Canada's Critical Minerals Strategy – A Response to the Department of Natural Resources Discussion Paper

Jamie Kneen
MiningWatch Canada
September 15, 2022

Natural Resources Minister Jonathan Wilkinson released a discussion paper[1] on Canada's Critical Minerals Strategy at the annual Prospectors and Developers Association of Canada (PDAC) convention earlier this year. This is a response to that document.

A comprehensive industrial strategy is badly needed to confront the multiple crises Canada – and all humankind – is up against: climate, biodiversity, water, pollution, inequality, migration, and more. Unfortunately, this is not it. This is an adaptation of business as usual. While the emphasis on value-added manufacturing, high standards for environmental and human rights protection, Indigenous rights, and circular economy are welcome, the strategy is not backed with proposals for meaningful implementation and is effectively rendered almost meaningless by its central thrust – deepened and accelerated extraction of raw materials for global markets. There is no recognition of the material implications of the Paris commitments to address the climate crisis, much less of already-strained planetary limits, beyond laudable but merely conceptual mentions of recycling and circular economy.

This is Canada's "business as usual" – extraction, processing, and shipping raw materials, with limited "branch plant" manufacturing, reconstituted with added emphasis on value-added processing. So on the one hand, this discussion paper proposes a limited and inadequate industrial restructuring that would increase Canada's industrial capacity and autonomy, but only to a limited extent and only using a limited set of policy tools; on the other hand, it fails to contemplate measures that would even remotely allow Canada to address the climate crisis in a meaningful way, and in fact promotes measures that will lead to a deepening of not just the climate crisis but also other planetary crises, biophysical as well as socio-political and economic, including inequality, democratic governance, migration, and human security.

Mining, whether for critical minerals or other industrial inputs, is not going to stop tomorrow. Even a fully circular economy will have losses due to the inevitable inefficiencies of recycling, and a significant

[1] Natural Resource Canada, Canada's Critical Minerals Strategy: Discussion Paper. June 14, 2022. https://www.canada.ca/en/campaign/critical-minerals-in-canada/canada-critical-minerals-strategy-discussion-paper.html

amount of newly-mined material is needed to get to circularity at levels of metal use anything like existing ones. But the conditions of extraction need to be rigorously protective of the environment and affected communities, and the locations of extraction need to be carefully chosen. Canada has the potential to claim advantages in ESG (environmental, social, and governance) credentials, but we have serious shortcomings to overcome in order to do so with any credibility.

As the discussion paper points out, Canada has a competitive advantage in terms of our mineral resource wealth, technical expertise and mining technology, and access to already-existing hydro power. It is also true that Canada's legal and regulatory frameworks are better developed than many other jurisdictions. In many areas, however, this is not a high standard to meet. In other aspects, Canada is neither a global leader – for instance in the comprehensive application of impact assessment or in regulatory enforcement, whether for environmental protection or investor protection – nor meeting global best practices, such as in tailings management. Canada is not even meeting its own stated aspirations, such as the case in implementing UNDRIP (the *UN Declaration on the Rights of Indigenous Peoples)*.[2]

General Comments

1. Demand projections are still just projections. The widely-touted "business as usual" projections are aimed at converting fossil fuel energy to renewable energy to meet exponentially increasing demand from wealthy countries. This means more cars, more air travel, more urban/suburban development, and more consumer goods with no consideration for how that demand will actually be met or at what cost, much less any effort to address global energy poverty. These projections are being made with little consideration for the social and environmental costs of mining all that new material, including impacts on the climate and important carbon sinks like peatlands, forests, and oceans. We need to have the courage to make and pursue projections that will bring us not just within 1.5 degrees Celsius but also within planetary and ecological boundaries for water use, biodiversity protection, and beyond.

2. Canada does not have significant or viable deposits for all or even most "critical minerals," much less actual mines (operating or under development) and infrastructure. As such, domestic supplies for domestic use will still have to be supplemented by global sourcing (cobalt from the Democratic Republic of Congo, for example, as opposed to offtake from domestic nickel mining), and much of the extraction will be for export. Recent experience with dramatic US policy shifts from "America First," which tried to exclude Canadian content, to the *Inflation Reduction Act* invoking the *Defense Production Act* and considering Canadian content as an integral part of US industrial production. Boosting exploration activities will identify more deposits, but they may not be suitable for development. We know that the vast majority of exploration activity doesn't ever lead to actual mines being developed. Money is pumped into logistics and supplies, while its environmental impacts are significant. At the same time, global and domestic markets for Canadian production will continue to be unstable and unpredictable without significant mitigating measures such as government interventions to stabilise prices and production.

3. Government should consider all available policy tools to tackle the climate crisis, and in the context of critical minerals, needs to be able to do more than pump money into subsidies and tinker with regulatory processes. Levies and taxes can also be applied to discourage undesirable or counter-climate activities or technologies. Government can also intervene in commodities markets to stabilise prices, guarantee or pool purchasing. And finally, government may be reluctant to "choose winners and losers" in any field, but if it is serious about a critical minerals strategy, it should be able to invest directly in

[2] United Nations. Declaration on the Rights of Indigenous Peoples. September 13, 2007. https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html

strategic projects – as it has in the Trans-Mountain Pipeline, under a different definition of 'strategic' – or even nationalise or mandate specific operations where the market is unable to reliably support policy objectives, for example around circular economy or where securing a domestic supply is considered too important to leave to market forces.

4. Not all deposits should be mined, and strict conditions need to be enforced on extraction where it is allowed. Outside of existing protected areas, no-go zones for mining need to be established to protect areas of ecological, cultural, and economic importance. FPIC and community consent need to be respected, rigorous impact assessment processes need to be followed, and the highest regulatory standards need to be enforced.

- **No-go zones:** Mining should be clearly ruled out for existing protected areas, plus identified areas of ecological, cultural, and economic importance. Rigorous community-based processes are needed to identify and delineate such zones, whether that is through land use planning or other processes.
- **Free, Prior, and Informed Consent (FPIC) and community consent:** Commitments to implement the UNDRIP, the Calls to Action of the Truth and Reconciliation Commission (TRC) and the recommendations of the Murdered and Missing Indigenous Women and Girls (MMIWG) Inquiry need to be honoured. Democratic processes for non-Indigenous communities need to be reinforced to build public engagement and to counter any potential for corruption and influence.
- **Impact assessment:** Rigorous, mandatory assessment processes need to be implemented. There is no "fast track" that will not increase the risk of serious damage to ecosystems as well as community engagement and social licence. The fact remains that most delays in the assessment process are on the proponent's clock, and that efforts to limit the time available to government agencies and the public has only caused additional problems (and, ironically, additional delays).
- **Environmental and health protection:** The highest regulatory standards need to be enforced to control water consumption and pollution, air pollution, worker health and safety, and especially tailings dam safety. If a mine cannot be built safely, it should not be built.

Credible participatory planning processes have long been neglected, but along with measures to build community readiness and government regulatory and especially scientific and technical capacity, participatory planning processes would greatly help in setting development priorities and conditions. Similarly, while opportunities over the years may have been missed for governments to have responded to calls for regional impact assessments and community-based land-use planning, it is not too late to undertake such initiatives to build consensus around where and how mining can take place, providing certainty to residents, rights-holders, governments, and investors alike. Many of these processes are outside of federal jurisdiction, but the federal government can and should take the lead where it can and should encourage and support other governments to undertake them.

Comments on the Discussion Questions

Prioritization and Areas of Focus

Do you concur that the value chains identified and their associated minerals offer Canada the greatest opportunities for economic growth?

The question should be, "What measures need to be taken to increase the probability of institutional stability, social cohesion, and survival in the face of the climate crisis, and how can those measures be undertaken with a minimum of social disruption – and maximum social and ecological benefit?" A

focus on economic growth impedes consideration of non-growth strategies that are needed to increase economic and social resilience and environmental sustainability. That said, some of the value chains identified probably will be important for Canada to pursue to build a truly circular and environmentally sustainable low-carbon economy, as long as they are oriented towards reduced demand, greater efficiency, and recycling.

Are the six areas of focus and their associated objectives the right ones to help Canada achieve its vision on critical minerals for domestic and global value chains?

1. Drive research, innovation, and exploration

This is not a coherent "area of focus" and needs to be redefined to separate valid and important support for research and innovation – including geoscience – from subsidies for the mineral exploration sector, which are poor public policy since they are difficult or impossible to link to the desired results.

Research and innovation – public and private – are badly needed to support increased energy and material efficiency and reduced demands, both through the entire cycle of material use and in the organisation of production and work, transportation of goods and people, and use and consumption. Exploration is a completely different topic, and there needs to be a clear division between geoscience as a knowledge base, and the essentially speculative economic activity of prospecting. As mentioned above, its environmental impacts are also significant. Expanding exploration activity in the absence of effective land use frameworks can easily contribute only to increased exploration activity if promising deposits are discovered in inappropriate locations. Furthermore, a 30% Critical Mineral Exploration Tax Credit for targeted critical minerals is essentially a giveaway to the whole industry, since there is nothing to stop companies from claiming to be exploring for critical minerals while in fact exploring for something else, like gold, often found in association with one critical mineral or another, or indeed just exploring for whatever they can find.

2. Accelerate project development

"Accelerate project development" is a euphemism for deregulation. It is not a useful objective if ESG credentials, not to mention actual protection of the environment and community well-being and resilience, or recognition and accommodation of Indigenous rights, are to be treated seriously. In many respects, impact assessment and regulatory processes are already streamlined to the point of ineffectiveness. While they could certainly be improved and made more responsive, the objective should surely be coherent, rigorous, effective, and efficient processes, not quicker approvals – even if that is one outcome of, for example, improved capacity within government agencies and host communities alike.

Support for the Strategic Innovation Fund could be a sound investment, but needs to be carefully deployed to avoid supporting or investing in projects and technologies that are "bridges to nowhere" – that is, serve as partial strategies to decarbonisation but do not lead to deeper decarbonisation or actually divert from or impede strategies for deeper decarbonisation.

Support for northern regulatory processes is welcome but needs to be matched by ongoing investment in scientific and regulatory capacity across federal departments and agencies to be able to provide more effective support to both impact assessment processes and regulatory enforcement.

Support for a Critical Minerals Centre of Excellence would seem to be merely an extension of the ineffective and duplicative Major Projects Management Office. Federal departments and agencies should be responsible for ensuring that their own programs and processes are navigable, and if there are gaps in policy coherence, those departments and agencies should be able to coordinate policy and program development and implementation from the ministerial level down. Adding another office and more bureaucracy seems like a false solution.

3. Build sustainable infrastructure

Great care needs to be taken in determining what is sustainable, but fortunately the frameworks for doing so already exist within the *Impact Assessment Act* and only require the development of criteria to help make such determinations, for example in terms of energy and materials invested vs. savings over time, optimised impacts and trade-offs (greatest positive impacts and minimal negative impacts), etc.

4. Advance Indigenous reconciliation

This is a crucial element and has to be central to this strategy. As mentioned above, Canada has committed to implement the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) as well as to follow up on the Calls to Action of the Truth and Reconciliation Commission and the recommendations of the Murdered and Missing Indigenous Women and Girls Inquiry. Respect for Indigenous authorities and legal orders to co-manage natural resources, and meaningful commitment to Free, Prior, and Informed Consent (FPIC), will be critical. This can be done through Indigenous-led processes for the planning, assessment, and monitoring of resource extraction projects, or by governments co-developing and co-implementing such processes with Indigenous authorities.

Please note that in reference to Indigenous peoples, the “I” is capitalized.

5. Grow a diverse workforce and prosperous communities

Especially in the extractive sector, this is a challenge, but an important one to meet. Strenuous efforts are required to analyse and minimise the gendered impacts of extractive projects, and to build inclusive and affirmative workspaces. Again, effectively responding to and implementing the recommendations made in the Murdered and Missing Indigenous Women and Girls Inquiry is key here, particularly as it relates to ‘man camps’. Addressing systemic issues of sexual violence within the mining workforce is key to any efforts at workforce diversification. It is important to find and implement mechanisms to ensure that such projects contribute to communities beyond sponsorships and salaries, and contribute to business development and diversification as well as durable social and physical infrastructure.

6. Strengthen global leadership and security

This theme does not clearly distinguish the specific areas of focus that it seems to be addressing. Strategies need to be developed to specifically address the dynamics of domestic production for domestic use in “home-shored” value chains, domestic production for export, and imported materials for processing and subsequent re-export (like aluminum) or domestic value chains. The activities of Canadian companies globally are a completely different issue that intersects only coincidentally where products mined elsewhere by a Canadian company happen to be imported into

Canada, and with the overwhelming focus of Canada's global mining presence being on gold, that's not particularly relevant.

Drive Research, Innovation, and Exploration

What are priority areas for research programs (academia, industry, governments)?

Research and innovation – public and private – are badly needed to support increased energy and material efficiency and reduced demands, both through the entire cycle of material use and in the organisation of production and work, transportation of goods and people, end use and consumption, and recycling and circularity. Innovation must be directed towards bringing our collective environmental footprint back within planetary boundaries.

What more should be done to drive critical mineral exploration and innovation?

Mineral exploration is essentially speculative and will respond to market signals, with or without public subsidies. Since such supports are difficult or impossible to link to the desired results, they are essentially just a giveaway to investors, subsidizing speculation and incentivizing exploration activity regardless of its actual prospects and impacts. They are a poor investment of public money.

Accelerate Project Development

How can we streamline the regulatory processes to better facilitate project development?

First, it is important to clarify what is being discussed here. It seems that "the regulatory processes" include impact assessment as well as actual regulation and enforcement. Impact assessment is a planning tool, meant to inform and facilitate decision-making. While it should have close links to regulatory requirements and regulatory agencies, it functions very poorly when treated as a regulatory process.

To say that "domestic projects are also subject to rigorous regulatory assessments to meet Canada's reputable ESG standards" is false on both fronts. Regulatory assessments (assuming this to mean impact assessment processes) apply only to some projects, and they can hardly be called rigorous when their processes and scope are so constrained and predetermined.

Project development is principally delayed on account of finances, as proponents seek financial backing in the face of volatile markets. Government may be reluctant to "choose winners and losers" in any field, but if it is serious about a critical minerals strategy, it should be able to invest directly in strategic projects – subject to the most rigorous scrutiny and assessment processes, of course, to prevent politicised decisions and avoid boondoggle investments.

There is a widely-promoted fallacy that "good" extractive projects are being held up by onerous and lengthy assessment processes. Leaving aside the question of what makes a project "good" or how that determination is to be made in the absence of meaningful engagement with affected communities and relevant experts as well as the appropriate negotiation with Indigenous authorities, this is empirically

false.[3] A 2019 C.D. Howe Institute study[4] found that most delays in assessment processes are on the proponent's clock – years, and even decades – often as they wait for market or financial conditions to improve or try to overcome local opposition. Delays are also often due to a simple lack of preparedness as proponents present inadequate studies and plans, which they have to repeatedly supplement and resubmit. The same study also showed that the most problematic projects, those found to have significant adverse environmental effects, and especially those that were ultimately turned down, were subject to longer reviews, arguably demonstrating an appropriately higher level of scrutiny. Meanwhile, a significant number of mining projects are not even required to undergo assessment. In Ontario there is no such requirement at all.

At the same time, putting the public and government agencies under arbitrary and restricted time limits severely diminishes the quality of their participation, producing poorer contributions and even, ironically, delaying assessment processes as proponents and intervenors must respond to overly vague or inappropriate guidelines. The best way to accelerate such processes is to build the capacity of all parties to participate effectively, which requires a more generalised and longer-term approach across the board, ahead of potential projects actually being proposed. Land use planning and regional development plans can also serve to streamline subsequent project proposals to the extent that they can build knowledge and build consensus and clarity about the conditions and appropriate locations for industrial development.

Build Sustainable Infrastructure

What regional infrastructure gaps must be addressed (e.g., transportation and clean energy) to enable the sustainable development of Canada's critical mineral resources?

Non-renewable resource extraction is not "sustainable," by definition. It removes resources that future generations would otherwise have access to. Therefore, any infrastructure to support extractive development can only contribute to sustainability if it is making a larger contribution to human development and the quality of life in remote communities, for example, than to the profitability of a mining project.

Advance Indigenous Reconciliation

How can Indigenous governments and organizations, communities, and individuals partner and participate in critical mineral value chains (including regulatory processes)? How can government and non-Indigenous industry proponents support this effort?

These are important questions, but they are secondary to the central question that the discussion paper does not acknowledge, which is how the extractive sector can respect and recognise Indigenous and Treaty rights on Indigenous territories, including respecting and supporting Indigenous authorities and Indigenous protocols and legal orders. It is not realistic to discuss partnerships with communities whose basic needs for healthcare, nutrition, education, housing, and even clean water are neglected. It is also

[3] Derrick Tupper de Kerckhove, Charles Kenneth Minns, and Brian John Shuter. The length of environmental review in Canada under the Fisheries Act. Canadian Journal of Fisheries and Aquatic Sciences. March 11, 2013. https://cdnsciencepub.com/doi/10.1139/cjfas-2012-0411

[4] Grant Bishop and Grant Sprague. A Crisis of Our Own Making: Prospects for Major Natural Resource Projects in Canada. C.D. Howe Institute. February 21, 2019. https://www.cdhowe.org/public-policy-research/crisis-our-own-making-prospects-major-natural-resource-projects-canada

absurd – and an abdication of the federal government's responsibility to rectify that neglect – to leave it up to industry and industrial development to fill those gaps by offering employment, procurement contracts, and benefit-sharing when communities are too stressed to exercise internal decision-making processes or engage meaningfully in external processes or negotiations.

Once the conditions of colonial deprivation have been addressed, or where they are less oppressive, then initiatives to build community and institutional capacity will be beneficial to all parties.

Grow a Diverse Workforce and Prosperous Communities

How do we leverage critical minerals investment into more diverse skills training, employment, and regional outcomes, including for local, rural, and Indigenous communities?

The proposed measures are promising. However, there also needs to be an emphasis on the conditions of work if the sector is to replenish and diversify its workforce. Training people is great but unless operators can ensure that they do not tolerate violence and are actively working against racism, gender discrimination, and any other form of discrimination, then that work will not be attractive to a diverse workforce. Governments can support industry in this regard and should work to better enforce labour and workplace protections. But industry also must assume responsibility.

Strengthen Global Leadership and Security

How might the Government work with its partners and stakeholders so that greater value is placed on high ESG standards throughout the value chain?

Canadians like to think of this country as a leader in ethical and responsible business that is well-regulated and respects human rights and the environment, and the Canadian government and Canadian corporations ardently promote this image. Like all stereotypes, this image is built around elements of truth. Canada is better off than many other countries in technical ability and regulatory development (if not enforcement). However, there are serious flaws in environmental, social, and corporate governance – evinced by regulatory failures such as the Mount Polley disaster, for which Imperial Metals has never been charged – conflicts with Indigenous peoples, lax corporate disclosure requirements, and ineffective anti-fraud and anti-corruption enforcement.

Aside from the *Corruption of Foreign Public Officials Act*, no current Canadian laws restrict the activities of Canadian corporations internationally; instead, the Canadian government goes to great lengths to support the overseas activities of Canadian companies with no discernible conditions or restrictions. Human rights are supposed to be protected and promoted through the federal government's new policy *Responsible Business Conduct Abroad: Canada's Strategy for the Future.* But this only perpetuates the ineffective policy of expecting Canadian companies to respect the law wherever they operate. It does not provide any support to other governments in enforcing those laws, nor sanctions companies that act illegally. It does not withdraw political and financial support, nor does it provide any restitution or access to justice for those harmed by the actions of Canadian companies. As noted earlier, as shameful as this is, it's not actually relevant to a discussion of Canada's critical minerals strategy, as these companies' production is not integrated with Canadian industry or value chains and, for a variety of reasons, is unlikely to be in the future.

Canada does have an opportunity to be a leader in attracting ESG investment and promoting high ESG standards by taking advantage of its potential to overcome its regulatory and governance gaps and

deficits. For example, both the Canadian government and some territories and provinces have made significant advances in areas like ensuring that financial securities are in place for mine site clean-up, or identifying, assessing, and remediating orphaned and abandoned mines and related public health and environmental liabilities. More work is needed in all these areas, but they present strong evidence of what can be done by developing and enforcing better regulations and committing public resources where necessary and appropriate. Likewise, Canada's experience in co-management of natural resources with Indigenous peoples under comprehensive land claim agreements can be used to build on the positive and learn from the negative aspects – but meeting Canada's commitment to the UNDRIP and its FPIC standard will require significant work with Indigenous peoples to co-develop the appropriate decision-making and management processes. At the same time, issues like mine waste and tailings dam safety need to be addressed much more rigorously to meet the stringent protective requirements described in the *Safety First Guidelines for Responsible Mine Tailings Management*.[5] Finally, corporate disclosure rules need to be strengthened – and enforced – for the protection of investors and other stakeholders alike.

All of this can only be achieved with the cooperation and collaboration of all parties: industry, Indigenous governments, civil society, and all levels of government. However, the federal government must take the lead, setting standards and putting policy into law and regulation where it has the authority to do so, not relying on incentives, voluntary measures, and self-regulation; and making the needed investments in community and institutional capacity to bring credibility to claims of good environmental, social, and corporate governance.

Conclusion

The challenge of meeting the climate crisis is too pressing and too profound for half measures. We welcome the clear thinking and solid commitments that are evident in parts of the discussion paper, and we look forward to building on them to fill the gaps and develop a more comprehensive and truly effective strategy.

[5] Earthworks and MiningWatch Canada. Safety First Guidelines for Responsible Mine Tailings Management, second revision. May 31, 2022. https://miningwatch.ca/safety-first