

A GUIDE TO EFFECTIVE CLIMATE GOVERNANCE FOR TSX VENTURE ISSUERS IN THE MINING SECTOR

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Canada Climate Law Initiative | L'Initiative canadienne de droit climatique



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COVER IMAGE:

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ABOUT THE CANADA CLIMATE LAW INITIATIVE:

The Canada Climate Law Initiative (CCLI) provides businesses and regulators with climate governance guidance so that they can make informed decisions in the transition to a net-zero economy. Powered by the nation's top expertise, we engage with boards of directors and trustees to ensure businesses, pension funds, and asset managers understand their legal duties with respect to climate change. Our legal research offers important insights in a rapidly transforming policy landscape.

CCLI acknowledges that it is situated on the traditional, ancestral, and unceded territory of the xʷməθkʷəy̓əm (Musqueam) and is committed to working in partnership with Indigenous Peoples on effective climate governance.

CCLI is supported financially by family foundations, and is established at the Centre for Business Law, University of British Columbia Peter A. Allard School of Law and Osgoode Hall Law School, York University.



EXECUTIVE SUMMARY

Junior mining companies are incredibly important to Canada’s transition to a net-zero emissions economy. “Critical minerals” are essential inputs for various renewable energy and clean technology applications. The mining sector represents close to 60% of the companies listed on the Toronto Stock Exchange Venture Exchange (TSXV), most of which are pre-revenue exploration companies. Junior companies often have greenhouse gas emissions that are not yet significant, and yet there is growing demand from investors and regulators to disclose their emissions and their transition plans to decarbonize.

With proposed changes to government regulation, junior resource executives should be aware of, and respond to, new requirements. It is the responsibility of directors to report to their investors what the board and company are doing to help to mitigate concerns about climate change. Failure to do so could leave the company, its board, and management vulnerable to investor exit or regulatory or civil liability.

This guide provides information to support TSXV-listed boards, management, and professionals in the mining and mineral exploration sector on their path to effective climate governance. It clarifies the legal duties of directors and officers of junior mining companies with respect to climate change; offers insights regarding proposed new regulation; highlights industry guidance on effective climate governance practices; and outlines key questions directors and management should ask themselves to meet regulatory requirements, market expectations, and their fiduciary duties to the company. The guide helps answer the question: “What exactly do I need to do to ensure I am getting the necessary information to our investors”.





I. INTRODUCTION

The significance of the Canadian mining sector will grow in the transition to a net-zero greenhouse gas (GHG) emissions economy. “Critical minerals” have become extremely important in the path to sustainability in exploration, extraction, processing, downstream product manufacturing, and recycling.¹ They are essential inputs for various renewable energy and clean technology applications, including advanced batteries, permanent magnets, solar panels, wind turbines, and small modular reactors.

Mineral exploration, development, and mining companies have a key role in finding and developing responsible sources for the critical minerals necessary to transition to a net-zero economy. There is an important opportunity for the mining industry to address global challenges and be a positive net contributor to the transition. As early stage companies, junior mining companies are often low emitters, yet they face growing demand from investors, regulators, and the public to disclose their transition plan to decarbonize. Investors are becoming increasingly engaged and are expecting a higher level of performance from their investee companies’ boards and executives. There are

also expected changes to regulation that will require more climate-related disclosure. Directors and executives need to adhere to these new reporting standards if they wish to attract and retain investment and avoid litigation risk.

As new regulation develops, junior mining companies need to be included in policy conversations as their business models are dramatically different from the major operating mining companies, yet their voices are not always heard.² Due to the nature of their operations, GHG emissions from junior companies are much smaller, or even insignificant, compared to major mining companies. Even when in development, many junior companies could be years away from actual operations. How they manage both risks and opportunities differs from companies in full production, and their opportunities to reduce their GHG emissions and act on climate change are also limited.

This guide particularly focuses on issuers listed on the TSXV. The guide provides information to help boards, management, and professionals in the mining and mineral exploration sector on their path to effective climate governance. The guide aims to:

- clarify the legal duties of directors and officers of junior mining companies with respect to climate change;
- offer a snapshot of proposed new regulation relevant to junior companies;
- flag industry guidance that is available;
- offer insights as to why these initiatives are important to investors, regulators, and directors and officers of junior resource companies; and
- outline key questions directors and management should ask themselves to meet their regulatory requirements, market expectations, their fiduciary duty to enhance climate governance practices.

As demand for critical metals and minerals increases, pressure is on companies to discover new deposits, develop their existing projects quickly, engage with local communities so they understand the projects, and work with governments to streamline the permitting process for more timely approvals. Mining companies must look to their own internal processes and risk management practices to guide their strategic planning and risk management.



II. CLIMATE-RELATED RISKS AND OPPORTUNITIES

Junior mining companies face both physical risks and transition risks. Physical risks can be acute, such as extreme weather events – snow, flooding, atmospheric rivers, wildfires, heat waves - which can disrupt exploration efforts or hinder movement of employees; or they can be chronic risks, such as permafrost thaw disrupting northern roads, and sea level rise and inundation affecting properties adjacent. These risks can negatively affect operations that are often remote and isolated, causing supply chain issues, difficulty in accessing projects, all leading to increased input costs in addition to economic inflationary pressures.

Climate-related risks are impacting junior companies' ability to explore or operate efficiently and effectively, as increasing costs associated with compliance puts pressure on management, diverting funds from work on the ground and advancing the projects as quickly as possible.

Very few TSXV-listed mineral and mining issuers have mining operations, and their primary sources of emissions are associated with drilling, heating and running the exploration camp, travel to and

from camp, shipping, land use changes (clearing for camp and drill pads), and corporate travel. With most camps being remote, the opportunities for reducing emissions are limited. Power for drilling and heating are typically provided with diesel generators. If the camp is on the grid, it would use the factors provided by the energy provider to calculate emissions.

Transition risks include policy, market, legal, technology, and reputational risks. Policy risks relate to changing regulation in respect of the transition in net-zero emissions, in terms of environmental assessments, securities law disclosure requirements, and accounting standards. For example, effective 2023, banks will be required to disclose their financed emissions and their transition plans to meet Canada's commitment to net-zero emissions by 2050, meaning that they will be requiring climate-related information from junior companies seeking debt or equity financing.³

Times are changing, in that investors are becoming more cognizant of risks to their investments, whether environmental, reputational or social, and are expecting a higher level of performance from their investee companies' boards of directors and executives. They are asking for climate risk data and pushing for credible, consistent, and comparable disclosures.

Technological risks are those associated with new technologies to scale up existing exploration and development processes to commercially viable use or to develop new technologies to identify the potential for new critical mineral resources and other key prospects. Reputational risks refer to public perceptions of the extent to which mining companies are responsive to public demands for a just transition and concern about misleading advertising or financial disclosure, often referred to as "greenwashing".



III. LEGAL DUTIES OF DIRECTORS AND OFFICERS

With proposed changes to government regulation, junior resource executives should respond to the new requirements and report to their shareholders. It is the fiduciary responsibility of directors to outline to their investors what the board and company are doing to help to mitigate concerns about climate change. Failure to do so could leave the board and management vulnerable to investor exit or regulatory or civil liability.

Directors and officers of companies have a duty to ‘act honestly and in good faith with a view to the best interests of the corporation’ and to ‘exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances’.⁴ These duties are enshrined in Canada’s corporate laws and form the baseline against which conduct will be assessed. Directors and officers must therefore be competent, provide oversight leadership to executives, and proactively seek to identify, measure, and manage climate-related risks and opportunities that are material to their company. Directors should ensure that there are clear and feasible governance strategies to manage climate-related risks and opportunities, including amending the business plan to reduce

emissions throughout the supply chain. Directors and officers must be diligent in addressing concerns that could affect the short-, medium-, and long-term viability of their companies.

Directors and officers must understand the company's contribution to emissions when undertaking exploration and development activities, both on and off the work site, working with suppliers, key stakeholders, First Nations, and partners to reduce or control emissions, including through an improved quantitative-qualitative risk governance approach to measure and manage the sustainability and viability of their operations. As projects advance through the mining life cycle, directors and officers should understand and be able to communicate to investors the emissions related to ongoing exploration, development, and production, as well as planning for mine closure and how the impacts of current operations will be mitigated once a project or mine has ceased operating.



IV. PROPOSED CHANGES TO SECURITIES LAW AND ACCOUNTING STANDARDS WILL APPLY TO JUNIOR MINING COMPANIES

Proposed changes to legislation will require more comprehensive climate risk reporting. While the regulatory environment is fluid, both regulators and investors are increasingly using the same framework when collecting and using climate-related information from companies. The Taskforce on Climate-Related Financial Disclosures (TCFD) framework, and its four pillars of governance, risk management, strategy, and targets and metrics,⁵ is the framework that informs most development of policy, standards, and best practice guidance globally. Canadian and international jurisdictions and regulators have adopted the TCFD framework.

Junior resource companies are different from larger in-production mining companies, and regulators continue to grapple with the extent to which they should be treated differently under proposed legislation. The pace of regulation and policy in respect of decarbonization and transition to a net-zero economy is accelerating. It can be hard for boards to track changing expectations, given the different mix of voluntary guidance and regulatory requirements. The good news is that regulators are now

working for the first time toward convergence of various standards under accounting, securities, and mining law, although this convergence will take several years. Junior resource companies need to be part of this conversation about the most appropriate standards to apply. This section provides a snapshot of where regulation is at as of 5 March 2023 and what to expect in the coming months.

1. SECURITIES LAW

The Canadian Securities Administrators (CSA), which includes all the provincial and territorial securities regulators, has stated that climate change is a mainstream business issue and all issuers must disclose material climate risks and how they are managing them.⁶ Even if the company is only beginning to develop a capacity to measure carbon emissions, it must disclose material risks identified and its efforts to measure and manage them.⁷

What is new is that proposed National Instrument 51-107 Climate-related Disclosures (NI 51-107) will require greater levels of transparency and measurability of net-zero targets and activities, expected to come into force in 2023.⁸ Proposed NI 51-107 is based on the TCFD framework of reporting governance, risk management, strategy, and metrics and targets. The draft instrument states that the climate-related disclosures related to strategy, risk management and metrics and targets will be included in the reporting issuer's annual information form (AIF), or its annual Management Discussion and Analysis (MD&A) if the issuer does not file an AIF. Disclosure for venture companies will be required for the financial years beginning on or after January 1 of the third year after the effective date of the proposed instrument (three-year transition phase).⁹

i. Governance

Pursuant to proposed NI 51-107, issuers, including junior mining companies, will be required to describe the board's oversight of climate-related risks and opportunities and management's role in assessing and managing them.¹⁰ This requirement will not be subject to a materiality assessment, meaning that these companies will have to discuss their oversight and management of climate-related risks and opportunities even where the company decides climate risks are not material.¹¹ Draft Form 51-107A asks for only two items of information:

- (a) Describe the board of directors' oversight of climate-related risks and opportunities;
- (b) Describe management's role in assessing and managing climate-related risks and opportunities.¹²

These two requirements are straightforward. The CSA notes that they supplement existing National Instrument 58-101 Disclosure of Corporate Governance Practices and National Policy 58-201 Corporate Governance Guidelines.¹³

ii. Risk Management

Effective risk management is a key obligation of directors and executives. In overseeing the management of risk, directors must meet the objective standard of what a reasonably prudent person would do in comparable circumstances.¹⁴ Directors must put aside any preconceptions they may have about the reality of climate change risk and “require reports and recommendations from management and external sources as necessary and be satisfied that the corporation is addressing climate change risk appropriately”.¹⁵ Proposed Form NI 51-107B asks for three information points, regardless of materiality:

- (a) Describe the issuer’s processes for identifying and assessing climate-related risks.
- (b) Describe the issuer’s processes for managing climate-related risks.
- (c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the issuer’s overall risk management.¹⁶

iii. Strategic Planning

No matter how small, junior companies need some strategic planning in order to be listed and to attract investors. Proposed Form NI 51-107B asks issuers to disclose, where material:

- (a) Describe the climate-related risks and opportunities the issuer has identified over the short, medium, and long term.
- (b) Describe the impact of climate-related risks and opportunities on the issuer’s businesses, strategy, and financial planning.¹⁷

Material is defined as: “information is likely material if a reasonable investor’s decision whether to buy, sell or hold securities in an issuer would likely be influenced or changed if the information in question was omitted or misstated.”¹⁸

Controlling emissions increases as the exploration company moves to new stages in development, as far as technology to date allows, and strategic planning for these changes is critically important. In reporting strategy, the company should be transparent about the time horizons and the reasons for limitations in such planning, being as accurate as possible and disclosing the reasons for being unable to plan strategically beyond specific time horizons. Access to equity capital and debt financing is increasingly dependent on being able to satisfy investors that such planning is taking place.

iii. Metrics and Targets

Junior companies are often focused on short-term planning, generally periods of up to 18 months, because longer term strategic planning will be driven by the results of exploration. Draft Form NI 51-

107B has two parts, the first on metrics and targets, which will require companies to:

- (a) Disclose the metrics used by the issuer to assess climate-related risks and opportunities in line with its strategy and risk management process.
- (b) Describe the targets used by the issuer to manage climate-related risks and opportunities and the issuer's performance against these targets.

This disclosure requirement is based on a materiality requirement, as defined above; in other words, there is no mandatory disclosure if the information is not material to investors' decisions whether to invest. Important to remember is that governance and risk management of climate risks and opportunities will have to be disclosed irrespective of whether they are material, as discussed above.

The second requirement is not yet finalized, and the CSA is still consulting; however, the current draft is based on a "comply or explain model". The current draft specifies:

- (a) Disclose: (i) the issuer's Scope 1 GHG emissions and the related risks, or the issuer's reasons for not disclosing this information, (ii) the issuer's Scope 2 GHG emissions and the related risks, or the issuer's reasons for not disclosing this information, and (iii) the issuer's Scope 3 GHG emissions and the related risks, or the issuer's reasons for not disclosing this information.
- (b) disclose the reporting standard used by the issuer to calculate and disclose the GHG emissions referred to in (a).
- (c) If the reporting standard referred to in (b) is not the GHG Protocol, disclose how the reporting standard used by the issuer is comparable with the GHG Protocol.¹⁹

Disclosure is also informed by NI 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), to the extent climate is relevant to the mineral project.²⁰ "NI 43-101 feasibility studies can outline key estimates such as potential climate impacts on critical infrastructure (tailings, road, waterways etc), on-site emissions, sensitivities to carbon taxes and various critical supply chains as companies reach the development stage."²¹

Many junior companies will be acquired by larger mining companies before they go into production. If and when they do commence production, emissions are likely to increase as they scale up production activity. As exploration companies move towards feasibility studies, planning for emissions targets and their monitoring should be embedded in oversight and management.

2. PROPOSED NEW ACCOUNTING STANDARDS

Junior listed companies will also be subject to new accounting standards in respect of climate-related matters. The International Financial Reporting Standards Foundation (IFRS) has stated that under current accounting standards, climate-related matters that are material must be reported in financial

statements.²² However, it has proposed two new accounting standards aimed at clarifying what must be disclosed.

IFRS' new International Sustainability Standards Board (ISSB) has issued two exposure drafts, IFRS S1 General Sustainability-related Disclosures (IFRS S1) and IFRS S2 Climate-related Disclosures (IFRS S2), which the ISSB has announced will come into force at the end of June 2023, to be effective for annual reporting periods beginning on or after 1 January 2024.²³ These new standards are science-based and TCFD-aligned, and will require companies to report their transition plans to decarbonize.

The ISSB has tentatively decided to introduce a safeguard in the initial transition period. Specifically, it introduces the concept of "reasonable and supportable information that is available at the reporting date without undue cost or effort" into IFRS S1 and IFRS S2. It is aimed at helping companies apply specific requirements in the standards regarding the scope of the company's value chain and measurement of its Scope 3 GHG emissions; anticipated effects on financial performance, financial position and cash flows; applying climate-related scenario analysis; and calculating the amount and percentage of assets or business activities vulnerable to transition and physical risks and aligned with climate-related opportunities.²⁴ A company will also be able to include information that is not aligned with its reporting period, when that information is obtained from suppliers in its value chain with a different reporting cycle.²⁵ This safeguard will provide breathing space to companies in the transition to new reporting standards.

3. CANADA'S GREEN AND TRANSITION FINANCE TAXONOMY

In March 2023, the federal government released its final Roadmap for a Green and Transition Finance Taxonomy to guide financing in the transition to net-zero emissions.²⁶ Its objective is to foster the issuance of green and transition financial instruments that are consistent with Canada's goal of achieving net-zero emissions by 2050. Its new Taxonomy Council will publish a short-form taxonomy covering priority sectors by mid-2023, and lay the groundwork for longer-term implementation. It should provide greater certainty about whether economic activities are aligned with credible, science-based transition pathways.

To be eligible for financing under the taxonomy, companies will have to set net-zero targets, develop transition plans, and provide effective climate disclosure.²⁷ Banks and asset owners will evaluate projects against framework criteria to determine whether they are "green" or "transition", and will assess projects against "do no significant harm" criteria to ensure the project is not detrimental to other environmental, social, and governance (ESG) objectives.²⁸ The taxonomy should open up new financing for venture issuers that can demonstrate effective climate governance.



V. INDUSTRY GUIDANCE

Effective governance is key to financial sustainability. The TCFD offers guidance on metrics, targets, and transition plans, which is helpful in getting started.²⁹ However, some of the guidance internationally is not helpful for junior mining companies.

The majority of early-stage mineral exploration companies do not meet threshold requirements required pursuant to the federal Greenhouse Gas Reporting Program (GHGRP), which requires that all facilities that emit 10,000 tonnes per year or more of GHG, in carbon dioxide equivalent units (CO₂ eq), must submit an annual report.³⁰ Some concern has been expressed that the GHG Protocol is appropriate for large emitters (>10,000 tonne CO₂eq per year) and offers consistency of disclosure under the GHGRP, but that this global standard is too onerous for venture mineral companies. The Prospectors and Developers Association of Canada (PDAC) has identified that a drill program in excess of 200,000m annually “could” produce sufficient emissions to trigger the reporting requirements. PDAC has developed a GHG calculator better suited to junior companies. It recommends that the PDAC GHG calculator be used to estimate junior companies’ drill program

GHG production in order to confirm site-specific GHG generation.³¹ The PDAC GHG calculator can assist companies to identify current emissions and project future emissions based on planned work programs.³²

Emissions are important at different stages of junior companies' development. As PDAC has observed, "Traditionally, the most important aspect for investors in mineral exploration is the prospect for value creation through a company finding and advancing an economically viable deposit towards production. Investors are increasingly working to better understand the scale of on-site emissions of exploration projects despite their relatively small-scale in comparison to established mines or other industrial activities [...]."³³

PDAC has also developed guidance for exploration companies to undertake responsible exploration – the e3 Plus Framework for Responsible Exploration.³⁴ For example, it offers guidance in how to reduce diesel use at exploration sites.³⁵ PDAC worked with Avalon Advanced Materials to evaluate case studies related to how junior companies could reduce GHG emissions during exploration activities. Factors such as minimizing water pumping (recycling at drill versus continuous pumping of fresh water), insulation, fuel management (given diesel is GHG intensive, can some activities use other fuel sources), transportation management, solar and wind generators as supplements to diesel energy, and drilling contract incentives.

***Key tool:** The excel-based GHG emission calculator from PDAC provides a simple reporting scheme to allow companies to track costs associated with carbon emissions, understand what their impacts are, and to help them with mitigation as projects advance.*

The TSXV also offers sector support. In 2020, in collaboration with CPA Canada, the TSXV developed the "Primer for Environmental & Social Disclosure".³⁶ In 2021, the TSXV partnered with IHS Markit (now part of S&P Global) to provide all of its issuers with free access to their ESG Reporting Repository, which includes an on-line tool to track and record climate-related issues.³⁷ Its educational programs continue to offer governance advice for TSXV-listed companies in their path to effective climate governance.



VI. WHY THESE INITIATIVES ARE IMPORTANT TO THE CANADIAN INVESTING PUBLIC AND TO DIRECTORS AND OFFICERS OF JUNIOR RESOURCE COMPANIES

Energy transition requires minerals such as copper, lithium, manganese, and platinum for grid infrastructure, batteries, electric vehicles (EV), wind turbines, and solar panels.³⁸ Critical minerals are also essential for advanced manufacturing, including defence and security technologies, semiconductors, and consumer electronics, as well as critical infrastructure. The World Bank reports that the production of minerals such as graphite, lithium, and cobalt could increase by 500% by 2050 to meet the growing demand for clean energy technologies.³⁹ The International Energy Agency projects that EV and battery storage will account for half of the mineral demand growth from clean energy technologies over the next two decades.⁴⁰

Canada holds some of the world's most substantial reserves of many minerals, including 15 million tonnes of rare earth oxide.⁴¹ The federal government has published a list of 31 critical minerals as part

of its Critical Minerals Strategy.⁴² Canada considers these minerals critical to the transition to a net-zero emissions world, and has allocated almost \$4 billion to their further development.⁴³ Canada has nickel, copper, cobalt, manganese, lithium, and graphite, all currently important EV battery minerals.⁴⁴

Mining companies are a significant part of the Canadian economy. In 2021, the direct contribution of Canada's minerals and metals sector to Canada's gross domestic product (GDP) was \$97 billion, which represented 4% of Canada's total GDP. The indirect effects from the minerals and metals sector added a further \$35 billion to the GDP, for a total contribution of \$132 billion.⁴⁵ Canada is the global leader in the production of potash and is one of top five global producers for aluminum, diamonds, gemstones, gold, indium, niobium, platinum group metals, titanium concentrate and uranium.⁴⁶ The value of Canada's mineral production reached \$55.5 billion in 2021.⁴⁷

The mining industry employs over 600,000 people (direct and indirect employment) with an average total annual compensation of \$134,000. Impacts of the Canadian mining industry are global, with 43% of the world's public mining companies listed on the Toronto Stock Exchange (TSX) and the TSX Venture Exchange (TSXV).⁴⁸ The mining sector represents close to 60% of the companies listed on the TSXV, most of which are pre-revenue exploration companies.⁴⁹ In 2020, the overall value of mining assets abroad held by junior Canadian companies was \$14.9 billion, and 1,187 junior companies held 51% of their assets in Canada, 36% in the Americas (excluding Canada) and the rest in other countries.⁵⁰

The junior mining companies play a key role in the mining industry by identifying and developing new promising mining prospects; by adopting new technologies and exploration techniques, leading to more innovation and discoveries; and by giving larger mining companies access to additional resources in the case of a takeover. Junior mining companies can also have a significant impact on local economies, creating jobs and economic opportunities in remote locations.



VII. QUESTIONS TO GUIDE DIRECTORS AND OFFICERS IN EFFECTIVE CLIMATE GOVERNANCE

The notes at the end of this guide offer direct links to a number of resources to guide venture mineral companies on their path to effective climate governance. In this part, we outline some questions that corporate directors and executives can ask themselves to help meet their regulatory and market requirements, and meet their overall fiduciary duties to the company.

1. GOVERNANCE

- How should we integrate climate risks and opportunities into our board governance structure?
- As directors and officers, do we have the appropriate skills and expertise needed for a robust assessment, management, and communication of the climate risks and opportunities for our company; and how do we gain and maintain an appropriate level of knowledge about foreseeable climate risks and opportunities for a company operating in our sector, markets, and geographical regions?

- Are we connecting climate risks and opportunities to our existing business processes, including reporting, accounting, auditing, and risk management?
- While climate change is the responsibility of the full board, do we need to allocate responsibility for its oversight across board committees or does it warrant a dedicated climate committee?
- Do our board and committee agendas permit adequate time for climate risk and opportunity issues to be considered?
- Does the climate risk assessment conducted by management and the board encompass the breadth and interconnectedness of climate risks and opportunities, including risks to and impacts on local communities, stakeholders, suppliers, and investors?
- How does the company determine which of these foreseeable risks may have a material impact on financial position, performance, and prospects, and how do we assess the potential impact of these issues on the key drivers of risk and opportunity? On what basis are risk appetites set and these issues prioritized?
- Who is responsible and accountable for the execution of the company's policy and strategy on climate change at a management level?
- Do we have a transition plan?
- Is executive remuneration linked to the company's achievement of its climate-related targets? If so, how? If not, why not?
- Is the company engaging with community partners, stakeholders and suppliers at multiple points of interaction to communicate the company's strategies to reach net-zero carbon emissions?

2. RISK MANAGEMENT

- How have climate-related issues been considered and integrated within our prevailing risk assessment and management framework?
- Has external expertise been applied to our analysis of climate-related risks? If not, are we satisfied that our internal capabilities are robust enough?
- What governance processes are in place to ensure that emerging risks and opportunities are captured, assessed, verified, and reported to the board?
- As part of its oversight, has the board asked management to give its best estimate of any forecasted changes in investor, supplier, and competitor behaviour expected to result in positive or negative changes in the price of commodities?
- Is the board satisfied that the company is respecting federal guidance on environmental labels and claims in Canada and wherever international operations may be located?
- How are management mitigating risks of service interruption due to acute and chronic climate events?

3. STRATEGY

- How should the consideration of climate change be integrated into our overall strategic planning processes?

- Are the assumptions and methodologies we apply fit for its forward-looking purpose?
- Is the board aware of how our company's community partners, stakeholders, investors, and other capital providers are factoring climate-related risks into their investment and voting decisions?
- Are we satisfied that we have the right executive leadership in place for the strategic direction we want to take on climate change?
- Where we are entering feasibility and production stages, have the potential risks and opportunities to our strategy been stress-tested across scenarios representing the plausible range of science-based climate futures, including a pathway to net-zero emissions?
- Is the board confident that management is considering new technologies and logistics systems to reduce emissions and keep pace with changes in the mining and mineral exploration sector?
- Has management considered different transportation modalities to ensure that it is using the most energy-efficient and least carbon-emitting supply and distribution channels?
- Given the interactions between climate change and biodiversity, have we systematically evaluated direct and indirect impacts on biodiversity?

4. METRICS AND TARGETS

- Based on our company's identified purpose and goals, has the board set science-based targets for scope 1, 2, and 3 emissions reductions for managers to implement?
- Has the company directed appropriate resources to collect accurate data that will assist in developing emissions reduction plans?
- Has the board adopted a climate action plan with appropriate resources to meet targets, measure progress, and report accurately? Is the action plan embedded throughout the company, its projects, and its supply chain?
- How do we set appropriate metrics for the assessment of relevant climate-related issues in the context of our business?
- What are appropriate targets for our management of climate-related risks within short-, medium-, and long-term time horizons – and on what basis do we consider these targets to be credible? How do we verify our progress against the targets? Has the company set a baseline year against which to measure and report emissions reductions?
- Is the company negotiating requirements for emissions reduction targets in supply contracts?
- How do we communicate the risks and our commitment to finding opportunities in the transition to net-zero emissions to community partners and key stakeholders?

5. DISCLOSURE THROUGH FINANCIAL STATEMENTS

- What assessment has been undertaken to ensure that relevant and material matters disclosed in the MD&A are consistently integrated across the company's financial statements?
- Which climate change-related variables are material to the accounting estimates in our financial statements? Have they been considered and applied in determining these estimates, and have relevant assumptions been applied consistently?

- Which material climate-related assumptions (and associated uncertainties) are material to investors' reasonable understanding of our financial statements, and thus warrant disclosure in the notes to the financial statements – even where there is no quantitative impact on the relevant accounting estimate?
- Are our financial disclosures aligned with TCFD recommendations on governance, strategy, risk management, and metrics and targets that are decision-useful for a reasonable investor? Do these disclosures address risks and opportunities for both our business model and value chain, and our approach to their management over defined short-, medium-, and long-term time horizons?
- Is the board satisfied that the company is appropriately reporting key climate-related targets such as targets related to emissions reductions, water, and energy usage, and climate-related biodiversity impacts, including for the full upstream and downstream value chain, where appropriate, in line with financial goals? Are we monitoring key data and indicators, and which global reporting standards are met by the company regarding biodiversity?
- Are directors confident that management has factored expected government action, such as carbon pricing, standards to decarbonize activities, or income tax-related changes, into estimates of future cash flows and the discount rate?
- Have any climate-related issues been raised as “key audit matters” by our external auditors? To what extent has the audit committee engaged in dialogue with the external auditor to evaluate the audit quality of climate-related risk and performance disclosure?
- Is the audit committee assessing and reporting to the board the company's disclosure of avoided GHG emissions through the entire company, addressing whether the target is absolute, or intensity-based, timeframes over which the target applies, a base year from which progress is measured, and key performance indicators used to assess our progress against targets?
- Is the board, on the advice of the audit committee, confident that the financial statements and other continuous disclosure documents integrate climate-related assumptions in the accounting estimates and disclose management's assessment of material climate-related risks and opportunities to current standards required by Canadian securities regulators, corporate law, accounting standards, and stock exchange listing requirements?

An aerial photograph of a river flowing through a dense forest. The river is the central focus, with white water rapids and a rocky bed. The surrounding forest is lush and green, with some fallen logs visible on the banks. The overall scene is natural and serene.

The Canada Climate Law initiative offers free sector-specific presentations to boards and their senior executives that would like more information on regulatory changes and best practice standards.

Contact: ccli-info@allard.ubc.ca.

REFERENCE NOTES AND LINKS TO RESOURCES

1. Government of Canada, Canadian Critical Minerals Strategy (2022), [Critical-minerals-strategyDec09.pdf \(canada.ca\)](#) at 1 (hereafter Canadian Critical Minerals Strategy).
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