

ESG and Responsible Mining in B.C.

Aligning with Market Demands, Trends and Opportunities

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Contents

Foreword 3

The Rise of ESG Considerations and Implications for Mining 4

Key ESG Challenges for Mining in B.C. 7

Climate Change Performance 8

Tailings Dam Safety 12

Indigenous Consent 15

A Moment of Convergence and Opportunity 18

Endnotes 21



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Foreword

The future of mining in B.C. is taking place in a rapidly evolving context, both provincially and in the larger world. The mineral sector is presented with new opportunities but also faces challenges—new and old—that require new thinking and new approaches: one way or another, “business as usual” is not a viable option. The challenges posed by growing social and market demands for strong environmental, social and governance (ESG) considerations are converging with unprecedented opportunities to gain market access and attract investment as a reward for meeting key performance standards. How will the sector respond? And how can the B.C. government shape this response?

This white paper captures this powerful convergence as it relates to the mining sector in B.C. and beyond. With the focus on greenhouse gas emissions reduction, tailings dam safety, and Free Prior and Informed Consent of Indigenous peoples, the authors zero in on areas where B.C. has great opportunities to show leadership, and where key challenges remain to be addressed.

It provides a helpful overview of areas of strategic priority for government, industry and downstream buyers and investors alike. It speaks to a wide range of drivers for responsibly sourced minerals and metals and some key milestones on the path forward, including 1) the need to credibly demonstrate ESG performance on the ground, 2) meaningful inclusion of diverse voices in ongoing ESG reforms, and 3) aligning policy and regulation with evolving global standards to ensure all British Columbians consistently benefit from best practices.

The report was prepared by two independent experts with a strong interest in having B.C. gain long term social and economic benefits from taking a leadership position on ESG for the minerals sector. We encourage you to use the report as a tool to better understand and inform meaningful ESG standards for the sector in B.C.

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The Rise of ESG Considerations and Implications for Mining

The B.C. government has a stated goal to *“attract investment in mining and create jobs, advance reconciliation and enhance environmental outcomes in support of a safe and thriving mining sector in British Columbia.”*¹ Furthermore, it has made a commitment to incorporate formalized Environmental, Social, and Governance (ESG) measurement and analysis in the areas of policy, procedures and industry practices moving forward in the province.

“ Through the StrongerBC Economic Plan, our government is securing B.C. as a world leader for championing corporate environmental, social and governance standards (ESG), helping British Columbians to develop, promote, and market environmentally and socially responsible goods and services.”²

This is consistent with the advice from a recent report by the Canada West Foundation, which found that *“A real opportunity exists for governments in Canada at the municipal, provincial and federal levels to support strong and consistent ESG reporting, raise the bar for performance, communicate success to different stakeholder audiences and provide clarity for investors.”*³ The report identifies four categories of actions that governments can take to maximize the benefits that come from robust ESG performance (Table 1).



Table 1: Government actions to maximize benefits of robust ESG performance⁴

	<p>Support strong and consistent ESG reporting</p>	<p>There is a role for government in building strong and consistent ESG reporting within the jurisdiction—across companies, sectors, industries and government departments, as well as across multiple levels of government. This provides all parties with a shared language and framework, so that they can more easily talk with one another and tell a common story as they compete globally.</p>
	<p>Raise the bar for ESG performance</p>	<p>Both companies and jurisdictions are judged on their ESG—and the two are closely linked. Raising the bar involves using performance data and policy to incentivize high performance, make conditions more appealing to investors and stakeholders, and send strong signals about continuous improvement.</p>
	<p>Communicate your ESG story</p>	<p>For strong performance to translate into benefits, government needs to ensure that data and information relevant to ESG is accessible to interested audiences, both in terms of being easy to find and being easy to use.</p>
	<p>Provide clarity for investors</p>	<p>ESG is a tool to help investors evaluate financial investment risk and opportunity. Government agencies have a role in providing clarity and setting rules—with ESG just as with other financial claims. This clarity in turn increases investor confidence and attracts further investment.</p>

B.C.’s focus on ESG aligns with the mining sector itself, which sees ESG and decarbonization as the top two business risks and opportunities for mining and metals in 2022 (Figure 1).⁵

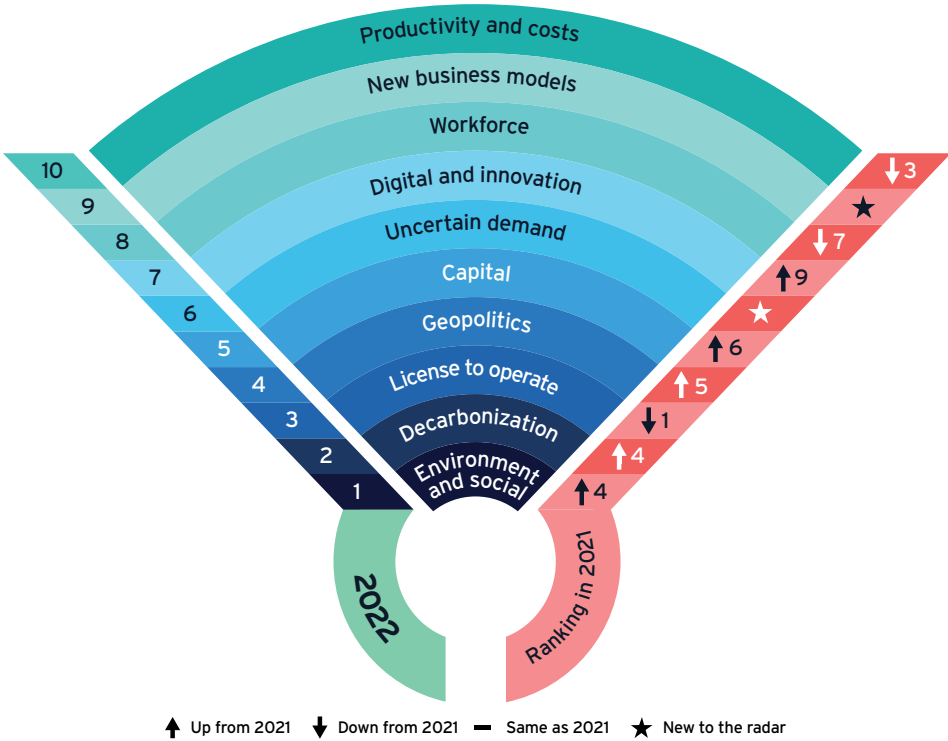


Figure 1: Top 10 business risks and opportunities for mining and metals in 2022 (EY)

There is, therefore, an important opportunity and imperative to align the province's mining laws and policies with market demands and expectations. Supporting strong ESG directions and incentives for responsible mining practices offers the benefits of increasing and/or securing access to expanding markets for responsible mining resources, while also reducing the costs of community conflict⁶ and taxpayer liabilities.

A number of trends are converging and putting a spotlight on the mining sector within the context of responsible investment and responsible procurement of critical minerals and metals by sectors like automotive, electronics and clean energy. These include:

- The convergence of affordable, clean energy systems, aggressive government commitments to carbon reduction targets and growing consumer demand is leading to a rapid and dramatic expansion of clean energy generation, transmission and storage technology – and this will result in increased demand for and impacts of minerals and metals;⁷
- Governments in Canada and the USA are also recognizing that this transition, which is in many ways reliant on “critical minerals” supplies, must reflect responsible mining practices if it is to succeed;⁸
- Recent major tailings dam failures have underscored the material risks to investors who have, as a result, organized, in association with the UN Environment Program, to use their financial influence to drive safety improvements in the mining sector;⁹
- The expansion of third party audited, multi-sector defined market-based standards has attracted many of the world's largest metals purchasers and are shaping their procurement and investment policies. Additionally, they are increasingly being recognized as valuable instruments by government;¹⁰ and
- There is growing recognition that doing good is just good business. *“Companies with better ESG credentials perform better than lower credential peers on return-on equity; return-on-assets and on stock market performance. There is a positive correlation between ESG ratings and cost of debt...Companies with high ESG performance had better risk management which reduced volatility. High ESG ratings could result in both lower cost of capital to the company and lower spreads.”*^{11,12}

In this context, heightened by growing evidence of climate instability, geopolitical supply chain disruptions and growing investor pressure, responsible sourcing of minerals and metals has shifted from promise to imperative for many companies. Ford, Tesla, GM, BMW, VW, Daimler, Microsoft, Apple, HP, and ArcelorMittal are examples of strong proponents with clear materials sourcing policies. Similarly, a group of over 100 investors representing more than \$20T USD assets under management have launched Mining2030¹³ to drive reforms on a range of issues in the sector, including mine tailings, Indigenous rights, biodiversity and the low carbon transition.

“ Investors look to ESG performance and ratings as a proxy for good management and risk mitigation. It is essentially a playbook for decreasing risks a company might face in a country where it plans to build and operate a mine — from carbon emissions intensity and mine tailings management to indigenous relations and worker safety.¹⁴

This marks an unprecedented moment of convergence in interests and responsibilities for both governments and companies and B.C. is uniquely positioned to contribute to and benefit from these historic times.

Key ESG Challenges for Mining in B.C.

This white paper provides an overview of where leading investors and minerals and metals buyers are focusing their concerns. It also shows how reforms in B.C. mining policies and regulations could align with this growing suite of ESG policies and expectations in ways that would simultaneously meet market demands, protect communities and ecosystems and improve the performance and competitiveness of the mining sector in the province. It is meant to stimulate interest within both the private sector and government to seize the opportunity to have B.C. demonstrate leadership in a way that serves the long-term interests of citizens and markets alike.

While studies by Clean Energy Canada¹⁵ and the Pembina Institute¹⁶ acknowledge the growing global demand for metals and minerals needed for clean energy

technologies, they also acknowledge that any claims by the mining sector to be a climate-friendly industry must be considered within the broader context of lifecycle GHG emissions (relative to alternatives, including recycling), as well as impacts on biodiversity and communities and other key ESG factors necessary to address the balance of sustainability metrics being called for by the marketplace.

When it comes to explicit investment and procurement criteria for the mining sector, there are three primary areas of focus for the private sector:

1. Climate change performance;
2. Tailings dam safety;
3. Free prior and informed consent of Indigenous peoples.

Each of these areas touches on a range of policies and regulations that can require, enable or impede industry performance relative to best practices standards. In turn, there are practical implications for decarbonization, community engagement, watershed health, taxpayer liability and overall corporate accountability.

Climate Change Performance

The Challenge

In its 2022 Budget and Fiscal Plan, the B.C. government notes that *“British Columbia’s mining sector can play a critical role supporting the transition to a low-carbon future both locally and globally. Metals and minerals found within B.C. are used to create green technology such as electric vehicles and wind turbines, and B.C. mining operations stand out as having a lower greenhouse gas intensity than most global competitors.”*¹⁷ The latter assertion is based on an analysis for the B.C. Business Council and the B.C. government — titled the Low Carbon Industrial Strategy — which



found that the province is home to some of the lowest carbon mining and smelting operations in the world largely due to the province's hydroelectricity.¹⁸ As a result of this lower greenhouse gas (GHG) intensity, the analysis found that producing the province's copper, aluminum and steelmaking coal resulted in between 6 million and 8.5 million fewer tonnes of GHG emissions that would have been generated had the same products been supplied by competitors.

“ A mining company unprepared for the transition to more sustainable practices, as climate change takes hold, is not only putting its reputation and operations at risk, but also jeopardizing future performance and investment opportunities.¹⁹

However, absolute mining sector emissions in B.C. have increased 163% between 2007 – the baseline year for the province's GHG emission reduction targets – and 2020, from 274,000 tonnes to 720,000 tonnes of CO₂ equivalent. The three-year trend (2017-20) is a 76% increase or 312,000 tonnes.²⁰ With B.C.'s industry sector subject to a 2030 GHG reduction target of 38%-43% (relative to 2007 emissions), and a 27%-32% reduction required from the transportation sector (including heavy-duty trucks used in mining), both existing and any new mines will need to demonstrate dramatically superior GHG performance.²¹

Market Response to Climate Change Performance

In light of these trends, policymakers and the mining sector will need to redouble efforts to ensure absolute GHG emissions decrease in line with provincial targets and the relative GHG competitiveness of B.C. mining isn't eroded. With increasing recognition of these risks, investors are increasingly putting pressure on mining companies to demonstrate that they are actively working to align their operations with net zero emissions targets and mitigate climate change risks.^{22,23}

“ Decarbonization is a major industry disruptor and as such needs to be treated like any other strategic risk; dealt with at a board and executive level, and managed as part of the overarching business strategy, not addressed as a separate climate strategy delegated to a discrete team. Sharing a road map to net zero and successes along the way will be key to gaining investor confidence and, potentially, competitive advantage.²⁴

The mining sector faces numerous, significant climate change-related risks that are cause for investor concern: physical, transition and legal and regulatory risks (Table 2).

Table 2: Climate change-related risks for the mining sector²⁵

<p>Physical</p>	<ul style="list-style-type: none"> • Changing climatic conditions, more frequent and extreme weather events and stresses on the availability of critical resources (e.g., water) can place mine infrastructure (and transport and power infrastructure) and operational capabilities at risk.
<p>Transition</p>	<ul style="list-style-type: none"> • Transition risks span the entire mining value chain, and include: <ul style="list-style-type: none"> » Evolving political, social and consumer attitudes to high GHG emitting and polluting industries and products; » Evolving expectations of communities, shareholders, financiers and other key stakeholders; » Changing regulatory and legal frameworks; increased political risks (e.g., resource nationalization and trade tensions); » Regional security concerns; » Changing global markets and competition; and » Fluctuating commodity prices.
<p>Legal</p>	<ul style="list-style-type: none"> • The mining sector is a potential target of climate-related activism, litigation and regulatory action, which can also pose serious reputational, financial and operational consequences. • As climate impacts (and associated pressures for prioritizing green energy transition metals developments) converge with a range of biodiversity and community safety concerns, it is anticipated that Indigenous organizations will assert FPIC-related legal processes and protections to address mining risks.
<p>Regulatory</p>	<ul style="list-style-type: none"> • The majority of climate-related disputes are found in routine licensing, permitting and other matters related to obtaining project approvals where it is now common to see climate change-related arguments and science raised and considered by decision-makers. • Approvals may also be prolonged as governmental agencies conduct additional analyses to mitigate their own litigation risk.

Buyers are also increasingly making procurement choices with climate-performance – and the implications it has for their own corporate climate goals – in mind. For example, Vale signed a long-term contract with Tesla Inc. to supply Class 1, low-carbon nickel in the United States from its operations in Canada.²⁶

Milestones on the Path Forward to Net Zero

To manage the twin imperatives of reducing GHG intensity (to meet investor and buyer expectations and minimize exposure to domestic carbon pricing and/or border carbon tariffs) and absolute GHG emissions (to meet B.C.'s legislated and sectoral GHG reduction targets), the mining sector will need to move aggressively to innovate and adopt new technologies and best practices in its operations. A key opportunity in B.C., given access to relatively low-cost hydro power, is the pursuit of fully electrified mines.²⁷

The key elements of this approach to best practices — which, if B.C. is to remain at the forefront of ESG and climate performance in the mining sector, must shift from voluntary to mandatory — include:²⁸

- Scenario planning the different pathways to net zero, to create a flexible, agile decarbonization strategy.
- Aligning organization design and culture by incentivizing behavior that helps achieve targets Incorporating net-zero achievement into capital allocation methods.
- Determining which tools, technology and innovation to invest in and who to collaborate with.
- Deciding when to sell exposed assets or whether to transition to new energy economy metals.
- Assessing other potential opportunities, including recycling, renewables and carbon-reduced products.
- Reviewing funding and capital models including funding sources, the role of government and internal allocation and how to make best use of tax breaks and incentives.
- Determining how offsets and other financial instruments can be used to help achieve net zero.

Tailings Dam Safety

The Challenge

The Mt. Polley disaster — and the subsequent attention to existing and future liabilities — exposed the serious flaws and weaknesses in the way tailings facilities are designed, approved, monitored and maintained in B.C. Given that there are more than 172 existing tailings dams, with several more major dams proposed for new mines, this need to ensure safety for communities and watersheds, not to mention shareholders, is urgent – for ecological, ethical and economic reasons.²⁹

The government's own Review Panel on the Mt. Polley disaster predicted that *“if the inventory of active tailings dams in the province remains unchanged, and performance in the future reflects that in the past, then on average there will be two failures every 10 years and six every 30. In the face of this prospect, the Panel firmly rejects any notion that business as usual can continue.”*³⁰

Subsequent reports from Auditor General³¹ and the Mines Ministry's own Mine Audits and Effectiveness Unit³² detail a range of deficiencies in the way tailings are permitted, monitored and managed. Each includes a series of detailed recommendations calling on the B.C. government to update its procedures policy and in some case regulations to address these gaps.³³

Substantial work has been undertaken towards implementation of several of these recommendations.^{34,35} To be successful and effective in addressing ESG goals, these reforms will need to a) move from policy to performance implementation, b) continue to evolve with emerging best practices and c) be sufficiently inclusive of civil society and indigenous voices.³⁶ Additionally, given that the Mt. Polley Panel recommended the reduction of the inventory of tailings facilities by half, more attention is needed on the safe closure/decommissioning/reclamation of facilities no longer attached to an operating mine.



In order to live up to its aspirations of demonstrating best practices and leadership in tailings safety, these recommendations must translate into action and, through ongoing transparent reporting and evaluation, accountability.

Market Response to Tailings Dam Risks

The question of tailings safety touches on a wide range of concerns including health and safety, water and biodiversity protection and Indigenous rights that are addressed in the responsible sourcing codes,³⁷ investment criteria,³⁸ and procurement policies³⁹ of individual companies in the automotive, electronics, steel and investment sectors.

Additionally, an increasing number of buyers and investors are committing to assurance systems (such as the Initiative for Responsible Mining Assurance and ResponsibleSteel),⁴⁰ that have specific mining performance standards, including tailings management, which are independently audited by third-party certifying bodies. This approach has the benefit of:

- a. Supporting international best practices that are commonly recognized and validated by a diverse range of business and stakeholders; and
- b. Allowing for the considerably complex and onerous task of evaluating the performance of key criteria to be managed by accredited experts who can provide a reliable and consistent assessment of compliance that can be used along supply chains.

Finally, governments, including the European Parliament and the Office of the President of the United States, are also starting to incorporate market-based responsible sourcing requirements for metals as a reference point for emerging policy and law that deals with mining-related impacts.⁴¹

Milestones on the Path Forward to Tailings Best Practices

With best practices evolving rapidly and B.C. seeking to carve out a leadership position to attract market attention from ESG-focused buyers and investors, it will be important to address the high consequence risks of tailings dam failures by establishing a more precautionary approach to the design, management and closure of tailings facilities that puts ecosystem and community safety first.⁴²

This approach will have the benefits of providing companies with the responsibly sourced materials their policies prescribe and will afford B.C. greater preferential access to this growing segment of the market. Downstream buyers, investors, provincial and Indigenous governments, civil society, and industry can all contribute to and benefit from the implementation of this proactive approach.

The key elements of this approach to a more fully precautionary approach include:

- Engage with Indigenous rights holders, including First Nations that have active or prospective exploration and mining projects in their Territories, to determine applicable Indigenous legal order, laws and protocols with respect to tailings safety regulations and policies;
- Engage with expert stakeholders, including civil society, to design and monitor the implementation of tailings safety regulations and policies that meet market and investor expectations;
- Prioritize safety above cost considerations in the design, construction, operation and closure of mine waste facilities;
- Design facilities to withstand the most extreme meteorological and seismic events;
- Prohibit facilities located immediately upstream from communities and sensitive ecosystems;
- Prohibit the use of upstream dams, especially in high precipitation and seismic areas;
- Require full financial assurances for site closure and post-closure costs, as well as full financial insurance for accidental damages;
- Require accountability, transparency and public disclosure on mine waste risks;
- Commit to a plan/strategy to reclaim, decommission or otherwise seek safe closure of tailings storage facilities in B.C. no longer associated with operating mines.

Indigenous Consent

The Challenge

In addition to tailings safety liabilities, a dominant concern reflected in the marketplace is around the application of the rights of Indigenous peoples to applicable projects. Consistent with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), downstream buyers and investors have clearly prioritized Free Prior and Informed Consent (FPIC) in their responsible sourcing/investment criteria.

Optimistically, B.C. is advanced and showed true leadership in introducing the *Declaration on the Rights of Indigenous Peoples Act* (DRIPA) in 2019, which requires the Province to “make all BC law consistent with UNDRIP”. This appears to be a trigger across all legislation and policy in B.C. This legal requirement will likely be incrementally fulfilled.

Recently, a group of investors with \$1.1T worth of assets under management noted:

“ DRIPA’s potential embraced by investors in our 2019 letter is a future where the uncertainty plaguing the mining industry today is removed and B.C. is deservedly recognized as a global leader in responsible mining — but that path runs through the successful implementation of DRIPA. Without clear policy direction and amended legislation to ensure Indigenous rights are upheld and respected, the investment climate in B.C. will grow more unstable and uncertain.⁴³”

A further sign of progress, in terms of provincial promises, is in the Declaration Action Plan,⁴⁴ released in March 2022, which commits to “modernize the Mineral Tenure Act in consultation and cooperation with First Nations and First Nations organizations.”



A notable major step in the implementation of the Plan is the first consent-based decision-making agreement under the *Declaration on the Rights of Indigenous Peoples Act* (Declaration Act) between the Tahltan Central Government and the Province.

This agreement honours Tahltan's jurisdiction in land management decisions in Tahltan Territory in recognition of the Tahltan's title and rights within its territory. The agreement seeks to advance reconciliation as well as provide clarity and predictability for the Eskay Creek Revitalization Project.⁴⁵

It is important to note that this commitment occurs in the context of a significant, ongoing legal challenge to B.C.'s *Mineral Tenure Act* by the Gitxaala First Nation.⁴⁶ Additionally, there are numerous areas that will require significant attention to redress current deficiencies across a range of projects, policies and laws as documented in a recent report by the B.C. Mining Law Reform initiative.⁴⁷

To be successful in resolving the Gitxaala legal challenge and to fulfill the promise under the Declaration Action Plan, the *Mineral Tenure Act* will have to include an FPIC-compatible process for mineral tenure and reconcile existing permitting on lands that are now in dispute with First Nations. Articulating a path forward with tangible solutions and approaches to reforming the *Mineral Tenure Act* will strengthen B.C.'s commitment to land-use policy and planning, and bring more certainty to investors, communities and First Nations by confirming social choice on the land base through inclusive processes.

Last, it is noteworthy that the Action Plan singles out the *Mineral Tenure Act* for legal reform but does not speak to legal changes to the *Mines Act*, *Environmental Assessment Act*, *Reviewable Projects Regulation*, *Environmental Management Act* and other applicable legislation. It is understood that the legal requirement to make all B.C. laws consistent with UNDRIP and the Action Plan are separate legal obligations, but there will be progressive implementation to ensure fuller legal certainty on these co-existing obligations.

By developing a path forward with First Nations to build a co-managed land and resource management regime, the government can ensure B.C.'s natural resources are managed effectively now and in the future.

Market Response to FPIC

As with tailings dam safety, companies are highlighting expectations of FPIC compliance in a range of ways, including investment criteria,⁴⁸ responsible sourcing policies⁴⁹ and assurance system standards.⁵⁰

B.C. has a unique opportunity to demonstrate global leadership to investors and buyers keen to recognize and reward companies that are willing to operationalize FPIC. However, as seen in the private sector standards, this market reward will be predicated on demonstrated performance as opposed to policies that simply outline good intentions. B.C.'s head start with DRIPA and now the Action Plan presents an unprecedented market advantage, subject to its success in moving forward with implementation of changes to the *Mineral Tenure Act*.

Milestones on the Path Forward to Indigenous Consent

- Require that mining exploration and development activities achieve FPIC and conform with Indigenous land-use plans and restrict mining activity where there is no such plan in place.
- Adopt a discretionary mineral tenure regime that incorporates a broad suite of values and interests and ensures that in issuing tenures, decision-makers uphold Indigenous title, rights and interests, including compliance with applicable Indigenous legal orders.
- Enable (at the request of Indigenous governments) revocation of exploration and mineral development rights that are inconsistent with land-use plan designations, duty to consult and DRIPA.
- Establish and fund Indigenous-led community-based watershed monitoring “Guardian” programs with equal application of Indigenous knowledge through government-to-government agreements.
- Develop data collection protocols that comply with applicable Indigenous legal orders on control, protection and confidentiality of Indigenous knowledge and train community-based monitoring staff so that data generated locally can be used for management, governance and statutory decision making.

A Moment of Convergence and Opportunity

These are unprecedented times of opportunity for a critical convergence of social, economic and environmental interests and values. The combined crises of the pandemic, climate instability and geopolitical factors affecting supply chain security for materials necessary for the clean energy transition have forced a wide range of actors to reassess their contributions to a more sustainable future. They are helping companies redefine what value means in the marketplace and what governments need to reassure their citizens that mining meets globally accepted ESG standards. Business as usual is no longer an option and everyone — from governments and affected communities to investors, buyers and mining companies — need to be involved in practical solutions.

PricewaterhouseCoopers underscored this sentiment as a core message in the most recent report on the state of the industry in B.C.: *“More than ever, we see increasing evidence that those miners that are proactive about ESG issues, and view the ongoing recovery as an opportunity to invest in the transition to a low-carbon economy, are likely to outperform in the long term.”*⁵¹

This report has attempted to outline some of the key areas of convergence between market demands, community rights, ecosystem health, industry performance and government responsibilities. Whereas previously, governments have been cautious about imposing standards that might render companies less competitive, there is now evidence that a lack of standards poses an even greater risk in the marketplace going forward. A preliminary exploration of these opportunities has been undertaken by B.C. through the Mining Jobs Taskforce and the subsequent Responsible Metals Markets Forum, and the current context should enable key ESG insights and recommendations to be applied for the sector.



By reflecting and anticipating growing demands for higher ESG performance, B.C. can help create competitive advantage by sending clear, consistent messages around best practices through regulatory reform and the associated capacity building inside government and across companies and communities.

For investors and buyers seeking to make good on commitments to responsible sourcing and investing, B.C. represents a relatively unique opportunity as a target for capital investment and procurement. As such, market leverage can be helpful in moving the province from promise to performance.

Summary and Next Steps

B.C. has the potential to be a key supplier of the metals and minerals needed to support the clean energy transition and is uniquely positioned to be a producer-of-choice for those investors and buyers focused on leading ESG and climate change performance within the mining sector.

As a recent Canada West Foundation report noted: *“Ignoring these questions is not an option. Increasingly, ESG is a point of differentiation that affects competitiveness both for jurisdictions and the companies that operate within them. Sustainability performance has become “table stakes,” and governments that don’t explicitly grapple with these issues risk having others dictate how their performance will be assessed.”*⁵²

To capitalize on this opportunity, B.C. must adopt a three-pronged strategy:

- ① Encourage the mining sector operating in B.C. to adopt leading ESG and climate performance measures;
- ② Continuously improve and strengthen regulations, innovation programs and operating requirements to ensure B.C. mines remain at the forefront of ESG and climate performance; and
- ③ Require mandatory ESG and climate performance disclosure, enabling credible, data-driven promotion of B.C.’s metals and minerals to investors and buyers alike, helping secure new markets and attract additional investment.

Such an approach would include indicators such as greenhouse gas emissions (intensity and absolute) backed by net zero transition plans, water use and land disturbed as well as harder-to-measure criteria such as free, prior, informed consent and tailings dam safety. Additionally, B.C. can show the presence of governance frameworks both within the B.C. government and within the mining sector that would drive stronger ESG performance.

Such a strategy would recognize how B.C. government policy could encourage companies to meet ESG objectives and how improved policy and regulatory frameworks would provide credibility for ESG performance claims. As one very good example, the announcement of B.C.'s interim reclamation policy has clearly created a stronger foundation for bonding and elevates the province's approach to clean-up of mines after their operating lives.

To further develop the three-pronged strategy described above, we recommend that the B.C. government:

- Convene ESG and climate performance advisory groups for both Indigenous and stakeholders to advise on both relevant metrics and disclosure;
- Establish a comprehensive and publicly accessible province-wide data collection system for ESG performance at B.C. mines;
- Commit to publishing an annual summary of ESG performance (against these metrics); and
- Encourage companies mining in B.C. to verify their ESG performance via third-party/independent validation or certification to assure performance.

The rationale for engaging a strong ESG and net zero approach for the mining sector is clear; internationally, consumers and the marketplace are demanding stronger ESG measures and climate performance from the mining sector. What was once a focus on a handful of measures has now become a more sophisticated approach that truly reflects the multiple environmental, social and governance issues within this sector and the long-term impacts that remain on the landscape for generations.

Endnotes

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