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British Columbia's Mining Policy Performance: Improving BC's Attractiveness to Mining Investment



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Executive summary

Mining is an important economic driver for Canada and the Province of British Columbia. British Columbia ranks third for Canadian mineral production after Ontario and Quebec, with an estimated production value of \$8.3 billion in 2012. The mining sector employs over 29,000 people and mineral tax revenues in British Columbia in 2011/2012 were more than \$400 million.

While the viability of this sector is cyclical and subject to global factors including commodity prices, market demand, and relative mineral potential, policy factors can also be a key determinant in attracting globally mobile mining investment. The purpose of this paper is to analyze British Columbia's mining sector in order to identify policy changes that could improve its attractiveness as a destination for mining investment.

Part 1 of the paper reviews British Columbia's exploration investment since 1990 and the global market forces and policy factors that have shaped this investment. The share of British Columbia's exploration investment relative to Canada's total is also reviewed, noting periods where investment in the province has lagged.

Part 2 of the paper analyzes data from the Fraser Institute Survey of Mining Companies to identify which policy factors are most deterring to mining investment in British Columbia. This analysis is based on mining survey respondents' opinions of what policy factors have been most dissuasive to mining investment in the province over the last five years. Survey data has been complemented by government and industry reports, in order to link policy changes with survey findings.

The role of uncertainty as a deterrent to mining investment is common to the four main investment barriers identified. Uncertainty creates risk for mining investment by decreasing investor confidence in their ability to recoup and profit from their investments. Mining is already an inherently risky endeavor, with a lengthy and time-consuming process to discover and develop mines and move them into production. Bringing a new mine into production is also costly, with profitability subject to volatile and cyclical commodity prices, variable input costs, and currency exchange rates. Policy uncertainty and instability can compound risk for mining companies and threaten the viability of projects.

The following four factors were identified through this analysis.

Investment Barrier 1

Uncertainty concerning disputed land claims

Uncertainty over disputed land claims deters mining investment by removing land from exploration, as well as by deterring exploration and investment in areas where prospectors are uncertain whether they will be able to develop any viable deposits discovered. The evolving relationship between Aboriginal peoples and government is a primary reason for this uncertainty. This relationship is complicated by the fact that there are relatively few finalized treaties and by recent court decisions. In particular, the Crown's "duty to consult" and a lack of clarity on industry obligations have added to uncertainty.

Recommendations to reduce uncertainty concerning disputed land claims

- ◆ Continue to settle land and resource ownership through an expedited BC Treaty Process.
- ◆ Prioritize mechanisms to resolve asserted Aboriginal Rights and Title for bands not participating in the BC Treaty Process, without litigation.
- ◆ Develop clearer guidance for third parties to facilitate meeting the Crown's Duty to Consult.
- ◆ Continue revenue sharing between the province and First Nations as pioneered in BC.
- ◆ Provide clearer guidance and early consultation with the mining industry on Aboriginal policy changes to avoid deterring investment.

Investment Barrier 2

Uncertainty over which areas will be protected

The second key policy factor deterring exploration investment in British Columbia over the last five years has been uncertainty over which areas will be protected as wilderness, parks, or archeological sites. Uncertainty concerning protected areas negatively affects mining investment by increasing the risk of investing in an area that may fall subject to later restrictions, as well as by excluding land from exploration and mineral development. Factors driving this uncertainty are land use planning processes that prioritized creating new protected areas (thereby imposing constraints on mining activities), the unilateral creation of parkland, expropriation of legally obtained mineral claims, and uncertainty over compensation for mineral claims affected.

The continued erosion of land available for mining and the decision to prohibit mining exploration and development in the Flathead Valley continue to impact mining investment even today.

Recommendations to reduce uncertainty concerning which areas will be protected

- ◆ The province should strictly commit to the two-zone land use system and avoid arbitrary changes that reduce miners' trust and investors' confidence.
- ◆ Where expropriation is necessary, fair, market-based compensation should be provided in a timely and transparent manner.
- ◆ The province should assess the potential social and economic impacts of lost mineral exploration and development prior to removing land from mining and exploration.

**Investment
Barrier 3**

Uncertainty concerning environmental regulations

A third key deterrent to mining investment in British Columbia has been uncertainty concerning environmental regulations. A lack of stability and uncertainty in environmental regulations deters investment, as a project's viability can be threatened by new regulations, requirements, or delays. The introduction of British Columbia's *Environmental Assessment Act* and the province's decision to prohibit uranium and thorium exploration and development were both found to contribute to this uncertainty.

Recommendations to reduce uncertainty concerning environmental regulations

- ◆ The province should continue efforts to streamline the mine permitting process and make it more predictable and timely, while protecting health, safety, and the environment.
- ◆ Early and meaningful consultation with industry stakeholders should occur prior to the adoption of new processes and restrictions.
- ◆ The ban on uranium and thorium mining should be reconsidered through a transparent and open process that considers all stakeholders, scientific evidence, and socio-economic implications of the ban.
- ◆ The government should refrain from abrupt policy changes that restrict or ban mining activities unilaterally. Where new scientific results require changes, a full process of consultation and compensation should occur.

Investment Barrier 4

Regulatory duplication and inconsistencies

The final key deterrent to mining investment in British Columbia over the past five years has been regulatory duplication and inconsistencies. Regulatory duplication and overlap can cause confusion and make it more difficult, time-consuming, and costly for mining companies to comply. Overlap, instability, and distortionary incentives in the federal and provincial tax regimes have contributed to this uncertainty, as has the introduction and reversal of a harmonized sales tax (HST) in British Columbia. Until recently, duplication in the environmental assessment processes at the federal and provincial level was also problematic.

Recommendations to reduce regulatory duplication and inconsistencies

- ◆ In the short term, Canada Revenue Agency should provide greater clarity and consistent application of expenses eligible for Canadian Exploration Expenses.
- ◆ Both the federal and provincial governments should move towards the gradual elimination of distortionary tax incentives in favor of a single, lower-rate corporate income tax.
- ◆ British Columbia should re-examine harmonization of sales tax with the federal government through an open and transparent process.
- ◆ British Columbia should continue working with the federal government towards a single, clear, and predictable “one project, one process” (British Columbia, 2012a) for project review.

Policy uncertainty plays a role in all of the factors found to be deterring investment in British Columbia. Uncertainty creates risk for mining investment and diminishes the confidence of miners in the security of their investments. It also undermines government credibility and confidence in the stability, transparency and predictability of regulations—factors essential for attracting mining investment. Past policy decisions have made British Columbia less attractive to miners and have deterred the exploration investment necessary to discover and develop new mines (greenfield projects) needed to replace closing and depleting mines. Because of these policies, it is more cost and time effective for companies to focus exploration and development near existing mines (brownfield projects) in order to meet global demand, as well as maintain company reserves. However, it is important for the long-term survival of mining in the province that policies are developed supporting the development of greenfield projects. Delays and

uncertainty have also limited the ability of mining companies to take advantage of favorable commodity prices and to expand or open mines during periods of rising prices.

In recent years, British Columbia has made progress towards greater policy certainty. This is reflected in mining survey results and in a decline in investment deterred due to the four key factors reviewed. However, further improvements are needed to maintain competitiveness and to help sustain the exploration investment necessary for the long-term success of this sector.

Introduction

British Columbia's mining industry is cyclical and responsive to global market forces, but policy remains an important factor in maximizing the benefits of mining. Part 1 of this paper reviews the recent history of mining in the province and examines the linkages between policy factors and exploration investment. Part 2 uses data from the last five years of the Fraser Institute Survey of Mining Companies to identify which policy areas have been most deterrent to mining investment. The paper concludes with recommended policy changes to improve the attractiveness of British Columbia for mining investment.

1. Historical performance of British Columbia's mining sector

Natural resource wealth and mining have shaped Canada's economy, and mining continues to be an important sector today. The mining and mineral processing industry provides the equivalent of 320,000 full-time jobs in Canada, at wages above the national average (Canada, 2012c). Canadian mineral assets are valued at \$368 billion and in 2011 the mining sector contributed \$63 billion (3.9 percent) to Canada's GDP (Canada, 2012d, 2013d). In addition, mining and processing firms paid \$7.1 billion in corporate taxes and royalties in 2011 (Canada, 2013d).

The benefits of mining extend beyond just the mining sector, however. A recent study by PricewaterhouseCoopers determined that every dollar spent by the mining industry in British Columbia generated a total impact of \$1.73 when direct, indirect, and induced impacts are included (PricewaterhouseCoopers, 2011b). Other sectors supported by the mining industry include financial, accounting, and environmental services, and transportation. For instance, over half of the rail-freight revenues and port tonnage in Canada is from mining, and more than 3,000 Canadian firms provide services to the industry (Mining Association of Canada, 2011).

Given the economic importance of mining, jurisdictions around the world seek to attract investment in mining and the economic and social benefits created by this sector.

British Columbia's mining industry

British Columbia is an important mining province, ranking third for Canadian mineral production after Ontario and Quebec, with an estimated production value of \$8.3 billion in 2012 (Canada, 2013d). The mining sector employs over 29,000 people and mineral tax revenues in 2011/2012 were more than \$400 million (British Columbia, 2012b). British Columbia is Canada's largest producer of coal and copper and its only producer of molybdenum. The province

produces other important metals and minerals including gold, silver, zinc, and lead (BC Mining Economic Task Force, 2009).

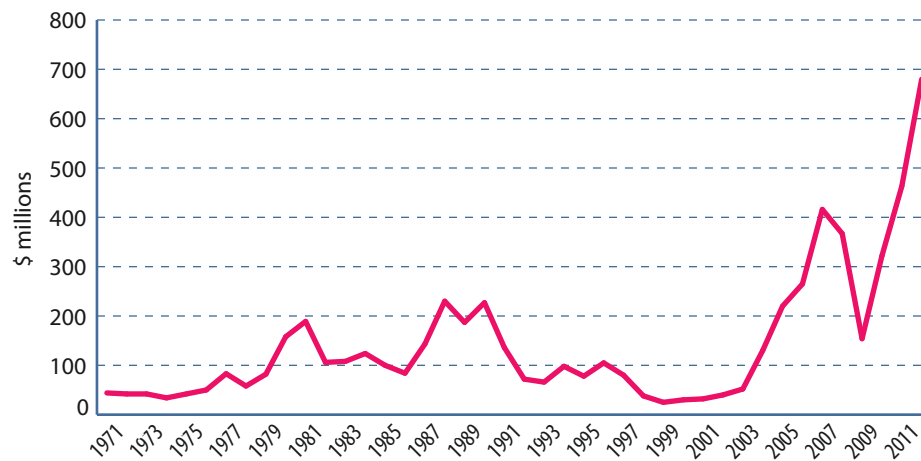
While mining exploration and production has expanded in recent years, it remains a cyclical industry subject to wide variations in earnings and exploration investment. Earnings in the mining industry fluctuate widely, primarily due to global supply and demand forces that cause large changes in mineral prices (Mining Association of British Columbia & Price Waterhouse, 1991). Canada is a price-taker for metals and minerals, with supply and demand factors and economic growth around the world affecting the price received for exported commodities. In addition, the exchange rate for the Canadian dollar can have a significant effect on the profitability of the sector.

Overview of exploration investment, 1990–2012

Exploration is considered the lifeblood of the mining industry, since new ore-bodies must be discovered and developed to replace depleting ore reserves. Without ongoing exploration, mineral production would outstrip mineral reserves, putting the mineral processing and domestic mining industry at risk competitively and strategically (Mining Association of Canada, 2011). Exploration spending and deposit appraisal can therefore provide a sign of how healthy the mineral exploration sector is. **Figure 1** shows how exploration spending in British Columbia has fluctuated since the early 1970s.

The late 1980s were a period of expanded exploration spending and positive earnings for the mining sector. By 1991, this trend had reversed as exploration began decreasing and the mining industry recorded aggregate after-tax losses of \$95 million for 1990 (Mining Association of British Columbia & Price Waterhouse, 1991). This decline in revenues was attributed mainly to lower base and silver metal prices resulting from a slowdown in the global economy as well as reduced coal shipments (Mining Association of British Columbia & Price Waterhouse, 1991). The mining industry was also dissuaded by uncertainty in mineral tenure and land access, and mining companies were investing an increasing amount of their exploration budgets in jurisdictions outside of Canada (Price Waterhouse, 1994).

It took until 1994 for the mining industry in BC to become profitable again, buoyed in part by higher mineral prices, improved global economic conditions, and a decline in the Canadian dollar relative to the US dollar (Price Waterhouse, 1995). Revenues were positive for the next three years although, even with such positive earnings, the industry was only able to break even over the ten-year period from 1986 to 1996 (Price Waterhouse, 1997). In addition, despite returning to profitability, exploration and development expenditures remained relatively low when compared to the late 1980s. In fact, between 1990 and 2005, exploration expenditure failed to meet the estimated

Figure 1: Exploration expenditures in British Columbia, 1971–2012

Source: British Columbia Exploration Expenditures Estimate (accessed May 28, 2013).

\$150 million to \$175 million per year needed to keep the number of mines consistent in British Columbia (Price Waterhouse, 1997; British Columbia, 2006a). Provincial geologists were especially concerned about the low percentage of exploration funding going to grassroots or generative exploration, as compared to later-stage or mine site budgets (British Columbia, 1997).

Exploration expenditure dropped to its lowest level in more than 30 years in 1999, and the industry operated at a loss between 1998 and 2000 (British Columbia, 2000, PriceWaterhouseCoopers, 2009). In the *2001 Mineral Exploration Review*, low metal prices, global recession, and previous government policy were cited as difficult challenges for the sector (British Columbia, 2002). A rapid expansionary period followed from 2003–2007 due to significantly increased commodity prices and increasing demand from Asia and developing nations resulting in a global mining resurgence (British Columbia, 2004; PriceWaterhouseCoopers, 2007). This expansion was also facilitated by improvements to the permitting process, including a new online mineral tenure system that lowered the cost and complexity of mineral staking (British Columbia, 2006a; PriceWaterhouseCoopers, 2006).

Exploration spending began to decline in the latter part of 2008 as the financial crisis diminished investor confidence in global mining demand and miners became unable to attract exploration financing (British Columbia, 2009). Prices and demand began recovering in 2009 and investment in British Columbia soared in recent years, buoyed by strong world mineral demand and high mineral prices (PriceWaterhouseCoopers, 2011a; British Columbia, 2011a). British Columbia's mining industry was again challenged in 2012, however, as mineral prices fell in response to slower economic growth and the debt crisis in Europe, costs of production escalated with higher labor, energy, and raw material prices, and mining companies found it harder to raise capital (PriceWaterhouseCoopers, 2013).

British Columbia's relative share of exploration investment

British Columbia's mining industry has also fluctuated relative to other Canadian provinces and territories. **Figures 2 and 3** show the fluctuation in British Columbia's share of Canada's total exploration spending from 1986 to 2013. Following a Canada-wide bottoming out of the exploration cycle (1993–1994), British Columbia experienced slower growth in exploration expenditures relative to other provinces and territories (Price Waterhouse, 1997).

British Columbia's share of Canadian mining investment tripled between 2001 and 2006, from a low of 6 percent in 2001 to 18 percent in 2006 (Canada, 2013c). However, following 2006, the share of Canadian exploration spending in British Columbia decreased while the total amount spent in Canada on exploration was increasing, thus illustrating that money was leaving British Columbia and flowing to other jurisdictions within Canada (McPhie, 2009). British Columbia's share of Canadian exploration investment began to increase again in 2010, and since 2011 it has remained steady at around 20 percent (Canada, 2013c).

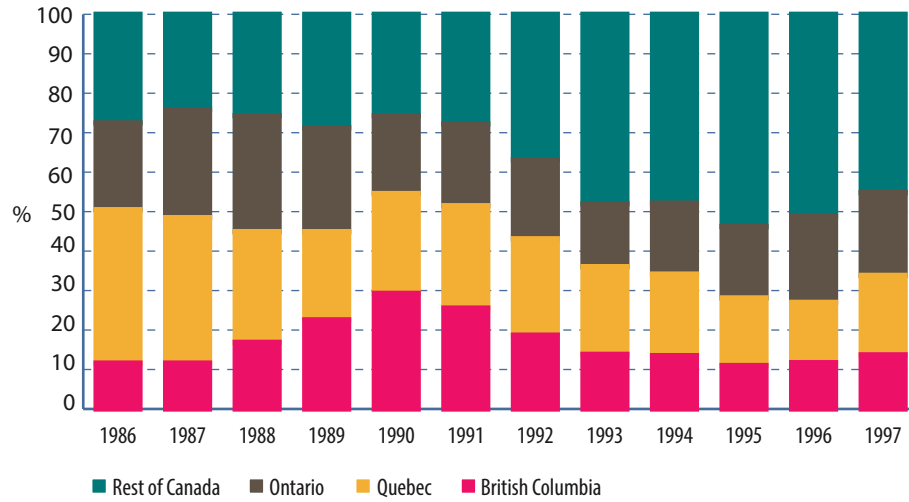
Fraser Institute Survey of Mining Companies

The Fraser Institute Survey of Mining Companies was first conducted in 1997. It arose directly from concerns over the future of British Columbia's mining sector. This period was marked by a decline in both exploration investment in British Columbia, and exploration in British Columbia as a share of Canada's total exploration investment. Concerns were raised that British Columbia's attractiveness for mining investment was deteriorating, in part due to public policy factors that had raised uncertainty for miners and were dissuading investment.

As conditions for mining investment worsened in British Columbia in the early 1990s, and tax and regulatory environments in several Latin American countries improved, there was a noticeable flow of exploration and development investment by mining companies based in British Columbia to other jurisdictions (Mining Association of British Columbia & Price Waterhouse, 1992). Canadian mining firms decreased the proportion of their exploration budgets spent in Canada from 81 percent in 1987 to 61 percent in 1992 (Price Waterhouse, 1994: 18).

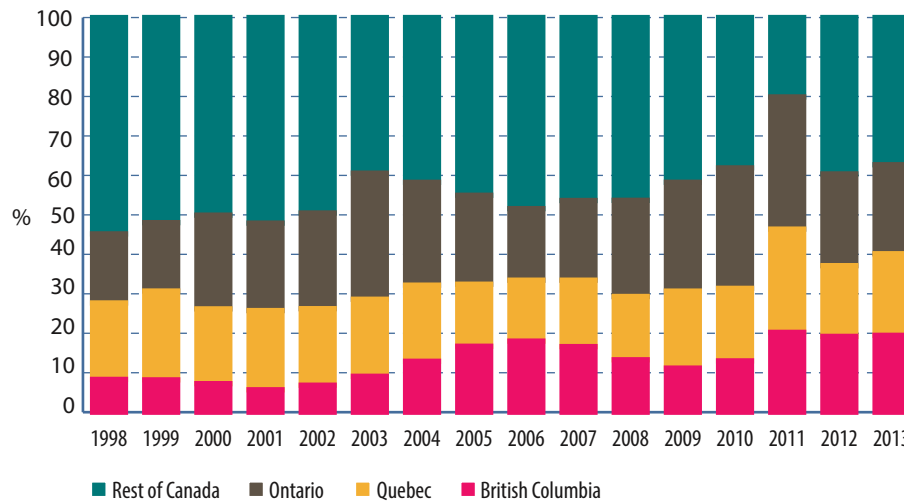
Other areas of Canada also benefited from the worsening conditions in British Columbia. Investment in exploration declined in British Columbia more than the rest of Canada partly due to uncertainties in mineral tenure, compensation for expropriated lands, access to lands, and in environmental policies and review processes (Mining Association of British Columbia & Price Waterhouse, 1993). Exploration investment in British Columbia also

Figure 2: British Columbia's share of Canadian exploration spending, 1986–1997



Source: British Columbia, Exploration Expenditure Comparisons from the National Exploration Survey (Natural Resources Canada).

Figure 3: British Columbia's share of Canadian exploration spending, 1998–2013



Source: British Columbia, Exploration Expenditure Comparisons from the National Exploration Survey (Natural Resources Canada).

failed to recover as quickly after the decline of the early 1990s when compared to other parts of Canada (Price Waterhouse, 1996).

While it is perhaps self-evident that the policy environment affects investment decisions, this is difficult to measure directly due to lack of data and difficulty isolating policy factors from market, geological, and other investment considerations. The links between policy factors and investment decisions are also obscured by the long time frames in mineral exploration and development. Finally, mine operators may be reluctant to openly criticize mining policy—fearing reprisals from regulators for projects currently underway.

Such concerns led to the Fraser Institute to develop the Survey of Mining Companies in order to measure the effects of public policies on attracting or dissuading mining investment. The survey originally focused on Canadian jurisdictions but has since expanded to 96 jurisdictions around the world. It can be completed anonymously online, and an invitation is sent annually to senior managers and executives at mining companies, as well as through mining associations and media (Wilson et al., 2013). In 2012/2013, just over half (54 percent) of survey respondents were exploration companies, while 20 percent represented producer companies with more than US\$50M in revenues and 6 percent were producer companies with less than US\$50M in revenue; the rest were consulting companies or other (suppliers, service providers, etc.). The survey asks senior executives in the mining sector to evaluate the degree to which certain public policy factors attract or dissuade investment as well as their investment intentions. This data allows comparison of how decision makers rate the attractiveness of jurisdictions in comparison to one another, as well as how investment is affected over time within a specific jurisdiction.

Methodology

The Survey of Mining Companies asks respondents to evaluate whether or not a particular policy factor, such as political stability or the taxation regime, encourages or discourages investment. Respondents are asked to score only for jurisdictions and policy factors with which they are familiar.¹ For each policy factor, respondents are then asked which of the following five responses best describes each jurisdiction with which they are familiar:

- 1 Encourages exploration investment.
- 2 Is not a deterrent to exploration investment.
- 3 Is a mild deterrent to exploration investment.
- 4 Is a strong deterrent to exploration investment.
- 5 Would not pursue exploration investment due to this factor.

Policy factors in the Fraser Institute Survey of Mining Companies

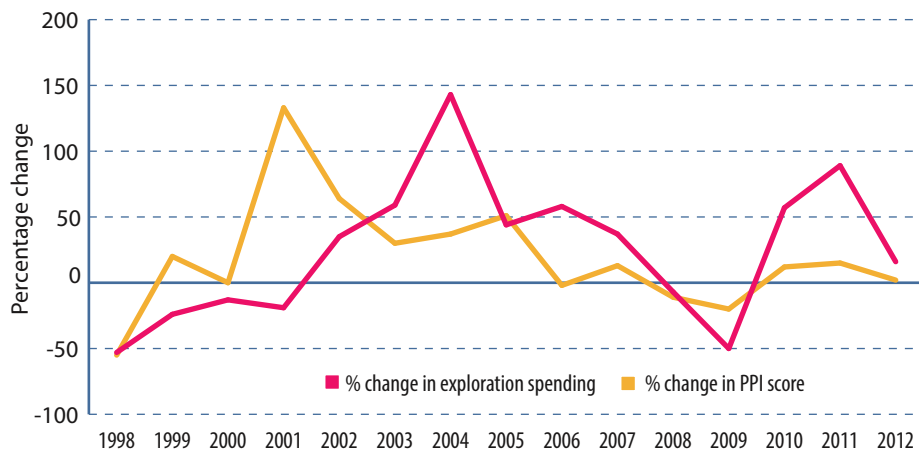
1. Uncertainty concerning the administration, interpretation, or enforcement of existing regulations.
2. Uncertainty concerning environmental regulations (stability of regulations, consistency and timeliness of regulatory process, regulations not based on science).
3. Regulatory duplication and inconsistencies (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 archaeological sites, etc.
8. Infrastructure (includes access to roads, power availability, etc.).
9. Socioeconomic agreements/community development conditions (includes local purchasing, 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 labour 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 labour/skills.

1. The 2012/2013 survey questionnaire contained the following instructions: "Please go through the following jurisdictions and select the ones that you are familiar with. Your selections need not be limited to first-hand experiences. Where you are knowledgeable, your informed opinion of a jurisdiction's policy climate is valuable as well. Please select as many as possible."

Correlation of results from the Survey of Mining Companies with actual exploration expenditures

The responses to policy questions in the mining survey are normalized and averaged into a single index, called the Policy Potential Index (PPI). This single index provides an overview of the policy environment within a jurisdiction, and allows for comparison between jurisdictions. While the PPI includes only policy factors, it does appear correlated with actual exploration investment in British Columbia (figure 4).² There appears to be a lag in between the changes in PPI and in exploration spending—suggesting that the PPI may provide a leading indicator of the attractiveness of the province for mining exploration investment—although this pattern deteriorates later in the time series and further analysis on mining series data for other jurisdictions is needed to confirm this finding. However, the observed correlation does lend validity to using survey data as a basis for analyzing barriers to mining investment in British Columbia in Part 2 of this report.

Figure 4: Changes in PPI score versus changes in exploration spending, British Columbia, 1997–2012



Sources: Fraser Institute Survey of Mining Companies (various years); Natural Resources Canada, from the federal-provincial-territorial Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures.

2. The correlation coefficient between exploration spending and PPI from 1997 to 2012 is 0.825.

2. Policy barriers to mining investment in British Columbia

While mineral exploration in British Columbia is cyclical and strongly correlated to commodity prices, the Fraser Institute Survey of Mining Companies has also found that policy factors play a significant role in exploration and mining investment decisions. Each year, respondents are asked how they weigh policy versus mineral potential in determining investment decisions, and the weighting by respondents has consistently shown that policy considerations are weighed at nearly 40 percent, whereas mineral potential is weighed at 60 percent. The following part of the report will focus on the policy factors that may have impeded investment in British Columbia's mining industry, using a time-series analysis of data from the Survey of Mining Companies.

Methodology

A time-series analysis was carried out using policy factor data from the survey years 2008/2009 to 2012/2013. The analysis entailed combining participant responses for 4. *'Is a strong deterrent to exploration investment'* and 5. *'Would not pursue exploration investment due to this factor'* to identify the extent to which specific policy factors were most strongly dissuading investment. In addition to survey data, survey comments and external surveys and reports were also reviewed to help relate survey findings to changes in the policy environment in British Columbia.³ Policy changes have been reviewed over a longer time period than the survey data analyzed, as the collective memory of industry, and the effects of poorly received policies, can last years and in some cases decades.⁴

3. Survey comments from 2008–2012 that are relevant to the policy factors discussed in this report have been included as Appendix 1.

4. The 2012/2013 Survey of Mining Companies received comments suggesting that the Windy Craggy project (discussed later in this paper) continues to influence miners' perception of British Columbia nearly two decades later.

Results

The results of the time series analysis exploring the effect of each policy factor on deterring investment in British Columbia can be seen in **Figure 5**, which charts the combined percentage of responses that identified each policy factor as either strongly deterring or outright preventing investment from the 2008/2009 to 2012/2013 Fraser Institute Surveys of Mining Companies.

What emerges from this analysis is that British Columbia's policy is not uniform in its effect on investment. Instead, a relatively small number of policy factors are responsible for the majority of deterred investment. The factors most deterring to investment, in order of greatest to least significant are:

- ◆ Uncertainty concerning disputed land claims;
- ◆ Uncertainty concerning what areas will be protected as wilderness, parks, or archaeological sites, etc.;
- ◆ Uncertainty concerning environmental regulations (stability of regulations, consistency and timeliness of regulatory process, regulations not based on science);
- ◆ Regulatory duplication and inconsistencies (includes federal/provincial, federal/state, inter-departmental overlap, etc.).

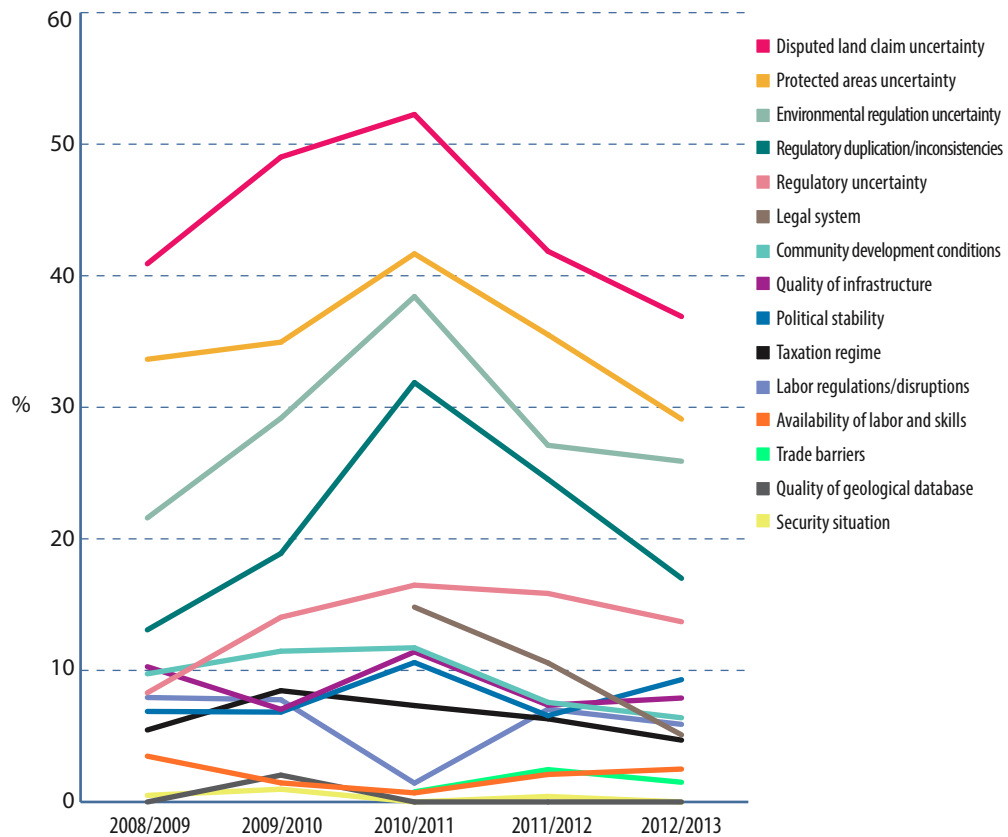
Together, these four factors were responsible for two thirds of total investment deterred in British Columbia in the 2012/2013 Survey of Mining Companies. By way of comparison, factors observed to be least dissuading to mining investment in British Columbia were level of security, quality of the geological database, trade barriers, and availability of labor and skills.

Uncertainty as a deterrent to investment

The role of uncertainty as a deterrent to mining investment is common to each of the four factors identified. While the particulars of how uncertainty affects mining investment in each policy area will be discussed in more detail below, the general mechanism common to all is that uncertainty creates risk for mining investment by decreasing investor confidence in their ability to recoup and profit from investments.

Mining is already an inherently risky endeavor, with a lengthy and time-consuming process to discover and develop mines and move them into production. It is estimated that for every 5,000 mineral prospects explored, only one will become a mine (Mining Association of British Columbia & Price Waterhouse, 1992: 21). Once deposits are discovered, it can take years or even decades for a mine to come into production, during which time tens of millions of dollars may be invested without being able to draw revenue or profits.

Figure 5: Percentage of investment strongly deterred by policy factor, 2008/09–2012/13



Sources: Fraser Institute Survey of Mining Companies (various years).

Even once production begins, miners are global price takers facing volatile and cyclical commodity prices, fluctuating foreign exchange rates, and variable input costs such as fuel, energy, labor, and construction materials. In addition, the value of the Canadian dollar can also affect profits significantly. In 2010, a one cent change in the Canadian dollar relative to the US dollar was estimated to cause a \$77 million change in gross mining revenues for the BC industry, and the strengthening of the Canadian dollar in that year alone lowered net revenues by an estimated \$856 million dollars for BC mining companies (PriceWaterhouseCoopers, 2011a).

Given the long time periods over which mines operate and the changes in profitability that they may encounter, it is important to minimize policy uncertainty and changes in policy that compound risk and uncertainty for miners. Miners must have confidence in the stability, predictability, and

transparency of the policy environment in which they operate, as the economic viability of a project can be affected significantly by changes. In particular, miners need confidence that exploration will not be impeded by costly regulations, that deposits found will be able to be developed, that deposits will not be subject to arbitrary expropriation without compensation, that projects reviews will be effective and timely, and that unexpected costs and taxes will not be unilaterally imposed (Price Waterhouse, 1997). Mining capital is globally mobile, and without such confidence in the stability and certainty of regulations investment can shift to areas that offer more certainty.

The next section will review which aspects of BC mining policy are dissuading investment, suggest examples of policy and actions that were viewed as hostile to mining investment, and offer lessons to improve mining confidence in British Columbia. While factors are discussed separately in survey questions and in the sections below, factors are often linked and may overlap.

Investment Barrier 1

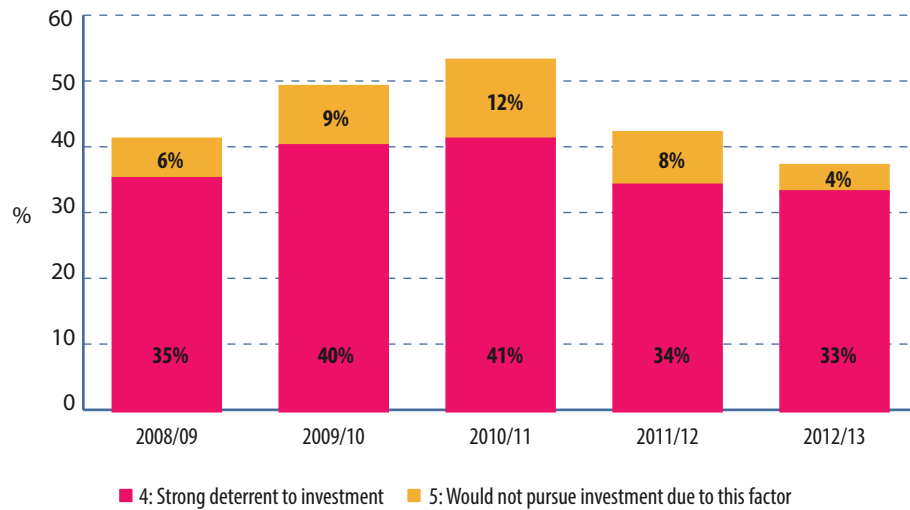
Uncertainty concerning disputed land claims

Based on our survey findings, uncertainty concerning disputed land claims was the single greatest factor deterring mining investment in British Columbia over the past five years. In 2012/2013 alone, 33 percent of respondents reported that they were strongly deterred due to this factor, and a further 4 percent reported that they would not invest in BC due to this factor (**figure 6**). In addition, 30 percent of respondents reported that they were mildly deterred from investing due to this type of uncertainty, meaning that less than a third of survey respondents for British Columbia were not dissuaded to some extent by this factor.

Due the low incidence of viable mineral deposits, mineral exploration relies on access to large tracts of land. Disputes over land claims can remove land from exploration, decreasing the future stream of potential mining projects. Exploration and development are negatively impacted if prospectors are uncertain whether they will be able to develop any viable deposits discovered. Investors are also reluctant to invest in developing mineral deposits where land tenure and access to claims may be uncertain.

One of the principle reasons for the uncertainty regarding disputed land claims in British Columbia is the evolving relationship between Aboriginal peoples, government, and industry proponents in the province. Land disputes have also arisen as a result of environmental and conservation groups seeking exclusion of land from industrial use. For the purpose of this report, we have included environmental disputes within the discussion of uncertainty regarding land protection for parks, wildlife and archeological sites, discussed in the next section of this report.

Figure 6: Investment deterred, 2008/2009–2012/2013
Uncertainty concerning disputed land claims



Source: Fraser Institute Survey of Mining Companies (various years).

Aboriginal peoples have a unique legal status in Canada that is recognized through Section 35 of the *Constitution Act, 1982*, which states: “The existing Aboriginal and treaty rights of the Aboriginal peoples of Canada are hereby recognized and affirmed” (Canada, 2012a). Aboriginal rights have also been confirmed through the Supreme Court of Canada, although a clear definition of these rights has not been provided and their proof, nature, and location remain to be addressed (Canada, 2012a; British Columbia, no date). Mining companies often find themselves on the front lines of tensions between asserted Aboriginal rights and title and the interpretation of such rights by the courts, as miners rely on having access to Crown Land (McPhie, 2009).

The situation is complicated by the unique circumstances of British Columbia. The province is home to the greatest diversity—culturally and linguistically—of First Nations people in Canada, with over 200 bands (of the 600 in Canada) and 34 distinct languages (British Columbia, no date). However, few treaties exist in the province to clearly define the rights, responsibilities, and relationship between the federal government, the provincial government, and First Nations, leading to uncertainty for all parties. This differs from the Provinces of Manitoba, Alberta, and Saskatchewan, and parts of Ontario, where aboriginal title, including mineral rights, was surrendered through historic treaties (Willms et al., 2012: 29).

Historic treaties in British Columbia include 14 Douglas Treaties on Vancouver Island and Treaty No. 8 in northeastern British Columbia, both of

which were signed prior to 1925 (British Columbia, no date). It was not until 1990 that the provincial government, federal government, and Nisga'a Tribal Council agreed to negotiate a treaty resulting, in 2000, in the first modern treaty in British Columbia (British Columbia, 2007b). Since then, modern treaties have also been concluded with the Tsawwassen, Maa-nulth, and Yale First Nations, and 57 other negotiations are ongoing, with several at the final negotiation stage (Canada, 2012b). Just over half of First Nations are currently engaged in the treaty process—representing two-thirds of Aboriginal people in British Columbia—and only one third of the province's land base is covered by treaties (British Columbia, no date; British Columbia 2007a). The result of so few treaties in British Columbia is uncertainty in land and resource ownership, use, and management that not only discourages investment but also limits the ability of First Nations to achieve self-reliance (Canada, 2012a).

While the resolution of treaties is positive in terms of bringing greater certainty over land claims, the treaty process has also led to uncertainty regarding land claims as the entire province is under one claim or another, and overlap exists between lands claimed by different bands (Price Waterhouse, 1994). In addition, many bands eligible to participate have not yet entered into the voluntary process. The treaty process itself is also not working as well as expected and has been significantly slower to resolve treaties than was forecasted (British Columbia, 2006b). In the absence of finalized treaties, the legal system is being used to shape and define rights in British Columbia, and the province is having to adjust its approach and policies for addressing Aboriginal rights as a result of these decisions (British Columbia, no date).

Of great significance was the Supreme Court of Canada decision on Haida in 2004 (*Haida Nation v. British Columbia*). This decision expanded the Crown's duty to consult First Nations before making decisions that could potentially affect not only proven rights but also asserted rights, and, if required, to accommodate by avoiding or mitigating the impact of decisions (British Columbia, 2010). Ultimately, the duty to consult rests with the Crown and "[t]hird parties such as proponents, do not have a legal obligation to consult Aboriginal groups" (Canada, 2011: 20). However, the Province may delegate certain procedural aspects of consultation to proponents under the *Environmental Assessment Act*, thereby requiring mining companies to share information about proposed projects with First Nations (British Columbia, 2011b). Since that time, a number of court decisions have continued to shape and define consultation and accommodation requirements in Canada (Canada, 2011).⁵

5. Such as *Delgamuuk v. British Columbia*, 1997 3 S.C.R. 1010; *Haida Nation v. British Columbia (Minister of Forests)*, 2004 SCC 73; *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, 2004 SCC 74; *Mikisew Cree First Nation v. Canada (Minister of Canadian Heritage)*, 2005 SCC 69; *Rio Tinto Alcan Inc. et al v. Carrier Sekani Tribal Council*, 2010 SCC 43.

The procedural aspects for this duty to consult remain unclear, however. One challenge lies in the fact that potential or established aboriginal or treaty rights vary both in scope and content, and issues addressed in consultation are specific to the location and nature of the activity (Canada, 2011). This variation in rights means that the consultation process needs to be adapted to address different kinds of rights and Crown obligations, in which significant differences exist (Canada, 2011). In addition, multiple First Nations may have rights in the same area but with varying types of rights across communities (British Columbia, Canada, 2011). This has created new uncertainty for industry as there remains a lack of clarity on how, with whom, why, and when Aboriginal consultation must occur, resulting in confusion and frustration for all stakeholders as well as increased costs for compliance (The Canadian Chamber of Commerce, 2013). Despite these challenges, many mining companies are working directly with First Nations and have entered into positive business relationships, including negotiating Impact Benefit Agreements (IBAs) or Participation Agreements (PAs) (McPhie, 2009; PriceWaterhouseCoopers, 2013).

Another significant policy change in the relationship between First Nations and the provincial government was the 2008 release of a policy statement on Resource Revenue Sharing, in which the province committed to share revenues received from new mine developments with First Nations. In August, 2010, British Columbia became the first province in Canada to share mineral tax revenues directly with First Nations, and two separate agreements were signed (PriceWaterhouseCoopers, 2011a). Revenue sharing with First Nations is negotiated on a project-by-project basis, largely through Economic and Community Development Agreements (ECDAs). It gives communities the chance to benefit from mining in their territories by providing them with revenue to meet their social and economic objectives (PriceWaterhouseCoopers, 2013). The introduction of revenue sharing has been viewed positively by industry, as it has brought greater certainty for explorers and developers on revenue sharing without adding additional costs for industry (PriceWaterhouseCoopers, 2011a; Association for Mineral Exploration British Columbia (AMEBC), 2010). It may also have contributed to the decline in investment deterred due to uncertainty surrounding land disputes that has been observed in the mining survey since 2010/2011.

A recent Federal Court decision in *Daniels v. Canada* could again increase uncertainty surrounding land claims in British Columbia. The question posed in the litigation was whether non-Status Indians and Métis are identified as 'Indians' under s 91(24) of the *Constitution Act, 1867*, with the court deciding in the affirmative—although it rejected the declaration that they have a right to be consulted by the federal government on a collective basis, respecting their Aboriginal rights and interests (Federal Court, 2013).

The federal government has already appealed this decision (Canada, 2013a). British Columbia is home to 59,000 Métis, although the Province does not consult with them as they do not recognize any Métis communities as being capable of successfully meeting site-specific requirements in Section 35 of the *Constitution Act, 1982* (British Columbia, 2013). Although the courts did not grant these groups the same rights as Status Indians, this decision does open the door for further legal action where these groups can seek the extension of rights.

Discussion and key recommendations: Uncertainty concerning disputed land claims

British Columbia faces unique challenges that have resulted in significant uncertainty in disputed land claims, particularly surrounding relationships between various levels of government and First Nations. The relatively small number of Treaties in the Province has contributed to this uncertainty, as have a number of recent court rulings, particularly regarding the Duty to Consult. Promisingly, British Columbia has improved its performance in recent years in terms of limiting the barrier to investment posed by land disputes and the resulting uncertainty. In particular, the direct sharing of royalties between the Province and First Nations appears to have settled industry concerns, as well as permitting First Nations a more active role in benefiting from mining and resource development.

The following actions are recommended to continue to improve certainty for miners in land disputes with First Nations in British Columbia:

- ◆ Continue to settle land and resource ownership through an expedited BC Treaty Process;
- ◆ Prioritize mechanisms to resolve asserted Aboriginal Rights and Title for bands not participating in the BC Treaty Process, without litigation;
- ◆ Develop clearer guidance for third parties to facilitate meeting the Crown's Duty to Consult;
- ◆ Continue revenue sharing between the Province and First Nations as pioneered in BC;
- ◆ Provide clearer guidance and early consultation with the mining industry on Aboriginal policy changes to avoid deterring investment.

Investment Barrier 2

Uncertainty over which areas will be protected

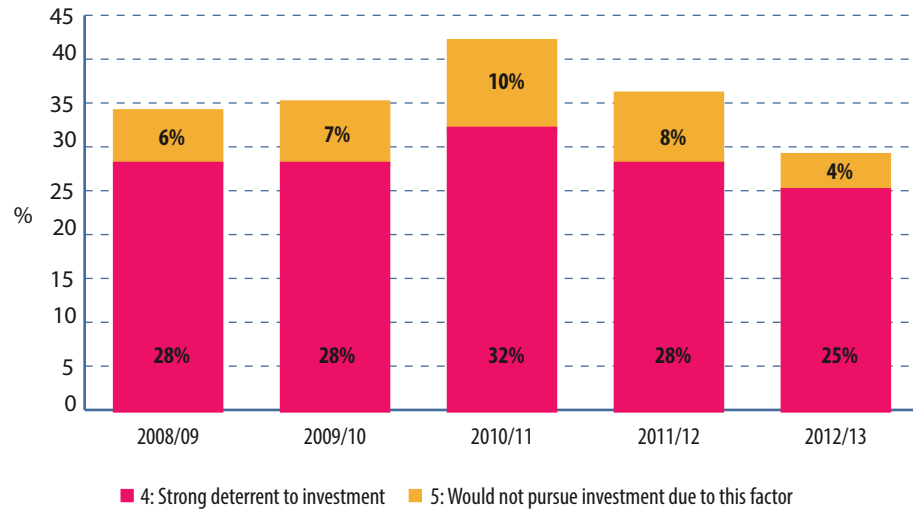
Based on our surveys, the second policy factor most dissuasive to mining investment in British Columbia over the last five years is uncertainty over which areas will be protected as wilderness, parks, or archeological sites (**figure 7**). In 2012/2013, 25 percent of respondents were strongly deterred from investing due to this factor and a further 4 percent would not pursue investment as a result. An additional 45 percent of respondents were mildly deterred due to this type of uncertainty, resulting in nearly three quarters of survey respondents indicating that they are being discouraged from investment due to uncertainty over which areas will be protected.

As in the case of uncertainty concerning disputed land claims, uncertainty concerning protected areas negatively affects mining investment by increasing the risk of investment and by excluding lands from exploration and mineral development. Mining requires temporary access to large amounts of land to identify mineral deposits that may eventually lead to mines. However, miners must also have confidence that any new mineral deposits discovered will be able to be developed, and that development will not be prohibited by new parks or by changes to permitted activities within an area.

Over the last two decades, policies and decisions were made in British Columbia that continue to shape the perceptions of miners in the Annual Survey. These policies emerged in a context of increased land use conflicts, as balance was sought between environmental and economic interests (Prospectors & Developers Association of Canada, 2008). However, many of the policies brought greater uncertainty for the mining industry and a perception that British Columbia was hostile to mining.

The provincial government passed the *Commissioner on Resources and Environment Act* in 1992, creating through this act the Commission on Resources and Environment (CORE) (British Columbia, 1993b). CORE was charged with developing a province-wide land use strategy using a collaborative model that sought to bring together diverse stakeholders for land use planning at the regional level (Prospectors & Developers Association of Canada, 2008; British Columbia, 1993b). The British Columbia Geological Survey prepared mineral potential maps for regional plans in order to rank the land base according to its ability to support mineral exploration and production (British Columbia, 1994). However, creating new protected areas became a main focus of the land use planning process, as the government proposed to double the area of provincial parkland to cover 12 percent of the province—significantly impacting the amount of land available to the mining industry for exploration and mining (Prospectors & Developers Association of Canada, 2008; Mining Association of British Columbia & Price Waterhouse, 1992). In 1992, a Protected Area Strategy was developed to meet the province's commitment to double parkland and to incorporate previous programs,

Figure 7: Investment deterred, 2008/2009–2012/2013
Uncertainty concerning protected areas



Source: Fraser Institute Survey of Mining Companies (various years).

including old-growth areas, wildlife habitats, ecological reserves, heritage sites, as well as provincial and national parks (British Columbia, 1993a). By 1995, CORE had been replaced by a new Land Use Coordination Office (LUCO) which would oversee new Land Resource Management Plans (LRMPs) for a smaller sub-regional scale of planning (Prospectors & Developers Association of Canada, 2008).

Despite the goal of consensus-based decision making, CORE ended up completing regional plans itself after consensus could not be reached, resulting in negative impacts for the mining industry (Prospectors & Developers Association of Canada, 2008). While land use plans had the goal of doubling parkland to 12 percent, the land use plans recommended for the regions of Vancouver Island, East and West Kootenays, and Cariboo-Chilcotin resulted in approximately 30 percent of the regional land mass being protected or having additional constraints on industrial activity (Price Waterhouse, 1995). This created great uncertainty for the industry; existing claims became subject to expropriation, and mineral exploration was halted in areas where prospectors lacked confidence in being able to develop any deposits discovered, due to the perceived sensitivity of these areas (Price Waterhouse, 1995).

A contentious decision of this era—one that continues to be cited annually by surveyed miners as an example of exceptionally poor and dissuasive policy—concerns the Windy Craggy project. The Windy Craggy deposit may be the largest undeveloped copper deposit in North America. It is estimated to contain over four million tonnes of copper, almost 60,000 kilograms of gold, and significant amounts of cobalt, together valued in 1993 at over \$8.5

billion, with an additional deposit also discovered nearby (Mining Association of British Columbia & Price Waterhouse, 1993; British Columbia, 1993a). The Windy Craggy project, operated by Geddes Resources Ltd., completed Stage 1 of the Mine Development Assessment Process in 1991. However, review of the project was suspended in 1992, in deference to the newly initiated CORE (British Columbia, 1993b). The atmosphere of uncertainty in BC was further heightened by a surprise mid-year decision by the province to declare the entire Tatshenshini-Elsek region a Class A provincial park, and to expropriate the claims of more than 20 resource companies and individuals, including the Windy Craggy deposit (Price Waterhouse, 1994). This decision was extremely disappointing for industry, and ignored the case for multiple land use, since proposed mining activities would have used just one tenth of 1 percent of the million hectares within the park. The decision— as well as the resulting uncertainty over compensation and settlement of claims—also shook the confidence of the mining industry (Price Waterhouse, 1994; Mining Association of British Columbia & Price Waterhouse, 1993).

The alienation of land from exploration and mining continued to grow as a result of the CORE, Protected Areas Strategy, and Land Resource Management Planning (LRMP) creating uncertainties for miners and discouraging exploration. The proclamation of the *Forest Practices Code for British Columbia Act* in 1995 added further obstacles for miners (Price Waterhouse, 1996). The regional plans and LRMPs did not provide the certainty for resource use and development as intended, and miners perceived that measures to protect wildlife were being implemented in a blanket or prescriptive manner without consideration of the impact on mineral exploration (Price Waterhouse, 1997; AMEBC, 2010). Two organizations representing miners formally withdrew from the land use planning process in 1999, arguing that the process was fundamentally flawed and inappropriate for mining, although both returned to the process in 2001, following a change in government (Prospectors & Developers Association of Canada, 2008).⁶

In 2002, the BC government amended section 14 of the *Mineral Tenure Act* to create a 'two-zone' land use system for mineral exploration and mining. The intention behind the reform was to clearly define lands as either open or closed to exploration or mining, in order to create greater certainty for mineral investors (British Columbia, 2003). The two zones identified in the reform are 'mineral zones', which are open to mineral exploration and development, and 'protected zones', which are closed to exploration and development. Although this two zone system was developed to create greater certainty regarding land use, government land use decisions have eroded

6. The organizations in question were the British Columbia and Yukon Chamber of Mines (now the Association of Mineral Exploration, British Columbia) and the Mining Association of British Columbia.

access to large areas of the mineral zone and conservation groups continue to press for further protection even after land use plans are finalized (AMEBC, 2012). There also exists a perception that exploration companies will not receive due process in areas where proposed activities may be controversial, even where a Land Use Plan has been negotiated and agreed to by all sectors.

Issues with the lack of clarity over protected areas were exacerbated in February 2010 when the BC government decided to ban title registration and exploration in the Flathead Valley, a region estimated to contain \$7 billion in mineral resources (AMEBC, 2011b). The decision was made despite the fact that, under existing land use plans, the Flathead valley was open to mining exploration and companies and individuals had legal rights and permits for claims (AMEBC, 2011b). In addition, the decision was made without due process or consultation and without a clear plan for compensation (AMEBC, 2011b). Not only did this decision undermine confidence in existing land use planning, but government also proposed compensating tenure holders for 'sunk costs' and not for the fair market value of the mining rights expropriated, which has further undermined the confidence of mining investors (BC Chamber of Commerce, 2013).

The 2010 Flathead Valley decision could explain the increase in the percentage of investors deterred due to uncertainty concerning parks and protected areas in the 2010/2011 mining survey. The uncertainty created by this decision, as well as the loss of confidence in the security of investments, has negatively affected the ability of British Columbia miners to attract investment and created a perception of a 'BC Discount' (BC Chamber of Commerce, 2013). Several comments from the 2010/2011 survey also identified the Flathead Valley, as well as the Windy Craggy project, as examples of a regulatory "horror story" related to operating in British Columbia (see Appendix). In fact, the Windy Craggy project has been cited as an example of poor policy as recently as the 2012/2013 mining survey, suggestive of the very long-term damage to the industry confidence and uncertainty that can result from unilateral decisions to exclude mining and expropriate claims.

Discussion and key recommendations:

Uncertainty concerning which areas will be protected

In recent decades, a significant amount of the land base in British Columbia has been excluded from mining and exploration due to the creation of parks and protected areas. This has directly affected mining investment by removing large parts of the province from mineral exploration and development. It has also deterred investment by reducing the confidence of prospectors that they will be able to develop any deposits discovered. Of particular concern to the industry is the exclusion and subsequent expropriation of legally obtained mineral claims to create parks or protected areas, most recently in the case of the Flathead Valley. This uncertainty has been compounded by a

lack of clarity in how expropriated claims are compensated, further affecting confidence for the security of investments in BC.

Since 2002, British Columbia has had a two-zone system where lands are classified as either open or closed to mining. However, despite this policy, uncertainty remains a significant deterrent to mining investment, since finalized land use plans have been overturned, mineral claims expropriated, new restrictions placed on mining areas, and decisions affecting mining made without industry consultation. This has undermined miners' confidence in the two-zone system, deterring investment.

The last two surveys have shown a decline in the percentage of miners deterred due to uncertainty concerning which areas will be protected (**figure 7**). In order to continue and build upon this trend, the following actions are recommended:

- ◆ The province should strictly commit to the two-zone land use system and avoid arbitrary change that reduces miners' trust and investors' confidence;
- ◆ Where expropriation is necessary, fair, market-based compensation should be provided in a timely and transparent manner;⁷
- ◆ The province should assess the potential social and economic impacts of lost mineral exploration and development prior to removing land from mining and exploration.

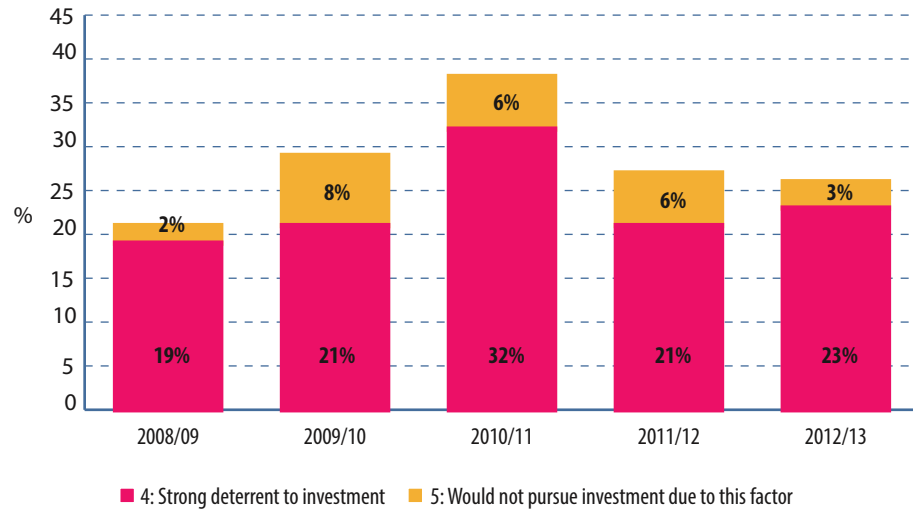
Investment Barrier 3

Uncertainty concerning environmental regulations

The third policy factor dissuading mining investment in British Columbia, based on Survey of Mining Companies responses since 2008/2009, is uncertainty concerning environmental regulations (stability of regulations, consistency and timeliness of regulatory process, regulations not based on science). **Figure 8** displays investment strongly deterred due to uncertainty concerning environmental regulations in British Columbia over the last five years. In 2012/2013, 23 percent of respondents were strongly deterred and a further 3 percent said they would not invest in British Columbia due to uncertainty concerning environmental regulations. In addition, 43 percent of respondents saw uncertainty in environmental regulations as a mild

7. According to the *Mineral Tenure Act* Mining Rights Compensation Regulation 5(1), “[t]he value of an expropriated mineral title must be determined by estimating the value that would have been paid to the holder of the expropriated mineral title if the title had been sold on the date of expropriation, in an open and unrestricted market between informed and prudent parties acting at arm’s length.”

Figure 8: Investment deterred, 2008/2009–2012/2013
Uncertainty concerning environmental regulations



Source: Fraser Institute Survey of Mining Companies (various years).

deterrent to investment, for a total of 69 percent of mining investment deterred.

Uncertainty concerning environmental regulations can deter investment in a number of ways. First, if there is a perceived lack of stability in regulations then project viability can be threatened—or, in the case of the uranium ban, halted completely—due to changing and uncertain policies. A second way uncertainty in environmental regulations can affect mining investment is by creating uncertainty in the consistency and timeliness of the regulatory process. Where the process is unclear, fluctuating, or subject to change, miners may be reluctant to invest due to additional costs, regulatory requirements, or new processes that can significantly add costs and delays to projects. A third and related issue for miners is the perception that regulations are not based on science. Based on survey comments, we have observed that where regulations are opaque and unpredictable, the perception can arise that the process has been politicized, allowing special interest groups or politics, rather than scientific evidence, to guide policy decisions.

British Columbia environmental assessment process

Environmental regulation in British Columbia is governed by the British Columbia *Environmental Assessment Act* (BCEAA), which established the environmental assessment process for projects to review and assess potential impacts. Whether or not projects require a review is determined by whether the project triggers certain thresholds outlined in the BCEAA, such as production volume or land disturbance (British Columbia Environmental Assessment

Office, 2013). A review can also be recommended by the Reviewable Projects Board, a government agency, or prescribed by the Minister of Environment.

Generally, exploration projects do not require an environmental assessment under the BCEAA because the volume of ore removed does not meet the minimum threshold for review (Baldwin & Fipke, 2010). In addition, the BC government amended the Mines Act in 2011 to exempt some low-risk activities from the permitting process and to streamline the regulatory process in order to make it easier for smaller mining companies to conduct low-risk mining activities (British Columbia, 2012b).

Any project requiring review will undergo an environmental assessment conducted by the Environmental Assessment Office (EAO) in order to receive an Environmental Assessment Certificate (Kazaz, 2012). An environmental assessment will examine a broad range of environmental issues. It will also include an examination of social, economic, health, First Nations, and heritage factors that may be impacted by the project, and it provides an opportunity for consultation with the public and First Nations (British Columbia Environmental Assessment Office, 2013). The EAO carries out the province's legal duty to consult and accommodate First Nations as well as ensuring all potential effects (environmental, social, heritage, and health effects) are considered (Kazaz, 2012). The EA process concludes with a decision on whether to issue an EA certificate and generally requires at least 20 months. However, it can take much longer as the Minister of Environment or EAO can extend any time limit set under the BCEAA (British Columbia, 2012c).

Projects designated as reviewable cannot proceed until the project assessment is complete, an environmental certificate is issued, and all necessary permits and licenses are obtained. Post-EA permitting can still be time-consuming, however, and may include obtaining the mine permit, air quality permit, water license, and effluent permit, although it is possible to request review of permits concurrent to the EA (Pincock, Allen, and Holt, 2008). Once the project is approved, the *Environmental Management Act* along with other acts, such as the *Wildlife Acts*, regulate the project and set environmental standards for it to meet (Kazaz, 2012). For any mining project there is also a mandatory requirement to invest in reclamation bonds, which are later used to rehabilitate the environment when the project is closed (PriceWaterhouseCoopers, 2012). The *Mines Act* regulates the rehabilitation and reclamation of minerals and exploration operations in British Columbia.

The BCEAA consolidated previous environmental review legislation and review processes—including the *Mine Development Assessment Act*—and attempted to reduce complexity, duplication, and uncertainty in mining permitting (Mining Association of British Columbia & Price Waterhouse, 1993; Price Waterhouse, 1995). It also provided greater certainty for miners with regards to timeframes and requirements for report contents, making British

Columbia's legislation the most detailed and comprehensive environmental assessment legislation in the country at the time (Price Waterhouse, 1995).

The introduction of the BCEAA was not without problems, however. Although the BCEAA was intended to compliment the federal environmental assessment process under the *Canadian Environmental Assessment Act* (CEAA) (Kazaz, 2012), regulatory duplication and overlap occurred, as discussed in greater detail in the next section of this report. Environmental expenditures such as for permitting, environmental monitoring, and compliance reporting also increased for mining companies (Price Waterhouse, 1997). The first mining project evaluated under BCEAA, the Huckleberry Mines Ltd., was not completed within the time frames prescribed and was also subject to an additional delay as it required review through the CEAA (Price Waterhouse, 1996). In addition, after the project received Approvals in Principle it faced a legal challenge charging that the EA process was not completed satisfactorily, adding additional costs and uncertainty from the legal action to an already costly and lengthy process (Price Waterhouse, 1997).

Uranium ban

A second important environmental policy change in British Columbia was the decision to ban uranium mining. A moratorium on uranium exploration was introduced in BC in 1980, but it expired in 1987 and was not renewed. On April 21, 2008, Boss Power submitted an application for a Notice of Work and Reclamation (NOW) to allow work to be completed on its mineral claim for the Blizzard deposit (Supreme Court of British Columbia, 2010). However, the Ministry of Energy, Mines, and Petroleum Resources instructed the Chief Inspector of Mines not to consider the NOW, preventing work being done on the claim (Supreme Court of British Columbia, 2010). On April 24, 2008, the province established a mineral reserve that meant that all new mineral claims in BC would not include the rights to uranium or thorium, and on the same day issued a statement that government would “ensure that all uranium deposits will remain undeveloped” (Supreme Court of British Columbia, 2010: section 9). On March 12, 2009, the province also issued a Cabinet order that retroactively stopped the review of proposed uranium and thorium exploration and development in BC (AMEBC, 2009). Boss Power took legal action and reached an out-of-court settlement with the province for \$30 million in October 2011 (AMEBC, 2011a).

The uranium ban brought uncertainty to the mining industry in British Columbia and survey comments have cited this decision as an example of poor policy (see Appendix 1). The manner in which the ban was implemented—unilaterally and without consultation with the industry—undermined government credibility and added to perceptions that mining investments in the province were insecure (BC Chamber of Commerce, 2013). Furthermore, critics of the decision such as Gavin C. Dirom, President and CEO of AMEBC,

argued that it is “an unsound public policy based on very little science and enacted without due process or public consultation” (AMEBC, 2011a). The implications of this decision may also extend to exploration beyond uranium and thorium. Uranium and thorium are widespread and common in mineral formations in British Columbia, and may be encountered in exploration for other minerals (BC Chamber of Commerce, 2013). The ban could inhibit exploration for polymetallic deposits as well as other important economic minerals where uranium or thorium could also be present (BC Chamber of Commerce, 2013). These factors contribute to uncertainty and could help explain the increase observed in investment deterred due to uncertainty concerning environmental regulations between 2008 and 2010.

On the other hand, the compensation agreement reached with Boss Power was regarded as fair and equitable by AMEBC, an organization that represents mineral exploration and development in British Columbia (AMEBC, 2011a). This could be regarded as a step in the right direction, as respect for private property and appropriate compensation are essential aspects of the regulatory framework. The decline in investment deterred due to uncertainty concerning environmental regulations since 2010 could reflect the greater certainty brought by this settlement.

Discussion and key recommendations:

Uncertainty concerning environmental regulations

Uncertainty concerning environmental regulations has been a deterrent to mining investment in British Columbia in recent years. The introduction of the *Environmental Assessment Act* sought to consolidate environmental regulations and provide greater certainty for industry. However, its implementation, and subsequent legal challenges to the process, contributed to uncertainty for the industry as well as adding additional costs and delays.

A second key policy change in this area was the decision to ban uranium and thorium exploration and development in the Province. The ban was particularly damaging to government credibility as it was implemented without meaningful industry consultation. Critics argue that the decision was also not based on science nor did it consider economic costs or benefits foregone.

A decline in the percentage of miners deterred due to uncertainty concerning environmental regulations has occurred since 2010/2011. The following actions are recommended to continue to build policy certainty:

- ◆ The province should continue efforts to streamline the mine permitting process and make it more predictable and timely, while protecting health, safety, and the environment;

- ◆ Early and meaningful consultation with industry stakeholders should occur prior to the adoption of new processes and restrictions;
- ◆ The ban on uranium and thorium mining should be reconsidered through a transparent and open process that considers all stakeholders, scientific evidence, and socio-economic implications of the ban;
- ◆ The government should refrain from abrupt policy changes that restrict or ban mining activities unilaterally. Where new scientific results require changes, a full process of consultation and compensation should occur.

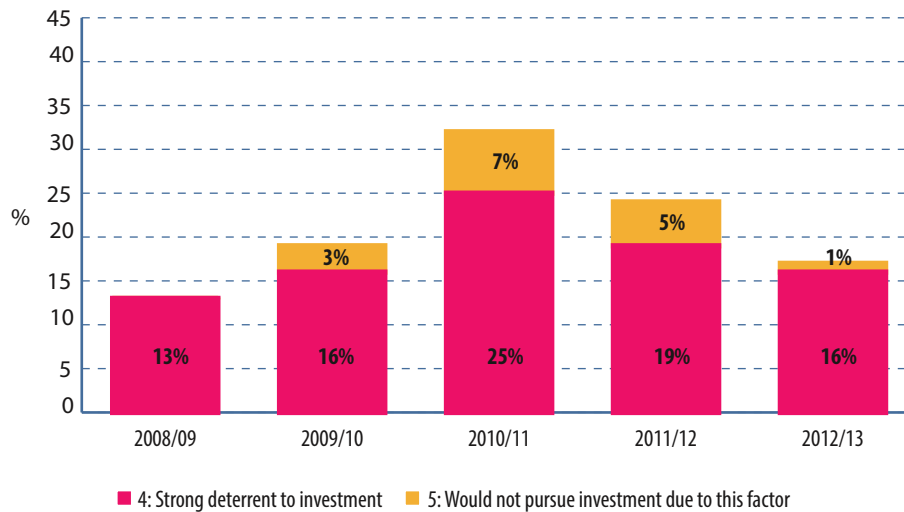
Investment Barrier 4

Regulatory duplication and inconsistencies

A final key barrier to mining investment in British Columbia from 2008/2009 to 2012/2013 was regulatory duplication and inconsistencies, including federal/provincial and inter-departmental overlap (**figure 9**). In the 2012/2013 Survey of Mining Companies, 16 percent of respondents were strongly deterred from investing due to this factor, and 1 percent of respondents would not pursue investment in British Columbia as a result. An additional 38 percent were mildly deterred, resulting in 55 percent of respondents deterred from investing in British Columbia due to regulatory duplication and overlap.

Regulatory overlap, duplication, and inconsistencies can deter mining investment in the province in several ways. First, overlap and duplication can cause confusion and make it more difficult for miners to comply. The clearer the expectations from a regulatory perspective, the better companies are able to manage their operations, plan future investments, and develop new projects (BC Chamber of Commerce, 2013). Duplication can also be very time consuming and one of the most frequent complaints from British Columbia miners concerns the lengthy permitting delays and regulatory overlap that exists between various levels of government (McPhie, 2009). In fact, new mining projects can take three to ten years for permitting in British Columbia, a timeline seen as burdensome given that the average mine life is typically seven years (McPhie, 2009:43). Regulatory overlap and duplication is also expensive for mining companies as delays and duplication increase costs. Finally, delays can also hamper the ability of mining companies to take advantage of upswings in the market or have sufficient opportunity to mine during favorable market conditions. Due to the cyclical nature of commodity markets, this opportunity lost can have significant effects on mines' viability and profitability.

Figure 9: Investment deterred, 2008/2009–2012/2013
Regulatory duplication and inconsistencies



Source: Fraser Institute Survey of Mining Companies (various years).

Tax regimes

One policy area creating uncertainty for mining companies operating in British Columbia is the duplication and overlap of taxation regulations between the federal and provincial government.

Tax rules applicable to mining are unique in Canada and recognize the highly cyclical and capital-intensive nature of the industry. Both federal and provincial governments provide generous treatment of exploration expenses that permit companies to recover most of their initial capital investment before paying significant amounts of taxes (Heakes et al., 2012). However, tax regimes in Canada cause problems for mining companies through overlap, inconsistent application, lack of stability in policy, and the distortionary nature of tax incentives. Unnecessary overlap and inconsistency between tax regimes in Canada can result in miners having to prepare multiple sets of tax calculations, to fulfill multiple filing requirements, and to plan around multiple and at times conflicting rules and regulations (The Canadian Chamber of Commerce, 2013). The Canadian Chamber of Commerce (2013) has also noted inconsistencies in the application of Canada Revenue Agency guidelines for eligible deductions under Canadian Exploration Expenses (CEE)—creating uncertainty for companies using the program.

Tax incentives also create policy uncertainty for the mining industry where they are not introduced permanently, but rather for defined periods of time—such as the BC New Mine Allowance, which will allow new mines and major expansions to deduct 133 percent of capital costs until 2013 (British Columbia, 2012b). Finally, tax incentives offered to the mining industry distort economic activity including the allocation of resources such as labor and

capital (buildings, machinery, and equipment), resulting in decisions based on incentives rather than the market determining where investment goes (Rabushka & Veldhuis, 2008). This distortion and complexity results in less than optimal profitability for miners, since it leads to excessive investment in certain tax-favored assets (Chen & Mintz, 2013).

Another area of uncertainty for miners in British Columbia was the introduction, and subsequent reversal, of a harmonized sales tax (HST). The HST was introduced in BC on July 1, 2010, but was reversed through a referendum held in 2011. As of April 1, 2013, British Columbia has reverted to a separate provincial sales tax (PST) and goods and services tax (GST). The changing tax policies created uncertainty for miners, and the return to a PST has added costs for miners both directly and indirectly—through a greater administrative burden to comply due to the complexity of rules related to various exemptions and the purchase of energy (PriceWaterhouseCoopers, 2012). This is consistent with other empirical research that indicates compliance costs are higher in Canadian provinces with independent sales tax regimes (Vaillancourt & Clemens, 2008).

Harmonization of federal and British Columbia environmental assessment processes

A second key area of regulatory overlap is in permitting mining projects, particularly surrounding environmental regulations. With the exception of national parks and aboriginal land, the federal government's authority over environmental regulations is generally less broad than that of the province (Kazaz, 2012). It does however have authority and a wide range of powers over the use of certain toxic substances and the protection of fish and fish habitat (Kazaz, 2012).

Until recently, mining projects in British Columbia could trigger not only a provincial environmental assessment under the BCEAA but also a federal review through the *Canadian Environmental Assessment Act* (CEAA). The CEAA was similar to the British Columbia environmental assessment process, and was generally triggered by projects that could affect fish habitat under the *Fisheries Act* or that involved the construction of works in waters deemed navigable according to the *Navigable Waters Protection Act* (Kazaz, 2012). This meant that mining projects could be subject to both a federal and provincial review, for the same project. Not only was this process duplicative, costly, and time consuming, it also increased uncertainty for miners. The case of the Taseko's Prosperity Project was cited in the mining survey as exemplary of the problems created by this policy overlap (see Appendix). The Prosperity mine was approved by the BC government but not by the federal review, highlighting the need for reform of the EA process (AMEBC, 2010).

There have been attempts to harmonize the federal and provincial regulations since their introduction, and in 2012 the federal budget introduced

legislation that repealed the CEEA and replaced it with an updated *Canadian Environmental Assessment Act, 2012* (CEAA 2012) (Canada, 2013b; British Columbia, 2012a). A key change in CEAA 2012 was to introduce substitution and equivalency provisions that require the Minister of Environment to allow a provincial process to be substituted for the federal environmental assessment process, if the substantive requirements of CEAA can be met and the province requests it (Canada, 2013b). British Columbia is pursuing substitution and equivalency for their environmental assessment process with the goal of “one project, one process” (British Columbia, 2012a). This change is supported by mining companies because it will eliminate duplication, as well as being expected to provide a competitive advantage for mining companies in British Columbia and other provinces (PriceWaterhouseCoopers, 2013). However, some uncertainty remains about how these changes will be implemented, such as how fisheries and pollution-prevention provisions of the *Fisheries Act* will work in practice, and whether the Act will be predictable and proportionate to risk (Canadian Chamber of Commerce, 2013).

Discussion and key recommendations: Regulatory duplication and inconsistencies

A key barrier for mining investment in British Columbia over the last five years has been regulatory duplication and inconsistencies. Regulatory duplication and inconsistencies between the federal and provincial governments in taxation regulations were identified as problematic for mining companies. Generous tax incentives also distort investment decisions and add complexity that limits the profitability of the sector. In addition, the introduction and later repeal of a harmonized provincial and federal tax in British Columbia (the HST) also created uncertainty and continues to add costs for miners in the province.

Duplication between the federal and provincial environmental assessment processes has also been problematic. This regulatory overlap meant that a single project could be subject to both a federal and a provincial environmental assessment process—thus duplicating efforts, adding delays, and increasing uncertainty with different decisions possible. Substitution and equivalency provisions introduced by the federal government in 2012 could reduce this duplication, although some uncertainties remain.

British Columbia has seen a reduction in investment deterred due to regulatory duplication and inconsistencies since 2010/2011, based on mining survey responses. In fact, the percentage of respondents indicating that this factor is ‘strongly deterring investment’ or that they ‘would not pursue investment’ as a result of regulatory duplication and inconsistencies has nearly

halved over the last two years (**figure 9**). The following actions are recommended to continue to improve performance in this policy area:

- ◆ In the short term, Canada Revenue Agency should provide greater clarity and consistent application of expenses eligible for Canadian Exploration Expenses (CEE);
- ◆ Both the federal and provincial governments should move towards the gradual elimination of distortionary tax incentives in favor of a single, lower rate of corporate income tax;
- ◆ British Columbia should re-examine harmonization of sales tax with the federal government through an open and transparent process;
- ◆ British Columbia should continue working with the federal government towards a single, clear, and predictable “one project, one process” (British Columbia, 2012a) for project review.

Conclusion

The mining sector in British Columbia generates wealth, employment, and government revenues benefiting the province as well as Canada as a whole. These benefits extend beyond mining to the goods and service providers that service the sector including financial, transportation, environmental, and professional services. The mining sector is globally mobile, however, and British Columbia must compete against jurisdictions around the world to attract mining investment.

The paper began with an examination of British Columbia's mining industry and the economic importance of the sector to the economy. Investment in the sector was shown to be cyclical, with investment varying significantly based on global demand, commodity prices, and the relative attractiveness of other jurisdictions considering geological and policy factors. The mining sector was thriving and expanding in the late 1980s. The early 1990s saw a decline in exploration investment that recovered somewhat in the middle of the decade before falling again in the late 1990s and early 2000s as previous government policy, low commodity prices, and recession led exploration investment to drop to a 30-year low. By 2003, the industry had recovered and, with the exception of a decline during the 2008 financial crisis, has continued to grow with strong global demand, high mineral prices, and record investment in exploration.

Exploration is a good indicator of the industry's current and future health, as new deposits and mines must be discovered to replace declining resources at existing mines. A review of British Columbia's share of total Canadian exploration investment shows periods where British Columbia lost out to investment in other provinces.

Part 1 concluded by introducing the Fraser Institute Survey of Mining Companies and describing the methodology used in the survey to measure the effect of policies on attracting mining investment. A comparison of the survey's Policy Performance Index with actual exploration expenditures in British Columbia since 1997 suggests a correlation.

Part 2 analyzed the survey results for British Columbia over the past five years and found four factors to be most deterring to investment. Recommendations to improve the attractiveness of British Columbia to mining investment are suggested for each policy area.

Investment Barrier 1

Uncertainty concerning disputed land claims

Uncertainty over disputed land deters mining investment by removing land from exploration, as well as by deterring exploration and investment in areas where prospectors are uncertain whether they will be able to develop any viable deposits discovered.

The principle reason for this type of uncertainty in BC is the evolving relationship between First Nations peoples, government, and industry proponents. This situation is complicated by the great diversity of First Nations peoples in the province, relatively few finalized treaties, and recent court decisions that continue to shape and define rights and obligations, particularly around the 'duty to consult.'

The following actions are recommended to decrease uncertainty concerning disputed land claims:

- ◆ Continue to settle land and resource ownership through an expedited BC Treaty Process;
- ◆ Prioritize mechanisms to resolve asserted Aboriginal Rights and Title for bands not participating in the BC Treaty Process, without litigation;
- ◆ Develop clearer guidance for third parties to facilitate meeting the Crown's Duty to Consult;
- ◆ Continue revenue sharing between the Province and First Nations as pioneered in BC;
- ◆ Provide clearer guidance and early consultation with the mining industry on Aboriginal policy changes to avoid deterring investment.

Investment Barrier 2

Uncertainty over which areas will be protected

The second key policy factor deterring exploration investment in British Columbia over the last five years has been uncertainty over which areas will be protected as wilderness, parks, or archeological sites. As in the case of uncertainty concerning disputed land claims, uncertainty concerning protected areas negatively affects mining investment by increasing the risk of investing in an area that may fall subject to later restrictions, as well as by excluding land from exploration and mineral development.

A number of policy factors have contributed to this uncertainty and to the perception that BC is hostile to mining. These included a land use planning processes that prioritized creating new protected areas and imposed

constraints on mining activities, the unilateral creation of parkland, expropriation of legally obtained mineral claims, and uncertainty over compensation for mineral claims affected.

The creation of a 'two-zone' land use system was intended to clearly define lands as open or closed to mining. However, it hasn't created the intended certainty for miners as access to land has continued to be eroded and government decisions—such as to ban title registration and exploration in the Flathead Valley—continue to be made without industry consultation or a clear plan for compensation for affected mineral claim holders.

The following actions are recommended to decrease uncertainty concerning what areas will be protected:

- ◆ The province should strictly commit to the two-zone land use system and avoid arbitrary changes that reduce miners' trust and investors' confidence;
- ◆ Where expropriation is necessary, fair, market-based compensation should be provided in a timely and transparent manner;
- ◆ The province should assess the potential social and economic impacts of lost mineral exploration and development prior to removing land from mining and exploration.

Investment Barrier 3

Uncertainty concerning environmental regulations

A third key deterrent to mining investment in British Columbia in recent years has been uncertainty concerning environmental regulations. A lack of stability and uncertainty in environmental regulations deters investment, as a project's viability can be threatened by new regulations, requirements, or delays. A related issue is policies that are not based on science, since they contribute to perceptions that special interest groups or politics, rather than scientific evidence, is guiding policy decisions and therefore raise uncertainty for miners.

The introduction of the British Columbia Environmental Assessment Act was a significant policy change that had mixed results in regards to certainty and risk. Recent efforts to streamline and make the process more time efficient have been well received by industry, but the introduction, in 2008, of a mineral reserve and de facto ban on uranium and thorium mining have had a definite effect of raising uncertainty and risk, as well as dissuading investment. This was in large part due to the way that this decision was made: suddenly, unilaterally, and without consideration of current scientific evidence, or of the long-term impacts this ban would have on other mineral exploration in British Columbia.

The following actions are recommended to decrease uncertainty concerning environmental regulations:

- ◆ The province should continue efforts to streamline the mine permitting process and make it more predictable and timely, while protecting health, safety, and the environment;
- ◆ Early and meaningful consultation with industry stakeholders should occur prior to the adoption of new processes and restrictions;
- ◆ The ban on uranium and thorium mining should be reconsidered through a transparent and open process that considers all stakeholders, scientific evidence, and socio-economic implications of the ban;
- ◆ The government should refrain from abrupt policy changes that restrict or ban mining activities unilaterally. Where new scientific results require changes, a full process of consultation and compensation should occur.

Investment Barrier 4

Regulatory duplication and inconsistencies

The final key deterrent to mining investment in British Columbia over the past five years has been regulatory duplication and inconsistencies. Regulatory duplication and overlap can cause confusion, as well as make it more difficult, time-consuming, and costly for mining companies to comply.

Tax regimes can cause problems for miners through federal/provincial overlap, inconsistent application, and lack of stability in tax incentives. Generous tax incentives at both the federal and provincial level are adding complexity, as well as distorting investment decisions, thereby resulting in less than optimal profitability. The reversion of British Columbia's harmonized sales tax (HST) to a separate provincial sales tax (PST) and federal goods and services tax (GST) has also added uncertainty and costs for mining companies.

Until recently, there was also duplication and overlap in environmental assessment processes, with a single project potentially subject to both a federal and provincial review. Recent updates to the federal review process now permit the substitution of equivalent provincial environmental assessment processes, and BC is pursuing such a strategy, although some uncertainties remain.

The following actions are recommended to decrease regulatory duplication and inconsistencies:

- ◆ In the short term, Canada Revenue Agency should provide greater clarity and consistent application of expenses eligible for Canadian Exploration Expenses (CEE);

- ◆ Both the federal and provincial governments should move towards the gradual elimination of distortionary tax incentives in favor of a single, lower rate of corporate income tax;
- ◆ British Columbia should re-examine harmonization of sales tax with the federal government through an open and transparent process;
- ◆ British Columbia should continue working with the federal government towards a single, clear, and predictable “one project, one review” (British Columbia, 2012) for project review.

Policy uncertainty plays a role in all of the factors found to be deterring investment in British Columbia. This is not surprising as uncertainty creates risk for mining investment and diminishes confidence that investors will be able to recover their high upfront costs for mining. British Columbia has made progress towards greater certainty for miners in the province and this is reflected in decreasing investment deterred, since 2010/2011, in the four key areas hampering investment. While these successes should be commended, more policy certainty is needed in order for BC to improve its ability to attract the exploration investment needed for long-term and sustained industry success.

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Appendix

Relevant comments from open-ended survey questions, 2008/2009–2012/2013¹

Investment Barrier 1: Uncertainty concerning disputed land claims

- ***What country or jurisdiction do you think has the most favorable policies towards mining? Why?***

Despite moderate uncertainty around land claims, strong political stability and social license for operation of environmentally, socially, and economically sustainable mines make BC a good place to invest and work. (2011/2012)

A consulting company, Company president

Better aboriginal/first nations consultation from the Provincial government. (2012/2013)

An exploration company, Other

- ***What country or jurisdiction do you think has the least favorable policies towards mining? Why?***

Canada has serious problems in BC with aboriginal issues and environmentalists. (2008/2009)

An exploration company, Company president

British Columbia—uncertainty about tenure, regulations, aboriginal issues. (2008/2009)

An exploration company, Company president

¹ Comments have been edited for length, grammar, and spelling, to retain confidentiality, to remove offensive language, and/or to clarify meanings.

British Columbia for the total lack of certainty with respect to First Nation land claims and the effective veto of First Nations make this a 'No Go Zone.' (2008/2009)

A producer company with more than US\$50M revenue, Company Vice-President

BC and NWT Aboriginal Land Claims Issues. (2009/2010)

An exploration company, Company president

BC—unresolved Aboriginal land claims, and dysfunctional environmental review processes. (2010/2011)

An exploration company, Other senior management

Total lack of transparency between the BC provincial environmental assessment agency and their discussion with First Nations. (2011/2012)

An exploration company, Other senior management

135 percent of BC's 100 percent is under some sort of aboriginal land claim. (2011/2012)

Other (Contractor), Company president

Uncertainty due to First Nation land claims. (2012/2013)

An exploration company, Manager

Far too much political and land claim interference. Strongly detracts from BC as a favorable mining province. (2012/2013)

An exploration company, Other (CFO)

Poor overview of environmental concerns ... too reactionary to aboriginal affairs. (2012/2013)

An Exploration Company, Company President

Land claims, environment, anticipated political change. (2012/2013)

An Exploration Company, Company President

BC: Problems with First Nations. (2012/2013)

An Exploration Company, Company President

● ***If there could be one policy change in this jurisdiction, what should it be?***

In British Columbia, settle the land claims and provide clarity and consistency to the process. (2008/2009)

A producer company with more than US\$50M revenue, Vice President

Settle Aboriginal Claims in BC. (2008/2009)

An Exploration Company, Company President

The government of BC needs to adopt a rigorous program to reach settlements with all the aboriginal groups in the province which do not have a current treaty. The government needs to read the Supreme Court decisions, develop a realistic policy about what it will require to 'protect the honour of the crown,' and set up a process to reach settlements where settlements will be reached and no group will be given a veto over the process. The other part of this challenge is to revise the negotiation process so that aboriginal peoples within each group must all be consulted and vote on each step of the negotiation process. If groups refuse to negotiate to reach agreement, the government should develop a legal strategy so that they have the right to impose a settlement. Otherwise, the whole province will be continue to be held to ransom which I don't believe is a reasonable outcome from defending the 'honour of the crown.' The government must be dedicated to sorting out its rights to develop mineral resources. (2010/2011)

An exploration company, Vice president

BC and NWT—governments [should] deal with First Nations directly—we need one stop shopping—risk is too high. (2011/2012)

An exploration company, Company president

Aboriginal land claim certainty in British Columbia. (2011/2012)

An exploration company, Company president

Settle First Nation land claims to provide surety of tenure on the land base. (2012/2013)

An exploration company, Manager

Lessen regulatory process ... deal with aboriginal issues. (2012/2013)

An exploration company, Company president

Quebec and British Columbia should settle land claims and invest directly into projects to propel them forward. (2012/2013)

An exploration company, Company president

It would be wise to have the government act on companies' behalf regarding environment and aboriginal affairs. (2012/2013)

An exploration company, Other

BC should have a policy of issuing coal licenses prior to aboriginal consultation with that consultation being an integral part of the social contract along with an acknowledgement that not all lands licensed will be permitted for exploration. (2012/2013)

An exploration company, Company president

Settle land claims. (2012/2013)

An exploration company, Company president

British Columbia—settle your aboriginal land claim issues so that there is some modicum of predictability in development. (2012/2013)

A consulting company, Manager

- **Can you give an example of what you would consider an exemplary policy related to operating in a particular jurisdiction?**

British Columbia has dramatically improved with regards to work permit processing - it has become manageable in terms of time and clearer definitions of working with First Nations. (2009/2010)

An exploration company, Company president

Clear and transparent regulations regarding land claims and uses (i.e. if you comply with A, B, and C, you are guaranteed ownership of the claims, permits, etc.). We have experienced this in Utah in general. It would be nice to see that in BC where there is uncertainty with clashing between Provincial and Federal levels re: permits (i.e. Taseko) and uncertainty regarding native land claims. (2011/2012)

An exploration company, Other senior management

- **Can you give an example of a regulatory “horror story” related to operating in a particular jurisdiction?**

Having a notice of work approved by the BC government and then getting sued by a First Nation’s group for failure to consult when government approved the consultation process. (2009/2010)

An exploration company, Company President

Nunavut, BC and other Provinces and Territories in Canada must be controlled on aboriginal land grabs and shaking companies down for handouts and royalties. (2010/2011)

A producer company with more than US\$50M, Other (Director)

Regulatory overlap and general dysfunction with regard to land access and asserted aboriginal rights in British Columbia. (2011/2012)

An exploration company, Company President

BC—Spent tens of millions on environmental and aboriginal issues without even putting a hole in the ground. (2011/2012)

An exploration company, Manager

Taseko's Prosperity's Mine in BC is a case in point of environmental approval and land claim issues gone wrong. This is not the first case in BC nor will it be the last. (2011/2012)

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

To assemble a permit to explore in BC, one must get all the stakeholders' consent, and mines branch staff must sign off. However, due to continual shuffling of government ministries, there is little continuity over time, so that each time you apply you are dealing with a new set of people, each determined to throw their weight around. Also the local aboriginal groups exploit this lack of continuity to expand the areas claimed by each group resulting in a welter of overlapping stakeholders, and attendant confusion. (2011/2012)

An exploration company, Other senior management

BC—both exploration and development permit wait times are unacceptable as they can range from 3 months to 2 years in some cases. Recently a permit application that had been sitting without release for referral to First Nations for 3 months was resolved, but only with the intervention of the government minister. There is no consistency between how local offices deal with referrals and no consistency with how they are issued. There is a general lack of communication and commitment from BC government employees to service the public, although there are notable exceptions. (2012/2013)

An exploration company, Manager

BC northeast—extremely long wait periods for operational permits related to First Nation processes and lack of capacity / will. (2012/2013)

A consulting company, Consultant

First Nation opposition to mining project in BC affected our exploration activities. (2012/2013)

An exploration company, Company president

- **Additional comments**

While BC has First Nations issues, Nevada has a worse regulatory burden at the exploration stage. (2009/2010)

A producer company with less than US\$50M, Other (Sr. Geologist)

Aboriginal Problems in BC remain a high risk component of working here. We ignore and carry on but would not be surprised at potential mines being shelved over this issue. (2009/2010)

An exploration company, Company president

Uncertainty related to the First Nations 'veto' over mining projects in BC remains a significant concern. (2010/2011)

An exploration company, Company president

If the Government in BC wants more mines they must change the permit system to encourage exploration. Aboriginal issues must be solved. They are the major problem holding up the procedure. (2011/2012)

Other (Prospector), Other

In Canada, commodity prices and First Nation uncertainty seem to have significant leverage on projects and even exploration. (2012/2013)

A consulting company, Consultant

Investment Barrier 2: Uncertainty concerning what areas will be protected as wilderness, parks, or archaeological sites, etc.

- **What country or jurisdiction do you think has the least favourable policies towards mining? Why?**

BC, for example: Windy Craggy, Kermess. (2008/2009)

An exploration company, Company President

British Columbia. Uncertainty of title—Windy Craggy. (2008/2009)

A consulting company, Other

Too much emphasis on environment/parks and de facto parks with wildlife closures (Flathead, Atlin-Taku, etc.) when it is now possible to mine efficiently, effectively and responsibly; too little emphasis on economic well-being. (2012/2013)

An exploration company, Manager

- **Can you give an example of a regulatory “horror story” related to operating in a particular jurisdiction?**

Windy Craggy in BC. Political expropriation equals Señor Chavez any day and we cast aspersions on him. (2008/2009)

An exploration company, Company President

Windy Craggy, BC. (2009/2010)

A consulting company, Other

Windy Craggy expropriation in BC 20 years ago, locked up the largest copper resource in the Province due to back room legislators in bed with Al Gore, a foreigner to Canada. Flathead Valley expropriation without hearing or recourse by the Premier of BC and Governor of Montana, basically totalitarian heads of government decisions, i.e. dictators. (2010/2011)

An exploration company, Company President

Windy Craggy (2010/2011)

Other (Supplier), Other (Owner)

BC, Canada closing the Windy Craggy by making a park around it. (2011/2012)

Other (Exploration), Company president

Flathead valley land use approved for mining yet the BC Government banned it. (2010/2011)

Other, Other Senior Management

The ‘Flathead’ government decision banned mining even though the land use plan allowed mining. (2010/2011)

Other, Other (Partner)

Flathead area was zoned as open to mining, then, with an environmentalist lobby funded by Americans, mining was banned. (2011/2012)

An exploration company, Other

British Columbia expropriated Windy Craggy 20 years ago, repeated it for Flathead Valley, who knows what is next with a new government. (2012/2013)

An exploration company, Company President

BC’s decision to make at least one new mine discovery inoperable due to the later imposition of a new Provincial Park are good examples of ‘Bananna-Republic’ Policy changes after major discovery. = out of luck even if you follow legal mining laws! (2012/2013)

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

Investment Barrier 3: Uncertainty concerning environmental regulations (stability of regulations, consistency and timeliness of regulatory process, regulations not based on science)

- **What country or jurisdiction do you think has the most favourable policies towards mining? Why?**

BC: Because there are transparent regulations on almost all issues concerning mining and stability on regulations. (2012/2013)

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

BC: Political risk is minimal. Mining laws are stable and certain. (2012/2013)

An exploration company, Other (CEO)

BC: Well educated regulatory system. (2012/2013)

An exploration company, Company president

BC: Recognize the importance of mining and have stable and sustainable approaches to mining. (2012/2013)

A consulting company, Consultant

- **What country or jurisdiction do you think has the least favourable policies towards mining? Why?**

Canada has serious problems in BC with aboriginal issues and environmentalists. (2008/2009)

An Exploration Company, Company President

BC, Canada. Too many environmental 'tree huggers'. (2008/2009)

A Consulting Company, Other

BC. Every aspect is different from the rest of Canada. Strict environmental laws that don't make things better just create more paper. (2008/2009)

A consulting company, Other

British Columbia: imposition of a uranium/thorium prohibition without any consultation. (2008/2009)

An exploration company, Company president

Completely green and anti-mining. Any jurisdiction that will outlaw a particular metal such as zinc in Wisconsin, originally the foundation of American zinc mining, or BC rabidly against uranium with NO rationale except witchcraft and voodoo. (2010/2011)

An exploration company, Company president

When working in BC there is an endless process for permitting. The mining inspectors are poorly qualified and have no background in mining. The mining inspectors continually harass the operators. (2011/2012)

An exploration company, Other

Politics trumps science in BC. (2012/2013)

An exploration company, Other senior management

Difficulties in permitting new mining projects. (2012/2013)

An exploration company, Vice president

BC: Unclear policies. (2012/2013)

An exploration company, Company president

BC: Constantly moving goal posts indicating that government is hostile to mining. (2012/2013)

An exploration company, Company president

- ***If there could be one policy change in this jurisdiction, what should it be?***

The draconian environmental policies of these jurisdictions are based on junk science. All these jurisdictions could have a thriving exploration and mining industry, employing people and providing economic benefit to the jurisdiction, if they would balance environmental impacts with economic benefits. You can have both. The NIMBYs and environmental groups should not be able to influence government policies like they have. It is criminal. (2008/2009)

Other, COO

In BC, being less political and more technical in decision making. (2010/2011)

An exploration company, Vice president

Enforce policies currently in effect. (2012/2013)

An exploration company, Company president

Policy Stability (no moving goal posts). (2012/2013)

An exploration company, Company president

Be more realistic in tradeoff between mining, and the need for mine infrastructure, and the modification of the environment. There is room for both. (2012/2013)

An exploration company, Vice president

- **Can you give an example of what you would consider an exemplary policy related to operating in a particular jurisdiction?**

BC's attempts to cut red tape and duplication of regulations. (2012/2013)

An exploration company, Other senior management

Less government agencies and red tape. A clear policy toward mining. (2012/2013)

An exploration company, Company president

- **Can you give an example of a regulatory "horror story" related to operating in a particular jurisdiction?**

Working within BC and having a new restrictive 'environmental policy' being applied to an area by the Ministry of Environment where there is already a project within the BC Environmental Assessment Process, with no warning. When contacted and questioned about this change in policy, the Ministry of Environment indicated that they were unaware of our project and other exploration projects working in the area. (2009/2010)

A producer company with more than US\$50M, Manager

Cancellation of uranium exploration in BC with no consultation or compensation for funds expended. (2009/2010)

An exploration company, Company president

Three groups suing the BC Government over the recent restrictions over uranium exploration. (2009/2010)

An exploration company, Other (Director)

17 months to obtain exploration permit amendment in BC. (2009/2010)

An exploration company, Company president

Confiscation of exploration assets in third world countries like DRC, Venezuela, Ecuador, Bolivia and British Columbia. (2010/2011)

A consulting company, Other

Failure to issue permits and tenure in British Columbia. (2011/2012)

An exploration company, Other (Director)

Different process for different mining divisions—some time delays well past the permitting acceptable timeframes ... (2011/2012)

An exploration company, Company president

The Blizzard uranium deposit, south central BC, owned by Boss Power Corp., denied exploration/development permit. (2011/2012)

A consulting company, Other

Coal exploration and development in BC near the Montana border. (2011/2012)

A producer company with more than US\$50M, Other senior management

Boss Power's loss of the Blizzard uranium resource in BC, and subsequent payout of \$30M. (2011/2012)

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

Uranium—\$30 million payout for botched exploration approval at Boss's Kelowna property. (2011/2012)

Other (Exploration), President

BC—non-processing of Boss Energy NOW application. Result—\$30 million compensation settlement! (2011/2012)

An exploration company, Vice president

Permits being withheld in northeast BC related to caribou concerns despite world class mitigation, overturning the BCEAO prosperity mine by the federal EA office. (2011/2012)

A consulting company, Company president

[The Province] outlawed uranium in BC, and then complains about power availability. (2012/2013)

An exploration company, Company President

British Columbia: After investing \$100 million mining permit denied: Taseko Mines, Morrison Lake Mines, Boss Uranium, Windy Craggy, etc. (2012/2013)

An exploration company, Other senior management

- **Additional Comments**

I hope common sense prevails in BC. But given the success of protest groups in this province, all bets are off as to future of mining in BC. (2011/2012)

Other (Exploration), President

Investment Barrier 4: Regulatory duplication and inconsistencies (includes federal/provincial, federal/state, inter-departmental overlap, etc.)

- **Can you give an example of what you would consider an exemplary policy related to operating in a particular jurisdiction?**

Clear and transparent regulations regarding land claims and uses (i.e. if you comply with A, B, and C, you are guaranteed ownership of the claims, permits, etc.). We have experienced this in Utah in general. It would be nice to see that in BC where there is uncertainty with clashing between Provincial and Federal levels re: permits (i.e. Taseko) and uncertainty regarding native land claims. (2011/2012)

An exploration company, Other senior management

BC: Policy of allowing projects with a size of <200 tonnes/day or <75,000 tonnes/year to be fully approved and permitted by provincial government, with no certain trigger to Federal level processes, that allows small mines to get producing in 1-2 years versus 4-5 for big mines. Rationale: many if not most large mines grew from or were funded by initial small mines (particularly precious metals) that Canada needs more of. (2011/2012)

An exploration company, Vice president

Both the government of BC and of Canada encourage mining and even offer considerable tax incentives to allow investors to finance such ventures. (2012/2013)

An exploration company, Other senior management

In British Columbia, Canada, the policies change to multi- versus single year permitting. (2012/2013)

An exploration company, Company president

- **What country or jurisdiction do you think has the least favourable policies towards mining? Why?**

British Columbia—permitting etc. can take too long. Too much consultation with various agencies and groups. (2008/2009)

An exploration company, Other

British Columbia: Uncertainty on continuing flow through benefits and corporate taxation if government changes; long permit wait times. (2012/2013)

An exploration company, Manager

- ***If there could be one policy change in this jurisdiction, what should it be?***

Streamlining/combination of environmental [assessment] processes. (2012/2013)

A producer company with more than US\$50M, Other senior management

BC: applies to the rest of Canada too, but have one unified process for project environmental approval, not a provincial level followed by a federal level. (2012/2013)

An exploration company, Vice president

- ***Can you give an example of a regulatory “horror story” related to operating in a particular jurisdiction?***

Imperial Metal’s Red Chris deposit. Approved by BC & joint Federal government. Court challenge by environmentalists due to uncertainty in Federal regulations. Absolutely ridiculous. (2009/2010)

Other (Service company), Manager

BC permitting and environmental assessment delays. Regulators consistently lack an understanding of the industry. (2009/2010)

A producer company with less than US\$50M, Other (Director)

Provincial and federal duplication in the environmental assessment process in BC/Canada. (2009/2010)

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

BC has a hierarchy of 3 different types of mineral claims, leases, and crown grants. The online claim viewer maintained by the government is woefully inadequate in explaining which of the overlapping claims has precedence. The services of a mine lawyer are almost mandatory. (2009/2010)

A consulting company, Other senior management

British Columbia—environmental permitting process currently underway with projects like Mt Milligan (Terrane Metals) and Prosperity (Taseko). (2009/2010)

A producer company with more than US\$50M, Other Senior Management

The Federal government denying the Prosperity Project. (2010/2011)

Other, Other Senior Management

Total duplication of review of Environmental Assessment Application resulting in different decisions—Prosperity Project in BC. (2010/2011)

An exploration company, Company president

Federal government overruling Provincial government, BC, Canada. (2010/2011)

A producer company with more than US\$50M, Manager

BC has a good EA process messed up by Federal process ... so Province is good, but Feds make it net bad. (2010/2011)

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

Total lack of transparency between the BC provincial environmental assessment agency and their discussion with First Nations. (2011/2012)

An exploration company, Other senior management

Federal Department of Fisheries in BC. (2011/2012)

An exploration company, Company president

Permits being withheld in northeast BC related to caribou concerns despite world class mitigation, overturning the BC Environmental Assessment Office (EAO) prosperity mine by the federal Environmental Assessment (EA) office. (2011/2012)

A consulting company, Company president

Prosperity Mine in BC: Was approved at the provincial but not at the federal level. Now First Nations are all wrapped up in it. Local communities support the project but something just isn't making sense. And Fish Lake, the proposed lake for mine tailings never had any natural fish in it, only the ones that were stocked. (2012/2013)

An exploration company, Vice president

BC: Adanac, federal water permit. (2012/2013)

A consulting company, Consultant

- ***Additional comments***

In British Columbia, British Columbia Environmental Assessment Office (BCEAO) can take years before you get the Terms of Reference to undertake an Environmental Impact Assessment (EIA). If a mine falls into the federal Canadian Environmental Assessment Act (CEAA) process, it is a kiss of death for the project. (2008/2009)

Other, Other

The permitting process is getting bloated. The Government seems to think adding layer upon layer of new rules creates jobs for consultants. Well it does, until the people raising the money get tired of it or just can't raise the money anymore. (2012/2013)

An exploration company, Company president

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