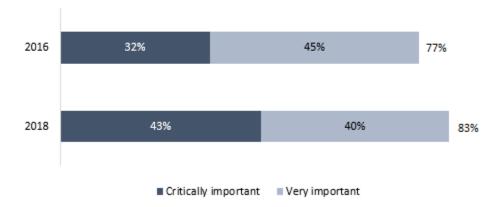
While many other Canadian attitudes toward shipping have remained constant since 2016, this one has changed dramatically.

CONTACT:

Page 3 of 20

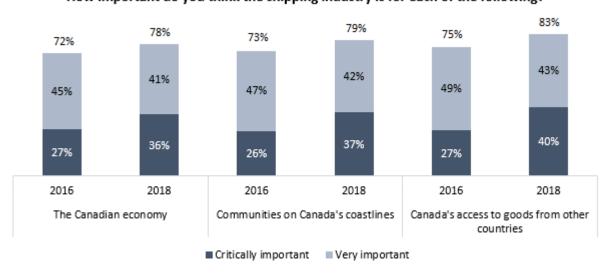
More than eight-in-ten Canadians say marine shipping is either "critically important" or "very important" to Canada's ability to export goods to other markets. This represents a slight overall increase since 2016 (when 77% chose one of these two options), but an 11-point increase in the percentage saying shipping is "critically important" to export prospects:

How important do you think the shipping industry is for Canada's ability to export goods to other markets?



A similar increase in the number of Canadians viewing shipping as "critically important" can be seen in assessments of the industry's impact on Canada's access to goods from other countries, communities on the coast, and the Canadian economy as a whole:

How important do you think the shipping industry is for each of the following?



Though a strong majority across the country feels shipping is important to coastal communities, interestingly, it is those who *aren't* on the coasts who are most likely to say this. In the Prairie provinces of Alberta, Saskatchewan and Manitoba, 85 per cent say shipping is either critically or very important to

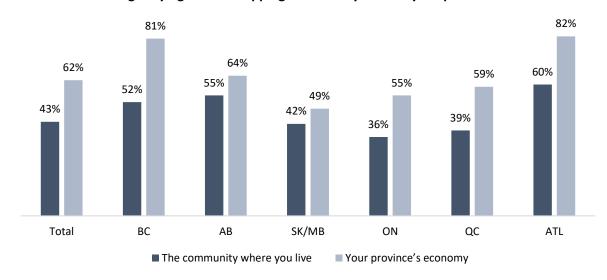


Page 4 of 20

cities and towns near the ocean, while in Quebec, this drops to a lower but still-majority 69 per cent (see comprehensive tables for greater detail).

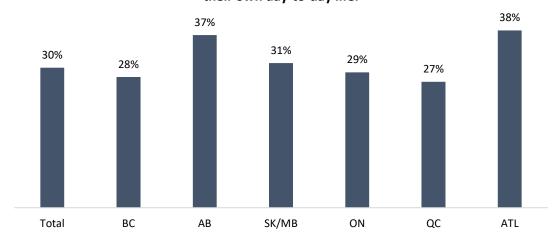
Residents of B.C. and Atlantic Canada *are* among those most likely to say shipping is highly important to the communities they live in, as well as their provincial economies. They are joined in these views – perhaps surprisingly – by Albertans, a full majority of whom see shipping as critically or very important to the communities in which they live.

Percentage saying marine shipping is "critically" or "very" important to each:



In a similar vein, Albertans are among those most likely to say shipping is key to their daily lives, outpacing Ontario, B.C., and Quebec residents by multiple percentage points on this question:

Percentage saying marine shipping is "critically" or "very" important to their own day-to-day life:





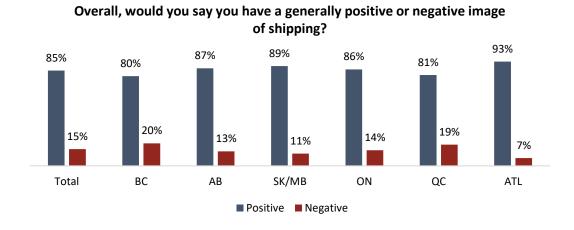
Page 5 of 20

General impressions of shipping remain fairly consistent

As mentioned, the perception that shipping is growing in importance comes alongside consistent findings on more general questions about the industry.

More than eight-in-ten (85%) have either a "very positive" or "somewhat positive" image of shipping, overall, a number statistically unchanged from 2016 (when 86% had positive views).

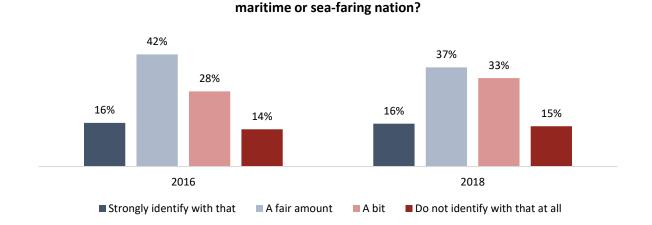
Negative overall impressions of shipping are highest (though still well short of a majority) in British Columbia and Quebec, rising to one-in-five in each province:



Shipping's sustained positive image comes alongside fairly consistent views of Canada's maritime heritage. Roughly half of Canadians (52%) say they identify "strongly" or "a fair amount" with Canada being a sea-faring nation, which represents a slight decrease since 2016 (when 58% felt this way).

That said, most of the shift in maritime identification between the first and second waves of this survey comes in the middle two opinions, with the percentages identifying strongly or not at all staying the same:

To what extent, if at all, do you personally identify with Canada being a



Page **6** of **20**

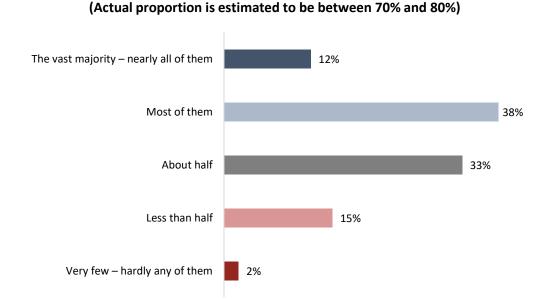
As was the case in 2016, those living on the coasts – as well as men and those ages 55 and older – are more likely to identify Canada as a sea-faring nation (see comprehensive tables).

Perhaps underlying these largely positive views of shipping in Canada – and indeed the industry's perceived importance – is the fact that Canadians continue to overestimate the proportion of their country's total trade that is conducted by sea.

Asked to estimate what percentage of imported consumer goods arrive in Canada by ship, Canadians, on average, place the total at roughly 67 per cent. They estimate a similar 64 per cent when asked to guess the proportion of all trade – imports and exports – conducted by ship. These estimates are higher than a 2017 estimate that approximately 20 per cent of Canada's total trade by value is moved by ship.

The vast majority of Canadians (83%) believe that at least half of the products they use on a daily basis were – at some point – transported by ship:

What proportion of the products you use on a daily basis would you estimate were transported by ship before they got to you?



Part 2: Perceptions of marine shipping safety

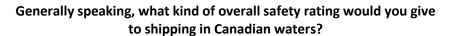
Overwhelming majority of Canadians believe shipping to be safe

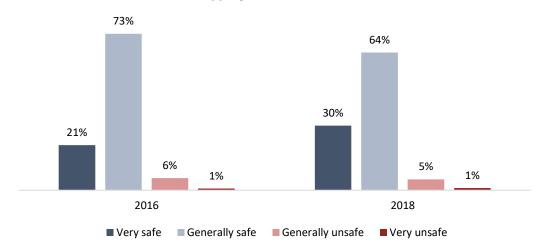
Given Canadians' largely positive views of marine shipping as an industry, it's perhaps not surprising that an overwhelming majority of them (94%) say shipping is either "very safe" or "generally safe."

This total is unchanged since 2016, but the percentage saying shipping is "very safe" has risen by 9 points:



Page 7 of 20





The widespread perception that marine shipping is safe should not be misinterpreted as a belief that the industry carries no risks.

Spills top the list of safety concerns

Indeed, asked what concerns they have about the industry, more than half of Canadians cite the potential for oil spills (54%) or fuel spills (51%).

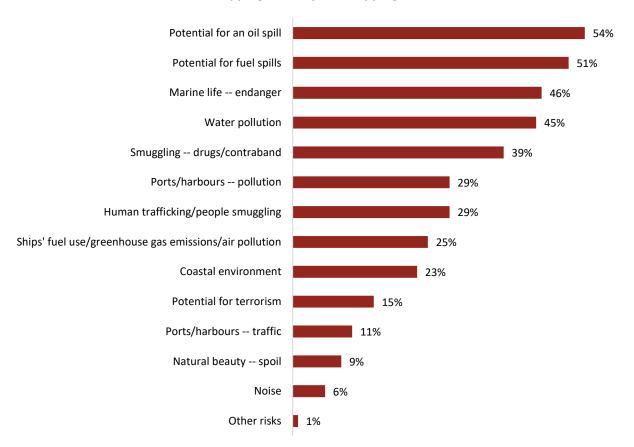
Petroleum-related safety concerns will be discussed in greater detail later in this report. For now, it's worth noting that this question about potential safety issues was asked about shipping overall, before respondents had been asked to think about the shipping of oil and gas, suggesting that these concerns are top-of-mind for Canadians, even as they rate the industry as safe overall.

Other safety issues Canadians find worrisome are summarized in the graph that follows.



Page 8 of 20

What types of potential safety issues and risks come to your mind when you think about the shipping industry and shipping in Canadian waters?



Economic contribution vs. environmental risk

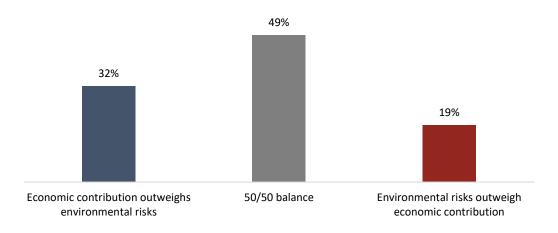
In addition to the potential for spills, many of Canadians' biggest concerns about shipping safety are related to the natural environment, from threats to marine life (46% mention this as an issue) to water and air pollution (45% and 25%, respectively).

For most Canadians, these environmental risks do not outweigh the economic contributions shipping makes to their country. Respondents were asked to assess these considerations on a scale from 1 to 5, with a 1 meaning that the economic contribution "totally outweighs" the environmental risks, and a 5 meaning the opposite. A response of 3 indicated a belief that there is a "50/50 balance" between the two sides.

While half of Canadians (49%) locate themselves in the middle of this scale, considerably more place themselves on the economic contribution side than on the environmental risk side, as seen in the following graph:

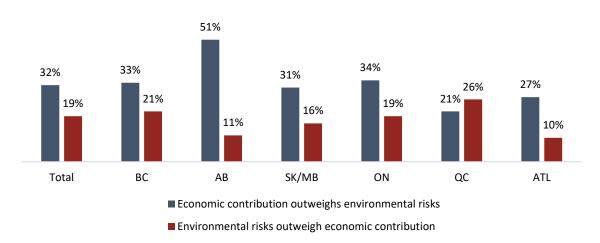
Page 9 of 20

How Canadians weigh the economic contribution of marine shipping against the potential environmental risks:



The perspective that shipping's economic contribution to Canada outweighs any environmental risks associated with it has remained fairly consistent at the topline level since 2016, when 31 per cent leaned toward the economic side of the scale and 14 per cent toward the environmental side, with 55 per cent in the centre.

How Canadians weigh the economic contribution of marine shipping against potential environmental risks:

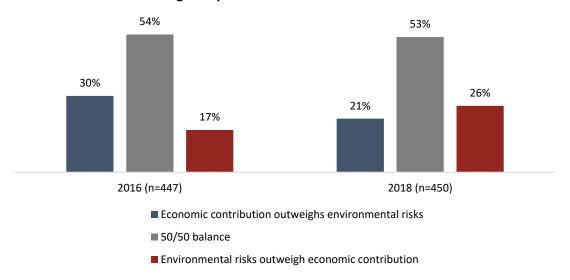


The proportion of Canadians saying environmental risks outweigh economic contributions has risen slightly, driven in large part by Quebec residents, who – in 2018 – are more likely to choose the environment side of this equation than the economy side:



Page 10 of 20

How Quebecers weigh the economic contribution of marine shipping against potential environmental risks:



Precisely why Quebec residents appear to have grown more concerned about environmental risks is unclear. No other region's respondents changed their overall orientation toward this question from 2016 to 2018.

Asked to use the same scale in assessing the environmental risk and economic reward of a number of other industries, including road transportation, rail transportation, electrical utilities, and the oil industry, Canadians vary in their responses, as seen in the graph that follows.

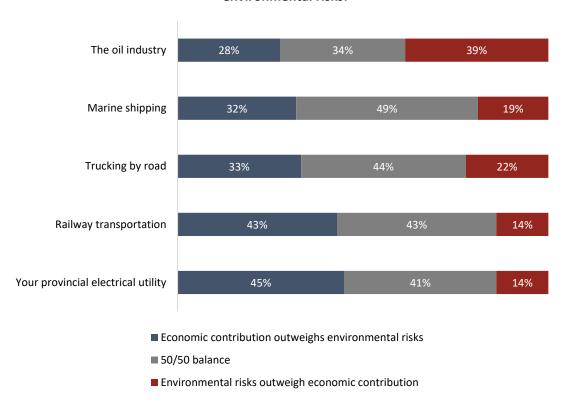
Canadians are more likely to view rail and electrical utilities as economic contributors than environmental risks, but tend to fall on the environmental side of the equation when asked about the oil industry (39% do, compared to 28% who say economic contributions outweigh environmental risk, and 34% who say the trade-off is about even).

Alberta is a significant exception to this line of thinking, with 57 per cent of respondents believing that the economic contribution outweighs the environmental risks. (Note that the questionnaire asked about trucking and rail transportation in general terms and did not specifically ask about shipping oil via these methods.)



Page 11 of 20

How Canadians weigh each industry's economic contributions and environmental risks:



Views of the trucking, railway, and electrical utilities industries vary less by region than views of marine shipping and the oil industry do (see comprehensive tables).

Confidence in shipping oil remains high

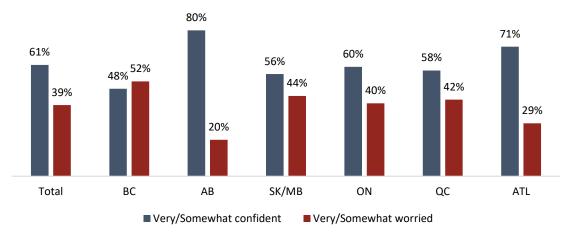
Despite the overall view that the environmental risks outweigh the economic benefits of the oil industry, a majority of Canadians are confident that shipping petroleum products in Canadian waters is safe. Six-inten (61%) say they are either "very" (18%) or "somewhat confident" (43%) about this, with the overall total essentially unchanged since 2016.

Alberta (80%) and Atlantic Canada (71%) – which sees <u>approximately 85 per cent of all oil tanker</u> <u>movements in Canadian waters</u> – are the most confident on the safety of shipping oil and gas, while B.C. is almost evenly split between confidence and concern:



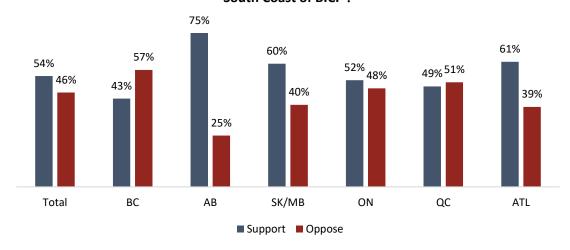
Page 12 of 20

Overall, would you describe yourself as confident or worried about the safety of marine shipping of petroleum products in Canadian waters?



When asked directly whether they support or oppose an increase in oil tanker traffic in and around the province's South Coast, most British Columbians (57%) express opposition. They are joined in this view by 51 per cent of Quebecers – the only other regional group where opposition to increased tanker traffic in Southern B.C. tops 50 per cent:

Do you support or oppose "an increase in oil tanker traffic around the South Coast of B.C."?

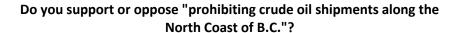


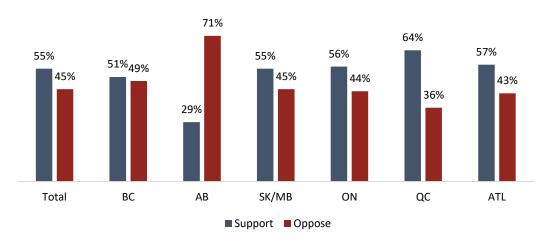
This finding is notable in light of <u>past ARI polling</u>, which has consistently shown British Columbians as more inclined to support than oppose the Trans Mountain Pipeline expansion project that would be responsible for an increase in tanker traffic in the South Coast of BC.

Also interesting is the fact that B.C. residents are more open to allowing crude oil shipments along their province's North Coast than residents of any other region except Alberta. Everywhere else, at least a small majority supports such a prohibition, which was a part of the Liberals' election platform in 2015 and recently moved from the House of Commons to the Senate for additional legislative review:

CONTACT:

Page 13 of 20

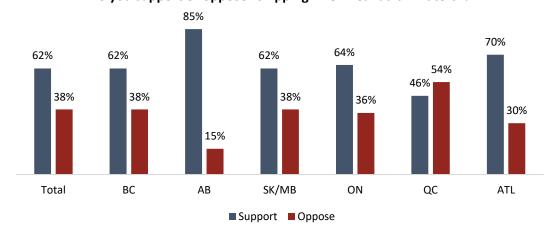




The gulf between B.C. and Quebec – often the two provinces most aligned in their opposition to expansion of the resource industry and most supportive of environmental initiatives – on this question is replicated on another one: the shipping of liquefied natural gas (LNG) in Canadian waters.

LNG has been shipped in the waters around Atlantic Canada for many years. Overall, six-in-ten Canadians (62%) support the shipping of LNG, including at least this many in every region except Quebec, where 54 per cent are opposed:

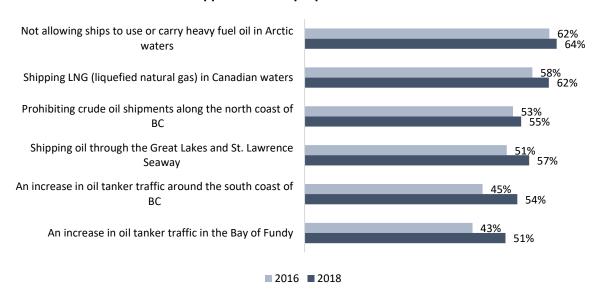
Do you support or oppose "shipping LNG in Canadian waters"?



Each of the petroleum-related shipping proposals canvassed in this survey has grown at least slightly in support since 2016. This includes both support for increased shipping in various locations, as well as support for moratoriums on shipping in others, as seen in the graph that follows.

Page 14 of 20

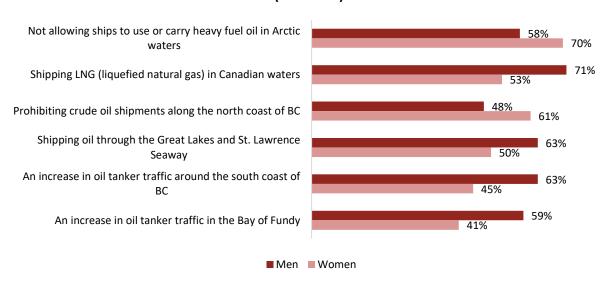
Support for each proposal over time:



In addition to the regional divides previously discussed, there is a pronounced gender gap on these questions. Men are much more supportive of expanded petroleum shipping than women, who are, in turn, more supportive of the two prohibitions on shipping petroleum products asked about in the survey.

This gender divide existed in <u>2016 results</u>, but it has become more pronounced in 2018, especially on the moratorium questions, where women are at least 12 percentage points more likely than men to express support (compared to gaps of 4 and 7 points respectively in 2016).

Percentage who support each of the following: (2018 data)



Page 15 of 20

Paradoxically, despite continued confidence in – and increasing support for – shipping oil in Canadian waters, the Canadian public continues to overestimate the number of major spills that have occurred in this country in the last 10 years.

As was the case during the first wave of this survey, respondents were provided with the International Tanker Owners Pollution Federation (ITOPF) definition of a "major spill" – one in which 700 tonnes of petroleum or more are spilled (roughly equivalent to 1/3 of the volume of an Olympic swimming pool). While several smaller spills and fuel leaks have occurred in the last decade, none of them have been large enough to be considered major.

Just one-in-ten respondents (11%) correctly identify this total, while the vast majority of Canadians believe that at least one major spill has occurred in the last 10 years. Indeed, two-thirds of Canadians (68%) believe that there have been three or more such spills in that time.

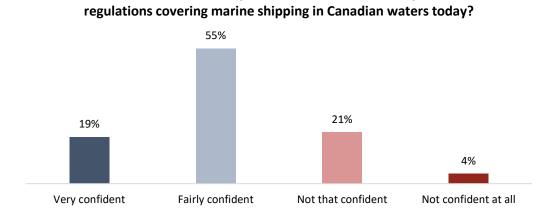
Part 3: Perceptions of shipping regulation and oversight

High marks for regulators

In keeping with the theme of positive assessments of shipping safety – both generally and for petroleum products – most Canadians also express confidence in the rules and regulations governing marine shipping in their country.

Three-quarters of Canadians (75%) say they are either "very" or "fairly confident" in such rules, though most respondents locate themselves in the latter category, as seen in the following graph:

How much confidence do you have in the overall safety rules and

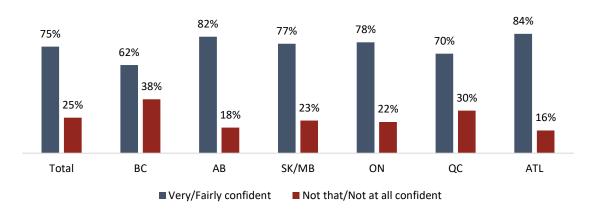


Majorities are confident in every region of the country, and they top seven-in-ten everywhere but British Columbia, where 62 per cent are at least fairly confident in shipping regulations:



Page 16 of 20

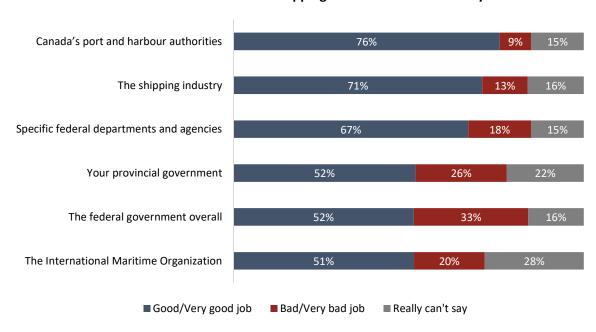
How much confidence do you have in the overall safety rules and regulations covering marine shipping in Canadian waters today?



This confidence in marine shipping regulations appears to extend to the regulatory bodies tasked with crafting and maintaining them as well.

Asked about a variety of agencies responsible for marine safety, more than half of Canadians say each one is doing a "good job." The federal government overall receives the most criticism, with one-third (33%) of Canadians saying they are doing a bad job when it comes to shipping regulation, but paradoxically, 67 per cent of Canadians say that specific federal departments and agencies are doing a good job and only 18 per cent say they are doing a bad job:

Is each of the following doing a good job or a bad job in terms of their contribution towards safe shipping in Canadian waters today?





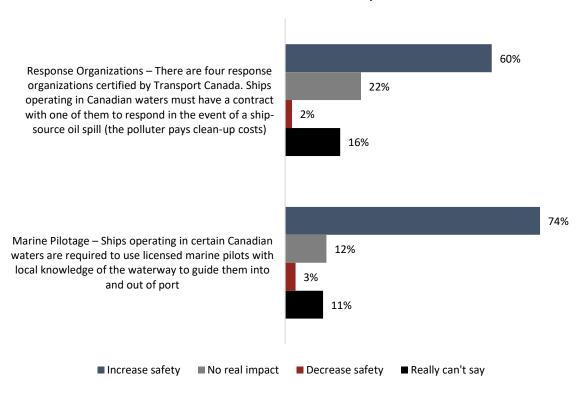
Page 17 of 20

The percentage of Canadians saying each of these organizations is doing a good job has increased since 2016, with the largest increases for the shipping industry (up 16 percentage points) and Canada's port and harbour authorities (+12). As was the case in 2016, men and older respondents are more likely to give a positive assessment to each of the agencies canvassed (see comprehensive tables).

Also increased considerably since the previous wave of this survey is the perception that two specific regulations – the requirement that ships operating in Canada have licensed marine pilots with local knowledge to guide them in and out of port, and the requirement that they have a contract with a certified response organization in case of an oil or fuel spill (with the polluter paying the clean-up costs) – increase safety in Canadian waters overall. Note that the descriptions of these two requirements were changed slightly in the 2018 questionnaire, in order to improve clarity (read the 2018 questionnaire here and the 2016 questionnaire here).

Today, six-in-ten (60%) say response organization rules make shipping in Canada safer (up from 44% in 2016), and nearly three-in-four (74%) say the same about marine pilotage rules (up from 63%):

For each policy, please indicate whether you think having it in place increases or decreases safety:



Of course, most Canadians are not particularly familiar with the specifics of laws that govern the shipping industry in their country, which is why the questionnaire used in this survey sought to explain policies such as the ones in the preceding graph. (Read the full text of the questionnaire here.)



Page 18 of 20

Along these lines, fully six-in-ten Canadians (60%) say they are unfamiliar with the federal government's Oceans Protection Plan – an umbrella program intended to protect the nation's coasts and waterways while growing the economy. Only one-in-seven Canadians (14%) are certain that they have heard of the program.

Once the plan is explained to them, however, Canadians tend to feel positively about it, as they do about shipping regulation in general. Almost three-quarters (73%) say they are either "very" or "fairly confident" in the Oceans Protection Plan, with a full majority (57%) locating themselves among the "fairly confident."

Interestingly, confidence is lowest in British Columbia, but highest in Quebec, making views of the plan another point of divergence between the two often-aligned provinces.

85% 80% 73% 71% 70% 68% 59% 62% 63% 57% 49% 57% 59% 49% 23% 19% 17% 16% 14% 11% 10% BC ATL Total AΒ SK/MB ON QC ■ Very confident ■ Fairly confident

How much confidence do you have in the Oceans Protection Plan?

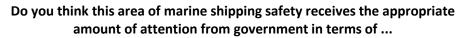
Still more to be done?

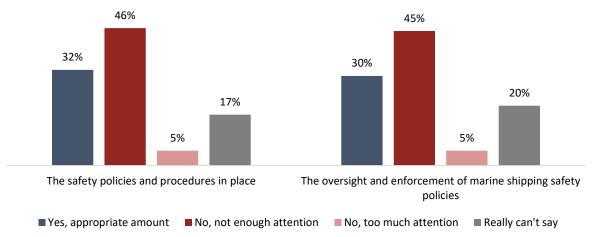
Despite their generally high opinion of marine shipping safety and the associated regulations, Canadians see further room for improvement.

Asked whether government pays an appropriate amount of attention to this issue – both in terms of the policies and procedures it puts in place, and its oversight and enforcement of such rules – half of Canadians say no, and those who say this overwhelminally believe too little attention is paid:



Page 19 of 20

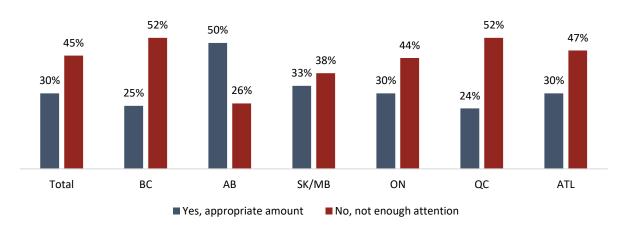




British Columbians and Quebecers lead the way in perceiving too little attention on these areas from government. Alberta, meanwhile, is the only region in which those who say government pays an appropriate amount of attention to marine shipping concerns outnumber those who say it does not.

While this pattern holds true on both questions, it is more pronounced on views of oversight and enforcement, which are shown in the graph that follows. (See comprehensive tables for greater detail.)

Do you think this area of marine shipping safety receives the appropriate amount of attention from government in terms of oversight and enforcement?



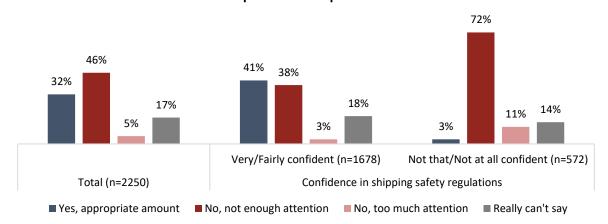
Perhaps unsurprisingly, the one-in-four Canadians who lack confidence in the overall regulatory framework for marine shipping are also overwhelmingly of the opinion that not enough attention is being given to this issue.



Page 20 of 20

More than seven-in-ten (72%) in this group say this, while those who express confidence in safety regulations are more divided on the need for additional government attention:

Do you think this area of marine shipping safety receives the appropriate amount of attention from government in terms of the safety policies and procedures in place?



The results demonstrate a gender gap on the question of oversight. Men of all ages are more confident in an appropriate amount of government oversight than women of all ages (38% compared to 22%). Women are more likely to respond "not enough attention" (48% versus 41% for men) or "really can't say" (25% versus 16% for men). However, very few of either gender (5%) indicate that there is "too much attention" paid to policies and procedures for safe marine shipping.

The **Angus Reid Institute (ARI)** was founded in October 2014 by pollster and sociologist, Dr. Angus Reid. ARI is a national, not-for-profit, non-partisan public opinion research foundation established to advance education by commissioning, conducting and disseminating to the public accessible and impartial statistical data, research and policy analysis on economics, political science, philanthropy, public administration, domestic and international affairs and other socio-economic issues of importance to Canada and its world.

Clear Seas Centre for Responsible Marine Shipping is an independent, not-for-profit organization that provides impartial and evidence-based research to inform the public and policy makers about marine shipping in Canada, including risks, mitigation measures and best practices for safe and sustainable marine shipping. Clear Seas' vision for safe and sustainable shipping is holistic, encompassing environmental, social and economic impacts of the shipping industry. Clear Seas was officially launched in 2015 to be a leading source of independent, fact-based information on safe and sustainable marine shipping in Canada.

For detailed results by age, gender, region, education, and other demographics, click here.