Fraser Institute Annual

SURVEY OF MINING COMPANIES 2023

Julio Mejía & Elmira Aliakbari





Contents

Survey Information	1
Executive Summary	2
Survey Methodology	5
Summary Indices	10
Global Survey Rankings	25
Global Results	27
Overview	52
Permit Times for Mining Exploration 2023	55
Explanation of the Figures	71
About the Authors	87
Publishing Information	88
About the Fraser Institute	89
Editorial Advisory Board	90

Survey Information

The Fraser Institute Annual Survey of Mining Companies was sent to approximately 2,045 explorations, development, and other mining-related companies around the world. The survey was conducted from August 16, 2023 to January 9, 2024. The companies that participated in the survey reported exploration spending of US\$4.2 billion in 2022 and US\$4.1 billion in 2023. The 2023 results from the Permit Times for Mining Exploration publication are included in this year's survey.

Executive Summary

This report presents the results of the Fraser Institute's 2023 annual survey of mining and exploration companies. The survey is an attempt to assess how mineral endowments and public policy factors such as taxation and regulatory uncertainty affect exploration investment. The survey was circulated electronically to approximately 2,045 individuals between August 16, 2023 and January 9, 2024. Survey responses have been tallied to rank provinces, states, and countries according to the extent that public policy factors encourage or discourage mining investment.

We received a total of 293 responses for the survey, providing sufficient data to evaluate 86 jurisdictions. By way of comparison, in 2022 we evaluated 62 jurisdictions, in 2021 84 jurisdictions, in 2027 77 jurisdictions and in 2019 76 jurisdictions. The number of jurisdictions that can be included in the study tends to wax and wane as the mining sector grows or shrinks due to commodity prices and sectoral factors.

This year's survey includes an analysis of permit times, as it did last year's survey.

The Investment Attractiveness Index takes both mineral and policy perception into consideration

We construct an overall Investment Attractiveness Index by combining the Best Practices Mineral Potential Index, which rates regions based on their geologic attractiveness, and the Policy Perception Index, a composite index that measures the effects of government policy on attitudes toward exploration investment. While it is useful to measure the attractiveness of a jurisdiction based on policy factors such as onerous regulations, taxation levels, the quality of infrastructure, and the other policy related questions that respondents answered, the Policy Perception Index alone does not recognize the fact that investment decisions are often sizably based on the pure mineral potential of a jurisdiction. Indeed, as discussed below, respondents consistently indicate that policy factors determine about 40 percent of their investment decision.

The top

The top jurisdiction in the world for investment based on the Investment Attractiveness Index is Utah, which moved up from 17th place in 2022. Nevada, which topped the ranking last year, ranked 2nd. Saskatchewan continues to be on the podium, ranking 3rd again this year. Rounding out the top 10 are Western Australia, Quebec, Manitoba, Arizona, Northern Territory, Newfoundland & Labrador, and Ontario. Canada has the most jurisdictions (5) in this year's top 10. The remaining five are in the United States (3) and Australia (2).

The bottom

When considering both policy and mineral potential in the Investment Attractiveness Index, Niger ranks as the least attractive jurisdiction in the world for investment followed by China, Solomon Islands, and Argentina: La Rioja. Also, in the bottom 10 (beginning with the less attractive for investment) are Mozambique, Zimbabwe, Senegal, Kazakhstan, Bolivia, and Cambodia.

Africa has the most jurisdictions (4) in the bottom 10, followed by Asia (3), Oceania (1), Argentina (1) and Latin America and the Caribbean Basin (1).

Policy Perception Index: A "report card" to governments on the attractiveness of their mining policies

While geologic and economic considerations are important factors in mineral exploration, a region's policy climate is also an important investment consideration. The Policy Perception Index (PPI), is a composite index that measures the overall policy attractiveness of the 86 jurisdictions in the survey. The index is composed of survey responses to policy factors that affect investment decisions. The policy factors we examined include uncertainty concerning the administration of current regulations, environmental regulations, regulatory duplication, the legal system and taxation regime, uncertainty concerning protected areas and disputed land claims, infrastructure, socioeconomic and community development conditions, trade barriers, political stability, labor regulations, quality of the geological database, security, and labor and skills availability.

The top

Utah ranked first this year with the highest PPI score of 100, moving up from fourth place in the 2022 report. Saskatchewan took the second spot held by Botswana in 2022. Along with Utah and Saskatchewan, the top 10 ranked jurisdictions are Manitoba, Botswana, Nevada, Quebec, Arizona, Finland, Wyoming, and Alberta.

The United States and Canada have the most jurisdictions (4 each) in the top 10 followed by Africa (1) and Europe (1).

The bottom

The 10 least attractive jurisdictions for investment based on the PPI rankings (starting with the worst) are Argentina: La Rioja, China, Niger, Colombia, Mongolia, India, Mozambique, Philippines, Zimbabwe, and Democratic Republic of Congo (DRC).

This year, Africa contributes four of the bottom 10 jurisdictions, followed by Asia (3), Argentina (1), Latin America and the Caribbean Basin (1) and Oceania (1).

Survey Methodology

Survey background

The mining industry is an important contributor both to Canada's economy and to economies around the world. It provides not only materials essential for all sectors of the economy, but also employment and government revenues. Mining contributes to economic growth worldwide and Canadian mining companies operate in jurisdictions around the world. While mineral potential is obviously a very important consideration in encouraging or dissuading mining investment, the impact of government policies can also be significant in encouraging or discouraging investment in this important area of economic activity. Moreover, many regions around the world have attractive geology and competitive policies, allowing exploration investment to be shifted away from jurisdictions with unattractive policies.

Since 1997 the Fraser Institute has conducted an annual survey of mining and exploration companies to assess how mineral endowments and public policy factors such as taxation and regulation affect exploration investment. Our purpose is to create a "report card" that governments can use to improve their mining-related public policy in order to attract investment in their mining sector to better their economic productivity and employment. Others in the mining sector, investment sector, academia, and the media also may find the survey useful for evaluating potential investment decisions, or for assessing various risk factors in jurisdictions of interest.¹

This year the survey includes 86 jurisdictions from all continents except Antarctica. The 2023 questionnaire included a number of jurisdictions that had an insufficient number of responses to enable them to be included in the report. The minimum threshold for inclusion in the report this year was five responses; any jurisdiction with fewer than 5 responses was dropped. Jurisdictions with between 5 and 9 responses were included but have been noted accordingly. This year's dropped jurisdictions include six in Argentina (Catamarca, Chubut, Mendoza, Neuquen, Rio Negro, and Santa Cruz), Armenia, Burundi, Central

¹ While we would prefer to measure the impacts of specific mining policy changes on investment in the sector directly, there are many barriers to doing so. The effects of policy on deterring exploration investment may not be immediately apparent due to the lag time between when policy changes are implemented and when economic activity is impeded and job losses occur.

African Republic, Cyprus, Dominican Republic, Egypt, Eritrea, Estonia, Ethiopia, France, French Guiana, Gabon, Greece, Guatemala, Guyana, Honduras, Hungary, Japan, Jordan, Kyrgyzstan, Laos, Lesotho, Madagascar, Malawi, Malaysia, Myanmar, New Caledonia, Nicaragua, Nigeria, Oman, Pakistan, Panama, Poland, Republic of the Congo (Brazzaville), Romania, Russia, Saudi Arabia, Sierra Leone, Slovakia, South Korea, Sudan, Suriname, Swaziland, Tajikistan, four in the United States (Michigan, Minnesota, New Mexico, and South Dakota), Uruguay, and Venezuela.

Jurisdictions are added to the survey based on interest from survey respondents; the inclusion of jurisdictions fluctuates based on a variety of factors such as industry turnover, industry downturns, and the movement of mining investment into jurisdictions seen as more attractive. This survey is published annually, and the results are available and accessible to an increasingly global audience. In the past, we included detailed tables in an appendix showing the breakdown of scores on each question for each individual jurisdiction. Those tables are now available online at https://www.fraserinstitute.org/studies/annual-survey-of-mining-companies-2023.

The Fraser Institute's mining survey is an informal survey that attempts to assess the perceptions of mining company executives about various optimal and sub-optimal public policies that might affect the hospitality of a jurisdiction to mining investment. Given the survey's very broad circulation, its extensive press coverage, and the positive feedback we receive from miners, investors, and policymakers about its usefulness, we believe that the survey broadly captures the perceptions of those involved in both mining and the regulation of mining for the jurisdictions included.

Sample Design

The survey is designed to identify the provinces, states, and countries that have the most attractive policies for encouraging investment in mining exploration. Jurisdictions that investors assess as relatively unattractive may therefore be prompted to consider reforms that would improve their ranking. Presumably mining companies use the information provided to corroborate their own assessments and to identify jurisdictions where the business conditions and regulatory environment are most attractive for investment. The survey results are also a useful source of information for the media, providing independent information as to how particular jurisdictions compare.

Company president 48.8%

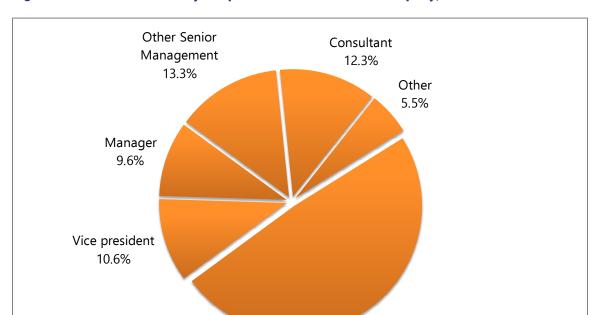
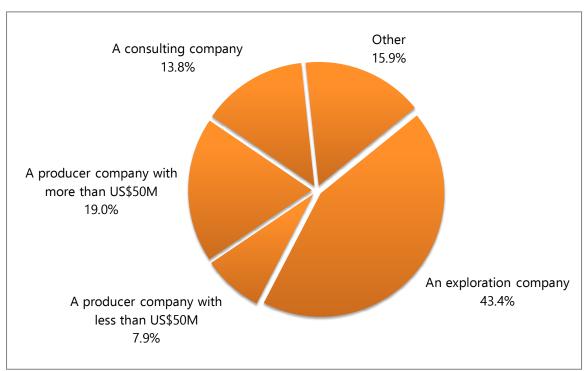


Figure 1: The Position Survey Respondents Hold in Their Company, 2023





The 2023 survey was distributed to 2,045 managers and executives around the world in companies involved in mining exploration, development, and other related activities. The names of potential respondents were compiled from commercially available lists, publicly available membership lists of trade associations, and other sources. Several mining associations also helped publicize the survey.

The survey was conducted from August 16, 2023 to January 9, 2024. We received a total of 293 responses from individuals, of whom 207 completed the full survey and 86 completed part. As figure 1 illustrates, well over half of the respondents (59 percent) are either the company president or vice-president, and 23 percent are either managers or senior managers. The companies that participated in the survey reported exploration spending of US\$4.1 billion in 2023.

Figure 2 shows that 43 percent of the 2023 survey respondents represent an exploration company. Twenty-seven percent of the respondents represent producer companies, and the final 30 percent is made up of consulting and other companies.

Survey Questionnaire

The survey is designed to capture the opinions of managers and executives about the level of investment barriers in jurisdictions with which their companies are familiar. Respondents are asked to indicate how each of the 15 policy factors below influenced company decisions to invest in various jurisdictions.

- 1. Uncertainty concerning the administration, interpretation, or enforcement of existing regulations;
- Uncertainty concerning environmental regulations (stability of regulations, consistency and timeliness of regulatory process, regulations not based on science);
- 3. Regulatory duplication and inconsistencies (includes federal/provincial, federal/state, inter-departmental overlap, etc.);
- 4. Legal system (legal processes that are fair, transparent, non-corrupt, timely, efficiently administered, etc.)
- 5. Taxation regime (includes personal, corporate, payroll, capital, and other taxes, and complexity of tax compliance);
- 6. Uncertainty concerning disputed land claims;
- 7. Uncertainty concerning what areas will be protected as wilderness, parks, or archeological sites, etc.;

- 8. Infrastructure (includes access to roads, power availability, etc.);
- 9. Socioeconomic agreements/community development conditions (includes local purchasing or processing requirements, or supplying social infrastructure such as schools or hospitals, etc.);
- 10. Trade barriers (tariff and non-tariff barriers, restrictions on profit repatriation, currency restrictions, etc.);
- 11. Political stability;
- 12. Labor regulations/employment agreements and labor militancy/work disruptions;
- 13. Quality of the geological database (includes quality and scale of maps, ease of access to information, etc.);
- 14. Level of security (includes physical security due to the threat of attack by terrorists, criminals, guerrilla groups, etc.);
- 15. Availability of labor/skills.

Respondents were asked to score only jurisdictions with which they were familiar and only on those policy factors with which they were familiar. The 15 policy questions were unchanged from the 2013 survey. However, two questions that had been included—on the level of corruption (or honesty) and on growing (or lessening) uncertainty in mining policy and implementation—were dropped in 2013 in response to complaints from previous years' respondents that the survey had become onerously lengthy. Also, those questions were seen to be redundant, or overlap heavily with other questions. For each of the 15 factors, respondents were asked to select one of the following five responses that best described each jurisdiction with which they were familiar:

- Encourages exploration investment
- Not a deterrent to exploration investment
- Is a mild deterrent to exploration investment
- Is a strong deterrent to exploration investment
- Would not pursue exploration investment in this region due to this factor

The survey also included questions about the respondents and the type of company they represented, regulatory "horror stories," examples of "exemplary policy," mineral potential assuming current regulation and land use restrictions, mineral potential assuming a "best practices" regulatory environment, the weighting of mineral versus policy factors in investment decisions, and investment spending.

Summary Indices

Investment Attractiveness Index

The Investment Attractiveness Index (table 1 and figure 3) is a composite index that combines both the Policy Perception Index (PPI) and results from the Best Practices Mineral Potential Index. While it is useful to measure the attractiveness of a jurisdiction based on policy factors such as onerous regulations, taxation levels, the quality of infrastructure, and the other policy related questions that respondents answered, the Policy Perception Index alone does not recognize the fact that investment decisions are often sizably based on the pure mineral potential of a jurisdiction. Indeed, as will be discussed below, respondents consistently indicate that while 40 percent of their investment decision is determined by policy factors, 60 percent is based on their assessment of a jurisdiction's mineral potential. To get a true sense of which global jurisdictions are attracting investment, both mineral potential and policy perception must be considered.

This year, as in other years, the index was weighted 40 percent by policy and 60 percent by mineral potential. These ratios are determined from a survey question that asks respondents to rate the relative importance of each factor. In most years, the split is nearly exactly 60 percent mineral and 40 percent policy. This year, the answer was 60.28 percent mineral potential and 40.10 percent policy. We maintain a 60/40 ratio in calculating this index to allow comparability with other years.

The PPI (table 2 and figure 4) provides the data on policy perception (see below for explanation on how the index is calculated), while the rankings from the Best Practices Mineral Index (table 3 and figure 5), based on the percentage of responses for "Encourages Investment" and a half-weighting of the responses for "Not a Deterrent to Investment," provides the data on mineral potential. Table 1 details the relative trends observed over the last five years for the performance of each of the jurisdictions on the Investment Attractiveness Index.

One limitation of this index is that it may not provide an accurate measure of the investment attractiveness of a jurisdiction at extremes, or where the 60/40 weighting is unlikely

² A best practices environment is one that contains a world-class regulatory environment, highly competitive taxation, no political risk or uncertainty, and a fully stable mining regime.

Figure 3: Investment Attractiveness Index

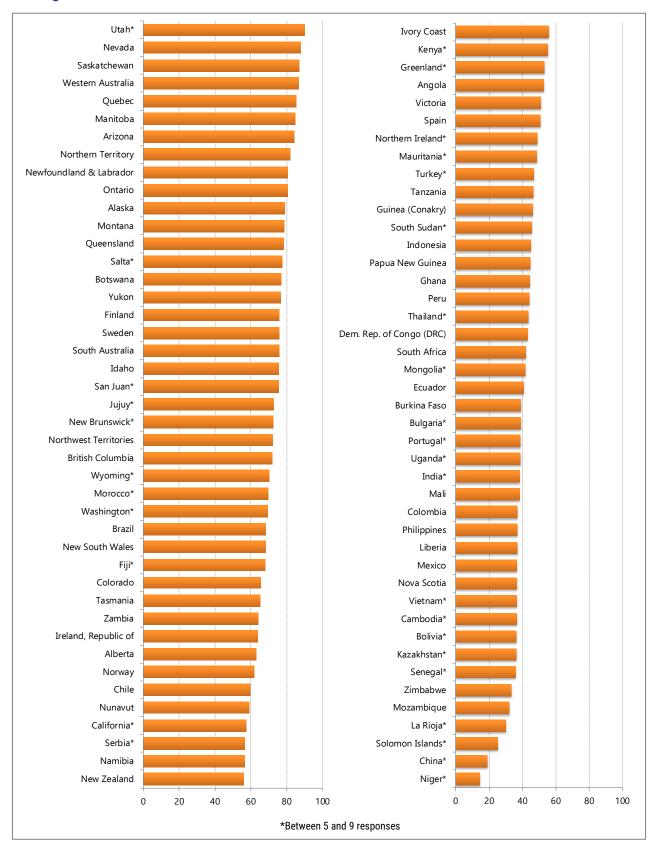


Table 1: Investment Attractiveness Index

			,	Score					Rank		
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Canada	Alberta	63.07	69.36	69.79	75.47	71.11	36 /86	24/62	30/84	22/77	30/76
	British Columbia	71.91	75.09	77.70	77.94	77.47	25 /86	15/62	16/84	17/77	19/76
	Manitoba	84.74	77.98	69.21	69.61	68.01	6 /86	14/62	32/84	37/77	34/76
	New Brunswick*	72.70	72.81	65.61	71.42	53.65	23 /86	21/62	36/84	32/77	60/76
	Newfoundland and Labrador	80.48	87.35	75.83	85.17	71.73	9 /86	4/62	21/84	8/77	28/76
	Northwest Territories	72.38	58.15	66.22	65.10	67.93	24 /86	43/62	35/84	46/77	35/76
	Nova Scotia	36.48	58.21	42.40	51.56	61.01	75 /86	42/62	71/84	66/77	52/76
	Nunavut	59.14	58.24	70.82	68.93	73.24	39 /86	41/62	28/84	39/77	26/76
	Ontario	80.46	80.75	79.59	76.43	79.29	10 /86	12/62	12/84	20/77	16/76
	Quebec	85.47	84.03	83.12	85.97	77.49	5 /86	8/62	6/84	6/77	18/76
	Saskatchewan	86.83	88.19	88.32	89.38	81.75	3 /86	3/62	2/84	3/77	11/76
	Yukon	76.57	73.26	82.43	77.30	75.56	16 /86	20/62	9/84	18/77	23/76
United States	Alaska	78.79	81.98	87.18	88.06	84.17	11 /86	11/62	4/84	5/77	4/76
	Arizona	83.97	84.23	86.38	90.45	82.43	7 /86	7/62	5/84	2/77	9/76
	California*	57.50	55.03	57.84	55.47	46.44	40 /86	48/62	49/84	62/77	63/76
	Colorado	65.40	84.94	76.38	79.82	68.46	32 /86	5/62	20/84	13/77	32/76
	Idaho*	75.38	68.11	82.72	85.00	82.78	20 /86	28/62	7/84	9/77	8/76
	Montana	78.49	73.55	72.77	70.51	61.87	12 /86	18/62	25/84	33/77	49/76
	Nevada	87.93	92.17	87.64	91.05	87.54	2 /86	1/62	3/84	1/77	3/76
	Utah*	90.00	73.79	80.22	73.41	80.51	1 /86	17/62	11/84	25/77	14/76
	Washington*	69.50	**	50.26	65.37	51.55	28 /86	**	64/84	45/77	61/76
	Wyoming*	70.14	**	72.46	72.82	71.41	26 /86	**	26/84	26/77	29/76
Australia	New South Wales	68.26	71.54	66.48	72.64	62.78	30 /86	23/62	33/84	27/77	47/76
	Northern Territory	81.72	84.64	78.35	77.27	81.43	8 /86	6/62	14/84	19/77	13/76
	Queensland	78.17	78.55	77.13	78.00	79.33	13 /86	13/62	18/84	16/77	15/76
	South Australia	75.60	83.37	81.70	85.64	83.31	19 /86	9/62	10/84	7/77	6/76
	Tasmania	65.25	54.74	76.81	55.46	75.70	33 /86	50/62	19/84	63/77	22/76
	Victoria	50.84	55.11	64.13	58.82	64.27	48 /86	47/62	39/84	56/77	43/76
	Western Australia	86.58	88.26	90.21	88.82	92.45	4 /86	2/62	1/84	4/77	1/76

Table 1 continued

				Score			Rank					
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019	
Oceania	Fiji*	68.22	**	**	**	**	31 /86	**	**	**	**	
	Indonesia	45.17	**	57.84	44.32	73.09	56 /86	**	50/84	74/77	27/76	
	New Zealand	55.75	**	42.28	56.12	64.59	43 /86	**	72/84	61/77	42/76	
	Papua New Guinea	44.88	51.03	53.04	54.67	58.84	57 /86	54/62	56/84	65/77	54/76	
	Philippines	36.89	**	52.87	**	**	72 /86	**	57/84	**	**	
	Solomon Islands*	25.22	**	**	**	**	84 /86	**	**	**	**	
Africa	Angola*	52.54	37.14	**	**	**	47 /86	59/62	**	**	**	
	Botswana	76.87	82.75	48.61	81.48	63.39	15 /86	10/62	66/84	11/77	45/76	
	Burkina Faso	38.95	64.61	52.77	59.68	61.19	65 /86	31/62	58/84	53/77	51/76	
	Democratic Republic of Congo (DRC)	42.97	48.52	29.67	58.12	39.20	61 /86	55/62	82/84	57/77	69/76	
	Ghana	44.35	62.27	61.29	71.85	**	58 /86	33/62	43/84	31/77	**	
	Guinea (Conakry)	46.04	55.59	60.92	65.92	76.64	54 /86	46/62	45/84	43/77	20/76	
	Ivory Coast	55.70	65.49	**	**	**	44 /86	30/62	**	**	**	
	Kenya*	55.22	**	**	**	**	45 /86	**	**	**	**	
	Liberia*	36.73	**	**	**	**	73 /86	**	**	**	**	
	Mali	38.04	57.42	33.05	76.27	39.53	70 /86	44/62	81/84	21/77	68/76	
	Mauritania*	48.47	**	55.20	63.39	**	51 /86	**	53/84	48 /77	**	
	Morocco*	69.61	74.13	82.56	**	**	27 /86	16/62	8/84	**	**	
	Mozambique*	31.90	34.96	**	61.24	**	82 /86	61/62	**	50/77	**	
	Namibia	56.43	59.88	52.59	59.72	58.22	42 /86	38/62	59/84	52/77	55/76	
	Niger*	14.61	**	**	**	**	86 /86	**	**	**	**	
	Senegal*	35.87	**	**	**	**	80 /86	**	**	**	**	
	South Africa	41.84	44.76	37.88	56.33	64.79	62 /86	57/62	75/84	60/77	40/76	
	South Sudan*	45.41	36.15	**	**	**	55 /86	60/62	**	**	**	
	Tanzania	46.38	52.90	45.76	42.08	32.82	53 /86	53/62	67/84	75/77	76/76	
	Uganda*	38.39	**	**	**	**	68 /86	**	**	**	**	
	Zambia	64.23	42.18	**	**	**	34 /86	58/62	**	**	**	
	Zimbabwe	33.43	34.29	26.55	49.52	44.81	81 /86	62/62	84/84	70/77	64/76	

Table 1 continued

				Score					Rank		
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Argentina	Jujuy*	72.92	59.70	61.17	63.55	51.21	22 /86	39/62	44/84	47/77	62/76
	La Rioja*	30.00	**	58.99	44.44	34.48	83 /86	**	47/84	73/77	74/76
	Salta*	77.24	56.48	72.05	74.69	67.19	14 /86	45/62	27/84	23/77	36/76
	San Juan*	75.35	73.41	75.32	63.35	76.20	21 /86	19/62	22/84	49/77	21/76
Latin America	Bolivia*	36.28	53.97	42.92	45.16	62.36	78 /86	52/62	70/84	72/77	48/76
and the Caribbean	Brazil	68.50	68.98	56.20	69.29	63.36	29 /86	25/62	51/84	38/77	46/76
Basin	Chile	59.76	60.34	69.33	72.11	77.72	38 /86	35/62	31/84	30/77	17/76
	Colombia	36.90	60.33	70.03	72.29	57.99	71 /86	36/62	29/84	28/77	56/76
	Ecuador	40.68	68.54	72.79	57.95	56.80	64 /86	27/62	24/84	58/77	57/76
	Mexico	36.51	60.16	66.46	66.87	65.43	74 /86	37/62	34/84	42/77	38/76
	Peru	44.01	60.68	61.64	70.41	75.14	59 /86	34/62	42/84	34/77	24/76
Asia	Cambodia*	36.38	**	**	**	**	77 /86	**	**	**	**
	China*	19.08	44.86	34.92	**	**	85 /86	56/62	79/84	**	**
	India*	38.23	**	**	**	**	69 /86	**	**	**	**
	Kazakhstan*	36.10	**	48.83	**	**	79 /86	**	65/84	**	**
	Mongolia*	41.71	54.39	50.66	**	**	63 /86	51/62	63/84	**	**
	Thailand*	43.26	**	**	**	**	60 /86	**	**	**	**
	Vietnam*	36.47	**	**	**	**	76 /86	**	**	**	**
Europe	Bulgaria*	38.85	**	**	**	74.24	66 /86	**	**	**	25/76
	Finland	75.67	66.75	79.18	82.75	92.00	17 /86	29/62	13/84	10/77	2/76
	Greenland*	52.96	**	52.13	66.91	64.68	46 /86	**	61/84	41/77	41/76
	Ireland, Republic of	63.93	**	78.18	80.40	83.22	35 /86	**	15/84	12/77	7/76X
	Northern Ireland*	48.94	**	64.46	70.23	**	50 /86	**	38/84	35/77	**
	Norway	62.06	**	55.49	59.65	70.26	37 /86	**	52/84	54/77	31/76
	Portugal*	38.71	**	**	72.26	83.92	67 /86	**	**	29/77	5/76x
	Serbia*	56.50	**	**	**	**	41 /86	**	**	**	**
	Spain*	50.53	68.90	29.55	49.76	**	49 /86	26/62	83/84	69/77	**
	Sweden	75.65	**	77.52	69.66	82.00	18 /86	**	17/84	36/77	10/76x
	Turkey*	46.73	**	52.15	79.27	81.60	52 /86	**	60/84	14/77	12/76x

 $[\]mbox{*}$ Between 5 and 9 responses on one or more questions.

^{**} Not Available

to be stable. For example, extremely bad policy that would virtually confiscate all potential profits, or an environment that would expose workers and managers to high personal risk, would discourage mining activity regardless of mineral potential. In this case, mineral potential—far from having a 60 percent weight—might carry very little weight.

Policy Perception Index (PPI): An assessment of the attractiveness of mining policies

While geologic and economic evaluations are always requirements for exploration, in today's globally competitive economy where mining companies may be examining properties located on different continents, a region's policy climate has taken on increased importance in attracting and winning investment. The Policy Perception Index, or PPI (see table 2 and figure 4), provides a comprehensive assessment of the attractiveness of mining policies in a jurisdiction, and can serve as a report card to governments on how attractive their policies are from the point of view of an exploration manager. In previous survey years, we have referred to this index as the Policy Potential Index. However, we feel that Policy Perception Index more accurately reflects the nature of this index.

The Policy Perception Index is a composite index that captures the opinions of managers and executives on the effects of policies in jurisdictions with which they are familiar. All survey policy questions (i.e., uncertainty concerning the administration, interpretation, and enforcement of existing regulations; environmental regulations; regulatory duplication and inconsistencies; taxation; uncertainty concerning disputed land claims and protected areas; infrastructure; socioeconomic agreements; political stability; labor issues; geological database; and security) are included in its calculation.

This year we continued the use of the methodology first used to calculate the PPI in 2015. The methodology differs from that of earlier years in that it considers answers in all five response categories, as well as how far a jurisdiction's score is from the average. To calculate the PPI, a score for each jurisdiction is estimated for all 15 policy factors by calculating each jurisdiction's average response. 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 15 policy variables are then added up to generate a final, standardized

PPI score. That score is then normalized using the formula $\frac{V_{max} - V_i}{V_{max} - V_{min}} \times 100$.

³ The methodology used previously only considered responses in the "encourages investment" category.

Figure 4: Policy Perception Index

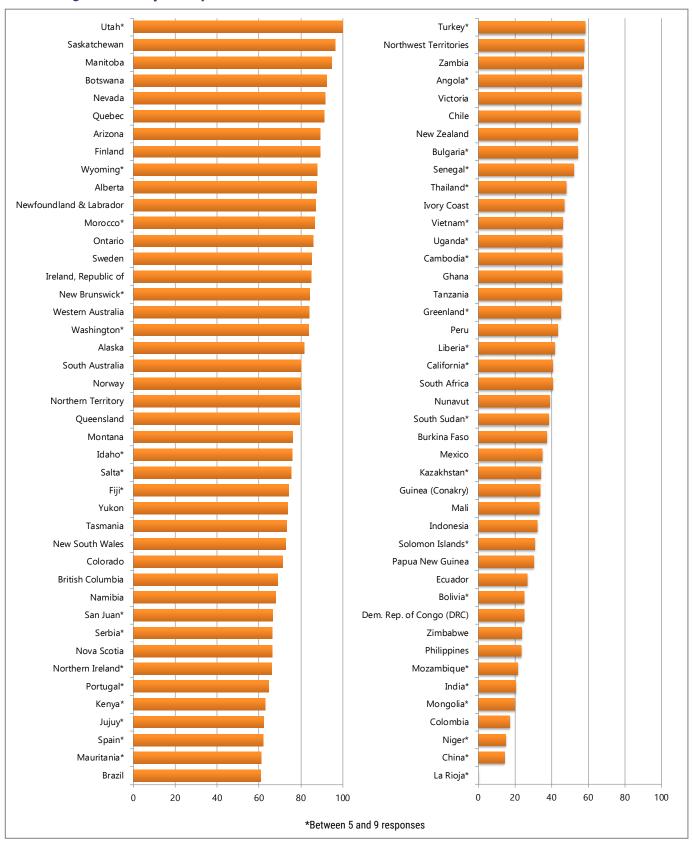


Table 2: Policy Perception Index

				Score			Rank					
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019	
Canada	Alberta	87.67	92.64	88.77	90.24	92.05	10 /86	6/62	10/84	18/77	6/76	
	British Columbia	69.11	68.97	75.76	75.36	71.80	32 /86	27/62	28/84	41/77	36/76	
	Manitoba	94.67	69.96	59.13	65.40	61.42	3 /86	24/62	57/84	58/77	53/76	
	New Brunswick*	84.24	88.27	84.62	88.55	87.24	16 /86	8/62	14/84	19/77	13/76	
	Newfoundland and Labrador	87.08	94.85	83.00	95.93	90.69	11 /86	5/62	18/84	8/77	8/76	
	Northwest Territories	57.72	32.88	57.74	67.55	63.24	45 /86	51/62	59/84	54/77	50/76	
	Nova Scotia	66.19	58.98	68.50	82.48	85.87	36 /86	33/62	39/84	24/77	18/76	
	Nunavut	39.09	26.47	70.46	70.33	67.19	65 /86	55/62	35/84	51/77	44/76	
	Ontario	86.03	76.87	83.06	80.70	82.46	13 /86	18/62	17/84	31/77	24/76	
	Quebec	91.13	86.41	92.69	90.50	83.57	6 /86	14/62	5/84	17/77	21/76	
	Saskatchewan	96.24	84.53	91.25	95.24	90.25	2 /86	15/62	8/84	9/77	9/76	
	Yukon	73.56	60.41	79.77	76.80	76.40	28 /86	31/62	23/84	39/77	32/76	
United States	Alaska	81.60	86.52	85.25	92.65	86.52	19 /86	13/62	13/84	13/77	17/76	
	Arizona	89.26	89.74	85.41	96.33	89.83	7 /86	7/62	12/84	7/77	10/76	
	California*	40.62	40.07	59.61	63.67	62.52	63 /86	46/62	55/84	62/77	52/76	
	Colorado	71.18	87.35	70.11	79.56	81.16	31 /86	9/62	37/84	33/77	25/76	
	Idaho*	75.95	86.94	83.58	100.00	91.57	25 /86	11/62	15/84	1/77	7/76	
	Montana	76.22	76.74	79.66	81.27	72.87	24 /86	19/62	24/84	28/77	34/76	
	Nevada	91.77	100.00	91.77	98.64	95.00	5 /86	1/62	6/84	5/77	3/76	
	Utah*	100.00	95.83	91.46	97.00	94.14	1 /86	4/62	7/84	6/77	4/76	
	Washington*	83.75	**	78.79	79.05	70.54	18 /86	**	25/84	35/77	37/76	
	Wyoming*	87.86	**	87.41	99.54	86.85	9 /86	**	11/84x	2/77x	16/76x	
Australia	New South Wales	72.83	73.85	71.75	72.13	66.96	30 /86	20/62	33/84	49/77	46/76	
	Northern Territory	79.31	69.95	75.87	78.48	77.26	22 /86	25/62	27/84	36/77	30/76	
	Queensland	79.30	67.81	80.33	81.12	76.91	23 /86	28/62	21/84	29/77	31/76	
	South Australia	80.24	95.94	83.09	90.88	85.55	20 /86	3/62	16/84	16/77	19/76	
	Tasmania	73.13	86.84	70.14	82.40	73.33	29 /86	12/62	36/84	25/77	33/76	
	Victoria	56.26	62.78	66.57	77.40	67.81	48 /86	30/62	43/84	38/77	43/76	
	Western Australia	84.10	86.95	92.83	94.77	93.99	17 /86	10/62	4/84	11/77	5/76	

Table 2 continued

				Score					Rank		
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Oceania	Fiji*	74.11	**	**	**	**	27 /86	**	**	**	**
	Indonesia	32.16	**	44.60	54.54	47.74	72 /86	**	72/84	69/77	64/76
	New Zealand	54.38	**	45.71	80.29	72.83	50 /86	**	70/84	32/77	35/76
	Papua New Guinea	30.38	20.44	45.09	53.35	49.60	74 /86	57/62	71/84	71/77	63/76
	Philippines	23.47	**	27.17	**	**	79 /86	**	83/84	**	**
	Solomon Islands*	30.91	**	**	**	**	73 /86	**	**	**	**
Africa	Angola*	56.36	17.85	**	**	**	47 /86	58/62	**	**	**
	Botswana	92.17	97.79	74.66	91.20	83.48	4 /86	2/62	31/84	15/77	22/76
	Burkina Faso	37.39	44.86	56.92	61.70	55.48	67 /86	41/62	60/84	65/77	60/76
	Democratic Republic of Congo (DRC)	24.93	21.30	29.18	53.64	38.00	77 /86	56/62	78/84	70/77	70/76
	Ghana	45.88	49.43	64.59	74.62	**	58 /86	37/62	47/84	46/77	**
	Guinea (Conakry)	33.84	10.404	62.29	74.81	41.60	70 /86	61/62	52/84	44/77	68/76
	Ivory Coast	46.94	58.73	**	**	**	54 /86	34/62	**	**	**
	Kenya*	63.04	**	**	**	**	39 /86	**	**	**	**
	Liberia*	41.82	**	**	**	**	62 /86	**	**	**	**
	Mali	33.34	38.55	49.30	78.18	45.27	71 /86	48/62	66/84	37/77	65/76
	Mauritania*	61.17	**	63.20	62.03	**	42 /86	**	50/84	64/77	**
	Morocco*	86.53	80.32	98.06	**	**	12 /86	17/62	2/84	**	**
	Mozambique*	21.42	12.40	**	61.24	**	80 /86	60/62	**	50/77	**
	Namibia	68.00	69.35	75.24	74.30	87.22	33 /86	26/62	29/84	47/77	14/76
	Niger*	15.09	**	**	**	**	84 /86	**	**	**	**
	Senegal*	52.18	**	**	**	**	52 /86	**	**	**	**
	South Africa	40.59	29.65	49.71	60.81	59.71	64 /86	53/62	65/84	66/77	56/76
	South Sudan*	38.53	30.39	**	**	**	66 /86	52/62	**	**	**
	Tanzania	45.65	43.20	51.91	48.94	28.47	59 /86	42/62	63/84	72/77	74/76
	Uganda*	45.99	**	**	**	**	56 /86	**	**	**	**
	Zambia	57.46	39.83	**	**	**	46 /86	47/62	**	**	**
	Zimbabwe	23.58	0.00	28.88	39.42	26.31	78 /86	62/62	79/84	75/77	75/76

Table 2 continued

				Score					Rank		
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Argentina	Jujuy*	62.30	46.12	66.09	70.63	57.44	40 /86	39/62	44/84	50/77	59/76
	La Rioja*	0.00	**	64.13	54.84	42.44	86 /86	**	48/84	68/77	67/76
	Salta*	75.25	49.54	81.13	87.87	77.97	26 /86	36/62	20/84	21/77	29/76
	San Juan*	66.49	71.02	77.30	75.04	80.21	34 /86	23/62	26/84	43/77	27/76
Latin America	Bolivia*	25.08	41.17	32.31	44.73	37.15	76 /86	43/62	77/84	74/77	71/76
and the Caribbean	Brazil	60.73	62.83	47.64	66.65	69.75	43 /86	29/62	68/84	56/77	39/76
Basin	Chile	55.66	46.68	68.86	83.06	86.86	49 /86	38/62	38/84	23/77	15/76
	Colombia	17.25	32.97	62.57	64.83	58.73	83 /86	50/62	51/84	59/77	57/76
	Ecuador	26.71	40.09	66.06	54.87	49.69	75 /86	45/62	45/84	67/77	62/76
	Mexico	35.02	40.10	60.67	64.41	62.72	68 /86	44/62	54/84	61/77	51/76
	Peru	43.36	33.84	46.28	75.16	67.02	61 /86	49/62	69/84	42/77	45/76
Asia	Cambodia*	45.95	**	**	**	**	57 /86	**	**	**	**
	China*	14.35	15.73	44.45	**	**	85 /86	59/62	73/84	**	**
	India*	20.57	**	**	**	**	81 /86	**	**	**	**
	Kazakhstan*	33.99	**	59.57	**	**	69 /86	**	56/84	**	**
	Mongolia*	19.89	28.84	36.65	**	**	82 /86	54/62	75/84	**	**
	Thailand*	48.15	**	**	**	**	53 /86	**	**	**	**
	Vietnam*	46.18	**	**	**	**	55 /86	**	**	**	**
Europe	Bulgaria*	54.27	**	**	**	80.60	51 /86	**	**	**	26/76
·	Finland	89.17	84.37	88.86	99.07	100.00	8 /86	16/62	9/84	3/77	1/76
	Greenland*	44.91	**	55.33	67.27	64.20	60 /86	**	62/84	55/77	48/76
	Ireland, Republic of	84.82	**	100.00	98.72	95.54	15 /86	**	1/84	4/77x	2/76
	Northern Ireland*	66.11	**	95.53	92.24	**	37 /86	**	3/84	14/77	**
	Norway	80.16	**	71.22	81.61	84.00	21 /86	**	34/84	27/77	20/76
	Portugal*	64.64	**	**	93.16	89.81	38 /86	**	**	12/77x	11/76
	Serbia*	66.25	**	**	**	**	35 /86	**	**	**	**
	Spain*	62.04	72.25	58.88	79.40	**	41 /86	22/62	58/84	34/77	**
	Sweden	85.27	**	81.31	88.42	89.62	14 /86	**	19/84	20/77	12/76
	Turkey*	58.50	**	55.38	69.60	78.99	44 /86	**	61/84	52/77	28/76

 $[\]mbox{*}$ Between 5 and 9 responses on one or more questions. $\mbox{**}$ Not Available

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.

Best Practices Mineral Potential Index

Table 3 and figure 5 show the mineral potential of jurisdictions, assuming their policies are based on "best practices" (i.e., world class regulatory environment, highly competitive taxation, no political risk or uncertainty, and a fully stable mining regime). In other words, this figure represents, in a sense, a jurisdiction's "pure" mineral potential, since it assumes a "best practices" policy regime.

The "Best Practices Mineral Potential" index ranks the jurisdictions based on which region's geology "encourages exploration investment" or is "not a deterrent to investment." Since the "Encourages" response expresses a much more positive attitude to investment than "Not a Deterrent," in calculating these indexes we give "Not a Deterrent" half the weight of "Encourages." For example, the "Best Practices Mineral Potential" for Saskatchewan was calculated by adding the percent of respondents who rated mineral potential as "Encourages Investment" (61 percent) with the 39 percent who responded "Not a Deterrent to Investment," which was half weighted at 19 percent. Thus, in the 2023 survey Saskatchewan has a score of 81, once it is rounded. Table 3 provides more precise information and the recent historical record.

A caveat

This survey captures both general and specific knowledge of respondents. A respondent may give an otherwise high-scoring jurisdiction a low mark because of his or her individual experience with a problem there. We do not believe this detracts from the value of the survey. In fact, we have made a particular point of highlighting such differing views in the survey comments and the "What miners are saying" quotes.

It is also important to note that different segments of the mining industry (exploration and development companies, say) face different challenges. Yet many of the challenges the different segments face are similar. This survey is intended to capture the overall view.

Figure 5: Best Practices Mineral Potential Index

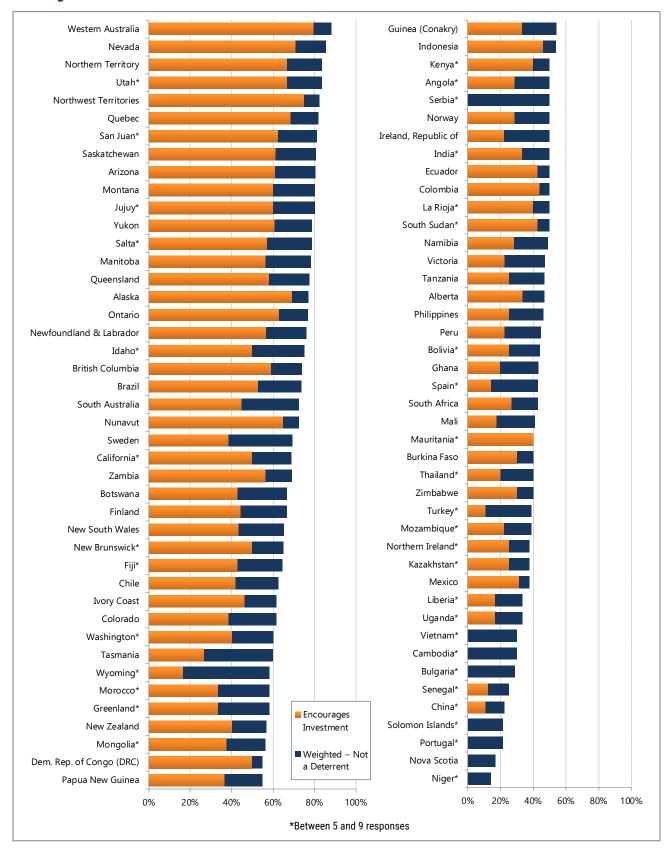


Table 3: Best Practices Mineral Potential Index

				Score					Rank		
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Canada	Alberta	46.67	53.85	57.14	65.63	57.14	40 /58	42 / 47	50/84	33/77	54/76
	British Columbia	73.77	79.17	78.99	79.66	81.25	17 /58	14 / 47	12/84	10/77	10/76
	Manitoba	78.13	83.33	75.93	72.41	72.41	11 /58	7 / 47	16/84	22/77	26/76
	New Brunswick*	65.00	62.50	52.94	60.00	31.25	24 /58	31 / 47	53/84	42/77	72/76
	Newfoundland and Labrador	76.09	82.35	71.05	78.00	59.09	15 /58	9 / 47	27/84	11/77	50/76
	Northwest Territories	82.14	75.00	71.88	63.46	71.05	4 /58	19 / 47	25/84	36/77	29/76
	Nova Scotia	16.67	57.69	25.00	30.95	44.44	57 /58	36 / 47	82/84	74/77	61/76
	Nunavut	72.50	79.41	71.05	68.00	77.27	19 /58	13 / 47	26/84	29/77	16/76
	Ontario	76.74	83.33	77.27	73.58	77.17	14 /58	7 / 47	13/84	20/77	18/76
	Quebec	81.71	82.43	76.74	82.95	73.44	5 /58	8 / 47	15/84	7/77	25/76
	Saskatchewan	80.56	90.63	86.36	85.48	76.09	7 /58	2 / 47	4/84	4/77	21/76
	Yukon	78.57	81.82	84.21	77.63	75.00	10 /58	10 / 47	6/84	12/77	22/76
United States	Alaska	76.92	78.95	88.46	85.00	82.61	13 /58	15 / 47	2/84	5/77	7/76
	Arizona	80.43	80.56	87.04	86.54	77.50	8 /58	11 / 47	3/84	1/77	15/76
	California*	68.75	65.00	56.67	50.00	35.71	21 /58	29 / 47	51/84	58/77	69/76
	Colorado	61.54	83.33	80.56	80.00	60.00	27 /58	7 / 47	10/84	9/77	45/76
	Idaho*	75.00	55.56	82.14	75.00	76.92	16 /58	39 / 47	7/84	17/77	19/76
	Montana	80.00	71.43	68.18	63.33	54.55	9 /58	23 / 47	31/84	37/77	56/76
	Nevada	85.37	86.96	84.88	86.00	82.56	2 /58	5 / 47	5/84	2/77	8/76
	Utah*	83.33	59.09	72.73	57.69	71.43	3 /58	35 / 47	22/84	49/77	28/76
	Washington*	60.00	**	31.25	56.25	38.89	28 /58	**	75/84	51/77	65/76
	Wyoming*	58.33	**	62.50	55.00	61.11	29 /58	**	38/84	56/77	43/76
Australia	New South Wales	65.22	70.00	62.96	72.97	60.00	23 /58	25 / 47	36/84	21/77	47/76
	Northern Territory	83.33	94.44	80.00	76.47	84.21	3 /58	1 / 47	11/84	14/77	5/76
	Queensland	77.42	85.71	75.00	75.93	80.95	12 /58	6 / 47	19/84	15/77	11/76
	South Australia	72.50	75.00	80.77	82.14	81.82	19 /58	19 / 47	9/84	8/77	9/76
	Tasmania	60.00	33.33	81.25	37.50	77.27	28 /58	47 / 47	8/84	72/77	17/76
	Victoria	47.22	50.00	62.50	46.43	61.90	38 /58	44 / 47	39/84	62/77	40/76
	Western Australia	88.24	89.13	88.46	84.85	91.43	1 /58	3 / 47	1/84	6/77	2/76

Table 3 continued

				Score					Rank		
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Oceania	Fiji*	64.29	**	**	**	**	25 /58	**	**	**	**
	Indonesia	53.85	**	66.67	37.50	90.00	35 /58	**	33/84	69/77	3/76x
	New Zealand	56.67	**	40.00	40.00	59.09	30 /58	**	71/84	68/77	49/76x
	Papua New Guinea	54.55	71.43	58.33	55.56	65.00	33 /58	23 / 47	48/84	54/77	38/76
	Philippines	45.83	**	70.00	**	**	41 /58	**	29/84	**	**
	Solomon Islands*	21.43	**	**	**	**	56 /58	**	**	**	**
Africa	Angola*	50.00	50.00	**	**	**	36 /58	44 / 47	**	**	**
	Botswana	66.67	72.73	31.25	75.00	50.00	22 /58	22 / 47	76/84	16/77	59/76
	Burkina Faso	40.00	77.78	50.00	58.33	65.00	48 /58	18 / 47	55/84	46/77	37/76
	Democratic Republic of Congo (DRC)	55.00	66.67	30.00	61.11	40.00	32 /58	28 / 47	78/84	39/77	63/76
	Ghana	43.33	70.83	59.09	70.00	**	44 /58	24 / 47	47/84	25/77	**
	Guinea (Conakry)	54.17	85.71	60.00	60.00	100.00	34 /58	6 / 47	46/84	40/77	1/76
	Ivory Coast	61.54	70.00	**	**	**	27 /58	25 / 47	**	**	**
	Kenya*	50.00	**	**	**	**	36 /58	**	**	**	**
	Liberia*	33.33	**	**	**	**	51 /58	**	**	**	**
	Mali	41.18	70.00	22.22	75.00	35.71	47 /58	25 / 47	83/84	18/77	70/76
	Mauritania*	40.00	**	50.00	64.29	**	48 /58	**	60/84	35/77	**
	Morocco*	58.33	70.00	72.22	**	**	29 /58	25 / 47	23/84	**	**
	Mozambique*	38.89	50.00	**	61.24	**	49 /58	44 / 47	**	50/77	**
	Namibia	48.72	53.57	37.50	50.00	38.89	37 /58	43 / 47	72/84	61/77	64/76
	Niger*	14.29	**	**	**	**	58 /58	**	**	**	**
	Senegal*	25.00	**	**	**	**	54 /58	**	**	**	**
	South Africa	42.68	54.84	30.00	53.33	68.18	46 /58	41 / 47	77/84	57/77	34/76
	South Sudan*	50.00	40.00	**	**	**	36 /58	46 / 47	**	**	**
	Tanzania	46.88	59.38	41.67	37.50	35.71	39 /58	34 / 47	68/84	71/77	68/76
	Uganda*	33.33	**	**	**	**	51 /58	**	**	**	**
	Zambia	68.75	43.75	**	**	**	21 /58	45 / 47	**	**	**
	Zimbabwe	40.00	57.14	25.00	56.25	57.14	48 /58	37 / 47	81/84	52/77	53/76

Table 3 continued

				Score					Rank		
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Argentina	Jujuy*	80.00	68.75	57.89	58.82	47.06	9 /58	27 / 47	49/84	45/77	60/76
	La Rioja*	50.00	**	55.56	37.50	29.17	36 /58	**	52/84	70/77	73/76x
	Salta*	78.57	61.11	66.00	65.91	60.00	10 /58	33 / 47	34/84	32/77	46/76
	San Juan*	81.25	75.00	74.00	55.56	73.53	6 /58	19 / 47	20/84	55/77	24/76
Latin America	Bolivia*	43.75	62.50	50.00	45.45	79.17	43 /58	32 / 47	56/84	63/77	14/76
and the Caribbean	Brazil	73.68	73.08	61.90	71.05	59.09	18 /58	21 / 47	40/84	24/77	48/76
Basin	Chile	62.50	69.44	69.64	64.81	71.62	26 /58	26 / 47	30/84	34/77	27/76
	Colombia	50.00	78.57	75.00	77.27	57.50	36 /58	16 / 47	18/84	13/77	52/76
	Ecuador	50.00	87.50	77.27	60.00	61.54	36 /58	4 / 47	14/84	43/77	41/76
	Mexico	37.50	73.53	70.31	68.52	67.24	50 /58	20 / 47	28/84	27/77	35/76
	Peru	44.44	78.57	71.88	67.24	80.56	42 /58	17 / 47	24/84	30/77	12/76
Asia	Cambodia*	30.00	**	**	**	**	52 /58	**	**	**	**
	China*	22.22	64.29	28.57	**	**	55 /58	30 / 47	79/84	**	**
	India*	50.00	**	**	**	**	36 /58	**	**	**	**
	Kazakhstan*	37.50	**	41.67	**	**	50 /58	**	66/84	**	**
	Mongolia*	56.25	71.43	60.00	**	**	31 /58	23 / 47	45/84	**	**
	Thailand*	40.00	**	**	**	**	48 /58	**	**	**	**
	Vietnam*	30.00	**	**	**	**	52 /58	**	**	**	**
Europe	Bulgaria*	28.57	**	**	**	80.60	53 /58	**	**	**	26/76
	Finland	66.67	55.00	72.73	71.88	86.67	22 /58	40 / 47	21/84	23/77	4/76
	Greenland*	58.33	**	50.00	66.67	65.00	29 /58	**	57/84	31/77	36/76
	Ireland, Republic of	50.00	**	63.64	68.18	75.00	36 /58	**	35/84	28/77	0.30
	Northern Ireland*	37.50	**	43.75	55.56	**	50 /58	**	65/84	53/77	**
	Norway	50.00	**	45.00	45.00	61.11	36 /58	**	63/84	65/77	42/76
	Portugal*	21.43	**	**	93.16	89.81	56 /58	**	**	12/77x	11/76x
	Serbia*	50.00	**	**	**	**	36 /58	**	**	**	**
	Spain*	42.86	66.67	10.00	30.00	**	45 /58	28 / 47	84/84	76/77	**
	Sweden	69.23	**	75.00	57.14	76.92	20 /58	**	17/84	50/77	20/76x
	Turkey*	38.89	**	50.00	85.71	83.33	49 /58	**	59/84	3/77x	6/76x

 $[\]mbox{\ensuremath{^{\star}}}$ Between 5 and 9 responses on one or more questions. $\mbox{\ensuremath{^{\star\star}}}$ Not Available

Global Survey Rankings

The top

The top jurisdiction in the world for investment based on the Investment Attractiveness is Utah, which moved up from 17th place in 2022 (see table 1). Nevada, which topped the ranking last year, ranked 2nd. Saskatchewan continues to be on the podium, ranking 3rd for second year in a row. Western Australia ranked 4th, moving down from the 1st place it occupied in 2022. Rounding out the top 10 are Quebec, Manitoba, Arizona, Northern Territory, Newfoundland & Labrador, and Ontario. Three jurisdictions—Utah, Manitoba, and Ontario—were outside of the top 10 in 2022 but this year displaced Colorado, South Australia, and Botswana.

Utah had the highest PPI score of 100 this year, replacing Nevada as the most attractive jurisdiction in terms of policy (see table 2). Saskatchewan, which ranked 15th last year, climbed 13 spots and now ranks 2nd. Manitoba ranks 3rd, becoming one of the top 10 jurisdictions for policy after ranking 24th in 2022. Along with Utah, Saskatchewan, and Manitoba, the top 10 ranked jurisdictions based on their PPI scores are Botswana, Nevada, Quebec, Arizona, Finland, Wyoming, and Alberta.

The United States and Canada have the most jurisdictions in the top 10 (4 each) followed by Africa (1), and Europe (1).

Nevada has ranked consistently in the top 10 over the last 10 surveys. Table 2 illustrates in greater detail the shifts in the relative ranking of the jurisdictions surveyed based on the respondents' perceptions of their policies.

The bottom

When considering both policy and mineral potential in the Investment Attractiveness Index, Niger ranks as the least attractive jurisdiction in the world for investment. This year, China, Solomon Islands, La Rioja, and Mozambique also ranked among the bottom 10 and followed Niger as the least attractive jurisdictions for investment. Also, in the bottom 10 (beginning with the worst) are Zimbabwe, Senegal, Kazakhstan, Bolivia, and Cambodia.

China, Mozambique, and Zimbabwe were among the bottom 10 jurisdictions last year.

The 10 least attractive jurisdictions for investment based on the PPI rankings are (starting with the worst) La Rioja, China, Niger, Colombia, Mongolia, India, Mozambique, Philippines, Zimbabwe, and Democratic Republic of Congo.

Global Results

Canada

Canada's median PPI score increased by 12 points from the 2022 survey. This year four Canadian jurisdictions—Saskatchewan (2nd), Manitoba (3rd), Quebec (6th), and Alberta (10th)—are ranked in the PPI top 10. When also considering how Canadian jurisdictions rank on the Investment Attractiveness Index, Canada is the third most attractive region in the world for investment after the United States and Australia. This year five Canadian jurisdictions ranked in the top 10 on investment attractiveness: Saskatchewan (3rd), Quebec (5th), Manitoba (6th), Newfoundland & Labrador (9th), and Ontario (10th).

Focusing on policy alone (and not overall investment attractiveness), British Columbia's PPI score barely moved, increasing by 0.1 points this year. Its PPI rank changed this year, however, coming in at an 32nd (out of 86) after ranking 27th (out of 62) last year. This year respondents expressed increased concern over British Columbia's trade barriers (+8 points), 5 the availability of skilled labour (+ 8 points), and regulatory duplications and inconsistencies (+8 points), and decreased concern over its community development conditions (-8 points), labour regulations (-7 points), and uncertainty concerning disputed land claims (-5 points).

Particularly, the three policy factors that continue to significantly hamper British Columbia's mining competitiveness are uncertainty concerning what areas are protected, uncertainty concerning disputed land claims, and environmental regulations. More than 63 percent of respondents found these three policy factors are deterrents to investment. Particularly, 68 percent of respondents expressed concern the uncertainty concerning what areas are protected and 64 percent of respondents showed concern over the uncertainty concerning disputed land claims. Investor concerns related to disputed land claims and protected areas likely reflect the ongoing tensions in the province over land title issues.⁶

27

⁴ Rankings are based on a jurisdiction's score relative to those of the other ranked jurisdictions. As a result, a jurisdiction may experience a drop or increase in rank even when its year-over-year score doesn't change.

⁵ The numbers in brackets show the difference between 2022 to 2023 of the total percentage of respondents that rate a particular policy factor as either a mild deterrent to investment, a strong deterrent to investment, or that they would not pursue investment due to this factor (i.e., the percentage point change).

⁶ See Ravina Bains (2014), A Real Game Changer: An Analysis of the Supreme Court of Canada Tsilhqot'in Nation v. British Columbia Decision, Fraser Institute; and Ravina Bains (2015), Economic Development in

Alberta's PPI score decreased by almost 5 points this year and the province went from ranking 6th out of 62 in 2022 to 10th out of 86 in 2023. This year, respondents for Alberta expressed increased concern over environmental regulations (+34 points), Alberta's legal system (+17 points) and the state of infrastructure (+17 points). However, the share of negative responses for the province dropped around community development agreements (-6 points) and uncertainty concerning disputed land claims (-5 points). Despite being in the top 10 most attractive jurisdictions based on policy alone, the province ranks 36th in the overall Investment Attractiveness Index due to a lack of geologic attractiveness in the eyes of investors (ranked 40th out of 58⁷ in the Best Practices Mineral Potential Index).

This year, Saskatchewan ranked 7th for its mineral potential. However, the province kept its 3rd place showing on the Investment Attractiveness Index. This is explained by an increase of almost 12 points in its PPI score this year. Respondents expressed increased concerns over the province's political stability (+5 points), its legal system (+5 points), and uncertainty concerning the enforcement of existing regulations (+5 points). However, respondents also indicated they had decreased concerns over the province's socioeconomic and community development agreements (-26 points), uncertainty regarding environmental regulations (-26 points), and uncertainty concerning what areas will be protected (-21 points).

Manitoba climbed to 6th place out of 86 jurisdictions on the Investment Attractiveness Index this year after ranking 14th out of 62 in 2022. Manitoba's PPI score also increased this year, by almost 25 points, and its position in the ranking rose from 24th (of 62) in 2022 to 3rd (of 86) in 2023. For the first time since 2016, when the province ranked 6th (of 104), Manitoba joined the ranks of the top 10 jurisdictions for policy alone. Respondents showed decreased concerns over factors like uncertainty regarding what areas will be protected (-37 points), concerns about disputed land claims (-36 points), and the state of community development conditions (-36 points). However, investors did show increasing concern about the province's taxation regime (+10 points), regulatory duplication (+8 points), and the availability of skilled labor (+3 points).

While Ontario decreased its score in the Investment Attractiveness Index marginally, by nearly 0.3 points, it still climbed to 10th place out of 86 after ranking 12th out of 62 in 2022. Ontario's PPI score increased by 9 points this year and its rank improved from

Jeopardy? Implications of the Saik'uz First Nation and Stellat'en First Nation v. Rio Tinto Decision, Fraser Institute. Both are available at www.fraserinstitute.org.

⁷ Some jurisdictions have the same score as others, so all with that score share the same rank.

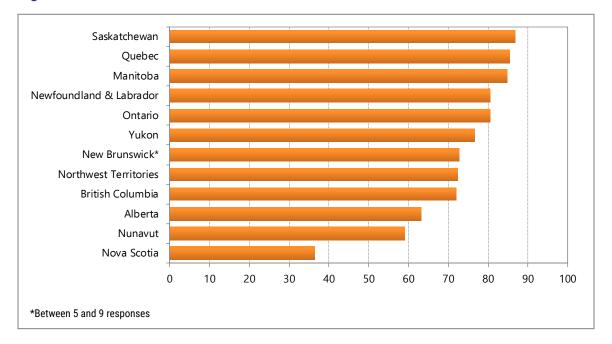


Figure 6: Investment Attractiveness Index—Canada

8th (out of 62) in 2022 to 13th (out of 86) in 2023. Nonetheless, respondents expressed increasing concern over uncertainty about environmental regulations (+9 points), the province's legal system (+7 points), and uncertainty regarding the enforcement of existing regulations (+5 points). However, survey respondents showed decreased concern about the province's taxation regime (-19 points), its community development conditions (-18 points), and the state of its infrastructure (-17 points).

Quebec's PPI score increased by almost 5 points this year, which improved its ranking from 14th spot (of 62) in 2022 to 6th (of 86) in 2023. This year, however, miners expressed increasing concern over regulatory duplication (+11 points), uncertainty concerning the enforcement of existing regulations (+11 points), and environmental regulations (+8 points). Respondents expressed decreased concerns over uncertainty concerning disputed land claims (-8 points), labor regulations (-8 points), and community development conditions (-6 points). Quebec is the 5th most attractive jurisdiction in the world for mining investment.

Newfoundland & Labrador saw its PPI score decrease by almost 8 points this year, which moved the province down in the ranking to 11th spot (of 86) after ranking 5th out of 62 in 2022. This year, miners were increasingly concerned about the uncertainty concerning

regulatory duplication (+26 points), protected areas (+22 points), and uncertainty regarding disputed land claims (+17 points).

New Brunswick's PPI score worsened by 4 points, which dropped it in the ranking from 8th place in 2022 to 16th in 2023. Respondents had increased concerns over regulatory duplication (+43 points), uncertainty about what areas will be protected (+26 points), and the availability of skilled labor (+22 points). However, they had decreased concerns about New Brunswick's community development conditions (-16 points), the uncertainty regarding the enforcement of existing regulations (-11 points), and its infrastructure (-3 points).

The Yukon, which this year again ranked 10th in the Best Practices Mineral Potential Index, increased its PPI score by over 13 points and ranked 28th in the PPI ranking (compared to ranking 31st last year). This year respondents indicated they had increased concerns about the availability of skilled labor (+8 points), infrastructure (+2 points), and political stability (+1 point). Due to its geologic attractiveness, the Yukon ranked 16th in the overall Investment Attractiveness Index, climbing from 20th spot in 2022.

Comments: Canada

The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

Alberta

Regulatory changes and coal phase-out schedule deter future exploration and investment.

— A producer company with less than US\$50M, Company vice-president

British Columbia

British Columbia has high uncertainty on land claims and environment review approaches.

— A producer company with more than US\$50M, Company vice-president

Policy changes placed significant strain on our company, which owns a historic mine site. We faced severe environmental compliance issues stemming from the legacy operation, nearly resulting in the bankruptcy of our company.

— A producer company with more than US\$50M, Company president

A major coal and rail development, backed by significant offshore investment, faced Indigenous protests after a land use plan designated the area for coal mining. This plan had received approval from both the Indigenous group and the BC government. However, British Columbia did not actively support the project, leading to our decision to sell at a loss.

—An exploration company, Company president

Manitoba

Manitoba made great progress in mining and exploration policy in 2023. Our hope is that this continues with the upcoming administration.

—An exploration company, Company president

Giving veto powers to First Nations members without clear criteria to impose the veto adds uncertainty and prevents investment.

—An exploration company, Consultant

Newfoundland & Labrador

Royalties from mining operations are not being properly invested in improving community development conditions. Royalties should be shared with the local municipalities and regional stake holders.

— An exploration company, Company president

Northwest Territories

The policy of exempting mineral extraction from taxation encourages investment.

— An exploration company, Company president

The governments in NWT, alongside the federal government, impose regulatory challenges and high costs, prompting companies to explore mining opportunities in jurisdictions beyond Canada.

— A consulting company, Senior management

Nova Scotia

Inconsistencies in regulations deter investment as one government authority may grant a license while another may declare a particular site for which the licence was granted a natural reserve.

— A consulting company, Senior management

Nunavut

The governments in Nunavut impose regulatory challenges and high costs prompting companies to explore mining opportunities in jurisdictions beyond Canada.

— A consulting company, Senior management

Ontario

Too many "grey" areas in the permitting process deter investment.

— A consulting company, Company president

The province's cadastre system [an inventory of land parcels, boundaries, and property ownership information] is transparent and provides an incentive for investment.

— An exploration company, Company president

Dispute over licensing for many projects delays the development of projects.

—An exploration company, Company president

Obtaining regulatory permits for the closure of a mine site has been unnecessarily difficult.

— A producer company with more than US\$50M, Company unit manager

Quebec

[The province] allows regional county municipalities to exclude large swaths of territory as incompatible with mining exploration.

— An exploration company, Company president

Saskatchewan

After purchasing a property and completing a positive environmental assessment, the rural municipality denied a zoning change that would have enabled a refinery project to proceed, causing our company millions of dollars in losses and years of delays.

— An exploration company, Company president

Yukon

The Yukon government did not know what to do with legacy permits, leading to botched communications with First Nations and a delayed closure of a mine that had never been built. The incoming company was expected to assume responsibility for legacy environmental issues that predated existing permits.

—An exploration company, Company vice-president

The mines regulator continues to stipulate regulations for drilling permits that lack the basic understanding of field work and the drilling process.

—An exploration company, Company president

The United States

The United States' median investment attractiveness score increased this year by 3 points. Based on policy factors and mineral potential, the most attractive state in which to pursue exploration investment is Utah, which this year ranked as the most attractive jurisdiction in the world.

Based on its median investment attractiveness score, the United States is the most attractive region in the world for mining investment, followed by Australia, and then Canada. However, the median PPI score for the United States decreased in 2023 (-4.3 points) and this year on policy alone ranks as the second most attractive region after Canada. T

he state with the most attractive policy environment is Utah, which, as noted, has an investment attractiveness that ranked it 1st in the world. This year, four US jurisdictions—Utah (1st), Nevada (5th), Arizona (7th), and Wyoming (9th)—ranked in the global top 10 on policy.

Despite those impressive results, the US jurisdictions showed mixed results this year. Utah, the most attractive jurisdiction to investors, increased its investment attractiveness score by 16 points and its policy perception index score by 4 points, ranking it 1st out of 86 in the policy ranking. Even so, respondents expressed increased concern over the state's regulatory duplication (+30 points), the quality of its geological database (+11 points), and uncertainty about environmental regulations (+10 points).

Nevada, which last year ranked as the most attractive jurisdiction for investment, this year ranks $2^{\rm nd}$ after its score decreased by over 4 points. Nevada's policy score also dropped by over 8 points and this year it ranks $5^{\rm th}$ out of 86 after ranking $1^{\rm st}$ out of 62 last year. However, survey respondents expressed decreasing concerns over Nevada's regulatory

⁸ The median is a measure of central tendency that is not affected by extreme values, unlike the mean. When the mean—and not the median—is calculated for all the regions, the United States has the highest Policy Perception Index, Best Practices Mineral Potential Index, and Investment Attractiveness Index scores on average.

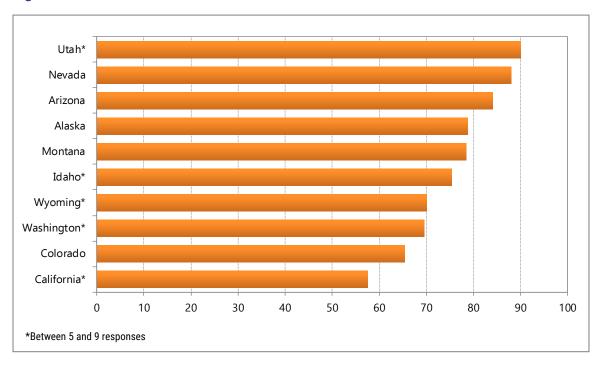


Figure 7: Investment Attractiveness Index-United States

duplication (+22 points), uncertainty concerning environmental regulations (+19 points), and the uncertainty concerning what areas will be protected (+15 points).

Arizona remained one of the top 10 most attractive jurisdictions for investment this year. The state dropped slightly—nearly 0.3 points—on the Investment Attractiveness Index, but kept its 7th place ranking (out of 86) after placing 7th (out of 62) in 2022. This year Arizona's PPI score also decreased—by almost 0.5 points—but it was able to keep its spot as the 7th (of 86) most attractive jurisdictions on policy. Miners expressed increased concern over the quality of Arizona's geological database (+23 points), regulatory duplication (19 points), and uncertainty regarding what areas will be protected (+12 points). Arizona remained in the group of the top 10 most attractive jurisdictions in the world when considering only mineral potential; it now ranks 8th (out of 58) on this factor.

Alaska's score on the Investment Attractiveness Index decreased by 3 points. However, the state kept is rank as the 11^{th} (of 86) most attractive jurisdiction for investment after occupying the same spot in 2022. Alaska decreased its policy score by nearly 5 points, which dropped its ranking to 19^{th} spot (out of 86) in 2023 from 13^{th} (of 62) in 2022. Respondents expressed increasing concern over Alaska's legal system (+19 points), the quality of its geological database (+15 points), and its community development conditions (+14 points).

Montana's score on the Investment Attractiveness Index increased almost 5 points, which caused its ranking to rise from 18^{th} (of 62) in 2022 to 12^{th} (of 86) this year. On policy alone, Montana's PPI score decreased by 0.5 points and it ranked 24^{th} out of 86. Respondents expressed increasing concern over uncertainty concerning what areas are protected (+26 points), regulatory duplication (+12 points), and the state's community development conditions (+4 points).

Idaho increased its Investment Attractiveness Index score by over 7 points and this year ranks 20th out of 86 jurisdictions. However, on policy alone, Idaho decreased its PPI score by almost 11 points and went from ranking 11th (out of 62) in 2022 to 25th spot (out of 86) in 2023. In particular, respondents expressed increasing concerns over Idaho's legal system (+30 points), uncertainty concerning its environmental regulations (+28 points), and regulatory duplication and inconsistencies (+27 points).

California ranks 40th out of 86 on the Investment Attractiveness Index and continues to be the United States' least attractive jurisdiction for investment. California increased its PPI score by over 0.6 points but despite that, dropped to the 63rd spot after ranking 46 (of 62) in 2023. This year, all survey respondents (100 percent) for California expressed concern about uncertainty concerning environmental regulations; 90 percent of respondents said regulatory duplications are a major deterrent to investment; and 82 percent said that uncertainty concerning the enforcement of existing regulations is a deterrent to investment.

Comments: United States

The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

Alaska

The [horror story is the] Mine Safety and Health Administration (MSHA). A significant obstacle arises when, as a small miner with no employees, you are informed that you [have lost] your rights. Regulations are imposed in such a way that fines are applied even in the absence of operations or employees.

—A producer company with less than US\$50M, Company president

When responding to a drilling permit application, the Alaska Department of Natural Resources was prompt in addressing any questions we had regarding the application

process. They were equally quick to pose their own questions upon submission of the application.

—An exploration company, Company president

Nevada

"Casual use" exploration rules need to be updated to accommodate modern-day auger soil sampling technology.

— A producer company with more than US\$50M, Company vice-president

Uncertainty concerning disputed land claims stalls projects and deters investment.

— A producer company with more than US\$50M, Company vice-president

Utah

Shorting drill permitting times is an incentive to investment.

— A producer company with more than US\$50M, Company president

Australia and Oceania

For the first time since 2019, Australia is not the most attractive region in the world for mining investment. This year, Australia is the second most attractive region for investment, surpassed by the United States. Western Australia (4th) and Northern Territory (8th) appeared in the global top 10 on the Investment Attractiveness Index in this year's survey.

The PPI scores for all the Australian jurisdictions, with the exception of Queensland and Northern Territory, decreased compared with 2022. South Australia (a drop of almost 16 points) and Tasmania (a nearly 14-point drop) declined the most, falling from the 3rd and 12th spot (out of 62) in 2022 to the 20th and 29th out of 86 in 2023, respectively. When evaluating Tasmania, miners were increasingly concerned about uncertainty regarding its protected areas (+35 points), disputed land claims (+29 points), and regulatory duplication (+28 points). On overall investment attractiveness Tasmania ranked second last of all the Australian jurisdictions.

Of the Australian jurisdictions, Queensland experienced the most significant increase in its PPI score (+11 points), improving its ranking from 28th (out of 62) in 2022 to 23rd (out of 86) in 2023. Respondents expressed decreased concerns over uncertainty regarding

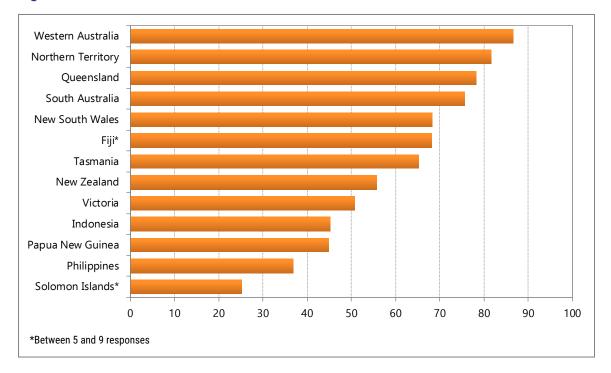


Figure 8: Investment Attractiveness Index—Australia and Oceania

environmental regulations (-21 points), regulatory duplication and inconsistency (-19 points), and uncertainty concerning the enforcement of existing regulations (-17 points).

The Northern Territory's PPI score increase of a little over 9 points this year meant that its rank improved from 25th (of 62) in 2022 to 22nd (of 86) in 2023. This year, miners had decreased concern about the quality of the geological database (-22 points), uncertainty regarding the administration and enforcement of regulations (-19 points), and the Northern Territory's legal system (-18 points).

Despite an almost 3-point decline in its PPI score, Western Australia continues to be Australia's highest ranked jurisdiction for overall investment attractiveness. Considering policy alone, the state went from ranking 10th (of 62) in 2022 to 17th (of 86) in 2023. Miners expressed increased concern about the state of Western Australia's infrastructure (+15 points), its political stability (+12 points), and disputed land claims in the state (+11 points).

This year, Fiji, Indonesia, New Zealand, Papua New Guinea, the Philippines, and the Solomon Islands received enough responses to be included in the survey and are grouped

together under Oceania. According to respondents, Oceania is the region with the lowest policy ranking and the fourth lowest overall investment attractiveness ranking.

Fiji ranks 31st (of 86) in the Investment Attractiveness Index and 27th on the PPI. According to this year's survey, 71 percent of respondents are concerned about Fiji's infrastructure, 50 percent over regulatory duplications and inconsistencies, and 43 percent over uncertainty concerning what areas are protected and over the state of community development conditions.

Papua New Guinea's PPI score increased by almost 10 points, which ranks the country 74th out of 86 this year. Respondents expressed increasing concerns over Papua New Guinea's trade barriers (+21 points), its community development conditions (+13 points), and uncertainty over what areas will be protected (+11 points). Additionally, all of the respondents indicated that the country's infrastructure and the quality of its geological database are the main policy factors deterring investment.

New Zealand ranks 43rd out 86 jurisdictions on the Investment Attractiveness Index and 50th out of 86 on the PPI ranking. Respondents for New Zealand expressed considerable concerns about uncertainty over what areas will be protected (88 percent of respondents), uncertainty about environmental regulations (83 percent), and uncertainty over the enforcement of regulations (72 percent).

Comments: Australia and Oceania

The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

New South Wales

Land access and permits are becoming a deterrent for investment.

—An exploration company, Company president

Lack of consistent regulations and coordination among government agencies deter investment.

—An exploration company, Senior management

Northern Territory

The geological database in the Northern Territory is the best in Australia. It provides much useful and abundant information to explorers.

— An exploration company, Company president

Oueensland

The coal royalty increase [was] coupled with a dismissive manner in which the government addressed the industry's concerns about the lack of consultation.

— An exploration company, Company manager

The recent government royalty changes have resulted in a substantial increase in the cost of doing business in Queensland.

— An exploration company, Company president

Implementing a significant hike in coal royalty rates without prior notice suggests a precedent that may extend to other commodities in the future. The uncertainty deters investment.

— An exploration company, Company president

Victoria

Implementing a substantial rise in gold royalties is creating uncertainty and deterring investment.

— A producer company with more than \$50M in revenue, Company president

Due to administrative mishandling and/or maladministration, we were deprived of a valuable exploration tenement in which we had made substantial investments in the past. Despite our repeated requests for meetings to rectify the matter, the minister has failed to respond. Senior administrators remained unresponsive.

— An exploration company, Company president

Western Australia

The laws governing Aboriginal cultural heritage and access rules are creating significant uncertainty.

—A consulting company, Company president

Numerous cases illustrate a deviation from the original intent of First Nations final agreements in the context of land use planning, protected areas, and the permitting process.

— A producer company with more than US\$50M, Company president

Africa

Africa's median score on the Investment Attractiveness Index decreased by a little over 9 points this year. With a median score of 44.88, Africa is the third least attractive region for mining investment when accounting for both mineral potential and policy, according to miners. However, Africa's median PPI score increased by over 6 points in 2023. This year, Kenya, Liberia, Mauritania, Niger, Senegal, and Uganda received enough responses to be included in the report.

Four African countries—Niger (84th), Mozambique (80th), Zimbabwe (78th), and Democratic Republic of Congo (77th)—ranked in the bottom 10 of the survey rankings this year based on policy. Furthermore, four African jurisdictions were ranked in the global bottom 10 based on their overall investment attractiveness scores: Niger (86th), Mozambique (82nd), Zimbabwe (81th), and Senegal (80th). Zimbabwe has been in the bottom 10 in the previous 10 editions of the mining survey.

Botswana is the highest ranked jurisdiction in Africa based on policy, ranking 4th (of 86) on the PPI in 2023. Botswana's lower PPI score this year (-5.6 points) reflects increasing concerns about skilled labor (+15 points), infrastructure (+9 points), its geological database (+9 points) and uncertainty concerning protected areas (+9 points). This year, Botswana dropped several places in the Investment Attractiveness Index and ranks 15th (out of 86) after ranking among the top 10 jurisdictions last year.

Morocco is the second most attractive jurisdiction in Africa for both overall investment and policy only. Morocco's PPI score increased by a little over 6 points and it now ranks 12^{th} (of 86) this year, climbing several spots from 17^{th} (of 62) in 2022. Investors expressed decreased concerns about uncertainty over the administration and enforcement of existing regulations (-40 points), political stability (-20 points), the country's legal system (-11 points), and uncertainty concerning disputed land claims (-11 points).

South Africa's policy score increased by almost 11 points. However, its position dropped somewhat and it ranks 64^{th} out of 86 jurisdictions after ranking 53^{rd} out of 62 in 2022.

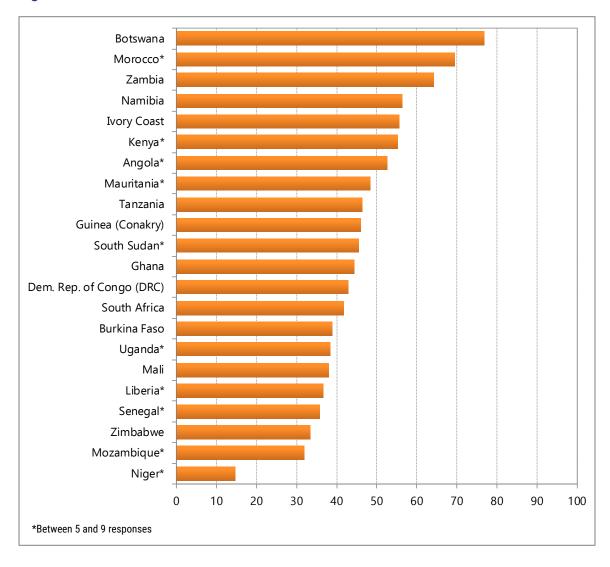


Figure 9: Investment Attractiveness Index-Africa

Investors were increasingly concerned about uncertainty over environmental regulations (+18 points), protected areas (+12 points), and labor regulations (+11 points).

Guinea (Conakry) increased its policy score by 23 points, going from 61st (of 62) in 2022 to 70th (of 86) in 2023 on the PPI ranking. Investors had increased concerns over the country's labour regulations (+20 points), uncertainty concerning disputed land claims (+18 points), and its taxation regime (+15 points).

Zimbabwe, one of the lowest-ranked African jurisdictions on policy (78th out of 86) and one of the least attractive jurisdictions for mining investment globally (81st out of 86),

experienced a 24-point increase in its policy score this year. Uncertainty regarding the administration, interpretation, or enforcement of existing regulations continues to be a major concern for investors (91 percent of respondents said this was the case), as is the country's political stability, which 90 percent of respondents said was a major deterrent to investment.

Comments: Africa

The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

Democratic Republic of Congo

Cadastral (tenement) information is available but outdated, and obtaining access to current data involves facilitating payments. Government officials involved in license management are openly engaged in corrupt practices.

— A consulting company, Company president

Namibia

Exploration companies are mandated to incorporate local ownership.

— A producer company with less than \$50M, Company president

The proposed "Investment Promotion Bill" is heightening uncertainty and risk.

— An exploration company, Manager

Mali

The renewal process for prospecting licenses, initially intended for a two-year period, was recently expanded. Anti-resource actors have proven effective in impeding the government's efficiency in this procedure.

— A producer company with more than \$50M in revenue, Company vice-president

Increasing taxes are a deterrent to investment.

— A consulting company, Manager

South Africa

Local community engagement and preferential procurement requirements lack clarity due to the absence of a definitive cadastral system delineating the extent, location,

and area of influence of various communities.

— A producer company with more than US\$50M, Company vice-president

Lack of transparency in permits is a deterrent to investment.

— An exploration company, Company president

South Sudan

Failure to adhere to force majeure regulations as prescribed by law deters investment.

— An exploration company, Company president

Zimbabwe

Corruption surrounding permitting and other processes deters investment.

— An exploration company, Company president

Argentina, Latin America, and the Caribbean Basin

This year, Argentina ranked as the 4th most attractive region in the world for investment with a median investment attractiveness score of 74.13. The country's PPI score increased, going from 49.54 in 2022 to 64.40 this year, an almost 15-point rise. Among Argentina's provinces, Jujuy and Salta increased their PPI scores this year. La Rioja received enough responses to be included in the report and this year ranks as the worst jurisdiction for policy and one of the least attractive for investment, ranking 83rd out of 86 jurisdictions. All of the respondents for La Rioja were concerned about labor regulation and 88 percent of respondents said the province's legal system is a deterrent to investment.

Salta (26th of 86) is the best-ranked Argentinian province on policy alone; the region increased its PPI score by 25.71 points this year. Investors were less concerned than in the past about Salta's political stability (-56 points), uncertainty about disputed land claims (-50 points), and trade barriers (-39 points). However, respondents were more concerned about community development conditions (+8 points), the taxation regime (+6 points), and infrastructure (+5 points).

San Juan saw a drop of nearly 5 points in its PPI score (-4.53 points) and it went from ranking 23rd out 62 in 2022 to 34th out of 86 in 2023. Survey respondents were increasingly concerned about the province's quality of its geological database (+36 points), availability of skilled labor (+28 points), and uncertainty about which areas will be protected (+22 points).

This year, of all the regions, Latin America and the Caribbean Basin experienced the largest drop in its median investment attractiveness score. It decreased by almost 20 points and the region has become the second least attractive region for mining investment globally. The region also saw a decrease of 5.62 points on its policy perception score from 2022. On policy alone, Brazil (43rd), and Chile (49th) are the most attractive jurisdictions in the region for investment while Colombia dropped in the ranking and this year is the least

Overall, Peru saw the highest increase in its policy score (+9.51 points) and went from the 49^{th} (out 62) spot in 2022 to the 61^{st} (out of 86) in 2023. Miners were increasingly concerned about uncertainty regarding its protected areas (+12 points), Peru's legal system (+12 points), and its labor regulations (+8 points).

attractive jurisdiction for investment in Latin America. In fact, Colombia is the fourth least attractive jurisdiction for investment in the world, occupying the 83th spot out of 86.

On the Investment Attractiveness Index, Chile's score decreased by 0.58 points and it went from ranking 35th (of 62) in 2022 to 38th (out of 86) in 2023. On policy alone, Chile ranks 49th (out of 86) this year, a drop of almost 9 points on its policy score from last year. Miners expressed increased concern over the uncertainty about which areas will be

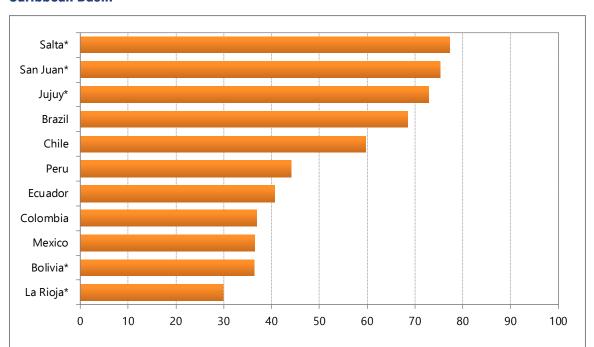


Figure 10: Investment Attractiveness Index—Argentina, and Latin America and the Caribbean Basin

*Between 5 and 9 responses

protected (+20 points), the quality of the country's geological database (+16 points), and uncertainty regarding the enforcement of existing regulations (+7 points).

Brazil saw a decrease of 0.48 points on the Investment Attractiveness Index; it went from ranking 25th (of 62) in 2022 to 29th (out of 86) in 2023. On policy alone, Brazil's score declined by over 2 points this year, and it ranks 43rd out of 86. Respondents expressed increasing concern over uncertainty about which areas will be protected (+47 points), community development conditions (+37 points), and regulatory duplication and inconsistencies (+23 points).

This year, Mexico's Investment Attractiveness Index score decreased by over 23 points, which dropped its ranking from 37^{th} (of 62) in 2022 to 74^{th} (of 86) in 2023. Mexico's score on policy alone decreased by 5 points and it dropped in the policy ranking from 44^{th} (of 62) to 68^{th} (of 86). Miners expressed increasing concern over Mexico's infrastructure (+26 points), uncertainty regarding protected areas (+26 points), and regulatory duplication (+15 points).

For the first time, on policy alone, Colombia is among the bottom 5 the least attractive jurisdictions in which to invest globally. Colombia experienced one of the highest score drops on the policy index (-15.72 points) and this year ranks 83rd (out of 86) on the PPI. All of the respondents for Colombia (100 percent) were concerned about the country's political stability, 95 percent of the respondents were concerned about Colombia's legal system, and 89 percent were worried about the country's security. Respondents also expressed an increased concern about the quality of its geological database (+31 points), its labor regulations (+28 points), and its taxation regime (+26 points).

Comments on Argentina, Latin America, and the Caribbean Basin

The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

Argentina

Foreign currency restrictions imposed by the Kirchnerist national administration deters investment.

— A producer company with less than US\$50M, Company president

The mandatory requirement to contract services with local operators in close proximity or affiliated with the local government shows a lack of transparency and is a deterrent to investment.

— A consulting company, Company president

Chile

Refusals of permits for advanced projects stemming from political decisions or inconsistent application of environmental regulations deter investment.

— An exploration company, Company president

Nationalization of mining assets increases uncertainty and deters investment.

— A consulting company, Company president

Colombia

The Ministry of Environment informed us that capturing rainwater runoff from tarps over the drill deck for drill water usage was not permitted. Instead, we were required to apply for a diversion permit from a site they designated, which was 1.5 kilometers away from the drill area.

— An exploration company, Company president

Uncertainty concerning environmental regulation deters investment.

— An exploration company, Company president

Exploration-to-development timelines are unreasonably brief, ranging from 7 to 12 years. These timeframes prove insufficient for conducting comprehensive studies and implementing mitigation strategies for significant new mining operations, particularly within an environment where operation-to-close plans are becoming more demanding. This policy stands out as one of the most detrimental factors for exploration efforts.

— A producer company with more than US\$50M, Company vice-president

Mexico

Recent amendments (in 2023) to the Mining Act have emerged as a significant impediment to exploration efforts.

— An exploration company, Company vice-president

President announcing a moratorium on new mining permits is a deterrent to investment.

— An exploration company, Company vice-president

[There is an] active cartel presence without any protection from Mexican police or authorities.

— An exploration company, Company president

The nationalization of lithium forces partnership with government and lack of transparency.

— A producer company with more than US\$50M, Company vice-president

Peru

Permit delays are exacerbated by political and regional opposition to mining activities.

— An exploration company, Company vice-president

Overall mismanagement of social conflicts that promote a negative view of mining is a deterrent to investment.

— A producer company with more than US\$50M, Company president

Asia

With a median policy score of 33.99, Asia is the second lowest ranked region globally. When we account for both mineral potential and policy performance, Asia is the least attractive jurisdiction in the world for mining investment. Consequently, China (85th), Mongolia (82nd), and India (81st) are among the global bottom 10 jurisdictions based on policy. This year, Cambodia, India, Kazakhstan, Thailand, and Vietnam received enough responses to be included in the report.

On policy alone, Cambodia ranks 57th out of 86 jurisdictions. All the respondents for that country (100 percent) expressed concerns over Cambodia's infrastructure, 80 percent over the quality of the country's geological database, and 60 percent over uncertainty concerning the enforcement of existing regulations.

India ranks 69th (of 86) on the Investment Attractiveness Index and 81st (of 86) on the Policy Perception Index. Ninety percent of respondents expressed concern over India's legal system, 83 percent pointed to uncertainty regarding the enforcement of existing regulations, and 82 percent said that regulatory duplications and inconsistencies were deterrents to investment.

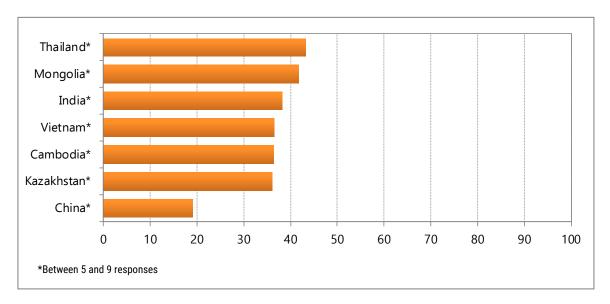


Figure 11: Investment Attractiveness Index—Asia

China decreased its policy score by 1.38 points. This year, all the respondents for China had concerns about uncertainty regarding the enforcement of existing regulations. Similarly, investors showed increased concern over community development conditions (+27 points), China's legal system (+20 points), and its geological database (+19 points).

Similarly, Mongolia decreased its score (-8.94 points) this year from 2022. Miners were increasingly concerned about uncertainty regarding protected areas (+38 points), uncertainty concerning disputed land claims (+33 points), and its taxation regime (+30 points). Moreover, all respondents were concerned about the state of Mongolia's infrastructure and 89 percent said that political stability is a major deterrent to investment.

Comments on Asia9

The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

India

The current government's approach to granting exploration licenses is outright absurd. When one proposes an exploration target area and applies for a license, the government proceeds to auction off the rights to that block to the highest bidder. Even if a discovery

⁹ This year, investors only provided one comment for Asia.

is made, the government continues this practice by auctioning off the mining rights.

— An exploration company, Company vice president

Europe

This year, Bulgaria, Greenland, the Republic of Ireland, Northern Ireland, Norway, Portugal, Serbia, Sweden, and Turkey received enough responses to be included in the report. Europe's median investment attractiveness score decreased by almost 15 points this year compared to 2022.

This year Finland increased its PPI score by almost 5 points and climbed from the 16th spot (out of 62) to 8th (of 86) on that index. On the overall Investment Attractiveness Index, Finland also improved its ranking and went from 29th (of 62) in 2022 to 17th (of 86) in 2023. This year, investors showed reduced concern about the availability of skilled labor (-27 points), community development conditions (-13 points), labor regulations and the quality of the geological database quality (-9 points each).

The PPI score for Spain, on the other hand, decreased by over 10 points, which dropped the country from 26th (out of 62) in 2022 to 49th (of 86) on the 2023 Investment Attractiveness Index. On policy alone, Spain went from the 22nd spot (of 62) to the 41st out of 86. Investors expressed concern about uncertainty regarding the country's protected areas (+33 points), community development conditions (+33 points), and regulatory duplication and inconsistencies (+27 points).

Sweden is the second-best performer among European jurisdictions on the Investment Attractiveness Index; it ranks 18th (of 86). On policy alone, Sweden ranks 14th (of 86). Overall, 48 percent of respondents were concerned about uncertainty over protected areas, 47 percent said that regulatory duplication and inconsistencies are a deterrent to investment, and 43 percent pointed to uncertainty concerning disputed land claims as a major concern for investors.

The Republic of Ireland ranks 15th (out of 86) for policy alone and 35th out of 86 on the Investment Attractiveness Index. Investors pointed to uncertainty regarding environmental regulation (48 percent of respondents), uncertainty concerning protected areas (45 percent), and regulatory duplication and inconsistencies (43 percent) as major deterrents to investment.

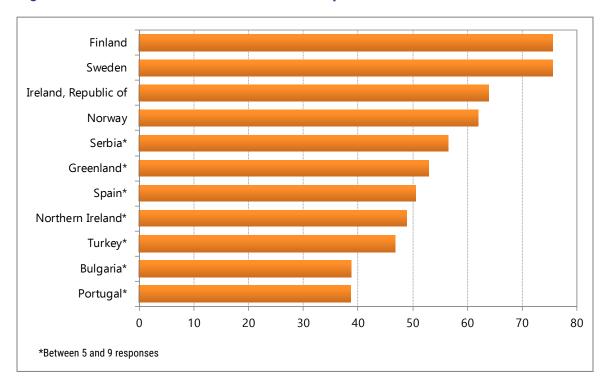


Figure 12: Investment Attractiveness Index—Europe

This year, Greenland ranks 60th out of 86 jurisdictions in the PPI and is the worst performer of all the European jurisdictions included in the study. All the respondents for Greenland were concerned about the country's infrastructure, 88 percent over uncertainty concerning environmental regulations, and 83 percent about the availability of skilled labor.

Comments on Europe

The comments in the following section have been edited for length, grammar and spelling, to retain confidentiality, and to clarify meanings.

Finland

The recent reform of mining laws has bestowed increased authority on local councils and other stakeholders to veto exploration and mining permits. This shift introduces greater uncertainty into the cycles of mining development.

— An exploration company, Company president

Northern Ireland

There is a lack of interest for mineral exploration from government authorities. Despite the availability of robust geological datasets and the region's potential for various commodities, a "hands-off" approach is adopted once exploration permits are issued, with no support from these departments when issues arise.

— An exploration company, Company president

Drilling regulations deter investors from operating and investing in the country.

— An exploration company, Company president

Norway

Off-road permits are subject to varying procedures in each municipality, occasionally featuring impractical conditions.

— An exploration company, Company president

Spain

[The country's] new climate change law creates uncertainty and deters investment.

— An exploration company, Company president

Long and intricate approval processes coupled with a complete lack of safeguards for mining investments leave investors vulnerable to expropriation without any compensation at any given time.

— An exploration company, Company president

Sweden

The uncertainty concerning what areas are protected deters investment.

— An exploration company, Company president

Overview

An analysis of the regional trends¹⁰ in the results of the Investment Attractiveness Index (based on both mineral potential and policy factors) from the 2023 mining survey shows a stark difference between geographical regions. As figure 13 indicates, the United States is the most attractive region in the world for investment this year, followed by Australia, and then Canada.

With the exception of the United States, Canada, and Argentina, all the regions decreased their relative investment attractiveness. The regions that experienced the greatest drop in their median score include Latin America and the Caribbean Basin (-32.8 percent), Asia (-26.5 percent), Europe (-21.9 percent), Africa (-17.3 percent), Oceania (-11.8 percent), and Australia (-3.8 percent). Argentina, the United States, and Canada increased their median investment attractiveness scores by 24.2 percent, 4.3 percent, and 0.6 percent respectively.

When considering policy alone (figure 14), Canada is the top performing region with an increased median policy score of 16 percent over last year. The United States saw a decrease of almost 5 percent on its median policy score and is now the second top performing region for investment. Australia is the third top performing region and saw its median policy score increase more than 7 percent. This year, Europe had the most significant decline in its policy score (-15.6 percent) and dropped to the fourth spot when considering policy alone. Latin America and the Caribbean experienced the second most significant decrease in median policy score, with a decline of 13.8 percent; as a whole, it is the second least attractive region for investment in the survey on policy alone.

Of the regions included in the survey, Oceania continues to have the least attractive policy environment despite its regional PPI median score increasing by 54.3 percent. Other regions where the regional PPI scores increased significantly were Asia (52.5 percent), Argentina (30 percent), Africa (16.8 percent) and Australia (7.4 percent).

¹⁰ The regional median investment attractiveness scores are calculated based on the jurisdictions included in each year. As a result, the number of jurisdictions included in the regional score will vary year-over-year depending on the number of survey responses.

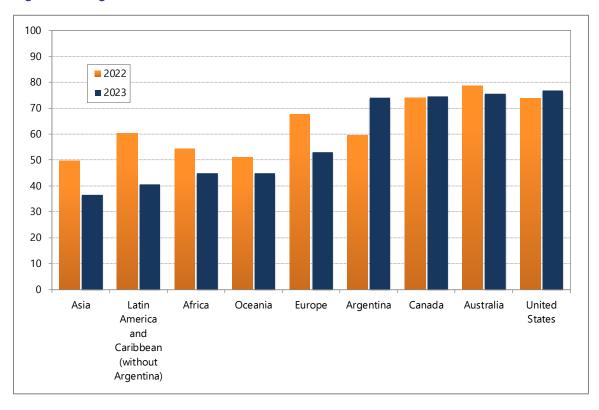


Figure 13: Regional Median Investment Attractiveness Scores 2022 and 2023



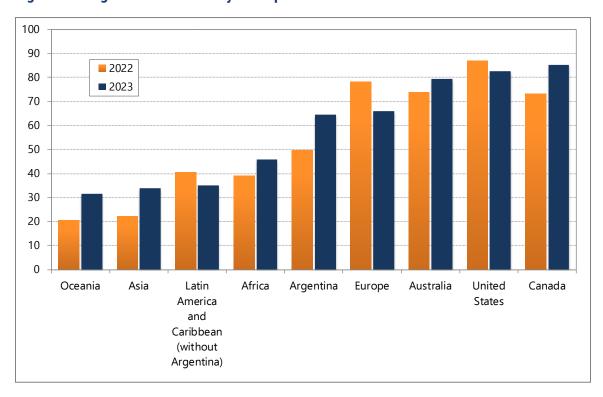
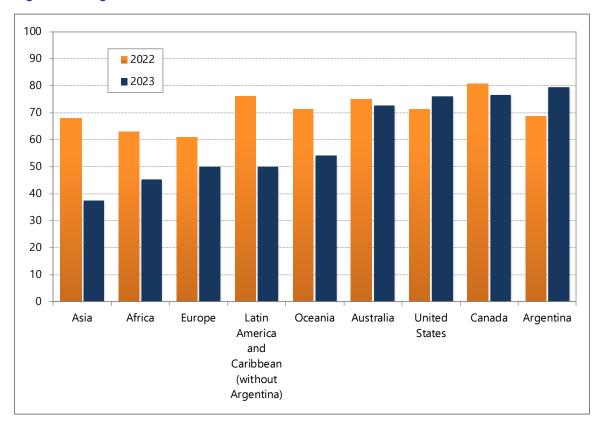


Figure 15: Regional Median Best Practice Mineral Potential Index Scores 2022 and 2023



Permit Times for Mining Exploration 2023

This year's survey includes and continues the work of the previous editions of *Permit Times for Mining Exploration* (2018, 2019, 2020, 2021, and 2022¹¹). It remains an early contribution to the attempt to assess the exploration permitting process and its possible effects. As with the earlier reports, we undertook a survey of mining executives who have recently applied for exploration permits in Canada's provinces and territories, and in a number of jurisdictions around the world, to get a better understanding of how timelines for permit approval, transparency, and other issues in the permit approval process differ.

The results of this sub-survey will enable us to better understand how states, provinces, and territories perform in this area and will serve as a starting point for future research aimed at identifying best practices for exploration permitting. This year's survey gathers data in jurisdictions in Australia, the United States, Canada, and Northern Europe, all regions where mining, environmental, and other policies are broadly comparable to those in Canada. This will help gauge Canada's performance in comparison to a number of similar jurisdictions.

To ensure that only individuals with knowledge of mining exploration in the regions included in the exploration permit survey answered the permit-time component of the survey, only those who provided responses for Canada, the United States, Northern Europe, and Australia in the broader survey were given access to the sub-survey on exploration permits. Only respondents who had applied for an exploration permit, license, notice of work, or similar document within the last two years were asked to respond to the sub-survey to ensure that only those with the most recent and relevant experience were answering the questions. As a result, 212 executives and managers answered the permit-time component of the survey. Only jurisdictions that had a minimum of five responses were included in the exploration permits study. Table 4 shows those jurisdictions that met this criterion. Jurisdictions with between 5 and 9 responses have been noted in subsequent tables to indicate that results for these jurisdictions are likely not as robust as those for jurisdictions with 10 or more responses.

¹¹ See https://www.fraserinstitute.org/studies/annual-survey-of-mining-companies-2022 for the *Annual Survey of Mining Companies*, 2022, which contains that year's Permit Times for Mining Exploration.

Table 4: Jurisdictions Discussed						
Canada United Stat		Australia	Europe			
British Columbia	Alaska	New South Wales*	Finland*			
Newfoundland & Labrador*	Nevada*	Northern Territory*	Sweden			
Northwest Territories		Queensland*				
Nunavut*		Victoria*				
Ontario*		Western Australia*				
Quebec						
Yukon*						

A little over 50 percent of respondents (51.4 percent) to the permit-time component of the *Annual Survey of Mining Companies* were company presidents. A further 20.3 percent of respondents were either company vice-presidents or managers (figure 16). Nearly half of the respondents, 47.2 percent, were from exploration companies. An additional 24.1 percent of responses came from production companies that are also involved in exploration activities (figure 17).

Results

The results of the survey have been broken into five areas: the length of time it takes to be approved for the necessary permits, changes over time, and the transparency, certainty, and confidence of the permitting process. Jurisdictions with less than five responses were dropped from the analysis and those with between five and nine responses have been noted in all the subsequent tables.

Figure 16: The Position Permit Times Survey Respondents Hold in Their Company

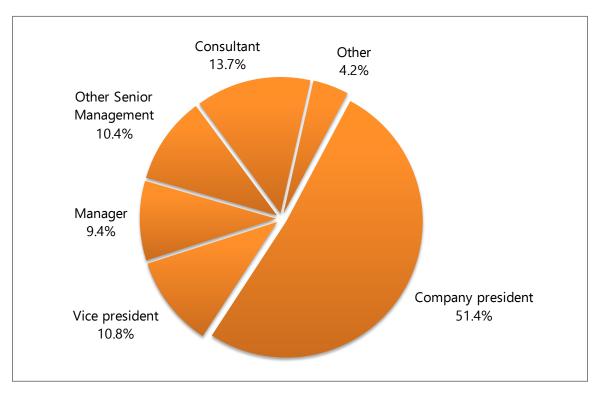
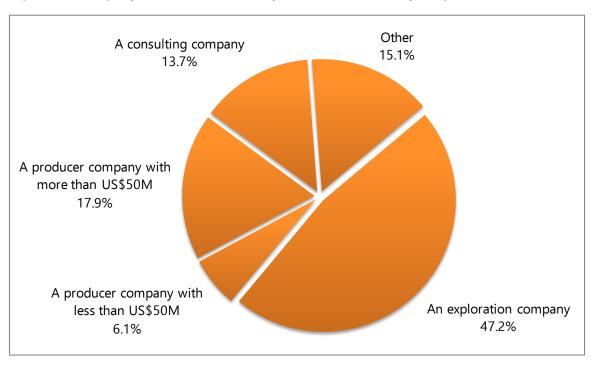


Figure 17: Company Focus as Indicated by Permit Times Survey Respondents, 2023



Time

Length of time to receive permits

To assess how the length of the permitting process differs among jurisdictions, we asked respondents three questions. Question 1 asked respondents to estimate the amount of time that they expected to spend acquiring the necessary permits to conduct exploration activities. Note that these are not permits to develop a mine, but rather permits to explore.

Canada

In some Canadian provinces and territories, respondents said they were able to acquire the necessary exploration permits within six months. However, there are notable differences among the provinces and territories (table 5). This year, Ontario stands out among all the jurisdictions included in the sub-survey, with 50 percent of respondents indicating that

	2 months or less	3 to 6 months	7 to 10 months	11 to 14 months	15 to 18 months	19 to 23 months	24 months or more
British Columbia	28%	33%	6%	11%	0%	17%	6%
Newfoundland & Labrador*	43%	29%	0%	29%	0%	0%	0%
Northwest Territories	8%	42%	25%	8%	17%	0%	0%
Nunavut*	17%	33%	0%	17%	17%	0%	17%
Ontario*	50%	20%	20%	10%	0%	0%	0%
Quebec	45%	36%	0%	0%	0%	18%	0%
Yukon*	14%	14%	14%	14%	43%	0%	0%
Alaska	30%	50%	10%	0%	0%	10%	0%
Nevada*	36%	45%	9%	0%	9%	0%	0%
New South Wales*	0%	80%	0%	0%	0%	0%	20%
Northern Territory*	20%	20%	0%	0%	20%	20%	20%
Queensland*	20%	20%	40%	20%	0%	0%	0%
Victoria*	0%	0%	20%	20%	0%	0%	60%
Western Australia*	22%	22%	33%	11%	11%	0%	0%
Finland*	0%	25%	25%	13%	38%	0%	0%
Sweden	11%	61%	17%	6%	6%	0%	0%

they were able to acquire the necessary permits for exploration in two months or less. Similarly, Quebec performed particularly well—45 percent of respondents indicated that they were able to acquire the necessary permits for exploration in two months or less—the second best performance for any jurisdiction in this sub-survey. Newfoundland & Labrador, where 43 percent of respondents indicated that they received their necessary permits in less than two months, performs better than British Columbia, where 28 percent indicated that this was the case. For the Northwest Territories, Nunavut and the Yukon, less than 20 percent of respondents indicated that they were able to acquire the necessary permits for exploration in two months or less. The pan-Canadian average for acquiring the permits in less than two months is 29 percent. Conversely, 57 percent of respondents for the Yukon and 50 percent for Nunavut indicated that getting their exploration permits took more than 11 months.

Overall, provinces like Quebec, Newfoundland & Labrador, and Ontario, which attract exploration investment for similar types of commodities, outperform most provinces and territories on permit times. For instance, 82 percent of respondents for Quebec, 71 percent for Newfoundland & Labrador, and 70 percent for Ontario acquired the necessary permits for exploration in six months or less.

Amongst the three provinces which attract the majority of Canadian exploration spending on base metals and precious metals—British Columbia, Ontario, and Quebec—the results are somewhat mixed. For example, Quebec (45 percent) and Ontario (50 percent) had relatively high percentages of respondents indicating that they expected it would take two months or less to acquire the necessary exploration permits. However, in British Columbia, only 28 of the respondents were able to acquire the necessary permits for exploration in two months or less. British Columbia also underperforms those two Canadian competitors in the longer permitting periods; among the three provinces it has the lowest percentage of respondents (61 percent) indicating that they expected to spend six months or less acquiring the necessary permits. As a matter of fact, 39 percent of respondents for British Columbia indicated that they expected to spend more than 6 months to get their exploration permits, whereas 30 percent of respondents for Quebec thought that would be the case, as did just 18 percent for Ontario.

United States

Of the two jurisdictions in the United States with sufficient responses to be included this year, Nevada has the highest percentage of respondents (82 percent) who indicated they

were able to attain their necessary permits in less than six months. Among the jurisdictions with the highest percentage of respondents indicating they were able to get the necessary permits in less than six months, Nevada and Quebec tied. Alaska and New South Wales were close behind; 80 percent of respondents for those two states indicated that they were able to get the necessary permits in less than 6 months. Only 10 percent of the respondents for Alaska and 9 percent of respondents for Nevada indicated that getting the necessary permits to explore took more than 11 months.

Australia

None of the respondents for New South Wales or Victoria indicated that they were able to receive their exploration permits in less than two months, but 22 percent of respondents for Western Australia and 20 percent for both the Northern Territory and Queensland indicated they received their permits in that time. In fact, all of the respondents for Victoria (100 percent) claimed that they couldn't get their exploration permits in under 6 months—the highest permitting time for all jurisdictions in this analysis. Moreover, 60 percent of respondents for Victoria indicated that it takes more than 24 months to get the necessary permits. Similarly, 60 percent of respondents for the Northern Territory, 60 percent for Queensland, and 56 percent for Western Australia claimed they couldn't get their exploration permits in 6 months or less.

When compared to Canada, most of Australia performed poorly on timely permitting for exploration. Of particular concern for Australia is the sizable percentage of respondents for Victoria indicating that it takes 24 months or more to receive their permits. Similarly, 60 percent of respondents for the Northern Territory indicated that it took more than 15 months to receive their permits.

Northern Europe

None of the respondents for Finland and only 11 percent of respondents for Sweden indicated that they were able to get their necessary exploration permits in less than 2 months. Furthermore, only 25 percent of respondents for Finland indicated that they were able to receive their permits in less than 6 months. In contrast, 72 percent of respondents for Sweden indicated that they received the necessary exploration permits in less than six months. While 75 percent of the respondents for Finland said the exploration permits took six months or more to get, this percentage for Sweden was only 28 percent.

Overall

When comparing the four regions included in the survey—Canada, the United States, Australia, and Northern Europe—the United States (80 percent) has, on average, the highest percentage of respondents indicating that they received their permits in six months or less. This average was 59 percent amongst Canadian jurisdictions, 49 percent amongst Northern Europe jurisdictions, and 40 percent amongst Australian jurisdictions.

Changes over Time

We also sought to assess how the times explorers expect to spend getting their permit approvals had changed over the last 10 years.

Canada

This year Canada's permitting approval times showed mixed results. For Quebec, Ontario, and Newfoundland & Labrador, 36 percent, 33 percent, and 29 percent of respondents respectively indicated that permit approval times had shortened (table 6). That was also the case for 17 percent of respondents for the Northwest Territories and Nunavut. However, in general, respondents for Canadian jurisdictions indicated that permit approval times are worsening. On average, 54 percent of respondents for the provinces and territories included in the survey said that permit approval times had lengthened either somewhat or considerably over the last decade. In particular, 86 percent of respondents for the Yukon, 67 percent for the Northwest Territories and Nunavut, and 50 percent of respondents for British Columbia claimed that permit approval times had lengthened somewhat or considerably over the past 10 years. Furthermore, 44 percent of respondents for Ontario and 36 percent for Quebec indicated that permit approval times in those provinces had also lengthened somewhat or considerably.

United States

Twenty percent of respondents for Alaska and 30 percent for Nevada indicated that the time it took to obtain an approved permit had shortened somewhat over the last 10 years. Conversely, 40 percent of respondents for Alaska claimed that permit approval times were getting worse in the state. Similarly, 30 percent of respondents for Nevada declared that permit approval times had lengthened somewhat.

Table 6: Changes in the Time to Permit Approval Over the Last 10 Years

	Shortened Considerably	Shortened Somewhat	Stayed the Same	Lengthened Somewhat	Lengthened Considerably
British Columbia	0%	0%	50%	28%	22%
Newfoundland & Labrador*	0%	29%	43%	29%	0%
Northwest Territories	0%	17%	17%	67%	0%
Nunavut*	0%	17%	17%	50%	17%
Ontario*	0%	33%	22%	11%	33%
Quebec	0%	36%	27%	9%	27%
Yukon*	0%	0%	14%	43%	43%
Alaska	0%	20%	40%	30%	10%
Nevada*	10%	20%	40%	20%	10%
New South Wales*	0%	20%	40%	20%	20%
Northern Territory*	0%	40%	40%	20%	0%
Queensland*	0%	20%	40%	20%	20%
Victoria*	0%	0%	20%	60%	20%
Western Australia*	11%	0%	56%	11%	22%
Finland*	0%	29%	0%	43%	29%
Sweden	0%	18%	12%	41%	29%

^{*}Between 5 and 9 responses

Australia

In Australia, 40 percent of respondents for the Northern Territory, and 20 percent for both Queensland and New South Wales indicated that the time necessary to obtain an approved permit had shortened somewhat over the last 10 years. For Western Australia, 56 percent of respondents said that permit approval times had remained the same.

For two Australian jurisdictions, New South Wales and Queensland, 40 percent of respondents indicated that permit approval times had lengthened either somewhat or considerably. Lengthening permit approval times were also noted by 80 percent of respondents for Victoria. This year the Northern Territory is the best performer in the country on this measure; only 20 percent of respondents for that state indicated that its permit approval times had lengthened.

Northern Europe

Twenty-nine percent of respondents for Finland and 18 percent for Sweden indicated that the time necessary for obtaining an approved permit had shortened somewhat over the last 10 years. On the other hand, 71 percent of respondents for both Finland and Sweden said permit approval times had lengthened.

Overall

Overall, the lengthening of permit approval times in Northern Europe and Canada mean that those regions performed poorly relative to the United States and Australia. An average of 71 percent of respondents for Northern Europe and 54 percent for Canadian jurisdictions indicated that permit approval times had lengthened either somewhat or considerably over the past 10 years, which compares to 35 percent who said that was the case in the United States and 43 percent in Australia.

Timeline Certainty

It is also important to those applying for exploration permits that the permit-granting organizations adhere to their advertised timelines. If the organizations do meet their published targets they extend the time it takes to get a permit which can place additional costs and risks on firms and act as a deterrent to investment (table 7).

Canada

In Canada, 83 percent of respondents for Newfoundland & Labrador and 78 percent for Ontario indicated that the permitting authority met its own established timelines either most of the time or some of the time. Quebec stands out on this metric; fully 100 percent of respondents indicated that it met its own permitting timelines. Quebec is the best performer of all jurisdictions in this category.

Yukon (57 percent), and the Northwest Territories (25 percent) had the highest percentages of respondents for Canada indicating that the permitting authority met its own established timelines or milestones less than half of the time or rarely.

Table 7: How Often Did the Jurisdiction Meet its Own Established Timelines/Milestones
for Permit Approval Decisions?

	Most of the time (80 to 100%)	Some of the time (60 to 80%)	About half the time (40 to 60%)	Less than half the time (20 to 40%)	Rarely met own timelines (0 to 20%)
British Columbia	41%	6%	35%	6%	12%
Newfoundland & Labrador*	50%	33%	17%	0%	0%
Northwest Territories	8%	33%	33%	8%	17%
Nunavut*	17%	33%	33%	17%	0%
Ontario*	44%	33%	0%	11%	11%
Quebec	67%	33%	0%	0%	0%
Yukon*	14%	0%	29%	29%	29%
Alaska	70%	10%	20%	0%	0%
Nevada*	44%	22%	22%	11%	0%
New South Wales*	20%	40%	20%	20%	0%
Northern Territory*	0%	20%	20%	60%	0%
Queensland*	0%	80%	20%	0%	0%
Victoria*	0%	0%	0%	40%	60%
Western Australia*	44%	22%	22%	0%	11%
Finland*	0%	43%	14%	43%	0%
Sweden	29%	29%	24%	12%	6%

*Between 5 and 9 responses

United States

Eighty percent of respondents for Alaska indicated that it met its permit approval timelines between 60 and 100 percent of the time; none said that the state met its timelines for permit approval decisions less than half the time or rarely. Meanwhile, 67 percent of respondents for Nevada claimed that the permitting authority met its own timelines between 60 and 100 percent of the time; only 11 percent indicated that permit approval timelines were met less than half the time or rarely.

Australia

Queensland was the best performing jurisdiction in Australia on meeting its timelines: 80 percent of respondents indicated that the permitting authority met its own established timelines between 60 and 100 percent of the time. Conversely, all of the respondents for Victoria indicated that the permitting authority met its own timelines half of the time or rarely.

New South Wales had the second highest percentage of respondents (60 percent) saying that the regulatory authority met its own timelines between 60 and 100 percent of the time.

Northern Europe

This year, 59 percent of respondents for Sweden said that the permitting authority met its own established timelines or milestones between 60 and 100 percent of the time while only 18 percent of respondents for the country indicated that it met its timelines only about half the time or less. Forty-three percent of respondents indicated that the permitting authority in Finland met its own timelines between 60 and 100 percent of the time while 43 percent suggested that it met its timelines only about half the time or less.

Overall

Overall, the United States is the best performer in the timeliness category; an average of 73 percent of respondents indicated that the US met its established timelines for approval decisions between 60 and 100 percent of the time. Only 6 percent of the respondents said that it met its established timelines half of the time or less.

Canada is the second-best performer on this measure; 59 percent of the respondents indicated that Canada met its approval timelines between 60 and 100 percent of the time, though 20 percent of respondents indicated that the country met its own established timelines for approval decisions less than half of the time.

Australia is the worst performer in this category: 45 percent of respondents said that approval decision timelines were met between 60 and 100 percent of the time. In comparison, an average of 51 percent of respondents for Northern Europe said that established timelines for approval decisions were met between 60 and 100 percent of the time.

Transparency

Another critical issue in the granting of exploration permits is transparency. When those prospecting for exploitable mineral deposits do not understand what the rules are or how they are applied, political interference and even corruption can enter the process, with the result that investment may be deterred (table 8).

Canada

In the area of transparency, Ontario and Quebec perform better than the other Canadian provinces and territories included in the sub-survey: 91 percent of respondents for both provinces noted that the level of transparency either encourages or is not a deterrent to exploration investment. Newfoundland & Labrador is the second-best performing Canadian jurisdiction: 86 percent of respondents for that province indicated that its level of

	Encourages exploration investment	Not a deterrent to exploration investment	Is a mild deterrent to exploration investment	Is a strong deterrent to exploration investment	Would not pursue Exploration investment due to this factor
British Columbia	16%	32%	42%	11%	0%
Newfoundland & Labrador*	43%	43%	14%	0%	0%
Northwest Territories	0%	38%	38%	23%	0%
Nunavut*	0%	57%	29%	14%	0%
Ontario*	36%	55%	9%	0%	0%
Quebec	64%	27%	9%	0%	0%
Yukon*	13%	13%	25%	38%	13%
Alaska	36%	27%	18%	18%	0%
Nevada*	27%	45%	27%	0%	0%
New South Wales*	17%	33%	17%	33%	0%
Northern Territory*	17%	67%	17%	0%	0%
Queensland*	33%	33%	17%	17%	0%
Victoria*	0%	33%	17%	17%	33%
Western Australia*	50%	30%	10%	10%	0%
Finland*	50%	50%	0%	0%	0%
Sweden	17%	61%	22%	0%	0%

transparency either encourages or is not a deterrent to exploration investment while only 14 percent of respondents reported that a lack of transparency in the permitting process was a mild deterrent to investment.

Canada's territories are another matter; a high share of respondents for the territories indicated that a lack of transparency was a deterrent to investment. For instance, 75 percent of respondents for Nunavut and 62 percent for the Northwest Territories claimed that the level of transparency in the permitting process was a key deterrent for investment.

Amongst the three provinces that attract the majority of Canadian exploration spending, Quebec and Ontario performed the best, followed by British Columbia, for which 86 percent of respondents indicated that the level of transparency either encourages or is not a deterrent to exploration investment.

United States

This year, 73 percent of respondents for Nevada said that its level of transparency either encourages or is not a deterrent to exploration investment, though the remaining 27 percent of respondents said that Nevada's level of transparency in the permitting process was a key deterrent for investment.

In contrast, 64 of respondents for Alaska reported that its level of transparency either encourages or is not a deterrent to exploration investment. However, 36 percent of respondents for Alaska indicated that the level of transparency in its permitting process is a key deterrent for investment.

Australia

The Northern Territories and Western Australia stand out: 83 and 80 percent of respondents, respectively, said that the level of transparency in those states either encourages or is not a deterrent to exploration investment. New South Wales, on the other hand, had 50 percent of respondents claiming that its level of transparency did deter investment. In last place was Victoria, for which 67 percent of respondents claimed the level of transparency was a key deterrent to investment.

Northern Europe

Finland stands out in Northern Europe: all of the respondents for this country reported that its level of transparency either encourages or is not a deterrent to exploration

investment. Sweden also performed well on this measure: 78 percent of respondents for the country said that its level of transparency either encourages or is not a deterrent to exploration investment, though 22 percent of respondents did say that Sweden's level of transparency was a deterrent to investment.

Overall

Canada continues to perform poorly compared with other regions included in the survey on transparency in the permitting process. An average of 38 percent of respondents for Canada said that a lack of transparency deters investment in the country. This compares to 37 percent for Australia, 32 percent for the US, and only 11 percent for Northern Europe.

Confidence

Another area for which we sought feedback was the confidence of respondents that they would eventually be granted a permit. If firms are not confident that they will be able to acquire the permits necessary to carry out their exploration activities once they have met the regulatory requirements, it is less likely that they will consider investing in that jurisdiction (table 9).

Canada

Ontario, Newfoundland & Labrador, and Quebec were the top Canadian performers in this category; all respondents were highly confident or confident that they would be granted the necessary permits in each of these provinces. Eighty-four percent of respondents for British Columbia, 62 percent for the Northwest Territories, and 57 percent for Nunavut were also either confident or highly confident that they would receive the necessary permits. In comparison, the Yukon is the worst performer of all surveyed jurisdictions. Only 38 percent of respondents for that territory were confident or highly confident that they would receive their permits.

United States

Eighty-three percent of respondents for Nevada and 82 percent for Alaska said that they were either confident or highly confident that they would receive the necessary permits. Only 18 percent of respondents for Alaska and 17 percent for Nevada said that they had little or no confidence that they would be granted the necessary permits.

Table 9: Confidence Level of Respondents that They Will Eventually be Granted the **Necessary Permit(s)**

	Not at all Confident	Low Confidence	Confident	High Confidence
British Columbia	5%	11%	63%	21%
Newfoundland & Labrador*	0%	0%	63%	38%
Northwest Territories	0%	38%	38%	23%
Nunavut*	0%	43%	43%	14%
Ontario*	0%	0%	64%	36%
Quebec	0%	0%	33%	67%
Yukon*	13%	50%	25%	13%
Alaska	0%	18%	36%	45%
Nevada*	8%	8%	33%	50%
New South Wales*	0%	20%	60%	20%
Northern Territory*	0%	20%	20%	60%
Queensland*	0%	0%	60%	40%
Victoria*	40%	0%	60%	0%
Western Australia*	11%	0%	33%	56%
Finland*	0%	0%	50%	50%
Sweden	0%	0%	67%	33%

Australia

All of the respondents for Queensland indicated that they were highly confident or confident that they would be granted the permits they needed. Western Australia also performed well: 89 percent of respondents for that state said that they were highly confident or confident that they would be granted the necessary permits. Another two Australian jurisdictions—New South Wales and the Northern Territory—performed quite well on this measure: 80 percent of respondents indicated that they were either highly confident or confident that they would receive their permits. Victoria is the worst performing jurisdiction included in the sub-survey: only 60 percent of respondents for that state were highly confident or confident that they would receive their permits.

Northern Europe

Northern Europe is the best performing region in the sub-survey on this measure. All of the respondents for the region said that they were either confident or highly confident that they would be granted the necessary permits once they had met the regulatory requirements.

Overall

While an average of 77 percent of survey respondents in Canada express either confidence or high confidence that the necessary permits will be granted, Canada still ranks as the worst performer in this category when compared to other regions.

For instance, 83 percent of respondents for the United States83 percent of respondents for the United States, on average, and 82 percent of respondents for the Australian jurisdictions, on average, said that they were either confident or highly confident that the necessary permits would be granted once they had met all the regulatory requirements. Northern Europe is the best performer in this category: all the respondents said they were either confident or highly confident that they would receive the necessary permits after they had met the regulatory requirements.

Explanation of the Figures

Figures 18 through 32 show the percentage of respondents who rate each policy factor as "encouraging investment" or "not a deterrent to investment: (a "1" or "2" on the scale). Readers will find a breakdown of both negative and positive responses for all areas online at fraserinstitute.org. (Note that any jurisdictions shown with a * received between 5 and 9 responses from survey participants.)

Figure 18: Uncertainty Concerning the Administration, Interpretation and Enforcement of Existing Regulations

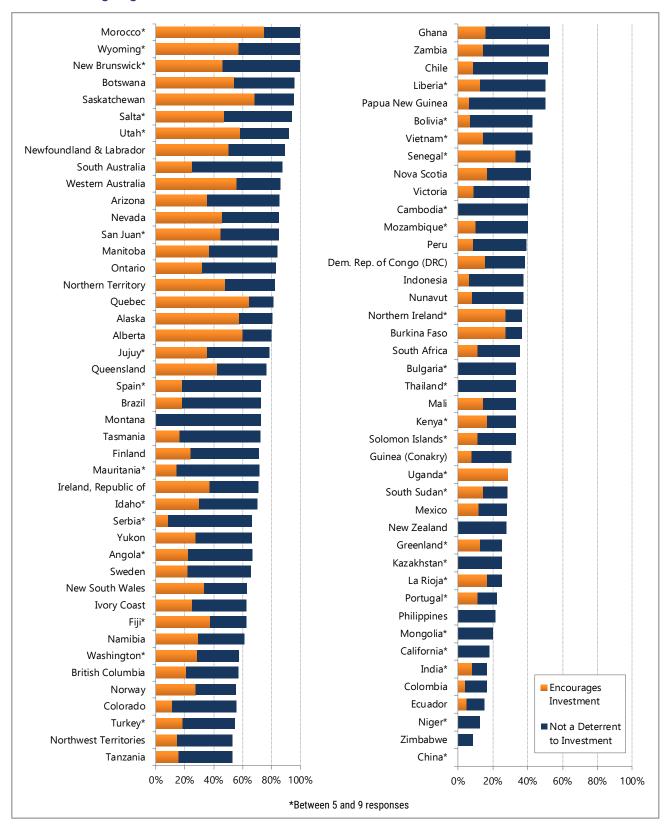


Figure 19: Uncertainty Concerning Environmental Regulations

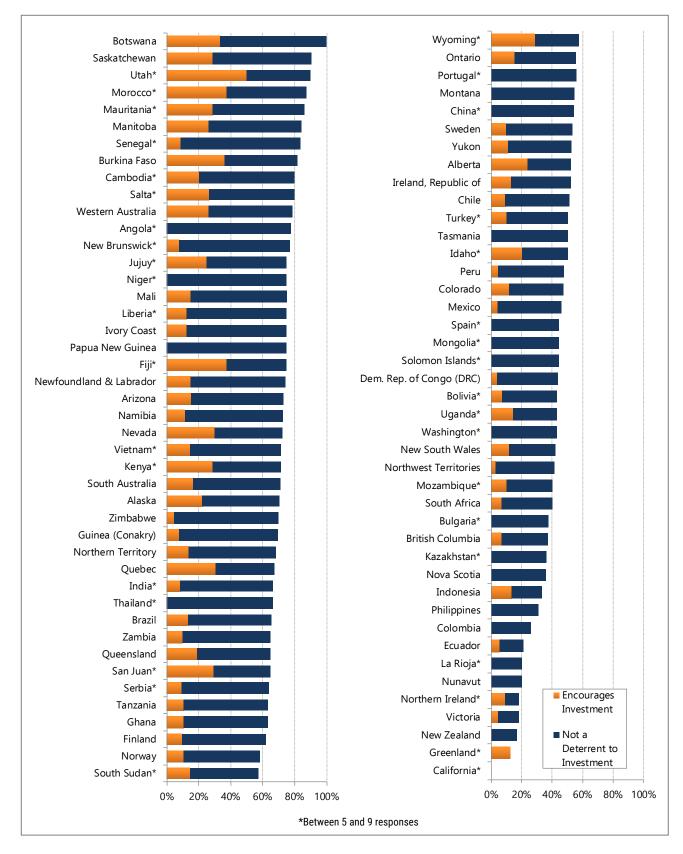


Figure 20: Regulatory Duplication and Inconsistencies

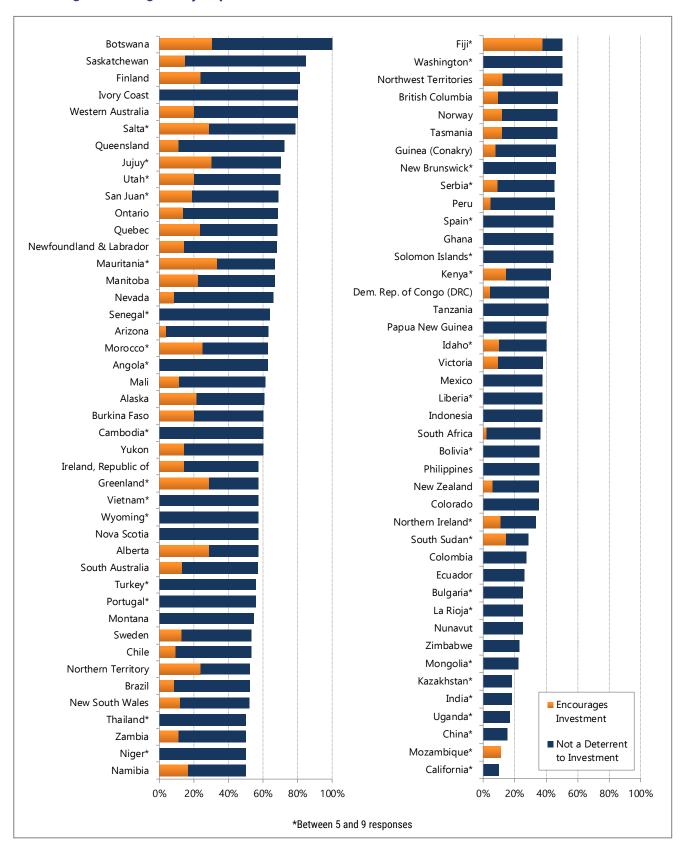


Figure 21: Legal System

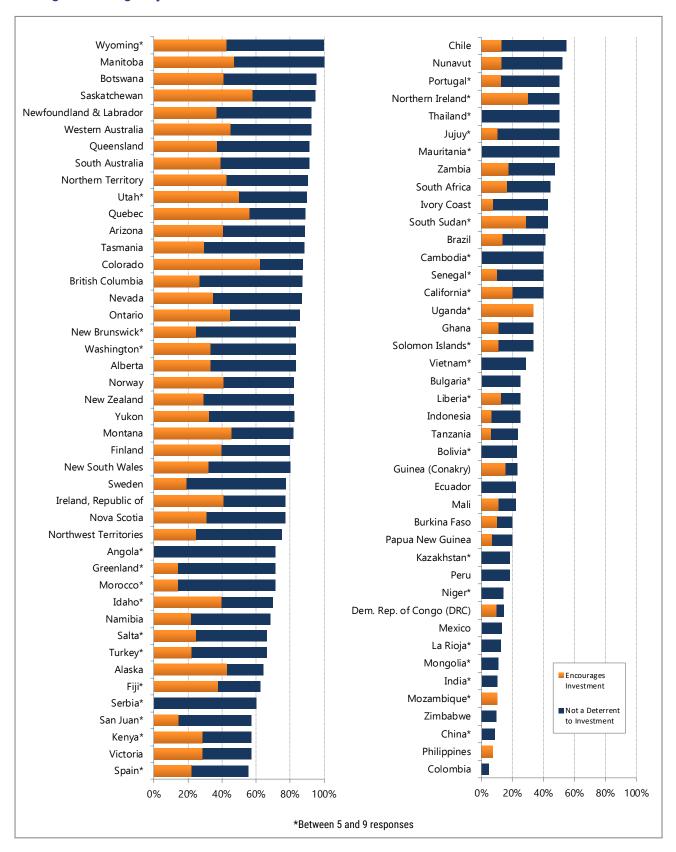


Figure 22: Taxation Regime

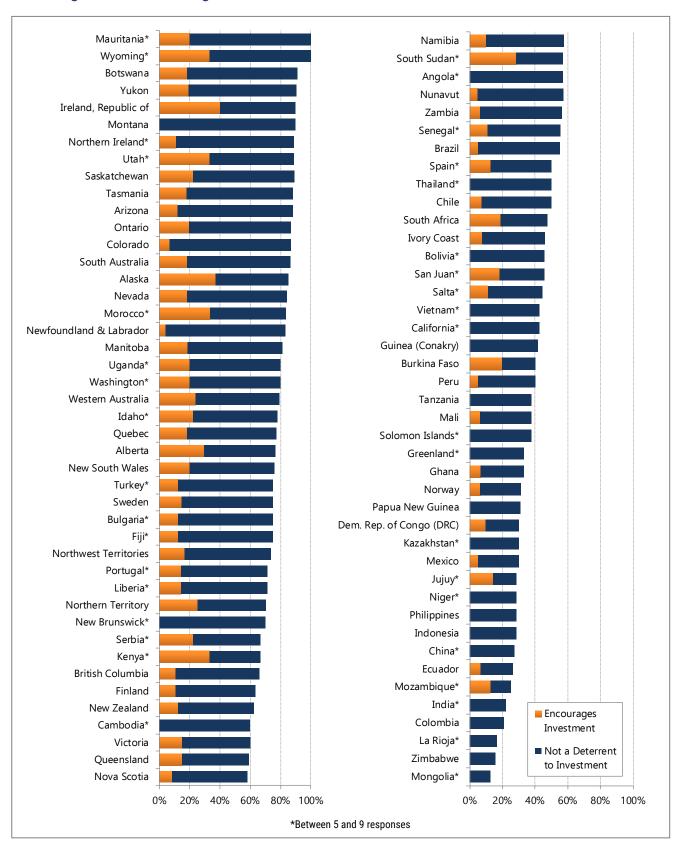


Figure 23: Uncertainty Concerning Disputed Land Claims

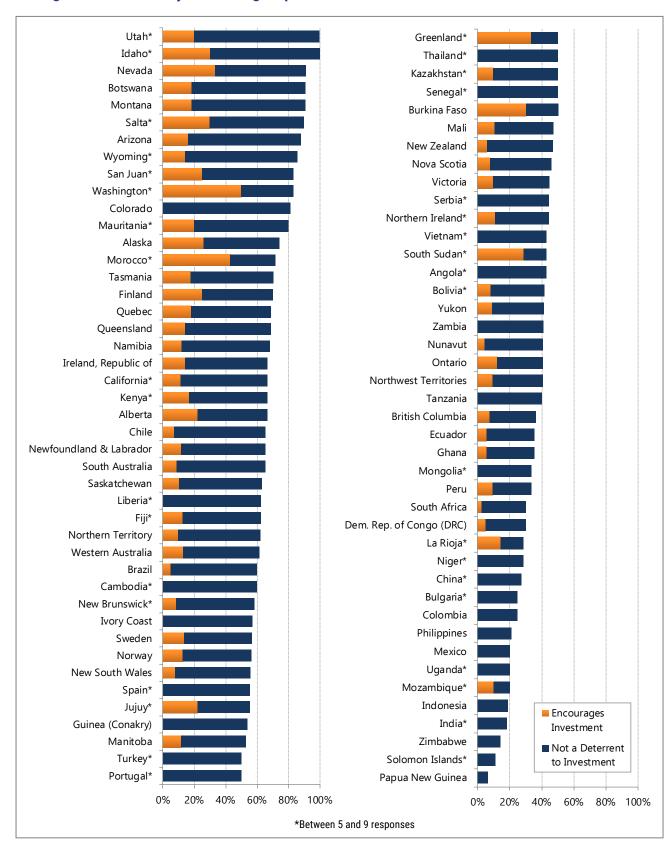


Figure 24: Uncertainty Concerning Protected Areas

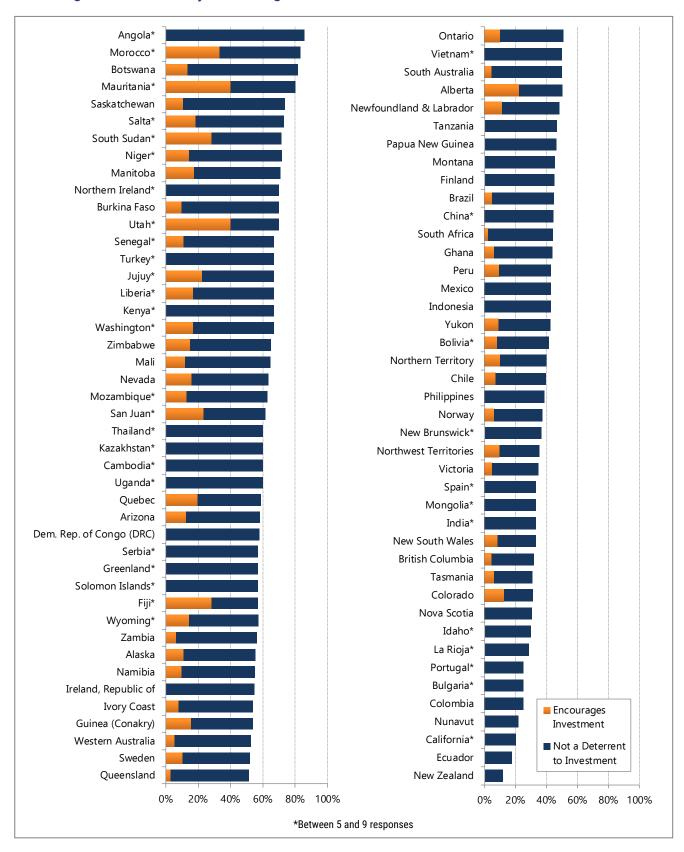


Figure 25: Quality of Infrastructure

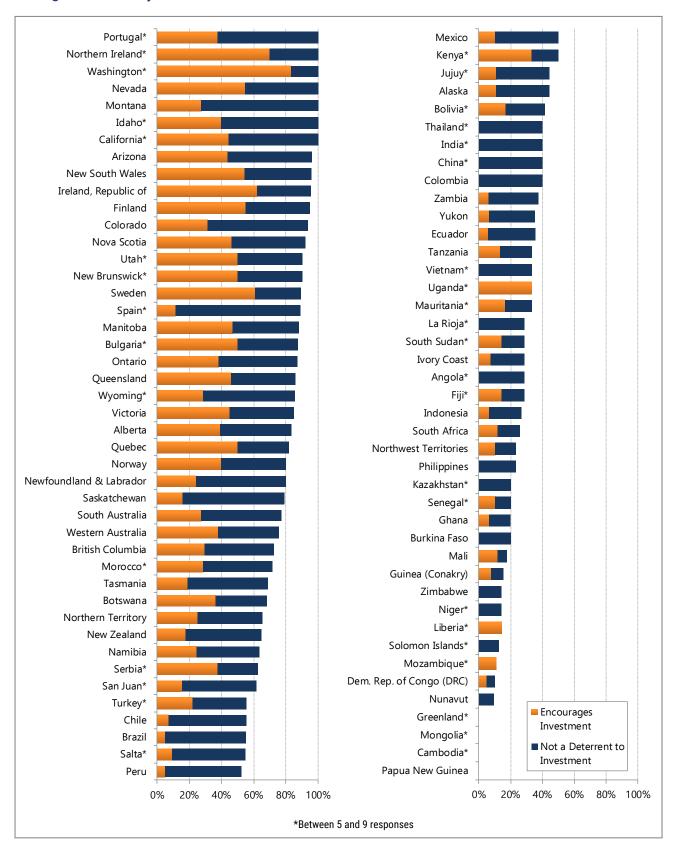


Figure 26: Socioeconomic Agreements/ Community Development Conditions

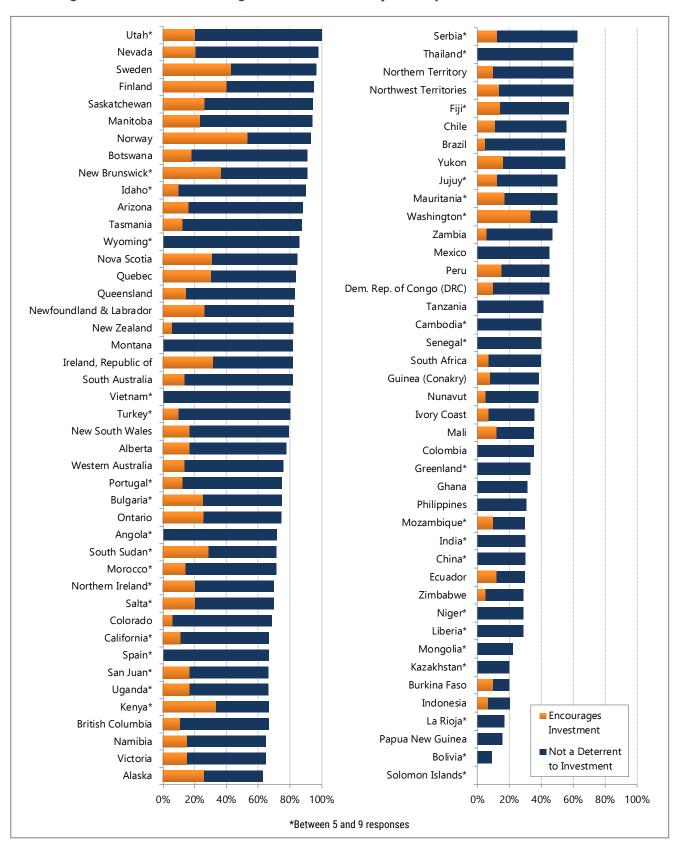


Figure 27: Trade Barriers

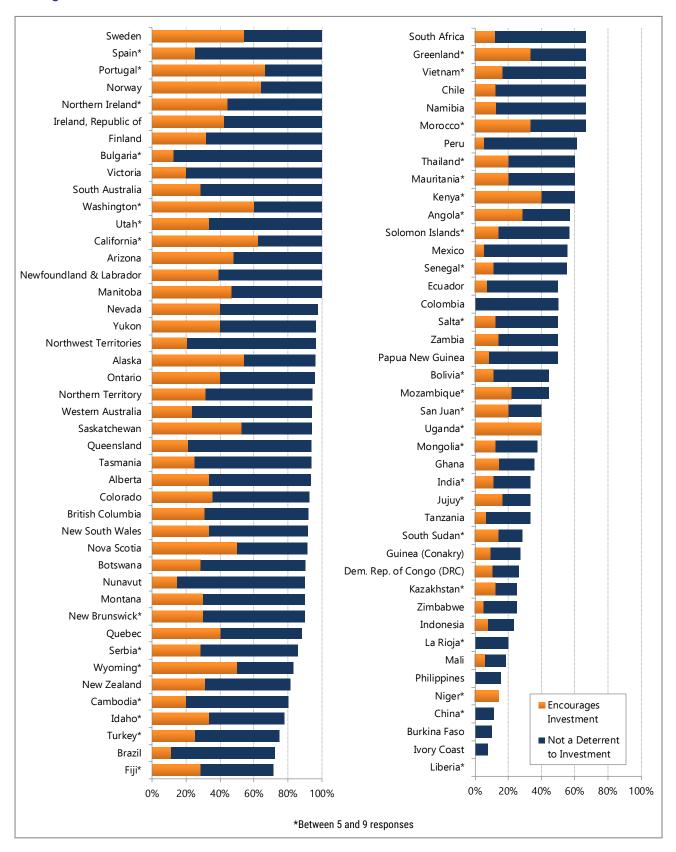


Figure 28: Political Stability

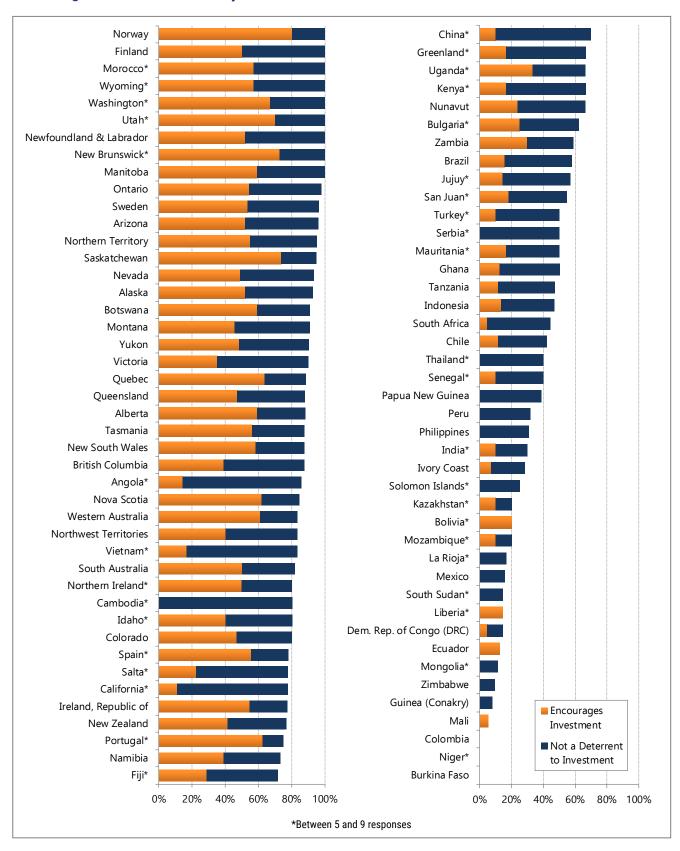


Figure 29: Labor Regulations/Employment Agreements and Labour Militancy/ Work Disruptions

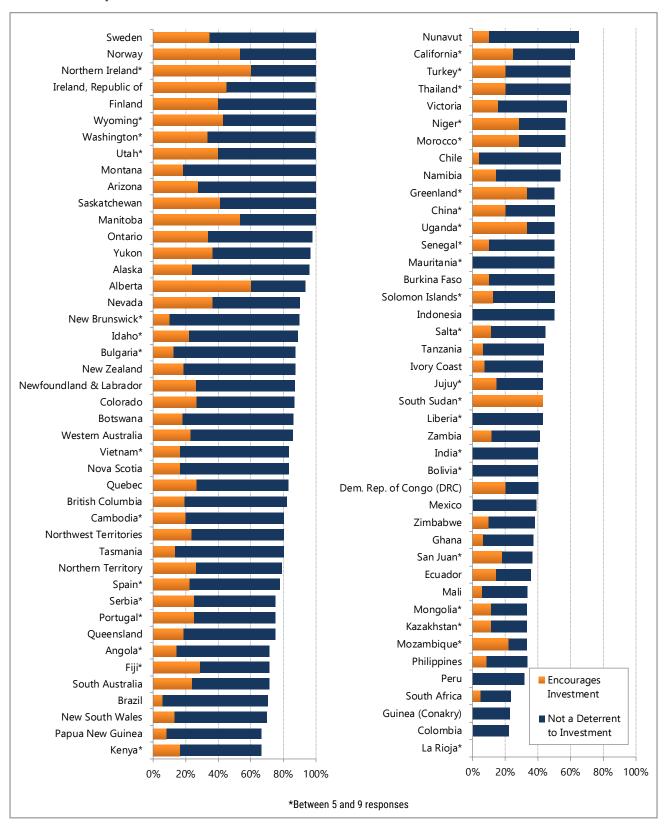


Figure 30: Geological Database

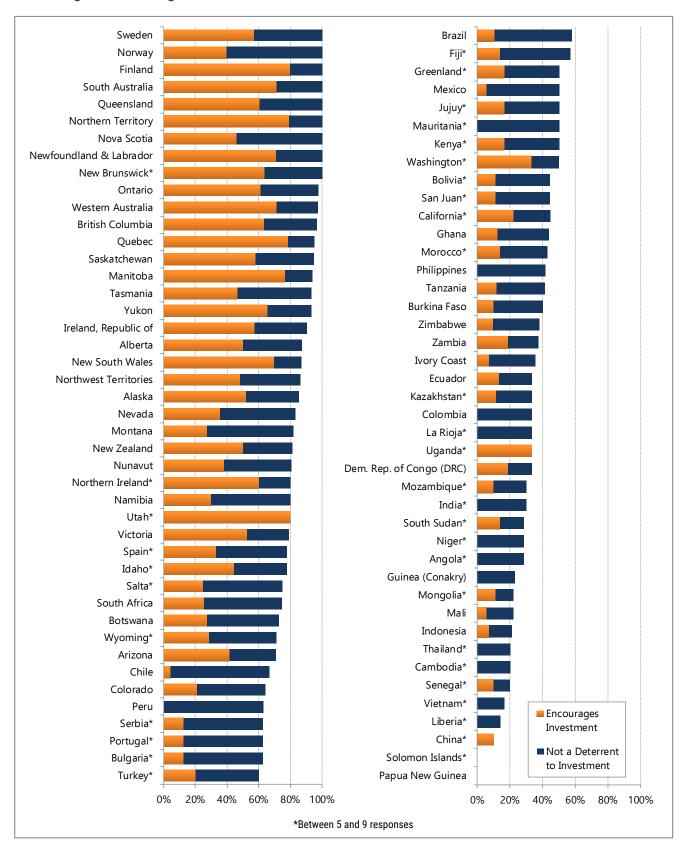


Figure 31: Security

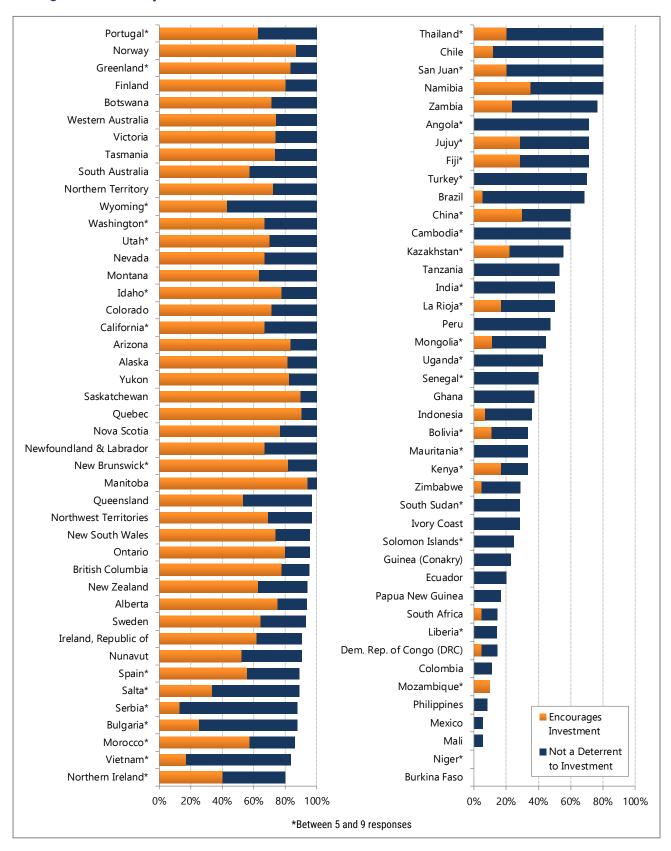
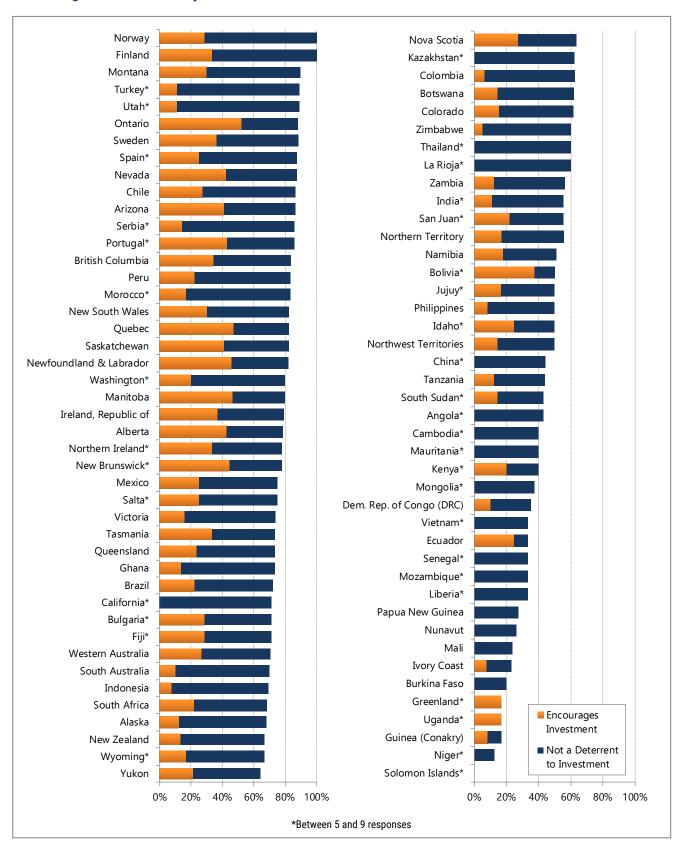


Figure 32: Availability of Labor/Skills



About the Authors



Julio Mejía is a Policy Analyst at the Fraser Institute. He holds a Bachelor of Government and International Relations and a Master's degree in International Affairs from the Externado University of Colombia, and a Master's degree in Criminology and Criminal Justice Policy from the University of Guelph. His commentaries have appeared in the *Financial Post*, *Halifax Chronicle Herald*, *Toronto Sun*, *Toronto Star*, and Colombia's leading news publications, including *El Tiempo* and *La Republica*. Mr Mejía specializes in energy policy, with a focus on the mining and petroleum industries.



Elmira Aliakbari is Director of the Centre for Natural Resource Studies at the Fraser Institute. She received a Ph.D. in Economics from the University of Guelph, and M.A. and B.S. degrees in Economics, both from the University of Tehran in Iran. She has studied public policy involving energy and the environment for nearly eight years. Prior to joining the Fraser Institute, Ms. Aliakbari was Director of Research, Energy, Ecology and Prosperity with the Frontier Center for Public Policy. Ms. Aliakbari's research has been discussed in prominent media outlets including the *Wall Street Journal*, and her commentaries have appeared in major Canadian and American newspapers such as the *Globe and Mail, Washington Times, National Post*, and *Financial Post*.

Publishing Information

Distribution

These publications are available from http://www.fraserinstitute.org in Portable Document Format (PDF) and can be read with Adobe Acrobat® or Adobe Reader®, versions 8 or later. Adobe Reader® DC, the most recent version, is available free of charge from Adobe Systems Inc. at http://get.adobe.com/reader/. Readers having trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should use Reader® or Acrobat®.

Ordering publications

To order printed publications from the Fraser Institute, please contact:

- e-mail: sales@fraserinstitute.org
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539.

Media

For media enquiries, please contact our Communications Department:

- 604.714.4582
- e-mail: communications@fraserinstitute.org.

Copyright

Copyright © 2024 by the Fraser Institute. All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

Date of issue

May 2024

ISBN

978-0-88975-781-3

Citation

Julio Mejía and Elmira Aliakbari (2024). Fraser Institute Annual Survey of Mining Companies, 2023. Fraser Institute. http://www.fraserinstitute.org

About the Fraser Institute

Our mission is to improve the quality of life for Canadians, their families, and future generations by studying, measuring, and broadly communicating the effects of government policies, entrepreneurship, and choice on their well-being.

Notre mission consiste à améliorer la qualité de vie des Canadiens et des générations à venir en étudiant, en mesurant et en diffusant les effets des politiques gouvernementales, de l'entrepreneuriat et des choix sur leur bien-être.

Peer review-validating the accuracy of our research

The Fraser Institute maintains a rigorous peer review process for its research. New research, major research projects, and substantively modified research conducted by the Fraser Institute are reviewed by experts with a recognized expertise in the topic area being addressed. Whenever possible, external review is a blind process. Updates to previously reviewed research or new editions of previously reviewed research are not reviewed unless the update includes substantive or material changes in the methodology.

The review process is overseen by the directors of the Institute's research departments who are responsible for ensuring all research published by the Institute passes through the appropriate peer review. If a dispute about the recommendations of the reviewers should arise during the Institute's peer review process, the Institute has an Editorial Advisory Board, a panel of scholars from Canada, the United States, and Europe to whom it can turn for help in resolving the dispute.

Editorial Advisory Board

Members

Prof. Terry L. Anderson Prof. Herbert G. Grubel

Prof. Robert Barro Dr. Jerry Jordan

Prof. Jean-Pierre Centi Prof. Ross McKitrick

Prof. John Chant Prof. Michael Parkin

Prof. Bev Dahlby Prof. Friedrich Schneider

Prof. Erwin Diewert Prof. Lawrence B. Smith

Prof. J.C. Herbert Emery Dr. Vito Tanzi

Past members

Prof. Jack L. Granatstein

Prof. Armen Alchian* Prof. H.G. Johnson*

Prof. Michael Bliss* Prof. Ronald W. Jones*

Prof. James M. Buchanan*† Prof. F.G. Pennance*

Prof. Stephen Easton* Prof. George Stigler*†

Prof. James Gwartney* Sir Alan Walters*

Prof. Friedrich A. Hayek*† Prof. Edwin G. West*

^{*}deceased; †Nobel laureate