

Mr. Nick Head-Petersen
Ministry of Energy, Northern Development and Mines,
Mines and Minerals Division, Strategic Services Branch
2nd Floor, 933 Ramsay Lake Road
Sudbury, ON P3E 6B5

Dear Mr. Head-Petersen:

Thank you for the opportunity to comment on the Province's draft Critical Minerals Strategy. We applaud the Government of Ontario for creating a Critical Minerals Strategy. In today's economy, critical minerals are becoming highly sought-after commodities. Ontario has an abundance of mineral wealth, positioning the province well to greatly benefit from this global demand. Without a proper strategy, though, this natural wealth could be squandered.

Background on King & Benton

King & Benton Regeneration Inc. is a brownfield developer with has successfully completed 21 brownfield redevelopment projects in its 25-year history. With a proven track record of acquiring and redeveloping brownfield sites, King & Benton has been at the forefront of the circular economy for over 2 decades.

Our particular interest in the Critical Minerals Strategy comes from King & Benton's acquisition of a decommissioned industrial site located at 65 Canal Bank Street in Welland, which for nearly 100 years, manufactured synthetic graphite. This site contains an industrial landfill, in which was deposited scrap, rejected and off-spec synthetic graphite.

As a result of the high-standard manufacturing legacy of Ontario and of this site in particular, King & Benton is planning to recover high purity synthetic graphite to be used in the production of batteries for electric vehicles and other high technology. We conservatively estimate the site to contain 500,000 tonnes of high purity graphite – equivalent to over 11 million tonnes of mined graphite – which should supply enough graphite for 6 – 12 million electric vehicle (EV) batteries.

We believe our 'urban mining' project could well serve as an example for many other industrial resource recovery projects on both a micro- and a large-scale basis.

Further, we are confident that, with the appropriate regulatory, policy and other government support, the 2020s, '30s and '40s can be decades of prosperity in the Niagara region, built off the legacy of the same minerals and manufacturing prowess that provided good jobs and wealth in the 1920s, '30s and '40s.

Strategy Objectives

We support the vision behind Ontario's strategy – to generate investment and increase Ontario's competitiveness in the global market, while supporting the transition to a cleaner, sustainable global economy. We believe the objectives set out in the discussion paper will support this vision. Our main caution, though, is that the commentary supporting these objectives and the strategy in general is almost completely focused on mining. As evidenced by our project in Welland, there is significant potential in resource recovery, or 'urban mining,' projects. Such projects have the benefit of likely getting the critical minerals to market quicker than would be the case where a new mining project comes online. And from an environmental perspective, resource recovery projects have the benefit not only of turning what was previously viewed as a waste product into a valuable material, but also of reducing the presence of waste generally and helping to clean the relevant lands.

We believe it is imperative the province's Critical Minerals Strategy significantly strengthens its focus on the potential of resource recovery projects in achieving its vision and attaining its objectives. An immense environmental and economic opportunity will be missed otherwise.

Ontario Critical Minerals List

Canada and more specifically Ontario has a vision of being a low-carbon economy with a strong clean technology sector. The critical minerals identified are essential for renewable energy, clean technology applications and their manufacturing. Key to realizing this vision is developing a robust Ontario Critical Minerals Strategy.

Ontario has the opportunity to capitalize on its varied geology as a source of mineral resources and on its experience in the mining sector as an area of competitive advantage. A strong Ontario Critical Minerals Strategy and supporting implementation will set the stage to attract investment and industry by signalling Ontario's intentions to be a global leader and to become the supplier of choice for global markets.

As highlighted above, in considering the Critical Minerals Strategy, resource recovery projects building off Ontario's manufacturing legacy needs to also be considered in terms of the potential availability of these critical minerals.

A strong Critical Minerals Strategy sets the stage to protect the environment and to advance the leading science, engineering and innovation that support the relevant sectors, while providing socio-economic benefits for the province. Developing this strategy now is very timely because critical minerals, especially those used in EV battery technology have been identified as supporting economic recovery and competitiveness.

The Critical Minerals Framework Strategy should be consistent with *The Canadian Minerals and Metals Plan*. This Plan recognizes the value of a circular economy as part of a comprehensive mining strategy.

Mine waste from the past and landfills have been widely identified as a significant source of useful materials for today's economy. Mine waste is seen as a sustainable and responsible source of critical and strategic minerals while at the same time having the potential to reduce environmental liability from past mining efforts. Other provincial plans like the *Québec Plan for the Development of Critical and Strategic Minerals 2020-2025* have identified recycling as a key component of their critical minerals strategy.

The Critical Minerals Framework Discussion Paper highlights an increasing demand for graphite, a key ingredient for EV battery technology, an area whose production is projected to experience exponential growth globally. As noted in the discussion paper, demand for battery raw materials, including graphite, presents an opportunity for Ontario.

The discussion paper also recognizes that Ontario has mineral development potential for graphite, but has no current mineral production. King & Benton's 65 Canal Bank Street site presents a significant opportunity for the Province as a result. Since this is a recovery project, rather than a mining one, the graphite on-site is available for manufacturing use immediately, rather than years from now. Ontario should include the site at 65 Canal Bank Street in Welland in Figure 1 (pg. 17 of the Paper) as a significant graphite deposit in development since it is a large historical stockpile of high purity synthetic graphite where we are finalizing plans for production. The Welland site's deposit means Ontario is "in the game" for the EV industry – it significantly advances Ontario's readiness to support a battery supply chain and does so well in advance of the sites already identified in that figure.

Regulatory and Policy Reform

Mining is an industry with a lot of history in Ontario. Ontario has worked hard to reduce the regulatory barriers for mineral exploration and development projects in a manner that maintains safety and protects the environment while recognizing Aboriginal and treaty rights. For example, the Ministry of Energy, Northern Development and Mines has been identified as the lead ministry for creating the One Window Co-ordination Protocol and the co-ordination of regulatory processes for provincial mineral exploration. In addition, the Province continues to explore policy, regulatory and legislative approaches to reduce regulatory burden and improve regulatory certainty for critical minerals mining exploration. These efforts help make Ontario more competitive for mining.

At the same time, regulatory barriers to reprocessing and repurposing mining waste or critical minerals waste has not received the same support or attention. Ontario needs to address the regulatory burden that resource recovery faces because the current process can make these projects non-viable from a commercial standpoint and generally creates a great deal of uncertainty. In addition, developers of these sites are left to navigate the roadblocks unaided by a co-ordinated process.

Resource recovery from waste should in fact be an easier process because it does not involve mining new sites and has the potential to address old environmental issues at landfills or old mining sites, while

still producing the economic benefit to the Province. As a caution, though, the regulatory framework for resource recovery projects needs to ensure it encourages processing and other value-added activities take place locally, rather than having a regime that makes shipping the recovered resource offshore for these economically valuable activities the most viable approach. Our experience is that current regulation effectively nudges actors to ship the recovered resource offshore.

Efforts to date at the Welland site, highlight the need for the government to establish a clear process for recovery from waste. This project will provide a tremendous amount of graphite to the global supply chain while also rehabilitating one of the oldest, most polluting, synthetic graphite sites in the world and return it to economically productive land. That said, the approach taken by the Ministry of Environment, Conservation and Parks makes exporting the recovered resource the easiest route. From the outset, the Ministry of Environment, Conservation and Parks (MECP) has treated the resources as 'waste,' rather than as a recoverable resource, which both the federal and Quebec governments do. More specifically, MECP views the recovered resource as 'waste' through primary, secondary and tertiary/upgrading until it is ready to be reconfigured as a final product, regardless of its economic value. As such, it requires the upgrading/refinement to be done in the context of a managed waste stream, with waste management systems approvals and waste approvals for all the processing equipment, adding significant administrative red tape and unnecessary regulatory burdens.

Supply Chain and Manufacturing Opportunities

The discussion paper acknowledges that processing capacity is needed for Ontario's critical resources to fully contribute to the global supply chain. A lack of processing capacity and a regulatory burden to domestic processing will incentivise the exporting of Canadian resources without fully capitalizing on the economic development and job creation opportunities they present. It will also hurt Ontario's ability to support economic initiatives that will use these products. Invest in Ontario should support foreign direct investment related to critical minerals and processing across the whole province, not only in Northern Ontario.

Ontario should ensure that the labour market has the skills needed to support the processing of critical minerals. Ontario could facilitate this by helping to establish micro-credential or college programs to support this sector.

The Province has already created a well-established mining innovation sector that is a collaboration between different levels of government, academic institutions, researchers and commercialization entities. A similar collaboration should be created to support research and development for processing innovation and for areas that will advance the technology across the supply chain, like electric battery storage. This will build on the scientific expertise Ontario has, while facilitating new intellectual property that can help Ontario remain competitive in the global economy.

Ontario is already known for having a strong automotive industry, strong manufacturing base and a highly skilled workforce. The Ontario government has recently invested in retooling Ford Canada's Oakville Assembly Complex and in the General Motors Co's CAMI manufacturing plant for the production of EVs. Future support from both the federal and Ontario governments are needed to secure processing capacity and to build an EV battery supply chain. This type of support would allow Ontario to capitalize on these automotive investments more fully. Ontario should follow Quebec's lead – they have taken their Critical Minerals strategy one step further and have created a Québec battery sector development strategy to signal their continuity in support across the supply chain to both the global economy and potential investors.

Summary

In summary, a well-developed Critical Minerals Strategy is needed that supports resource recovery, resource exploration and the down-stream supply chain, including processing, to make Ontario a leader in critical minerals and to keep Ontario's competitive position in the manufacturing industries, like the automotive sector, that are coming to rely on these resources.

Sincerely,



Steve Charest
CEO