

Canada-US Energy Sector Competitiveness Survey 2022

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Executive Summary

This report presents the results of the Fraser Institute's 2022 *Canada-US Energy Sector Competitiveness Survey* regarding barriers to investment in oil and gas exploration and production facilities in each country. The survey responses have been tallied to rank Canadian and American jurisdictions according to the extent of such barriers. Those barriers, as assessed by the survey respondents, include high tax rates, costly regulatory obligations, uncertainty over environmental regulations, and the interpretation and administration of regulations governing the “upstream” petroleum industry, as well as concerns over political stability and security of personnel and equipment.

This year's survey of senior executives in the upstream oil and gas sector is consistent with the methodology used in previous editions of the *Global Petroleum Survey* and the *Canada-US Energy Sector Competitiveness Survey*. A total of 82 respondents participated in the survey this year, providing sufficient data to evaluate three Canadian provinces and 12 American states.

Jurisdictions evaluated are assigned scores on each of 16 questions pertaining to factors known to affect investment decisions. These scores are then used to generate a “Policy Perception Index” for each jurisdiction that reflects the perceived extent of the barriers to investment.

According to this year's survey, Wyoming is the most attractive jurisdiction for oil and gas investment followed by Texas (2nd) and Oklahoma (3rd). Six other US jurisdictions also ranked in the top 10 this year: Kansas (4th), North Dakota (5th), Montana (7th), Mississippi (8th), US Offshore—Gulf of Mexico (9th) and Louisiana (10th).

This year, Saskatchewan featured in the top 10, occupying the 6th place and becoming the highest-ranked Canadian province followed by Alberta (12th). British Columbia (14th) was the worst performing Canadian jurisdiction, posing the greatest barriers to investment.

Investors pointed to the uncertainty concerning disputed land claims, the cost of regulatory compliance, and the uncertainty concerning environmental regulations as the major areas of concern in Canadian provinces compared with US states. In particular this year, 86 percent of respondents for British Columbia, 56 percent for Alberta, and 44 percent for Saskatchewan indicated that uncertainty concerning land claims was a deterrent for investment. In contrast, none of the respondents for Kansas and Mississippi and only 5 percent of respondents for Texas were deterred by this factor. Overall, on average, 62 percent of respondents were deterred by the uncertainty concerning land claims in Canada compared to 24 percent in the United States.

On regulatory factors, all the respondents for British Columbia, 73 percent for Alberta, and 44 percent for Saskatchewan pointed to the cost of regulatory compliance as a deterrent for investment whereas 10 percent indicated this was an issue for Oklahoma and 17 percent said it was an issue for Texas. On average, 73 percent of respondents for Canada are deterred by the cost of regulatory compliance, compared to 35 percent for the United States.

An Alberta/Texas comparison also demonstrates how results vary by region: 81 percent of respondents pointed to the uncertainty concerning environmental regulations as a deterrent to investment in Alberta compared with 13 percent of respondents for Texas. Overall, the percentage of respondents for the Canadian provinces indicating that this factor was a deterrent to investment was, on average, 63 percent compared to 38 percent for the United States.

Our analysis of the 2022 survey results indicates that negative sentiment by the industry's senior executives regarding key factors driving petroleum investment decisions continue to be higher in many Canadian provinces than in competing American jurisdictions. In fact, the US performs better than Canada in 15 out of the 16 policy factors.

Introduction

The *2022 Canada-US Energy Sector Competitiveness Survey* builds on the Fraser Institute's previous work on competitiveness with the *Canada-US Energy Sector Competitiveness Survey 2021* (Yunis and Aliakbari, 2021) the *Canada-US Energy Sector Competitiveness Survey 2020* (Yunis and Aliakbari, 2020), and the *Global Petroleum Survey 2019* (Stedman and Green, 2019).

Thanks to the results from these surveys, we are able to better understand how Canadian provinces, American states, and offshore regions perform in several policy areas. The *Canada-US Energy Sector Competitiveness Survey 2022* continues to serve as a report card for policymakers given that jurisdictions that investors assess as relatively unattractive may use the findings of this publication to consider either comprehensive policy reforms or improvements in individual policy areas.

A recent report suggests that capital investment in Canada is falling relative to the United States and many other developed countries (Globerman and Emes, 2021). In particular, the percentage of capital investment in Canada's oil and gas sector as a share of total capital investment has plummeted, from 28 percent in 2014 to 10 percent in 2022 (Statistics Canada, 2022).

The *2022 Canada-US Energy Sector Competitiveness Survey* highlights policies that are known to affect investment attractiveness including taxes, regulations, infrastructure, and labor availability, among others. This survey also provides a clear perspective on policy areas where regions require improvement in the eyes of investors. Our analysis offers a unique outlook on both the state of Canada's petroleum industry investment climate and how investor perceptions vary by region. In addition, this year's survey identifies potential reasons for declining investor perceptions of Canada's energy sector when compared to the United States.

Survey Methodology

Sample design

The questions sent to the senior executives for this 2022 survey of the upstream oil and gas sector are consistent with the survey questions used in previous editions of the *Global Petroleum Survey* and the 2021 and 2020 *Canada–US Energy Sector Competitiveness Surveys*. The survey is designed to identify provinces, states, and offshore regions with the greatest barriers to investment in oil and gas exploration and production. Jurisdictions that investors assess as relatively unattractive may use the findings of the survey to consider comprehensive policy reforms that could improve their position in the rankings or might consider implementing policies that would improve their standing in individual policy areas. Petroleum companies can also use the information to corroborate their own assessments and to identify jurisdictions where business conditions and the regulatory environment are most attractive for investment. The survey results are also a useful source of information for academics interested in international competitiveness in the oil and gas sector, or for the media, providing independent evidence as to how particular jurisdictions compare.

The survey was distributed to managers and executives in the “upstream” petroleum industry. This industry includes companies exploring for oil and gas, those producing crude oil from conventional and non-conventional sources (such as bitumen from oil sands and shale formations), and those producing natural gas from both conventional sources and non-conventional sources, such as coalbed methane and gas embedded in shale formations. It does not include companies that are refining, upgrading, or processing crude oil, bitumen, and raw natural gas, or those that are involved in the transportation and marketing of petroleum products, unless such companies are also directly involved in the upstream.

The names of potential respondents were taken from publicly available membership lists of trade associations and other sources. In addition, some industry associations and non-profit think tanks provided contact information and helped to advertise the survey to their members.

The survey was conducted from May 17th, 2022, until September 9th, 2022. A total of 82 individuals responded to the survey in 2022, which allowed for the inclusion of 3 Canadian provinces and 12 American states in this year’s survey results.¹

¹ Jurisdictions that received fewer than 5 responses were not included in the survey results.

Figure 1: The position survey respondents hold in their company, 2022

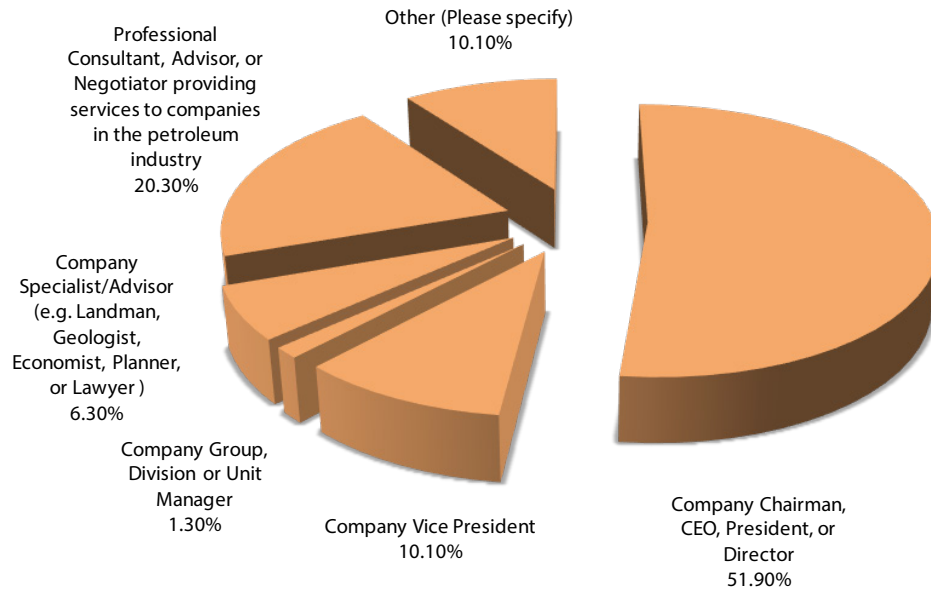


Figure 2: Activities performed by firms of survey respondents, 2022

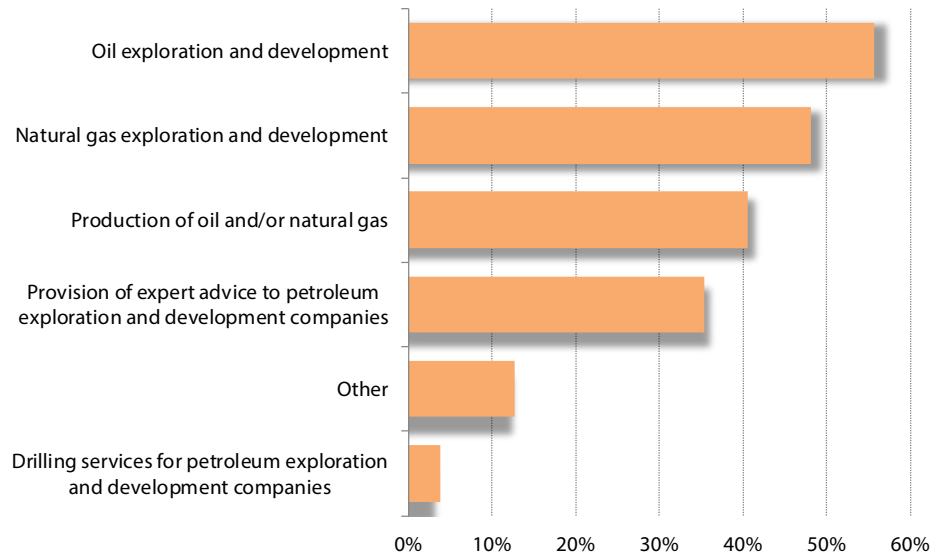
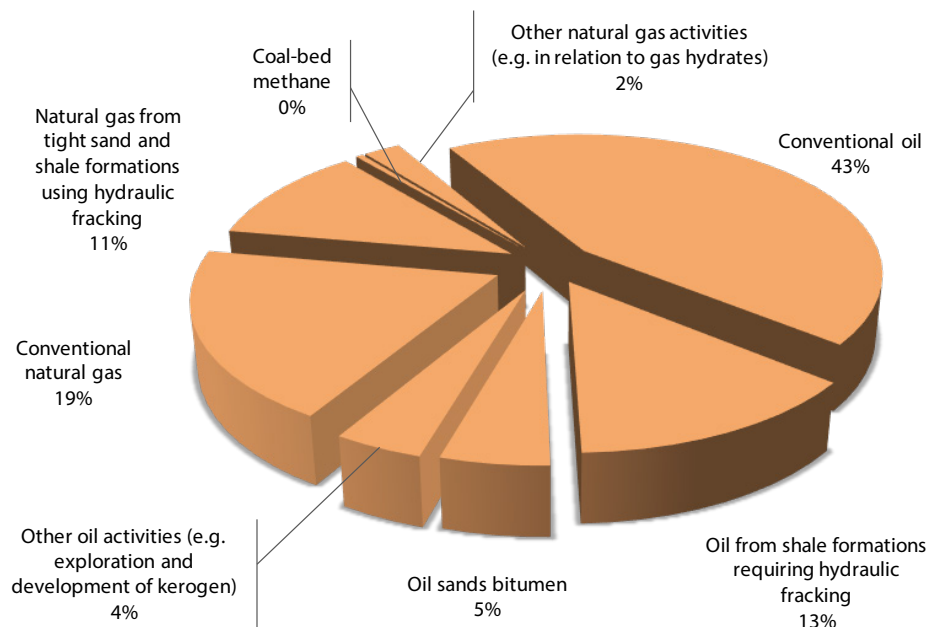


Figure 3: Company focus in petroleum exploration and development business, as indicated by respondents



As figure 1 illustrates, over half of respondents were chairmen, CEOs, presidents, or directors of their firms. In addition, nearly two-thirds of respondents identified themselves as either managers or holding higher-level positions. Figure 2 shows that over 55 percent of the firms participating in the survey are engaged in the exploration and development of oil, over 48 percent are engaged in the exploration and development of natural gas, 40 percent are engaged in production of oil and/or natural gas, and 35 percent provide expert advice and/or drilling services.

Figure 3 shows the principal focus of the petroleum exploration and development activities of companies whose managers or other representatives participated in the survey. Most of these companies (62 percent) specialize in finding and developing conventional oil and gas reserves. Unconventional oil and natural gas exploration and development represented 36 percent of the focus of companies in 2022.

Senior executives from petroleum firms reported that 22 percent of their upstream activity involves unconventional oil resources. The majority of this activity (60 percent) includes the recovery of oil from shale formations using hydraulic fracturing, 22 percent is focused on oil sands bitumen, and 18 percent on other oil activities such as the exploration or development of oil from kerogen found in shale rock.

Participants in the survey also reported that 14 percent of their upstream activity involves unconventional natural gas resources. The majority of this activity (80 percent) involves the recovery of natural gas from tight sand and shale formations using hydraulic fracturing. Seventeen percent of petroleum firms responding to the survey reported other unconventional natural gas activities (e.g., related to gas hydrates) while 3 percent focused on coal-bed methane.

Survey questionnaire

The survey was designed to capture the opinions of managers and executives about the level of investment barriers in jurisdictions with which they are familiar. Respondents were asked to indicate how each of the 16 factors listed below influence company decisions to invest in various jurisdictions. The factors were consistent with the previous versions of the *Global Petroleum Survey* and the 2020 and 2021 *Canada-US Energy Sector Competitiveness Survey*.

1. **Fiscal terms**—including licenses, lease payments, royalties, other production taxes, and gross revenue charges, but not corporate and personal income taxes, capital gains taxes, or sales taxes.
2. **Taxation in general**—the tax burden including personal, corporate, payroll, and capital taxes, and the complexity of tax compliance, but excluding petroleum exploration and production licenses and fees, land lease fees, and royalties and other charges directly targeting petroleum production.
3. **Environmental regulations**—stability of regulations, consistency and timeliness of regulatory process, etc.
4. **Regulatory enforcement**—uncertainty regarding the administration, interpretation, stability, or enforcement of existing regulations.
5. **Cost of regulatory compliance**—related to filing permit applications, participating in hearings, etc.
6. **Protected areas**—uncertainty concerning what areas can be protected as wilderness or parks, marine life preserves, or archaeological sites.
7. **Trade barriers**—tariff and non-tariff barriers to trade and restrictions on profit repatriation, currency restrictions, etc.

8. **Labor regulations and employment agreements**—the impact of labor regulations, employment agreements, labor militancy or work disruptions, and local hiring requirements.
9. **Quality of infrastructure**—includes access to roads, power availability, etc.
10. **Quality of geological database**—includes quality, detail, and ease of access to geological information.
11. **Labor availability and skills**—the supply and quality of labor, and the mobility that workers have to relocate.
12. **Disputed land claims**—the uncertainty of unresolved claims made by aboriginals, other groups, or individuals.
13. **Political stability.**
14. **Security**—the physical safety of personnel and assets.
15. **Regulatory duplication and inconsistencies** (includes federal/provincial, federal/state, inter-departmental overlap, etc.)
16. **Legal system**—legal processes that are fair, transparent, non-corrupt, efficiently administered, etc.

For each of the 16 factors, respondents were asked to select one of the following five responses that best described each jurisdiction with which they were familiar:

1. Encourages investment
2. Is not a deterrent to investment
3. Is a mild deterrent to investment
4. Is a strong deterrent to investment
5. Would not invest due to this criterion

Scoring the survey responses — Policy Perception Index

This year we replicated the methodology used in 2016, which follows that used in the Fraser Institute's *Annual Survey of Mining Companies* (see Stedman and Green, 2018b). The methodology differs from that used prior to 2016² in that it is based on an average of the responses for all five possible response categories.³ In previous years, the index was based only on the prevalence of responses in the “deters investment” categories. The measure also takes into consideration how far a jurisdiction's score is from the average in each of the policy areas. To calculate the Policy Perception Index (PPI), a score for each jurisdiction is estimated for all 16 factors addressed by the survey questions by calculating each jurisdiction's average response in relation to each survey question. This score is then standardized using a common technique, where the average response is subtracted from each jurisdiction's score on each of the policy factors and then divided by the standard deviation. A jurisdiction's scores on each of the 16 policy variables, as reflected by the responses to the survey questions, are then added to generate a final, standardized PPI score. That score is then normalized using the formula $((V_{max}-V_i)/(V_{max}-V_{min}))\times 100$.⁴ The jurisdiction with the most attractive policies receives a score of 100 and the jurisdiction with the policies that pose the greatest barriers to investment receives a score of 0.

² See appendix 2 for an overview of the previous methodology.

³ Encourages investment, not a deterrent to investment, mild deterrent to investment, strong deterrent to investment, and would not invest due to this factor.

⁴ Where V_{max} is the maximum value, V_{min} is the minimum value, and V_i represents the summed score of a jurisdiction.

Canada-US Results

Policy Perception Index Rankings

Table 1 compares the scores and rankings on the Policy Perception Index (PPI) in 2022. The first set of columns shows the absolute scores for the jurisdictions based on the methodology described above. The second set of columns shows the rankings. Readers are reminded that these rankings are driven purely by responses to the survey questions and do not account for the extent of any jurisdiction's proved oil and gas reserves. Hence, some jurisdictions with relatively small or even no reserves may rank more highly on the basis of the respondents' perceptions of business conditions, regulatory regimes, and other factors than some jurisdictions with significant reserve holdings.

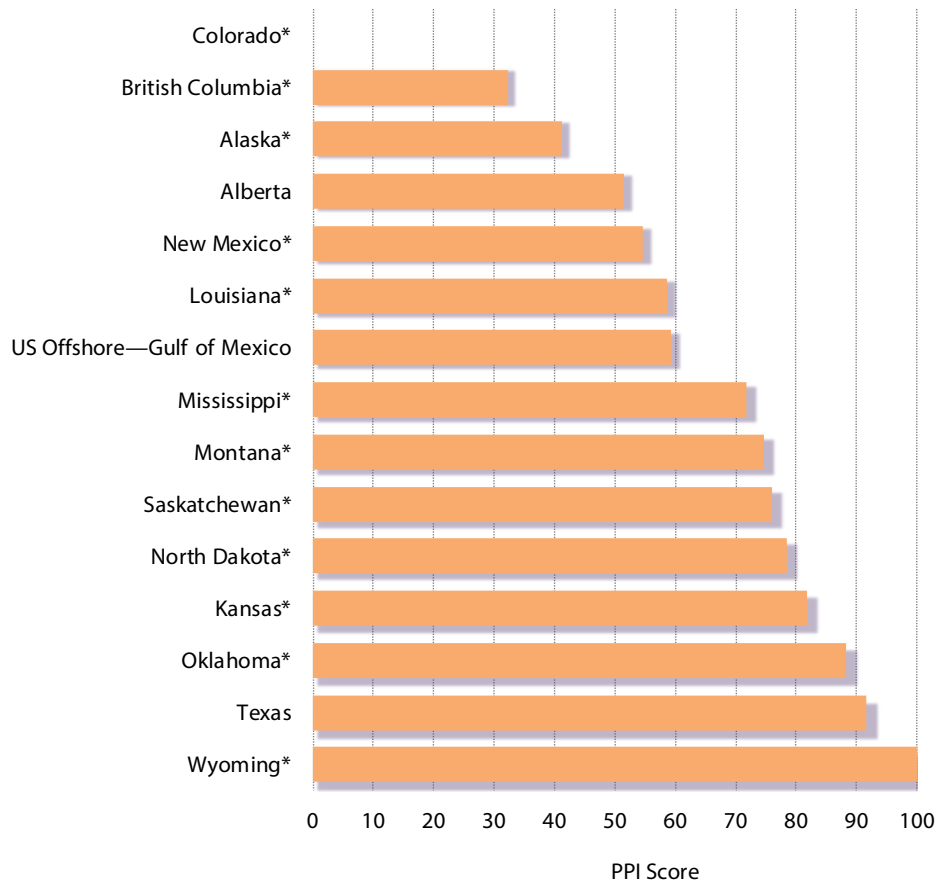
Table 1: Policy Perception Index 2022

	Score	Rank
Wyoming*	100.00	1/15
Texas	91.55	2/15
Oklahoma*	88.24	3/15
Kansas*	81.72	4/15
North Dakota*	78.38	5/15
Saskatchewan*	75.97	6/15
Montana*	74.69	7/15
Mississippi*	71.73	8/15
US Offshore—Gulf of Mexico	59.25	9/15
Louisiana*	58.52	10/15
New Mexico*	54.70	11/15
Alberta	51.44	12/15
Alaska*	41.12	13/15
British Columbia*	32.29	14/15
Colorado*	0.00	15/15
* = More than five but fewer than nine responses.		

Figure 4 presents the Policy Perception Index rankings for the 15 jurisdictions ranked this year. Respondents ranked the following 10 jurisdictions as the most attractive for investment in petroleum exploration and development:

1. Wyoming
2. Texas
3. Oklahoma
4. Kansas
5. North Dakota
6. Saskatchewan
7. Montana
8. Mississippi
9. US offshore – Gulf of Mexico
10. Louisiana

Figure 4: Policy Perception Index



* = More than five but fewer than nine responses.

Results by Region

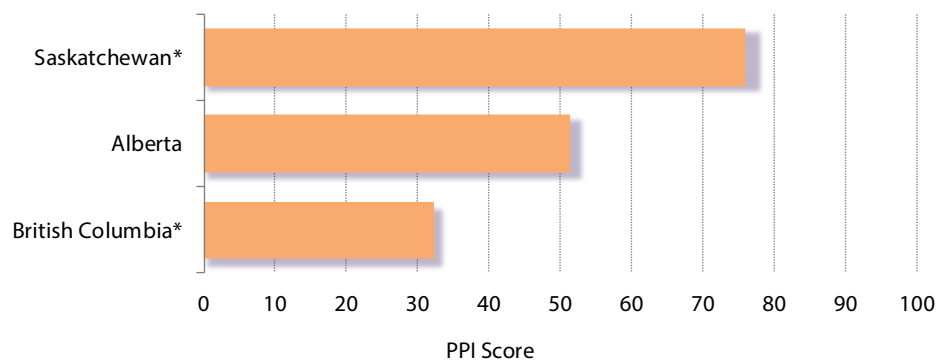
Canada

Figure 5 illustrates the relative performance of the Canadian jurisdictions in the 2022 survey. Compared to American jurisdictions, survey respondents gave less favorable overall scores to a number of Canadian jurisdictions this year, indicating that barriers to investment continue to be significant relative to the United States.

While Saskatchewan improved its policy scores in 2022 (compared to 2021 results) the scores for Alberta and British Columbia decreased. More specifically, British Columbia worsened its score by 18 points, Alberta by almost 19 points, while Saskatchewan improved by 0.8 points. These three provinces accounted for a little over 93 percent of Canada’s total oil production in 2021 (CER, 2021).

British Columbia’s position in the ranking worsened, going from 18th out of 22 jurisdictions in 2021 to 14th out of 15 jurisdictions this year. The province continues to be ranked among the jurisdictions with highest deterrents for investment. In contrast, Saskatchewan went from ranking 11th in 2021 to 8th in 2022 while improving its score and becoming the only Canadian jurisdiction in the top 10. Finally, Alberta’s position dropped when considering its relative ranking—the province went from ranking 12th out of 22 jurisdictions in 2021 to 12th out of 15 jurisdictions in 2022.

Figure 5: Policy Perception Index—Canada



* = More than five but fewer than nine responses.

According to the Policy Perception Index measure, Saskatchewan is the most attractive Canadian jurisdiction for upstream petroleum investment. The second most attractive Canadian jurisdiction is Alberta, followed by British Columbia.

Comments from respondents about various Canadian provinces and territories ranged from complimentary to critical. The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meaning.

Canada—General

“Often the federal government’s stance on petroleum production has definitely deterred investment. There is an overall hostility to petroleum companies in Canada that is very palpable in Eastern Canada. The inability to build pipelines, the land claim disputes, and unstable or unpredictable provincial governments are very much a deterrent to investing in Canada.”

“The federal government is deriding the oil and gas sector.”

Alberta

“Carbon Capture Utilization and Storage hub strategy essentially disqualifies use of depleted oil/gas reservoirs for storage and highly favors the giant players.”

Saskatchewan

“Regulatory procedure in Saskatchewan is overwhelmingly difficult and many of the processes demand too much time and money.”

“Saskatchewan is strongly encouraging the development of helium resources with tax incentives, infrastructure credits, low cost of leasing, etc. True pleasure to do business there.”

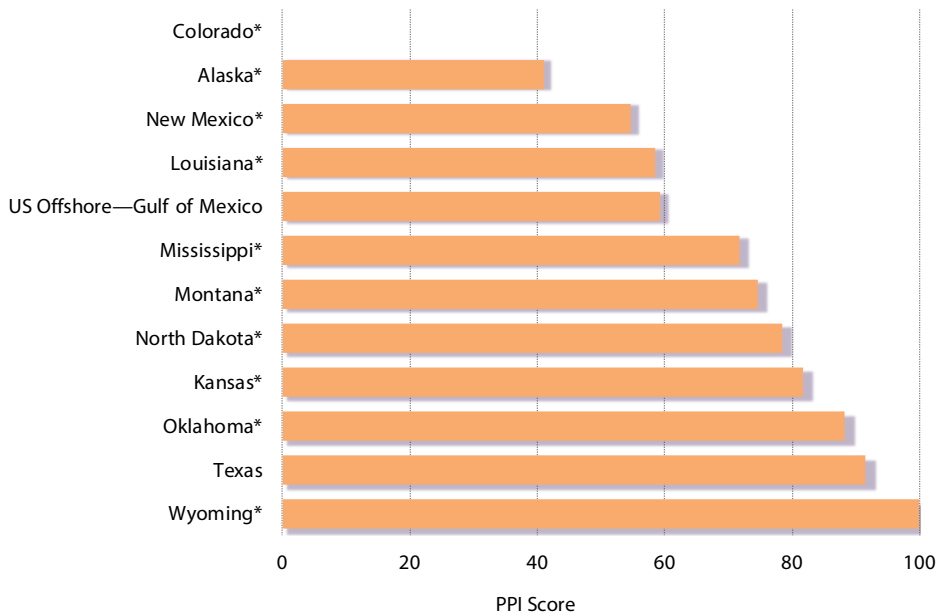
The United States

We received a sufficient number of responses in 2022 to enable us to rank 12 US jurisdictions.

Wyoming is the most attractive jurisdiction in the United States—and the most attractive jurisdiction included in this analysis. Texas is the second most attractive jurisdiction in the US and the second most attractive in this year’s survey. Seven other US jurisdictions also ranked in the top 10 this year: Oklahoma (3rd), Kansas (4th), North Dakota (5th), Montana (7th), Mississippi (8th), US Offshore—Gulf of Mexico (9th), and Louisiana (10th) (**figure 6**).

Compared to last year’s survey, eleven out of the twelve US jurisdictions (Texas, Oklahoma, Kansas, North Dakota, Montana, Mississippi, US Offshore—Gulf of Mexico, Louisiana, New Mexico, Alaska and Colorado) saw their policy scores decline while Wyoming was the only one that improved. For instance, policy scores for Louisiana and North Dakota declined by 17 and 16 points, respectively, while Wyoming saw its score increase by 2 points.

Figure 6: Policy Perception Index—United States



* = More than five but fewer than nine responses.

Survey participants' comments on a number of American jurisdictions are presented below. Comments have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

United States

"The current US administration is absolutely trying to shut down the oil and gas industry at the peril of the US population."

"To much instability and delay on permits granting. Lease sales and sale awards are cancelled due to arbitrary federal policy interpretations."

"All US and state government agencies need to be less extreme and more practical in enforcing and passing environmental permitting and leasing permits."

Colorado

"Colorado is highly over regulated and anti-oil exploration."

"The current administration is openly hostile to the fossil fuel industry and is doing everything in its power to prevent further development and regulate the industry out of existence."

"Regulations have made Colorado one of the worst places on earth to conduct oil and gas operations."

Texas

"Texas' regulatory system helps expedite permitting while following EPA regulations."

Wyoming

"The system penalizes those wishing to purchase old wells/ fields and reinstate production."

Results by Category

The results of the survey have been broken into four areas: regulatory factors, commercial, geopolitical, and land-related risks.⁵

Regulatory factors

According to investors, regulatory factors continue to be a defining issue hampering Canada's energy competitiveness. This year's respondents pointed to the uncertainty concerning environmental regulations, regulatory duplication and inconsistencies, and the cost of regulatory compliance as key areas of concern in Canada compared to the United States.

To evaluate investors' perceptions of regulatory processes across jurisdictions we asked survey respondents six questions about the various regulatory factors. The analysis for questions with similar results are combined in this section.

Cost of regulatory compliance (table 2)

Canada

This year, investors rated cost of regulatory compliance as the policy factor that most deters investment in Canada. The vast majority of Canadian provinces have poor results on this factor compared to their American competitors. For example, all respondents for British Columbia indicated that the cost of regulatory compliance was a deterrent to investment. Similarly, 73 percent of respondents for Alberta cited the cost of regulatory compliance as policy factor that scared away investment. Saskatchewan was the top performing Canadian jurisdiction in this category, with 44 percent of respondents claiming this factor dissuaded investment.

United States

In contrast, many US jurisdictions perform well on this factor, with some exceptions. Only 10 percent of respondents for Oklahoma—ranked 3rd in this year's survey—indicated that the cost of regulatory compliance was a deterrent to investment. In addition, only 14 percent of respondents for Mississippi and 17 percent for Texas and Montana cited this factor as a deterrent to investment. The worse performing US jurisdictions were US Offshore—Gulf of Mexico and Colorado, with 87 percent and 82 percent of all respondents deterred by this factor, respectively.

⁵ This section uses categories (based on Appendix 2 from Stedman and Green, 2018a) that focus on particular dimensions of policy to streamline the analysis.

Overall

On average, respondents see the cost of regulatory compliance as more problematic in Canada than in the United States. The percentage of respondents in Canadian provinces indicating that the cost of regulatory compliance was deterring investment was, on average, 73 percent (up 3 percentage points relative to last year's survey) compared to 33 percent for the United States.

Table 2: Cost of Regulatory Compliance

		1: Encourages investment 2: Not a deterrent to investment 3: Mild deterrent to investment 4: Strong deterrent to investment 5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	0%	27%	53%	13%	7%
	British Columbia	0%	0%	71%	29%	0%
	Saskatchewan	22%	33%	33%	11%	0%
UNITED STATES	Alaska	0%	38%	63%	0%	0%
	Colorado	0%	18%	36%	9%	36%
	Kansas	30%	50%	20%	0%	0%
	Louisiana	9%	55%	27%	9%	0%
	Mississippi	14%	71%	14%	0%	0%
	Montana	0%	83%	17%	0%	0%
	New Mexico	9%	55%	36%	0%	0%
	North Dakota	22%	56%	22%	0%	0%
	Oklahoma	20%	70%	10%	0%	0%
	Texas	22%	61%	17%	0%	0%
	Wyoming	45%	36%	18%	0%	0%
	US Offshore—Gulf of Mexico	0%	13%	60%	27%	0%

Note: Percentages may not add up to 100 due to rounding.

Regulatory enforcement (table 3)

Canada

When considering uncertainty concerning existing regulations, i.e., uncertainty regarding the administration, interpretation, stability, or enforcement of existing regulations, British Columbia is the worst performing province on this factor, with 71 percent of respondents indicating that regulatory enforcement was a deterrent to investment. At 69 percent of respondents saying that regulatory enforcement is a deterrent to investment, Alberta follows BC. The top performing Canadian jurisdiction on this measure was Saskatchewan, with 33 percent of respondents citing this factor as a deterrent to investment.

United States

Top performing US jurisdictions Wyoming and Texas saw 20 percent and 18 percent of respondents, respectively, indicating that uncertainty concerning regulatory enforcement was a deterrent to investment. However, several US jurisdictions perform poorly in this indicator. The poorest performing US states were Alaska, Colorado, and US Offshore—Gulf of Mexico, where 75, 73, and 57 percent of respondents were deterred by this factor, respectively.

Overall

On average, Canadian jurisdictions perform poorly relative to their US counterparts when analyzing the uncertainty around the administration, interpretation, stability, or enforcement of existing regulations. The percentage of respondents for the Canadian provinces indicating that this factor was a deterrent to investment was, on average, 58 percent compared to 33 percent for the United States.

Table 3: Regulatory Enforcement

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	0%	31%	56%	6%	6%
	British Columbia	0%	29%	29%	43%	0%
	Saskatchewan	33%	33%	22%	11%	0%
UNITED STATES	Alaska	0%	25%	50%	25%	0%
	Colorado	0%	27%	27%	9%	36%
	Kansas	22%	56%	22%	0%	0%
	Louisiana	27%	36%	36%	0%	0%
	Mississippi	0%	67%	33%	0%	0%
	Montana	0%	80%	20%	0%	0%
	New Mexico	10%	60%	30%	0%	0%
	North Dakota	25%	63%	13%	0%	0%
	Oklahoma	22%	78%	0%	0%	0%
	Texas	27%	55%	18%	0%	0%
	Wyoming	40%	40%	20%	0%	0%
	US Offshore—Gulf of Mexico	14%	29%	29%	29%	0%

Note: Percentages may not add up to 100 due to rounding.

Environmental regulations (table 4)

Canada

This year, investors rated uncertainty concerning environmental regulations, which asks respondents about the stability of regulations, and the consistency and timeliness of environmental regulatory processes, as the second policy factor that most deters investment in Canada.

As a result, many Canadian provinces perform poorly compared to competing US states. In Alberta and British Columbia 81 percent and 71 percent of respondents, respectively, pointed to uncertainty concerning environmental regulations as a key factor deterring investment.

The top performing Canadian jurisdiction on this measure was Saskatchewan, with 38 percent of respondents citing this factor as constraining investment.

United States

In contrast, only 13 percent of respondents for Texas, 10 percent for Oklahoma, and 14 percent for Mississippi were deterred by uncertainty concerning environmental regulations. The poorest performing US state was Colorado, where 91 percent of the survey respondents were dissuaded by this factor.

Overall

On average, uncertainty concerning environmental regulations is the second policy factor that most hampers Canada's energy competitiveness, and it continues to be a major area of concern when compared to the United States. The percentage of respondents for Canadian provinces indicating that this factor was a deterrent to investment was, on average, 63 percent compared to 38 percent for the United States.

Table 4: Environmental Regulations

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	0%	19%	50%	25%	6%
	British Columbia	0%	29%	29%	43%	0%
	Saskatchewan	25%	38%	38%	0%	0%
UNITED STATES	Alaska	13%	0%	63%	25%	0%
	Colorado	0%	9%	45%	18%	27%
	Kansas	30%	50%	20%	0%	0%
	Louisiana	9%	55%	27%	9%	0%
	Mississippi	14%	71%	14%	0%	0%
	Montana	17%	50%	33%	0%	0%
	New Mexico	9%	45%	36%	9%	0%
	North Dakota	38%	50%	13%	0%	0%
	Oklahoma	20%	70%	10%	0%	0%
	Texas	26%	61%	13%	0%	0%
	Wyoming	36%	45%	9%	9%	0%
	US Offshore—Gulf of Mexico	0%	27%	53%	20%	0%

Note: Percentages may not add up to 100 due to rounding.

Labor regulations and employment agreements (table 5)

Canada

This year, investors expressed heightened concerns over the impact of labor regulations, employment agreements, labor militancy or work disruptions, and local hiring requirements for the three Canadian provinces included in this study. In particular, 57 percent of respondents for British Columbia and 44 percent of respondents for Alberta (down 24 percentage points from last year) expressed concerns over this area. The top performing Canadian jurisdiction on this measure was Saskatchewan, with only 33 percent of the respondents citing this factor as dissuading investment, which represents an increase of 25 percentage points of the negative perception for this factor from the previous year.

United States

In contrast, no respondents for Mississippi, Montana, and North Dakota expressed that labour regulations and employment agreements were deterring investment. Similarly, only 5 percent of respondents for Texas and 10 percent for Wyoming claimed that labour regulations and employment agreements were dissuading investment. The poorest performing American states were Colorado and New Mexico where 63 percent and 44 percent of respondents, respectively, were deterred by this factor.

Overall

Labour regulations and employment agreements are more of a concern for investors in Canada compared to the United States. The percentage of respondents for the Canadian provinces indicating that this factor was a deterrent to investment was, on average, 45 percent (up 7 percentage points from last year's survey) compared to 19 percent for the United States.

Table 5: Labor Regulations and Employment Agreements

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	13%	44%	31%	13%	0%
	British Columbia	0%	43%	29%	29%	0%
	Saskatchewan	33%	33%	33%	0%	0%
UNITED STATES	Alaska	0%	67%	33%	0%	0%
	Colorado	0%	38%	38%	13%	13%
	Kansas	25%	50%	25%	0%	0%
	Louisiana	0%	80%	20%	0%	0%
	Mississippi	0%	100%	0%	0%	0%
	Montana	20%	80%	0%	0%	0%
	New Mexico	11%	44%	44%	0%	0%
	North Dakota	29%	71%	0%	0%	0%
	Oklahoma	13%	63%	25%	0%	0%
	Texas	26%	68%	5%	0%	0%
	Wyoming	60%	30%	10%	0%	0%
	US Offshore—Gulf of Mexico	8%	83%	8%	0%	0%

Note: Percentages may not add up to 100 due to rounding.

Regulatory duplication and inconsistencies (table 6)

Canada

Investors expressed significant concerns over regulatory duplication and inconsistencies for Canadian provinces compared to last year's survey and compared to their US competitors. Nevertheless, this factor presented an improvement of 20 percentage points over the 2021 survey.

In Saskatchewan and Alberta, at least 55 percent of respondents cited regulatory duplication and inconsistencies as a key factor deterring investment. In particular, 56 percent of respondents for Alberta (down 15 percentage points from last year's version) and 56 percent for Saskatchewan (down 11 percentage points from 2021) cited regulatory duplication and inconsistencies as a policy factor adversely affecting investment decisions. In addition, 43 percent of respondents for British Columbia indicated that this factor was discouraging investment.

United States

In contrast, none of the respondents for Montana indicated that regulatory duplication and inconsistencies were a deterrent to investment. Similarly, only 15 percent of respondents for Texas and 17 percent for Mississippi were deterred by regulatory duplication and inconsistencies. The worst performing US state was Colorado, where 67 percent of respondents were deterred by this factor.

Overall

This year, regulatory duplication and inconsistencies was an important concern for investors in Canada when compared to the United States. However, the factor saw an improvement over the 2021 survey. The percentage of respondents for the Canadian provinces indicating that this factor was a deterrent to investment was, on average, 52 percent (down 20 percentage points from last year's survey) compared to 33 percent for the United States (down 12 percentage points from the 2021 survey).

Table 6: Regulatory Duplication and Inconsistencies

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	0%	44%	44%	6%	6%
	British Columbia	0%	57%	14%	29%	0%
	Saskatchewan	11%	33%	44%	11%	0%
UNITED STATES	Alaska	0%	50%	50%	0%	0%
	Colorado	0%	33%	44%	0%	22%
	Kansas	11%	56%	33%	0%	0%
	Louisiana	0%	70%	30%	0%	0%
	Mississippi	0%	83%	17%	0%	0%
	Montana	0%	100%	0%	0%	0%
	New Mexico	0%	50%	50%	0%	0%
	North Dakota	0%	75%	25%	0%	0%
	Oklahoma	0%	67%	33%	0%	0%
	Texas	15%	70%	15%	0%	0%
	Wyoming	30%	40%	30%	0%	0%
	US Offshore—Gulf of Mexico	0%	50%	42%	8%	0%

Note: Percentages may not add up to 100 due to rounding.

Legal system (table 7)

Canada

Investor perceptions of the legal system vary by province. For instance, 14 percent of respondents for British Columbia indicated that this factor was a deterrent to investment. Likewise, 22 percent and 19 percent of respondents for Saskatchewan and Alberta, respectively, suggested that the general legal system was a deterrent for investment.

United States

None of the respondents for five US jurisdictions (Wyoming, Kansas, Montana, North Dakota, and Oklahoma) indicated the legal system was a deterrent to investment. In contrast, 16 percent of respondents for Texas, 17 percent for Mississippi, and 17 percent for US Offshore—Gulf of Mexico were deterred by this factor. As in the previous year, the worst performing US state was Colorado with 38 percent of respondents citing the legal system as a deterrent to investment.

Overall

As for previous factors, this year the percentage of respondents deterred by the legal system was lower in the US than in Canada. The percentage of respondents deterred by the legal system was, on average, 18 percent for Canada and 13 percent for the US.

Table 7: Legal System

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	25%	56%	13%	6%	0%
	British Columbia	29%	57%	0%	14%	0%
	Saskatchewan	44%	33%	22%	0%	0%
UNITED STATES	Alaska	20%	60%	20%	0%	0%
	Colorado	0%	63%	13%	0%	25%
	Kansas	13%	88%	0%	0%	0%
	Louisiana	11%	56%	22%	11%	0%
	Mississippi	17%	67%	17%	0%	0%
	Montana	20%	80%	0%	0%	0%
	New Mexico	20%	60%	20%	0%	0%
	North Dakota	13%	88%	0%	0%	0%
	Oklahoma	22%	78%	0%	0%	0%
	Texas	26%	58%	16%	0%	0%
	Wyoming	44%	56%	0%	0%	0%
	US Offshore—Gulf of Mexico	25%	58%	17%	0%	0%

Note: Percentages may not add up to 100 due to rounding.

Commercial risks

Fiscal terms and taxation in general (tables 8 and 9)

Canada

Fiscal terms and taxation in general continue to be key areas of concern for some Canadian provinces when compared to US states.

For instance, the share of respondents for Alberta citing fiscal terms and taxation in general as factors potentially deterring investment slightly increased between 2021 and 2022. This year, 26 percent of respondents (up 8 percentage points from last year's survey) indicated licenses, royalties, production taxes, i.e., fiscal terms, were affecting investment decisions and 31 percent of respondents (up 4 percentage points from last year's survey) claimed the level of taxation in the province was deterring investment. However, on taxes in general, Alberta is now the top performer among Canadian provinces and 9th among the jurisdictions included in the survey.

Saskatchewan is another province for which concerns by survey respondents about fiscal terms increased slightly. This year, 15 percent of respondents claimed that fiscal terms were discouraging investment in this province (making it the top performer among Canadian provinces and 7th overall on this policy factor) and 33 percent cited taxes in general in Saskatchewan as a key deterrent for investment.

In comparison with the US, some Canadian provinces continue to perform poorly in the fiscal terms and taxation area. In British Columbia, the worst performer among Canadian provinces, 67 percent of respondents indicated that fiscal terms were a deterrent and 86 percent cited taxation as dissuading investment.

United States

In contrast, Oklahoma had no respondents claiming that fiscal terms were affecting investment decisions. For Texas and Wyoming, top performers in the ranking, only 8 percent of respondents suggested fiscal terms in those states affect their investment decisions. Similarly, only 9 percent of respondents for Wyoming, 14 percent for Alaska, and 20 percent for Oklahoma cited taxes in general as deterring investments. The share of respondents indicating that fiscal terms and taxation were deterring investment in North Dakota were 11 percent and 22 percent, respectively.

Colorado was the worst performer on fiscal terms and taxation, with 69 percent and 70 percent of respondents, respectively, saying they were deterred by these factors.

Table 8: Fiscal Terms

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	26%	47%	21%	0%	5%
	British Columbia	11%	22%	44%	22%	0%
	Saskatchewan	46%	23%	8%	8%	0%
UNITED STATES	Alaska	15%	31%	8%	23%	0%
	Colorado	8%	31%	23%	23%	23%
	Kansas	38%	88%	0%	13%	0%
	Louisiana	43%	21%	21%	7%	0%
	Mississippi	20%	30%	10%	10%	0%
	Montana	33%	67%	0%	11%	0%
	New Mexico	30%	80%	30%	0%	0%
	North Dakota	122%	22%	0%	11%	0%
	Oklahoma	29%	41%	0%	0%	0%
	Texas	77%	12%	4%	4%	0%
	Wyoming	77%	23%	0%	8%	0%
	US Offshore—Gulf of Mexico	43%	36%	14%	21%	0%

Note: Percentages may not add up to 100 due to rounding.

Table 9: Taxation in General

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	6%	63%	25%	0%	6%
	British Columbia	0%	14%	57%	29%	0%
	Saskatchewan	22%	44%	33%	0%	0%
UNITED STATES	Alaska	0%	86%	0%	14%	0%
	Colorado	0%	30%	20%	40%	10%
	Kansas	30%	60%	10%	0%	0%
	Louisiana	9%	55%	27%	9%	0%
	Mississippi	14%	57%	14%	14%	0%
	Montana	33%	50%	0%	17%	0%
	New Mexico	9%	55%	36%	0%	0%
	North Dakota	33%	44%	11%	11%	0%
	Oklahoma	20%	60%	20%	0%	0%
	Texas	36%	45%	14%	5%	0%
	Wyoming	45%	45%	0%	9%	0%
	US Offshore—Gulf of Mexico	7%	60%	7%	27%	0%

Note: Percentages may not add up to 100 due to rounding.

Overall

On average, investors were more concerned about taxes than fiscal terms in Canada compared to the United States. The percentage of respondents for Canadian provinces indicating that fiscal terms were deterring investment was, on average, 36 percent compared to 22 percent for the United States (a 14 percentage point gap). Similarly, the percentage of respondents indicating that taxation in general was deterring investment was, on average, 50 percent for Canada compared to 26 percent for the United States (a 24 percentage point difference).

Trade barriers (table 10)

Canada

Investor perceptions of trade barriers in Canada are relatively low and vary by province. Alberta was the top performer for Canada in this category, with 19 percent of respondents suggesting trade barriers were a deterrent to investment. Similarly, 22 percent of respondents for Saskatchewan found in trade barriers a deterrent (down 11 percentage points from 2021). British Columbia was the province with the worst performance, with 29 percent of respondents pointing to trade barriers as a deterrent.

United States

In contrast, none of the respondents for three US states (Mississippi, North Dakota and Montana) cited trade barriers as a deterrent to investment. Similarly, only 10 percent of respondents for Texas and Wyoming, and 11 percent for Oklahoma indicated that this factor was a deterrent to investment. The worst performing jurisdiction in the US—and in fact in all the jurisdictions—was Colorado, where 44 percent of respondents were deterred by trade barriers.

Overall

The percentage of respondents deterred by trade barriers is low and similar in Canada and the United States. The percentage of respondents deterred by trade barriers was, on average, 23 percent for Canada and 16 percent for the US.

Table 10: Trade Barriers

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	25%	56%	13%	6%	0%
	British Columbia	0%	71%	29%	0%	0%
	Saskatchewan	33%	44%	22%	0%	0%
UNITED STATES	Alaska	17%	50%	33%	0%	0%
	Colorado	0%	56%	33%	11%	0%
	Kansas	33%	44%	22%	0%	0%
	Louisiana	0%	80%	10%	10%	0%
	Mississippi	17%	83%	0%	0%	0%
	Montana	20%	80%	0%	0%	0%
	New Mexico	10%	60%	30%	0%	0%
	North Dakota	25%	75%	0%	0%	0%
	Oklahoma	22%	67%	11%	0%	0%
	Texas	25%	65%	5%	5%	0%
	Wyoming	30%	60%	10%	0%	0%
	US Offshore—Gulf of Mexico	17%	67%	0%	17%	0%

Note: Percentages may not add up to 100 due to rounding.

Quality of infrastructure (table 11)

Canada

Investor perceptions of the quality of infrastructure varies by province. For example, 11 percent of respondents for Saskatchewan (top performing Canadian province and 9th overall in this policy area) indicated that the quality of infrastructure was adversely affecting investment decisions. The proportion rose to 43 percent of respondents for British Columbia.

United States

In contrast, none of the respondents for Kansas, Louisiana, Texas, and Oklahoma claimed that the quality of infrastructure was a deterrent to investment. Similarly, only 9 percent of respondents for New Mexico and 10 percent for Wyoming were deterred by this factor. The worst performing US states were once again Alaska and Colorado, where 71 percent and 50 percent of respondents, respectively, cited the quality of infrastructure as a factor dissuading investment.

Overall

Investors expressed heightened concerns about the quality of infrastructure in Canada compared to the United States, though that result was largely skewed by the responses for British Columbia. The percentage of respondents deterred by the quality of infrastructure was, on average, 24 percent for Canada and 17 percent for the United States.

Table 11: Quality of Infrastructure

		1: Encourages investment 2: Not a deterrent to investment 3: Mild deterrent to investment 4: Strong deterrent to investment 5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	29%	53%	6%	12%	0%
	British Columbia	14%	43%	43%	0%	0%
	Saskatchewan	33%	56%	11%	0%	0%
UNITED STATES	Alaska	0%	29%	43%	29%	0%
	Colorado	0%	50%	30%	10%	10%
	Kansas	44%	56%	0%	0%	0%
	Louisiana	10%	90%	0%	0%	0%
	Mississippi	17%	67%	17%	0%	0%
	Montana	14%	57%	14%	14%	0%
	New Mexico	27%	64%	9%	0%	0%
	North Dakota	20%	70%	0%	10%	0%
	Oklahoma	40%	60%	0%	0%	0%
	Texas	55%	45%	0%	0%	0%
	Wyoming	70%	20%	10%	0%	0%
	US Offshore—Gulf of Mexico	25%	67%	8%	0%	0%

Note: Percentages may not add up to 100 due to rounding.

Labor availability and skills (table 12)

Canada

Survey respondents reported a growing concern about labor availability and skills. In particular, 33 percent of respondents for Saskatchewan and 43 percent of the respondents for British Columbia indicated that this factor was a deterrent to investment. Likewise, 44 percent of respondents for Alberta said the availability of labour and skills was having an adverse impact on that province's investment attractiveness, up 28 percentage points from last year.

United States

Similarly, 44 percent of respondents for Kansas, 40 percent for Louisiana, and 50 percent for Colorado cited labor availability and skills as a deterrent to investment. However, only 20 percent of respondents for Wyoming, Texas, and Oklahoma indicated that this factor was affecting investment. The worst performing state was New Mexico, where 55 percent of respondents were deterred by this factor.

Overall

This year, the percentage of respondents deterred by labour availability and skills was higher in Canada than in the US. The percentage of respondents deterred by labour availability and skills was, on average, 40 percent for Canada and 31 percent for the United States.

Table 12: Labor Availability and Skills

		1: Encourages investment 2: Not a deterrent to investment 3: Mild deterrent to investment 4: Strong deterrent to investment 5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	19%	38%	38%	6%	0%
	British Columbia	29%	29%	29%	14%	0%
	Saskatchewan	33%	33%	33%	0%	0%
UNITED STATES	Alaska	0%	67%	17%	17%	0%
	Colorado	0%	50%	40%	10%	0%
	Kansas	11%	44%	44%	0%	0%
	Louisiana	0%	60%	30%	10%	0%
	Mississippi	0%	67%	17%	17%	0%
	Montana	0%	80%	20%	0%	0%
	New Mexico	9%	36%	45%	9%	0%
	North Dakota	11%	56%	22%	11%	0%
	Oklahoma	20%	60%	20%	0%	0%
	Texas	30%	50%	15%	5%	0%
	Wyoming	50%	30%	10%	10%	0%
	US Offshore—Gulf of Mexico	42%	50%	8%	0%	0%

Note: Percentages may not add up to 100 due to rounding.

Geopolitical risks

Political stability (table 13)

Canada

Investor concerns related to political stability increased this year for Canada and are slightly higher than in the US. For example, 57 percent of respondents for British Columbia (worst performing Canadian province on this measure) and 47 percent of respondents for Alberta indicated that this factor was a deterrent to investment. Saskatchewan was the best performing Canadian jurisdiction in this area, with 22 percent of the respondents citing this factor as a deterrent.

United States

None of the respondents for Mississippi, Kansas, or Wyoming indicated that political stability was a deterrent to investment. Similarly, only 5 percent of respondents for Texas and 10 percent for Oklahoma said this policy factor was a deterrent for investment. In general, multiple jurisdictions in the US improved over last year's survey. Alaska saw the best improvement, with only 14 percent of respondents pointing to this factor as a deterrent for investment, down 40 percentage points from 2021. However, Colorado, with 70 percent of respondents citing that political stability was adversely affecting their investment decisions, was once again the worst performer in this factor both for the United States and Canada.

Overall

Investor concerns over political stability are higher for Canada than the United States, which marks a change from last year. The percentage of respondents whose investment decisions were deterred by the political stability factor was, on average, 42 percent for Canada and 16 percent for the United States.

Table 13: Political Stability

		1: Encourages investment 2: Not a deterrent to investment 3: Mild deterrent to investment 4: Strong deterrent to investment 5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	24%	29%	29%	18%	0%
	British Columbia	14%	29%	43%	14%	0%
	Saskatchewan	44%	33%	11%	11%	0%
UNITED STATES	Alaska	14%	71%	14%	0%	0%
	Colorado	0%	30%	30%	0%	40%
	Kansas	11%	89%	0%	0%	0%
	Louisiana	0%	90%	10%	0%	0%
	Mississippi	17%	83%	0%	0%	0%
	Montana	17%	67%	17%	0%	0%
	New Mexico	0%	70%	30%	0%	0%
	North Dakota	40%	50%	10%	0%	0%
	Oklahoma	50%	40%	10%	0%	0%
	Texas	57%	38%	5%	0%	0%
	Wyoming	70%	30%	0%	0%	0%
	US Offshore—Gulf of Mexico	8%	67%	17%	8%	0%

Note: Percentages may not add up to 100 due to rounding.

Security (table 14)

Canada

The three Canadian provinces included in the survey this year performed worse on security than they did in the 2021 survey. In particular, Saskatchewan saw the highest deterioration, with 22 percent of respondents citing security as a deterrent to investment, up 14 percentage points from last year. Similarly, 25 percent of respondents for Alberta and 29 percent for British Columbia claimed that security was adversely affecting investment decisions, up 17 and 19 percentage points from last year.

United States

None of the respondents for Alaska, Kansas, Mississippi, Oklahoma, Montana, Texas, or Wyoming indicated that security was a deterrent to investment in those states. However, 13 percent of respondents for North Dakota claimed the state's security levels were deterring investment. The worst performing jurisdiction for this policy factor was Colorado where 33 percent of respondents were deterred by this factor.

Overall

Historically, the percentage of respondents deterred by security in both countries is relatively low. However, this year, the US performed better than Canada due to increasing concerns about security in the latter country. The percentage of respondents deterred by security issues was, on average, 25 percent for Canada compared to 6 percent for the United States.

Table 14: Security

		1: Encourages investment 2: Not a deterrent to investment 3: Mild deterrent to investment 4: Strong deterrent to investment 5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	38%	38%	25%	0%	0%
	British Columbia	29%	43%	14%	14%	0%
	Saskatchewan	44%	33%	22%	0%	0%
UNITED STATES	Alaska	0%	100%	0%	0%	0%
	Colorado	0%	67%	22%	11%	0%
	Kansas	13%	88%	0%	0%	0%
	Louisiana	0%	89%	11%	0%	0%
	Mississippi	17%	83%	0%	0%	0%
	Montana	20%	80%	0%	0%	0%
	New Mexico	11%	78%	11%	0%	0%
	North Dakota	25%	63%	13%	0%	0%
	Oklahoma	44%	56%	0%	0%	0%
	Texas	37%	63%	0%	0%	0%
	Wyoming	44%	56%	0%	0%	0%
US Offshore—Gulf of Mexico	25%	67%	8%	0%	0%	

Note: Percentages may not add up to 100 due to rounding.

Land-related risks

Uncertainty concerning disputed land claims and protected areas (tables 15 and 16)

Canada

Two policy areas that continue to hamper investor perceptions of some Canadian jurisdictions are uncertainty concerning disputed land claims and uncertainty over which areas will be protected. Investors expressed significant concern over these factors for British Columbia, where 86 percent and 71 percent of respondents, respectively, saw uncertainty surrounding disputed land claims and uncertainty over protected areas as a deterrent. In Alberta, 56 percent of respondents cited uncertainty concerning disputed land claims as a deterrent and 63 percent saw uncertainty over protected areas as a deterrent.

Saskatchewan is the top performing province in both of these factors, with 44 percent of respondents citing disputed land claims and 33 percent indicating protected areas as deterrents to investment.

United States

For the 2022 survey, none of the respondents for Oklahoma claimed that uncertainty regarding protected areas was a deterrent for investment, though 33 percent said that disputed land claims are. Similarly, 5 and 11 percent of respondents respectively indicated that uncertainty concerning disputed land claims in Texas and Louisiana was a deterrent to investment while 27 percent for Texas and 36 percent for Louisiana indicated that uncertainty concerning protected areas was an issue.

On the uncertainty concerning disputed land claims question Alaska was the worst performer with 80 percent of respondents saying this factor is a deterrent for investing. Similarly, all respondents (100 percent) for Alaska suggested that uncertainty regarding protected areas was a deterrent for investing in the state. Colorado was the second worst performer in the United States in terms of uncertainty concerning protected areas, with 73 percent of its respondents saying they were deterred by this factor. New Mexico was the second worst US performer on uncertainty over disputed land claims with half of the respondents claiming this factor was a deterrent for investment.

Table 15: Disputed Land Claims

		1: Encourages investment	2: Not a deterrent to investment	3: Mild deterrent to investment	4: Strong deterrent to investment	5: Would not pursue investment due to this factor
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	13%	31%	31%	19%	6%
	British Columbia	0%	14%	14%	71%	0%
	Saskatchewan	22%	33%	22%	22%	0%
UNITED STATES	Alaska	0%	20%	80%	0%	0%
	Colorado	0%	75%	25%	0%	0%
	Kansas	50%	50%	0%	0%	0%
	Louisiana	11%	78%	11%	0%	0%
	Mississippi	0%	100%	0%	0%	0%
	Montana	0%	80%	20%	0%	0%
	New Mexico	0%	50%	40%	10%	0%
	North Dakota	0%	75%	25%	0%	0%
	Oklahoma	22%	44%	33%	0%	0%
	Texas	26%	68%	5%	0%	0%
	Wyoming	33%	44%	22%	0%	0%
	US Offshore—Gulf of Mexico	17%	67%	8%	8%	0%

Note: Percentages may not add up to 100 due to rounding.

Overall

Overall, investors expressed greater concerns over disputed land claims and protected areas in Canada than in the United States. The percentage of respondents in Canadian provinces indicating that uncertainty concerning disputed land claims was deterring investment was, on average, 62 percent compared to 24 percent for the United States. Furthermore, the percentage of respondents for Canadian provinces indicating that uncertainty concerning protected areas was deterring investment was, on average, 56 percent compared to 40 percent for the United States.

Table 16: Protected Areas

		1: Encourages investment		2: Not a deterrent to investment		
		3: Mild deterrent to investment		4: Strong deterrent to investment		
		5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	0%	38%	50%	6%	6%
	British Columbia	0%	29%	43%	29%	0%
	Saskatchewan	11%	56%	33%	0%	0%
UNITED STATES	Alaska	0%	0%	43%	43%	14%
	Colorado	0%	27%	9%	27%	36%
	Kansas	33%	56%	11%	0%	0%
	Louisiana	0%	64%	27%	9%	0%
	Mississippi	0%	83%	0%	17%	0%
	Montana	0%	80%	0%	20%	0%
	New Mexico	0%	50%	40%	10%	0%
	North Dakota	13%	50%	25%	13%	0%
	Oklahoma	11%	89%	0%	0%	0%
	Texas	18%	55%	18%	9%	0%
	Wyoming	10%	40%	40%	10%	0%
	US Offshore—Gulf of Mexico	0%	43%	29%	29%	0%

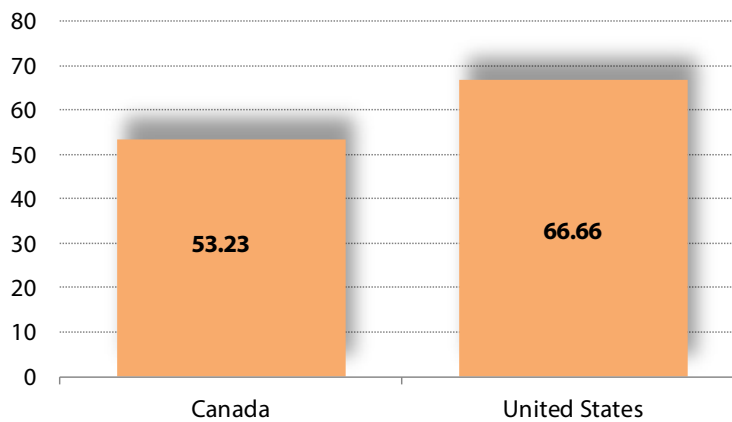
Note: Percentages may not add up to 100 due to rounding.

Overview

Our analysis of the 2022 survey results indicates that, while the second year of the Biden administration in the United States coincides with an 11-point decrease in its PPI score, the extent of negative sentiment regarding key factors driving petroleum investment decisions continues to be higher in Canada than the United States. In fact, as figure 7 illustrates, Canada's median PPI score (55.23) is over 10 points lower than that for the United States (66.66) demonstrating that the US has a competitive advantage over Canada in most policy areas. This year in particular, Canada had a higher share of negative responses relative to the US in 15 of the 16 policy factors.

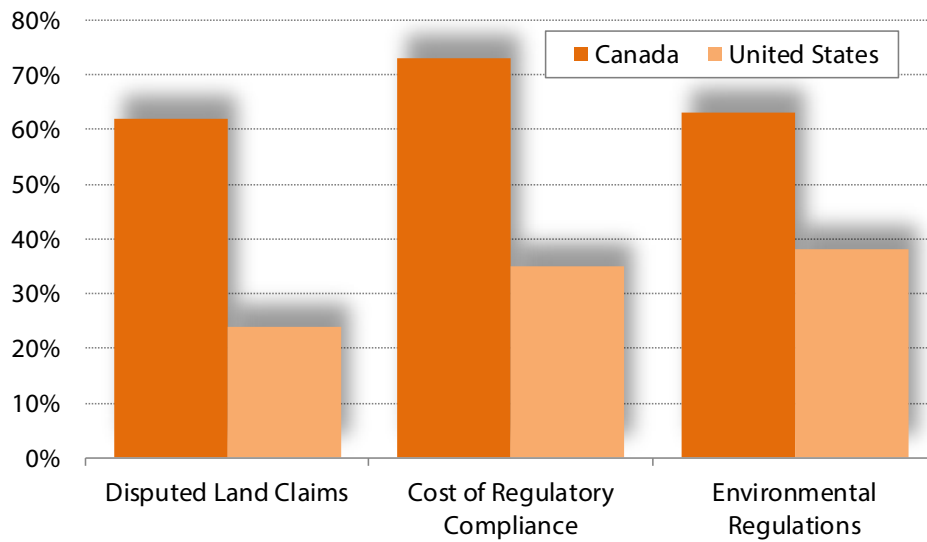
In this year's survey, investors pointed to uncertainty concerning disputed land claims as one of the key deterrents for investment in Canada when compared with the United States (figure 8). On average, 62 percent of respondents for Canada indicated that this factor is a deterrent for investment, compared with only 24 percent in the United States.

Figure 7: Canada-US Oil and Gas Investment Attractiveness, Median PPI Scores by Country



Additionally, investors continue to see Canada's regulatory environment as onerous compared to many competing US jurisdictions. In particular, investors cite Canada's cost of regulatory compliance and the uncertainty regarding environmental regulations as the top areas of concern (figure 8). On average, 73 percent of respondents for Canada are deterred by the cost of regulatory compliance, compared to 35 percent for the United States, a difference of 37 percentage points between regions. When considering environmental regulations, on average, 63 percent of respondents for Canada are deterred by this factor compared to 38 percent for the United States, a

Figure 8: Top Areas of Concern for Canada and the US, Average Deterrence by Factor



difference of 25 percentage points. This result is likely reflective of a number of regulatory changes in Canada in recent years that have resulted in a less competitive environment in Canadian provinces compared with many competing US jurisdictions.⁶

⁶ There are many potential reasons for investors to see Canada's investment attractiveness as declining. Some factors include insufficient pipeline capacity, the federal carbon tax, Bills C-69 and C-48, and onerous regulations.

Appendix 1: Additional Data

What follows is additional data that was included in the calculation of PPI scores but was not discussed in the analysis section (**Table 17**).

Table 17: Quality of the Geological Database

		1: Encourages investment 2: Not a deterrent to investment 3: Mild deterrent to investment 4: Strong deterrent to investment 5: Would not pursue investment due to this factor				
Response		Percentages				
		1	2	3	4	5
CANADA	Alberta	65%	29%	6%	0%	0%
	British Columbia	71%	14%	14%	0%	0%
	Saskatchewan	44%	44%	11%	0%	0%
UNITED STATES	Alaska	0%	86%	14%	0%	0%
	Colorado	0%	60%	40%	0%	0%
	Kansas	44%	56%	0%	0%	0%
	Louisiana	40%	40%	10%	10%	0%
	Mississippi	17%	67%	17%	0%	0%
	Montana	17%	83%	0%	0%	0%
	New Mexico	40%	40%	20%	0%	0%
	North Dakota	33%	67%	0%	0%	0%
	Oklahoma	50%	40%	10%	0%	0%
	Texas	57%	24%	19%	0%	0%
	Wyoming	70%	30%	0%	0%	0%
	US Offshore—Gulf of Mexico	33%	58%	8%	0%	0%

Note: Percentages may not add up to 100 due to rounding.

Appendix 2: Previous Methodology and Additional Sub-Indices

The methodology previously used in 2015 to calculate the Policy Perception Index is as follows. For each jurisdiction, we calculated the percentage of negative scores for each of the 16 factors. We then developed an index for each factor by assigning the jurisdiction with the highest percentage of negative responses a value of 100, and assigning correspondingly lower values to the other jurisdictions according to their scores. Upstream investors consider jurisdictions with the lowest index values the most attractive, and thus rank them above jurisdictions that scored higher as a consequence of having greater proportions of negative scores.

The Policy Perception Index value (referred to in surveys prior to 2013 as the All-Inclusive Composite Index) for each jurisdiction is derived from the equally-weighted scores achieved on all 16 factors. This index is the most comprehensive measure of the extent of policy-related investment barriers within each jurisdiction. Most of the discussion that follows is based on the jurisdictional scores and rankings obtained using this index **A high score on this measure reflects considerable negative sentiment on the part of respondents and indicates that they regard the jurisdiction in question as relatively unattractive for investment.**

In previous surveys we also included three additional sub-indices that focused on particular dimensions of policy, such as the regulatory climate and perceptions of geopolitical risk. In order to streamline the report and in response to feedback from respondents, we did not calculate these separate indices last year or this year. However, we have included below descriptions of the indices and which measures would be used to calculate them. For those wishing to calculate these additional indices, all data from the survey is publicly available at www.fraserinstitute.org.

Commercial Environment Index

The Commercial Environment Index ranks jurisdictions on five factors that affect after-tax cash flow and the cost of undertaking petroleum exploration and development activities:

- fiscal terms
- taxation in general
- trade barriers
- quality of infrastructure
- labor availability and skills

We calculated the scores for the Commercial Environment Index for each jurisdiction by averaging the negative scores for each of these five factors. A high index value indicates that industry managers and executives consider that the business conditions reflected in this measure constitute significant barriers to investment.

Regulatory Climate Index

The Regulatory Climate Index reflects the scores assigned to jurisdictions for the following six factors:

- the cost of regulatory compliance
- regulatory enforcement
- environmental regulations
- labor regulations and employment agreements
- regulatory duplication and inconsistencies
- legal system

A relatively high value on the Regulatory Climate Index indicates that regulations, requirements, and agreements in a jurisdiction constitute a substantial barrier to investment, resulting in a relatively poor ranking.

Geopolitical Risk Index

The Geopolitical Risk Index calculates scores for political stability and security. These factors are considered to be more difficult to overcome than either regulatory or commercial barriers, because for significant progress to be made on them, a change in the political landscape is usually required. A high score on the Geopolitical Risk Index indicates that investment in that jurisdiction is relatively unattractive because of political instability and/or security issues that threaten the physical safety of personnel or present risks to an investor's facilities.

Appendix 3: Policy Perception Index 2022 versus 2021

Policy Perception Index

Jurisdiction	2022		2021	
	PPI Score	Rank	PPI Score	Rank
Wyoming*	100.00	1/15	97.54	3/22
Texas	91.55	2/15	100.00	1/22
Oklahoma*	88.24	3/15	98.38	2/22
Kansas*	81.72	4/15	90.68	5/22
North Dakota*	78.38	5/15	94.71	4/22
Saskatchewan*	75.97	6/15	75.11	11/22
Montana*	74.69	7/15	77.92	8/22
Mississippi*	71.73	8/15	83.46	6/22
US Offshore—Gulf of Mexico	59.25	9/15	66.79	13/22
Louisiana*	58.52	10/15	76.01	10/22
New Mexico*	54.70	11/15	55.63	15/22
Alberta	51.44	12/15	70.43	12/22
Alaska*	41.12	13/15	51.77	17/22
British Columbia*	32.29	14/15	50.44	18/22
Colorado*	0.00	15/15	14.59	21/22

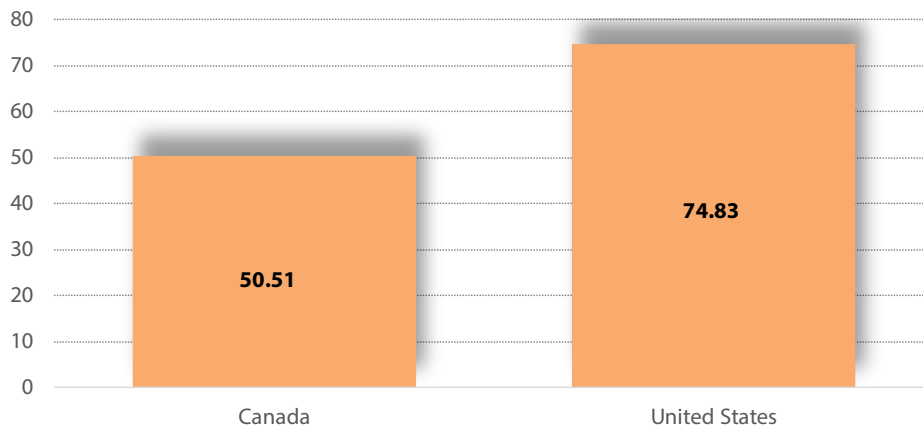
*Jurisdictions that received 5 to 9 responses in the survey are shown with an asterisk.

Appendix 4: Weighted Median PPI Regional Scores

Weighted Median PPI Regional Scores are calculated using standardized PPI scores and oil and gas reserves data for each jurisdiction. This calculation considers the importance of geological factors in investment attractiveness and decisions.

Oil and gas reserves data were taken from Canada Energy Regulator (2022),⁷ Canadian Association of Petroleum Producers (2022), and the United States Energy Information Administration (2022).

Canada-US Investment Attractiveness, Regional Median PPI Scores, Weighted by Oil and Gas Reserves



⁷ Oil and gas reserves data as of 2019.

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Acknowledgements

The authors wish to thank the anonymous reviewers for their comments, suggestions, and insights. Any remaining errors or oversights are the sole responsibility of the authors. As the researchers have worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

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Date of issue

December 2022

ISBN

978-0-88975-719-6

Citation

Julio Mejía and Elmira Aliakbari (2022). *Canada-US Energy Sector Competitiveness Survey 2022*. Fraser Institute. <<http://www.fraserinstitute.org>>.

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