

CAMECO CORPORATION

Comments on the Ontario government's Critical Minerals Framework Discussion Paper

May 3, 2021

INTRODUCTION

Critical minerals and the supply chains that transform them into valuable commodities have the potential to be key components of Ontario's economy. The development of an Ontario Critical Minerals Framework provides an opportunity to define roles and identify opportunities to capitalize on the province's potential as both a responsible source of critical minerals and a home to the supply chains that can supply global markets with secure, low-carbon electricity, communications and transportation inputs and technologies.

Cameco is very pleased to see that uranium is included on Ontario's critical mineral list under the category of *"Currently Processing Only"* as it recognizes that having deposits of critical minerals are not the only way to benefit from critical mineral supply chains. Headquartered in Saskatoon, Saskatchewan, Cameco is one of the world's largest producers of uranium for nuclear energy and is the world's largest publicly traded uranium company. We are uniquely situated with operations across the nuclear fuel cycle, including in mining, refining, conversion, and fuel manufacturing.

The majority of Cameco's operations are located in Saskatchewan and Ontario, and our total Canadian workforce stands at nearly 2,100 employees and long-term contractors. We are also proud to be one of Canada's largest industrial employer of Indigenous people. In Ontario, Cameco operates the world's largest commercial uranium refinery in Blind River, the only uranium conversion facility in Canada located in Port Hope and is the leading supplier of CANDU fuel assemblies and reactor components from our Cameco Fuel Manufacturing Inc. (CFM) facilities in both Port Hope and Cobourg. We note that our CFM facilities were not included in the list of Ontario Smelters & Refineries for Metal Mines on page 11 of the discussion paper and recommend that they be added. Cameco supplies uranium as nuclear fuel to both Ontario Power Generation (OPG) and Bruce Power and is a major supplier of components for the nuclear refurbishments that are currently underway in Ontario.

Cameco is a proud and important part of Canada's nuclear and critical mineral supply chains that deliver reliable, emissions-free electricity in Ontario, New Brunswick and around the world.

Canada's uranium and nuclear fuel sectors can play a significant role in underpinning economic recovery and the transition to net-zero emissions by providing highly skilled, well-paying jobs; serving as a leader in Indigenous employment and business development; engaging suppliers in a wide range of skilled trades and expertise; and stimulating innovation in a variety of nuclear disciplines including small modular reactors (SMRs).

URANIUM IS A CRITICAL MINERAL

Given that significant components of the global uranium and nuclear fuel cycle are already operating in Ontario and contributing to the province's critical minerals objectives, uranium must stay on Ontario's critical minerals list.

Cameco cannot stress enough that uranium is a critical mineral commodity. Given the significant role that uranium plays in fueling zero-emission electricity in Ontario, and around the world, and that a major portion of the nuclear fuel cycle is located in Ontario, we are pleased to see it on Ontario's critical minerals list even though uranium is not being actively mined in the province. Canadian uranium, and the Ontario-based nuclear fuel cycle, facilitate the generation of clean, affordable, carbon-free, baseload electricity that will power the transition to a low-carbon economy. Recognition that critical minerals supply chains are as important as the critical minerals themselves will position Ontario to take advantage of all aspects of this growing sector.

Many economic, energy and environmental policies being pursued in Canada and Ontario require critical minerals. Without access to these commodities, objectives related to net-zero emissions, electrification, electric vehicle and battery manufacturing will be challenging to meet. Cameco is also very pleased to see that Ontario's Critical Minerals Framework goes beyond rare earth elements that are usually associated with clean technology innovation, development and deployment. While rare earth elements are important, there are many other commodities and supply chains that are critical to Ontario's current and future economy.

OBJECTIVE 1: ENHANCING ECONOMIC DEVELOPMENT AND JOB CREATION IN ONTARIO AND SUPPORTING PARTNERSHIP OPPORTUNITIES FOR INDIGENOUS COMMUNITIES

Cameco has significant experience in working collaboratively with our Indigenous partners. Not only are we one of the largest industrial employers of Indigenous people in Canada, but also roughly 80% of the goods and services used at Cameco's mines and mills, totaling almost \$4 billion since 2004, are procured from northern Indigenous businesses operating in Saskatchewan.

As critical minerals become a more integral component of provincial economies, the success of critical mineral development in Ontario will depend on the long-term, positive partnerships and mutual trust that must be built by industry and the federal and provincial governments over time with Indigenous communities where critical mineral operations are likely to be located. Further development of a critical minerals sector in Ontario must recognize the importance of Indigenous partnerships throughout the supply chain and put in place procurement processes that do not disadvantage Indigenous-owned businesses.

Ontario's Critical Minerals Framework must create job opportunities for Indigenous resource sector workers and create the conditions that allow Indigenous entrepreneurs and businesses to support a growing industry. A strong and vibrant critical minerals sector in Ontario will lead to economic development and job creation in remote parts of the province, and in the service sectors (financial, engineering, environmental, etc.) that will support its growth. However, we want to stress that the work involved in developing opportunities and partnerships with Indigenous communities and businesses should not be seen to fall entirely or even primarily to industry, and that government should be playing a larger role than it has to date.

OBJECTIVE 2: REDUCING REGULATORY BARRIERS WHILE MAINTAINING PUBLIC HEALTH AND SAFETY AND RESPECTING THE ENVIRONMENT AND ABORIGINAL AND TREATY RIGHTS

A vibrant critical minerals sector in Ontario will not be possible without both regulatory and business certainty. Clear and streamlined regulatory, health, safety and environmental impact assessment processes that permit mines to be approved and supply chains to be created will help to re-establish Ontario's competitiveness and attract investment to the province's exploration and mining projects.

Ontario's resource wealth has long been a major contributor to the province's financial health, socio-economic well-being, and job creation efforts. The addition of critical minerals to Ontario's resource endowment will only enhance the resource sector's economic contributions and the province's reputation as a responsible resource developer that will meet the standards of ESG investors.

The nuclear industry is one of the most highly regulated industries in the world. In Canada, the nuclear industry is primarily federally regulated by the Canadian Nuclear Safety Commission; however, we must also comply with both federal and provincial environmental and occupational health and safety legislation. There is a growing regulatory burden in Canada, and certain efforts on the part of the federal government with respect to Indigenous reconciliation, such as Bill C-15 and Bill C-230, while laudable, threaten to undermine reconciliation efforts and investment in Canada's resource sector due to lack of clarity and consultation.

OBJECTIVE 3: ADVANCING ONTARIO'S POTENTIAL TO BECOME THE SUPPLIER OF CHOICE FOR CRITICAL MINERALS ON THE INTERNATIONAL STAGE

The success of Ontario's Critical Minerals Framework will be, to a significant extent, linked to the ability to responsibly and sustainably develop and export critical minerals and the valueadded products that use them.

Taking advantage of the global export market for critical minerals that are responsibly produced in a province with strong regulatory systems governed by rule of law will spur job creation and economic growth. Ontario, and the Ontario workers who will drive the critical minerals industry, would be very well-served by being viewed as the go-to supplier for the various critical mineral commodities needed around the world, and particularly in the United States, where access to critical minerals produced by a secure friend and ally is becoming increasingly important.

OBJECTIVE 4: INCREASING LOCAL SUPPLY CHAIN OPPORTUNITIES

A strong critical minerals sector in Ontario will likely result in the creation of new supply chains and/or the strengthening of existing ones to support a growing sector in Ontario and take advantage of international export opportunities. The Ontario nuclear industry provides a very good recent example.

The Ontario government's commitment to nuclear refurbishments at OPG and Bruce Power resulted in a fully engaged and expanding nuclear supply chain in the province. Similar results could be expected as the critical minerals sector ramps up production in Ontario. Another example of a supportive supply chain exists in the form of Cameco's operations in Ontario that enhance the value of uranium mined in Saskatchewan and turn it into nuclear fuel and manufactured fuel bundles. New opportunities also exist as the province considers deployment of small modular reactors to add to its low-emission electricity fleet.

These supply chains, combined with opportunities to manufacture electric vehicles and batteries using Ontario's reliable, emissions-free electricity mean that Ontario could play significant role in the transition to net-zero economy while providing highly skilled, well-paying natural resource and manufacturing jobs.

OBJECTIVE 5: ACCELERATING THE TRANSITION TO A LOW-CARBON ECONOMY

Delivering on the previous four objectives will position Ontario to make an even greater contribution to the transition to a low-carbon economy. Critical minerals are used in the production of low carbon technologies, renewable and nuclear energy applications. Ontario can play a leading role in supplying these industries and supporting the low-carbon transition through its approach to critical mineral development.

Ontario's Critical Minerals Framework must create the conditions where investment can flow to the sector, Ontario's competitiveness in the global market is maintained the transition to a cleaner, sustainable global economy is a smooth one.

CONCLUSION

Cameco is pleased to see that the Ontario Critical Minerals Framework Discussion Paper recognizes the role that supportive critical minerals supply chains play in maximizing the value of Ontario's and Canada's critical minerals. A robust provincial Critical Minerals Framework will maximize the contributions that critical minerals, including uranium, and their supply chains will make towards domestic and international goals of cleaner air, energy security and a low-carbon economy.

There are significant opportunities available to Ontario if it is willing to continue to work collaboratively with the federal government, other provincial partners and international allies to ensure supply chain security for critical minerals and to enhance cooperation on initiatives that address climate change.

In conclusion:

- 1. Uranium, and the nuclear fuel supply chain, are key components of Ontario's Critical Minerals Framework.
- Indigenous partnerships, employment and procurement with both industry and government will be important for the successful implementation of the Critical Minerals Framework.
- 3. Regulatory and business certainty will lead to increased competitiveness and create the conditions necessary for investments to flow into the critical minerals sector.
- 4. Ontario's Critical Minerals Framework must look beyond the province's borders to take advantage of the international demand for critical minerals and the value-added products that use them.
- 5. Critical minerals are the building blocks of the transition to a low-carbon economy.
- 6. We recommend that Cameco Fuel Manufacturing facilities be added to the list of Ontario Smelters & Refineries for Metal Mines on page 11 of the discussion paper.