

Navigating ESG Challenges to Unlock Canada's Critical Minerals Potential

written by Harry Kim | January 28, 2025

The shift to renewables is driving an unprecedented demand to unlock critical minerals projects. Is there a realistic pathway to navigate Canada's lengthy environmental approval processes that currently holds new projects back? At the current pace, mining output can't keep up with demand, let alone grow to meet future needs. To seize this generational opportunity and become a major domestic and international supplier, Canada must drastically streamline approval timelines.

To meet this challenge, mining companies have stepped up to be innovative, nimble and ready to challenge the status quo when commencing a new project. Treating ESG related challenges as strategic opportunities is key to getting ahead of the game and well within corporate grasp. Doing so could not only create more harmonious partnerships with community and First Nations, but will streamline approval processes, increase much needed recruitment and staff retention for mining companies (by aligning with younger generation values), and innovating design or use of waste to increase profit – all while decreasing potential environmental impacts.

The rising global demand and staying competitive

Net zero commitments of The Paris Agreement and the transition to renewables is creating an unprecedented demand for critical minerals. The list of critical minerals is also rapidly

expanding as forecast demand indicates potential shortages in the near to mid-term.

Industry's key challenge is how to operationalize new projects sooner, given the hurdles of exploration, engineering studies, community consent, approvals and financing. Economically viable projects are increasingly harder to find due to remote or hostile locations, with resources typically under deeper cover and decreasing minerals grades.

Internationally, countries with large mineral reserves are rapidly developing new policies to encourage critical mineral investment, undertaking new regional-scale ground penetrating imaging over prospective geological targets, and offering tax incentives and research funding to attract new project investment and downstream in-country processing and manufacturing.

So how does Canada stay competitive? Canada boasts a mature resource industry regulated by a system of federal, provincial, territorial and Indigenous approvals. There is broad consensus that the approval timeline for new projects has to be shortened, but without losing the requirements for good planning, environmental protection and meaningful Indigenous consultation and participation.

The 2022 Canadian Government Critical Minerals Strategy seeks to accelerate new responsible project development, from exploration to downstream mineral processing. In addition to driving exploration, R&D and innovation, the strategy also seeks to build sustainable infrastructure, advance reconciliation with Indigenous peoples, grow a diverse workforce and prosperous communities, and strengthen global leadership and security.

What does this mean for new projects? A company's success is very much aligned to how they meet community expectations on ESG

performance. Early recognition of the importance of ESG is key to managing community expectations, securing finance and getting on the fast track to project approval.

Transforming aspiration to action, operationalizing ESG strategy

Aligning ESG goals with a company's overall business strategy and demonstrating connection to financial performance can be crucial for long-term success. Embedding and operationalizing ESG values and principles into company policies and culture can help develop project specific sustainability strategies, providing clear guidance for management and employees. Effective strategies provide guidance on environmental risk management, social aspects including First Nations, community and government consultation, social and business development.

Align the regulatory strategy to de-risk the project

The regulatory approval process in Canada is complex. It is therefore critical that each proponent engages competent approval specialists who can develop strategies covering federal, provincial and other regulatory approvals and permits. The aim is to determine the most appropriate approval pathway and identify time critical risks to effectively de-risk a project. Approval strategies must not only cover mining consents, but include permits for all supporting infrastructure including power, water, transport access, accommodation and supporting works.

Effective partnering establishes the baseline for success

Active listening and collaboration with First Nations and communities to understand cultural and heritage aspects of the land, water and air – at the onset of a project – is vital to project success. These conversations help establish trust and can identify key issues and culturally high value areas early in the project. In areas with overlapping traditional territories, identification of all First Nation groups and navigating effective and meaningful engagement amid opposing views or desires is paramount.

Environmental and impact assessments of critical minerals projects located on First Nations lands must be undertaken with First Nations in consultation with the governments of Canada. Weaving traditional knowledge gained from these conversations into the environmental impact assessment pathways is critical for robust regulatory applications, as well as relationship building. Moreover, this approach supports the Reconciliation Framework (2024) guiding the Impact Assessment Agency's (IAA) approach to reviewing applications. Aligning with the IAA's mandate for reconciliation prior to application is a leading practice mining companies can use to streamline regulatory review and achieve consent-based approvals.

The 2024 First Nations Critical Minerals Strategy released by the BC First Nations Energy and Mining Council calls upon governments and proponents to recognize First Nations stewardship of their lands and participation in the decision-making process through the project life cycle. Recognizing First Nations stewardship of their lands, association with the natural environment, the need for Free Prior Informed Consent and enabling participation in the decision-making process through

the project life cycle can maximize preservation of the natural land, Traditional Uses, and/or First Nations economic reconciliation.

Developing a participatory First Nations and community committee can be a powerful mechanism for formal consultation to discuss mine development plans, technical, environmental and social material risks and opportunities, and develop collaborative mitigation plans not only for the approval pathway, but throughout the mine life cycle and into closure planning.

Set ESG baselines early and with community

Early commencement of an environmental baseline, environmental impact, and environmental risk assessment studies should be conducted in collaboration with First Nations and/or a community consultative group.

Undertaking a Health, Social and Economic Effects under the Impact Assessment Act 2019 in collaboration with public and Indigenous peoples' is required to identify, assess and characterize the health, social and economic effects of a project.

Through the engineering design phase of the project, an environmental and social design basis (ESDB) should be developed and built into project design. The ESDB should specify the minimum requirements for environmental emissions (air, land, water) based on the most stringent standards. Social design should address potential impact issues including community and human health, livelihood and benefits, workforce training, recruitment and retention aspects.

Going green

Many new critical minerals projects will be in remote areas with limited or no infrastructure. Development of standalone clean energy projects is a positive alternative to fossil fuel power generation and complements the philosophy of developing critical minerals for the clean energy transition. Hydro (traditional and pumped), wind, solar, geothermal and other alternatives will be more acceptable to communities – delivering green energy to the project, available to feed excess power back into the grid if/when transmission lines are brought to the area, supplying local communities alternatives to diesel power and providing opportunities for First Nations to participate through ownership and operation of that infrastructure.

Separately, recent advances have shown that extraction of other minerals from tailings can result in relatively benign low risk waste that can be repurposed, negating the need for a tailings storage facility, reducing potential environmental long-term risks.

With increased international reporting on emissions (e.g. the Taskforce on Climate-related Financial Disclosures), potential GHG taxes on companies contributing to emissions and customers seeking lower environmental impacts to produce minerals, development of a green energy supply chain (as well as decarbonizing mining and processing) is crucial.

Operationalizing corporate ESG principles in this way to effectively guide a company's decision making can mean it doesn't just tick a box, but genuinely delivers a higher value, lower impact project that enables reporting on tangible metrics.

Springboard from baseline success to operational readiness?

No longer can companies just report resources and reserves, production and financial performance. There is increasing scrutiny from regulators, communities and investors on ESG performance and reporting.

Leading junior companies are developing comprehensive ESG/sustainability policies and standards to communicate their company values, and how they plan to manage stakeholder consultation and environmental impacts from early exploration programs into project development. Companies need to develop social and business development plans with metrics and reports. The plans must address ESG material aspects, management plans to mitigate risks, and KPIs and metrics to measure performance. Periodic reporting of performance can be referenced against international guideline/metrics such as the Global Reporting Initiative (GRI) mining standard, or the pending Consolidated Mining Standard, Sustainability Accounting Standards Board (SASB) and the Task-Force on Climate-related Financial Disclosures (TCFD) frameworks.

External sustainability reporting assurance or input and review by external community reference groups are leading practice. Operationalizing ESG strategy effectively guides internal actions and decisions to meet or exceed current standards for leading edge ESG performance. Collaborating with external reference groups helps with the accuracy, balance and transparency of data and company performance communicated to stakeholders and investors.

Worker shortages are one of the most pressing issues facing mining companies in Canada today. ESG reporting and social

responsibility is paramount in the next generation's values and alignment with a company's values will increase recruitment and retention.

Leading the renewable energy transition

Obtaining consent from First Nations and communities takes time and effort, as does the navigation of regulatory approvals. Early engagement and programs to engender goodwill with stakeholders, gain consent and advance project approvals, are critical to a project timeline.

By adopting these practices, Canada's critical minerals industry can position itself to unlock projects swiftly and sustainably, ensuring its role as a leader in the global renewable energy transition.

At [EMM](#), we specialize in helping companies navigate complex environmental, social, and regulatory landscapes to ensure the successful and sustainable development of critical minerals projects. Our Advisory team has an exceptional operational and regulatory experience base that not only brings deep technical expertise but also comes with an operator's perspective.