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CANADA

STRENGTHENING CANADA'S RESILIENCE ON THE CRITICAL MINERAL FRONT

Report of the Standing Committee on National Defence

Charles Sousa, Chair

**OCTOBER 2026
45th PARLIAMENT, 1st SESSION**

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Report of the Standing Committee on National Defence

**Charles Sousa
Chair**

OCTOBER 2026

45th PARLIAMENT, 1st SESSION

NOTICE TO READER

Reports from committees presented to the House of Commons

Presenting a report to the House is the way a committee makes public its findings and recommendations on a particular topic. Substantive reports on a subject-matter study usually contain a synopsis of the testimony heard, the recommendations made by the committee, as well as the reasons for those recommendations.

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THE STANDING COMMITTEE ON NATIONAL DEFENCE

has the honour to present its

FOURTH REPORT

Pursuant to its mandate under Standing Order 108(2), the committee has studied the nexus between National Defence, National Security and Canada's critical minerals sector, and has agreed to report the following:

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LIST OF RECOMMENDATIONS

As a result of their deliberations committees may make recommendations which they include in their reports for the consideration of the House of Commons or the Government. Recommendations related to this study are listed below.

Recommendation 1

That the Government of Canada continue prioritizing domestic processing, refining, and midstream capacity for critical minerals as a strategic component of Canada's defence industrial base and allied supply-chain resilience. 34

Recommendation 2

That the Government of Canada use existing instruments to prioritize defence-critical mineral projects where targeted support can help advance commercially viable projects and strengthen Canadian and allied supply-chain resilience. 34

Recommendation 3

That the Government of Canada continue to strengthen domestic capacity across the critical minerals value chain, while deepening cooperation with NATO, the G7, and trusted allies to support resilient and diversified supply chains for defence-critical minerals, including through coordinated approaches to establish and maintain a critical minerals stockpile, as defined by NATO. 34

Recommendation 4

That the Government of Canada prioritize near-term opportunities to increase supply of defence-critical minerals, including brownfield expansions, mine-waste (tailings) recovery, and other lower-risk projects that can advance more quickly using existing infrastructure and community support, seeking to expand investment tax credits to mining recycling activities. 34

Recommendation 5

That the Government of Canada invest in research, commercialization, circular mining, and workforce development across the critical minerals and rare earth elements value chain, including in mineral processing, recycling, mine-waste recovery, and advanced materials for defence applications. 34

Recommendation 6

That the Government of Canada support strategic transportation, energy, and trade-enabling infrastructure development, particularly in northern and remote regions, to strengthen Canada’s long-term economic and security resilience and make Canadian-owned mines more attractive to investors. 35

Recommendation 7

That the Government of Canada work with industry, provinces and territories, Indigenous partners, and trusted allies to identify priority defence-critical minerals and assess, on a case-by-case basis, because strategic importance can vary significantly across different minerals, requiring tailored approaches, where Canada is best positioned to strengthen upstream, midstream, or downstream capacity. 35

Recommendation 8

That the Government of Canada, in partnership with industry, provinces and territories, Indigenous partners, and trusted allies, assess priority defence-critical minerals where domestic processing and refining are not currently commercially viable, and, where appropriate, use targeted public-private partnerships and regulatory frameworks to support the development of strategic domestic refining capacity essential to national security and supply-chain resilience, including in cases where market conditions alone do not support the required capabilities. 35

Recommendation 9

That the Government of Canada continue to strengthen its approach to foreign investment and strategic control in the critical minerals sector, ensuring that decisions affecting defence-critical mineral assets appropriately consider national security, economic resilience, and long-term sovereignty, building on approaches Canada has previously taken in strategically important sectors. 35

Recommendation 10

That the Government of Canada position itself as a cornerstone of NATO-critical mineral supply for Canada and its allies. 35

Recommendation 11

That the Government of Canada establish a clear and transparent methodology for identifying minerals essential to national security, defence, energy and digital transitions, and critical infrastructure and adopt a definition of “strategic minerals”; and that the Canadian critical minerals list (2021) be updated accordingly and reviewed every two years to reflect the latest scientific advances and geopolitical realities.

35

Recommendation 12

That the Government of Canada prioritize securing Canada’s domestic critical mineral needs first, before supplying NATO allies through our established agreements while ensuring sufficient domestic resilience and supply security and maintaining Canada’s reliability as an allied supplier.

36

Recommendation 13

That the Government of Canada seek agreements with other countries to secure minerals that Canada does not have.

36

Recommendation 14

That the Government of Canada use our critical minerals to strengthen Canada’s economic resilience, trade diversification and strategic partnerships.

36

Recommendation 15

That the Government of Canada advance economic reconciliation by enabling Indigenous and local communities to access equity stakes in major strategic mineral projects.

36

Recommendation 16

That the Government of Canada adopt a "one project, one review" model through mutual recognition agreements between governments to accelerate project approvals.

36

Recommendation 17

That the Government of Canada establish *Investment Canada Act* regulations that ensure that investments in the Canadian critical minerals sector made by foreign state-owned- or influenced enterprises from adversarial jurisdictions,

are subject to a national security review regardless of the value of the investment. 36

Recommendation 18

That the Government of Canada establishes mechanisms to protect Canadian intellectual property and critical mineral innovations. 36

Recommendation 19

That the Government of Canada establish structured collaboration between the Department of National Defence, Natural Resources Canada, industry, Indigenous partners, academia and mining stakeholders to align defence-critical minerals needs, logistics and technical expertise. 37



STRENGTHENING CANADA'S RESILIENCE ON THE CRITICAL MINERAL FRONT

INTRODUCTION

The strategic importance of critical minerals has amplified in recent years as countries compete to secure the materials that underpin advanced technologies in both civilian industries, such as energy and manufacturing, and the defence industry. Critical minerals are integral to a wide range of modern military capabilities, including munitions, aircraft and missile defence. As a result, “defence-critical minerals” – cobalt, gallium, germanium, graphite, lithium, nickel, rare earth elements and tungsten, among others – have become indispensable for maintaining military readiness and sustaining technological superiority.

As demand intensifies, ensuring reliable access to critical minerals is increasingly shaping national defence and security policy, as well as the dynamics among countries. Global dependence on the People's Republic of China (PRC) for the processing and refining of many defence-critical minerals has exposed vulnerabilities, prompting concerns about economic coercion and potential supply disruptions. Amid mounting geopolitical tensions, Canada and its allies recognize the imperative of strengthening cooperation to build critical mineral supply chains that are secure and resilient.

With diverse and abundant mineral supplies, as well as expanding processing capacity, Canada is positioning itself as a reliable supplier and producer of critical minerals. The growing alignment between the country's mining industry and its defence industry reflects an important shift: these resources can no longer be simply treated as commodities. They are strategic capabilities that are fundamental to Canada's national defence and economic prosperity.

On 16 September 2026, the House of Commons Standing Committee on National Defence (the Committee) adopted the following [motion](#):

pursuant to Standing Order 108(2), the committee undertake a study of no more than four meetings examining the nexus between national defence, national security, and Canada's critical minerals sector, specifically how secure access to critical minerals underpins Canada's defence capabilities, supports essential defence technologies, and strengthens strategic resilience and energy security; recognizing that



energy security is national security; that the committee pay particular attention to investments by the US Department of Defense, China and other foreign entities and their consequences; that the committee consider the possibility of supplying [North Atlantic Treaty Organization] NATO countries with strategic minerals; that the committee evaluate how critical mineral supply chains support Canada's defence industrial base, including the production and maintenance of advanced military technologies; that the committee also consider opportunities for enhanced domestic capacity and secure collaboration with trusted allies in support of national defence objectives; and that the committee report its findings to the House.

During four meetings held between 9 February and 23 March 2026, the Committee heard from 15 witnesses. They comprised Canadian federal and military officials, academics, industry representatives and other relevant parties. The Committee also received written briefs submitted by individuals and organizations.

This report summarizes comments made in appearances before the Committee or in a brief, as well as other relevant publicly available information. The first section provides an overview of Canada's critical minerals, as well as their defence applications. Situating critical minerals within the current geopolitical context, the second section discusses supply chain vulnerabilities for defence-critical minerals. The third section outlines a number of proposals aimed at strengthening the resilience of critical mineral supply chains. The final section of the report contains the Committee's conclusion and recommendations.

CANADA'S CRITICAL MINERALS: NATIONAL STRATEGIC ASSETS

Canada's critical minerals are vital to both its economic and national security. With important applications across a range of industries, and as core components of digital infrastructure, these minerals have become integral to many aspects of daily life in Canada and across the globe. They are also crucial to modern defence capabilities. Illustrating that Canada's immense potential regarding critical minerals represents a strategic advantage for the country, particularly for strengthening national defence and security, witnesses provided an overview of Canada's critical minerals and outlined their role in enabling defence capabilities.

Describing Canada's Critical Minerals

Witnesses acknowledged that Canada's vast natural resource endowment plays a central role in supporting economic growth and prosperity, and characterized the mining industry as a cornerstone of the country's economy. According to [Photinie Koutsavlis](#), the Mining Association of Canada's Vice-President of Economic Affairs and Climate Change, Canada's mining industry "contributed approximately \$117 billion to GDP [gross domestic product] in 2023, generated \$151 billion in exports, and directly and indirectly employ[ed] more than 700,000 Canadians. [The industry is also] the country's largest private sector employer of Indigenous peoples, by a proportional basis." Mentioning that Canada produces more than 60 minerals and metals, [Photinie Koutsavlis](#) added that Canadian capital markets list about 40% of the world's mining companies, making the country a "global hub for mining finance and expertise."

As well, witnesses explained that control over critical minerals is increasingly viewed as a source of national power and strategic influence. [Christopher Hernandez-Roy](#) – Deputy Director and Senior Fellow of the Americas Program at the Center for Strategic and International Studies – commented that, "[j]ust like coal and steel production in the 19th century, and perhaps oil in the 20th century, critical minerals are now keystones of national capabilities, alongside chip fabrication, aerospace and advanced manufacturing, information technology, artificial intelligence and energy." [Jeff Gaulin](#), Vale Base Metals' Vice-President of Corporate Affairs, asserted that "[c]ritical minerals are certainly an economic advantage for Canada. They attract investment, create jobs and spur regional development, but they also accelerate the energy transition and enable trade optionality. Today, critical minerals are a national strategic asset."

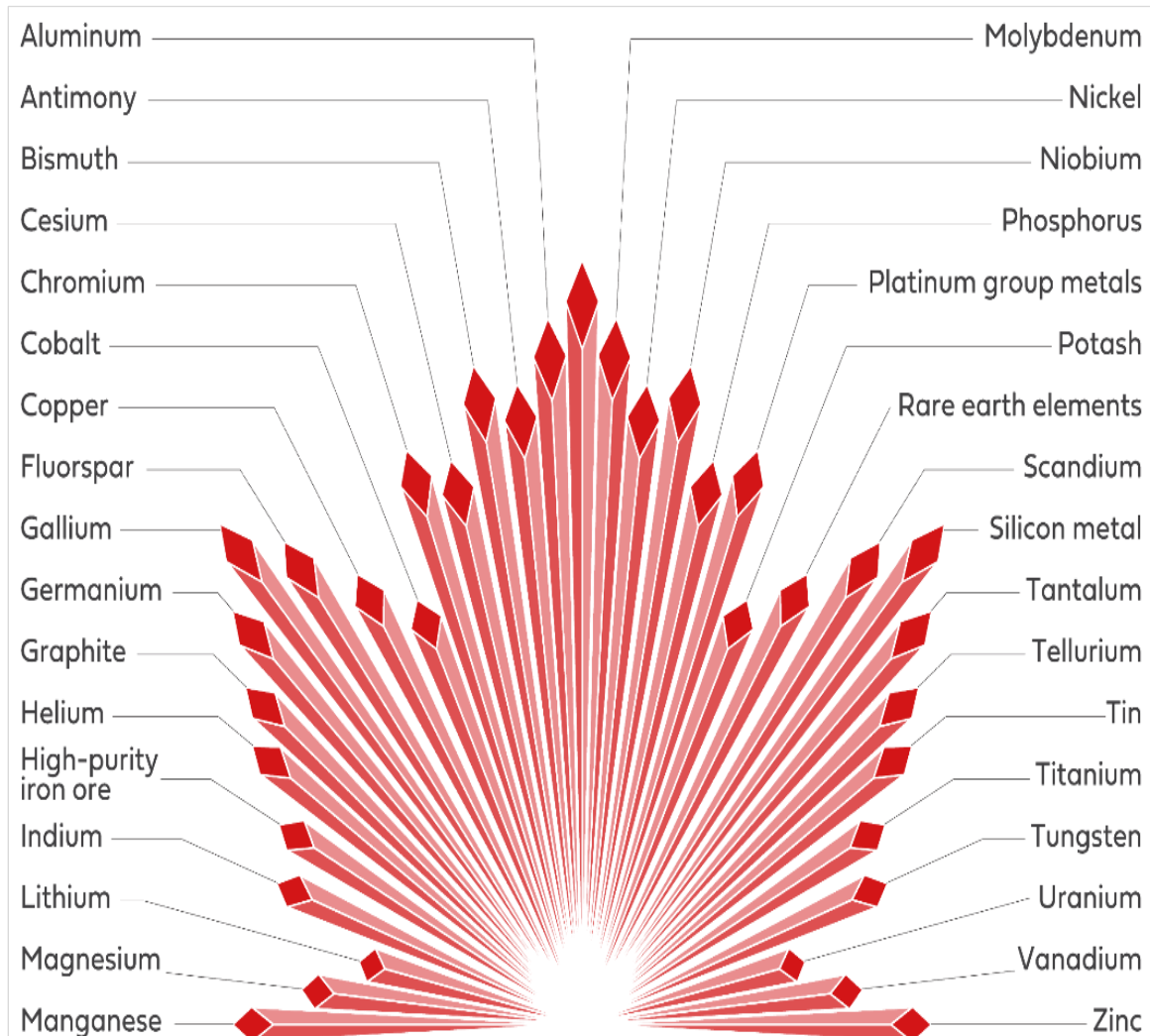
In 2022, the Government of Canada released [The Canadian Critical Minerals Strategy](#) (the Critical Minerals Strategy), which described critical minerals as a "generational opportunity" for Canada regarding mineral exploration, production, processing, downstream product manufacturing and recycling. Focused on the resources required for a global energy transition to low-carbon technologies and the digital economy, the Critical Minerals Strategy classifies a mineral as "critical" when at least one of the following three conditions is met:

- it is essential to the security of Canada's economy and its supply is under threat;
- it is required for Canada's national transition to a low-carbon economy;
- and, it is a sustainable source of highly strategic critical minerals for Canada's allies and partners.



Figure 1 identifies the 34 minerals that, as of 2025, Canada considers to be “critical.”¹ Figure 2 indicates, as of 2025, the locations of critical mineral mining projects, processing centres and advanced projects in Canada.

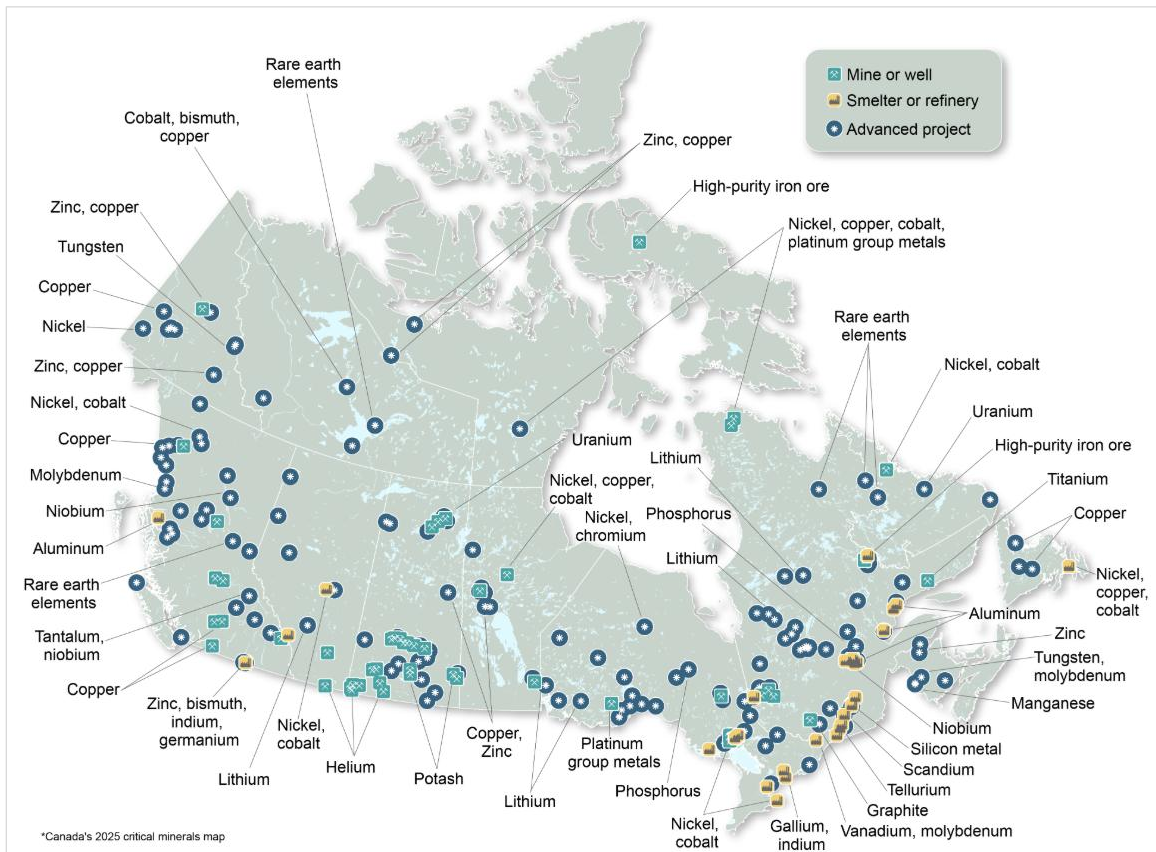
Figure 1—Canada’s 34 Critical Minerals, 2025



Source: Government of Canada, [Canada’s critical minerals](#).

¹ Currently, Canada considers 34 minerals to be “critical.” They include the 31 minerals from the [list released in 2022](#) as part of *The Canadian Critical Minerals Strategy*, as well as high-purity iron, phosphorus and silicon metal.

Figure 2—Locations of Canada's Critical Mineral Mining Projects, Processing Centres and Advanced Projects, 2025



Source: Government of Canada, [Canada's critical minerals](#).

Enabling Defence Capabilities

Characterizing the modern international security environment as increasingly shaped by hybrid tactics, electronic warfare, unmanned aerial systems, cyber capabilities, robotics and artificial intelligence (AI), witnesses highlighted the integral role of critical minerals in enabling next-generation defence capabilities. [Dr. Nadia Mykytczuk](#), Executive Director of Laurentian University's Goodman School of Mines, pointed out that "Canada's defence sovereignty is inseparable from its mineral sovereignty. Modern defence systems are fundamentally materials dependent." [Jeff Gaulin](#) asserted that "[n]o advanced military capability exists without secure access to critical minerals. These materials are not interchangeable. They are embedded in platforms that can last up to 40 years, and they are required for NATO interoperability."



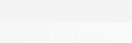
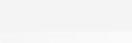
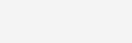
Witnesses indicated that critical minerals' distinct properties – such as conductivity, magnetism and strength – make these resources valuable inputs for modern military technologies that rely on electronic components, as well as enhanced endurance, versatility, precision and durability. [Jeff Gaulin](#) described critical minerals as “Arctic mission enablers,” and noted that cobalt, copper and nickel contribute to the development of defence capabilities – such as icebreakers, drones and AI systems – that are needed to operate in extreme Arctic conditions.

Similarly, [Dr. Mykytczuk](#) suggested that “[a]dvanced communications systems, aerospace sensors, autonomous systems and electrified military infrastructure all rely on secure access to critical minerals such as nickel, copper, cobalt and rare earth elements.”

[Isabella Chan](#) – Senior Assistant Deputy Minister, Lands and Minerals Sector at the Department of Natural Resources – said that, in addition to copper and nickel, modern munitions rely heavily on antimony, arsenic and tungsten. [Dr. Elizabeth Steyn](#), Associate Dean of Graduate Studies at the University of Calgary's Faculty of Law, drew attention to the importance of gallium and germanium for night-vision goggles, rare earth elements for ballistic weapons, and chromium, nickel and tungsten for hardened steel. In a [brief](#) submitted to the Committee, Cristina Pekarik – an economics and resource policy expert – detailed the wide range of defence applications supported by critical minerals.

As well, witnesses referred to NATO's [list of 12 defence-critical raw materials](#), which identifies the critical minerals that enable the Alliance's “technological edge,” as an indication of the critical minerals considered essential for defence manufacturing. [Isabella Chan](#) specified that the list comprises aluminium, beryllium, cobalt, gallium, germanium, graphite, lithium, manganese, platinum, rare earth elements, titanium and tungsten. Figure 3 illustrates some of the defence applications that rely on these materials.

Figure 3—NATO Defence-Critical Raw Materials Used in Selected Weapon Systems

		Aluminum	Beryllium	Cobalt	Gallium	Germanium	Graphite	Lithium	Manganese	Platinum	Rare Earth Elements*	Titanium	Tungsten
	Jet Fighter Aircraft	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Main Battle Tank	✓	✓	✓	—	✓	✓	—	✓	—	✓	✓	✓
	Missile	✓	—	✓	—	—	—	✓	—	—	✓	✓	✓
	Submarine	✓	—	✓	—	—	✓	✓	✓	✓	✓	✓	✓
	Frigate	✓	—	✓	—	—	✓	✓	✓	—	✓	✓	✓
	Artillery	✓	✓	—	—	✓	✓	—	—	—	✓	—	—
	Ammunition	✓	✓	—	—	✓	✓	—	—	—	✓	✓	—
	Torpedo	✓	—	—	—	—	—	✓	✓	—	—	—	—

* Rare Earth Elements include the following minerals: Cerium, Dysprosium, Erbium, Europium, Gadolinium, Holmium, Lanthanum, Lutetium, Neodymium, Praseodymium, Promethium, Samarium, Scandium, Terbium, Thulium, Ytterbium, and Yttrium.

Source: North Atlantic Treaty Organization (NATO), "[NATO Releases List of 12 Defence-Critical Raw Materials](#)," 11 December 2024.



Witnesses also noted that [*Security, Sovereignty and Prosperity: Canada's Defence Industrial Strategy*](#) (the Defence Industrial Strategy), which was released in February 2026, recognizes that secure supply chains for critical minerals are vital to operational readiness and Canada's sovereignty. [Wendy Hadwen](#), the Department of National Defence's Assistant Deputy Minister of Policy-Industry, suggested that the Defence Industrial Strategy will facilitate the identification of "minerals of advantage," as well as related investments "in getting them produced, processed and to market." In Wendy Hadwen's view, the Defence Industrial Strategy's supply chain security pillar, as well as its focus on sourcing critical minerals from within Canada, "will not only enhance our sovereignty, but provide economic benefits, including highly paid jobs, in communities and in regions across the country." Wendy Hadwen noted that the Defence Industrial Strategy signals that "the entire government ecosystem is orienting toward getting our products to market and putting the infrastructure in place."

Along with the Defence Industrial Strategy, witnesses highlighted some recent federal measures relating to critical mineral supply chains. [Isabella Chan](#) pointed to initiatives designed to strengthen such supply chains in support of "defence capability, operational readiness and national resilience." For instance, Isabella Chan observed that, "[i]n addition to close to the \$4 billion announced in 2022 to support the Critical Minerals Strategy, Budget 2025 also provided \$1.5 billion under the First and Last Mile Fund, complemented by the \$2-billion Critical Minerals Sovereign Fund to move projects to final investment decisions faster, increasing domestic production, diversifying supply chains and strengthening national security." According to Isabella Chan, Canada intends to develop its critical mineral supply chains so that it can "extract, process, manufacture and recycle critical minerals" while maximizing economic growth and employment.

In the opinion of witnesses, although Canada's mineral abundance offers significant potential to produce defence-critical minerals that contribute to national defence and allied capabilities, disruptions to critical mineral supply chains may hinder defence industrial capacity. As [Isabella Chan](#) cautioned, "resource endowment alone does not guarantee supply security." [Dr. Mykytczuk](#) underlined that "[d]omestic processing capability and innovative, integrated supply chains do."

DEFENCE-CRITICAL MINERALS: SOME SUPPLY CHAIN VULNERABILITIES

Given the centrality of critical minerals to operational readiness, protecting their supply chains is increasingly recognized as a matter of national security. However, the concentration of critical mineral production, processing and refining in certain regions around the world exposes Canada and its allies to various risks, such as supply chain

disruptions and market manipulation. In particular, the concentration of processing and refining capabilities in the PRC, combined with that country's demonstrated willingness to exercise coercive control over related technologies, has exposed defence supply chain vulnerabilities in many Western nations. Underscoring the dangers of this dependence, witnesses outlined predominant defence-critical mineral supply chain vulnerabilities: concentration risks, foreign investment and influence concerns, Arctic infrastructure deficits, barriers relating to the domestic mining industry, and alignment challenges between the mining industry and the defence industry.

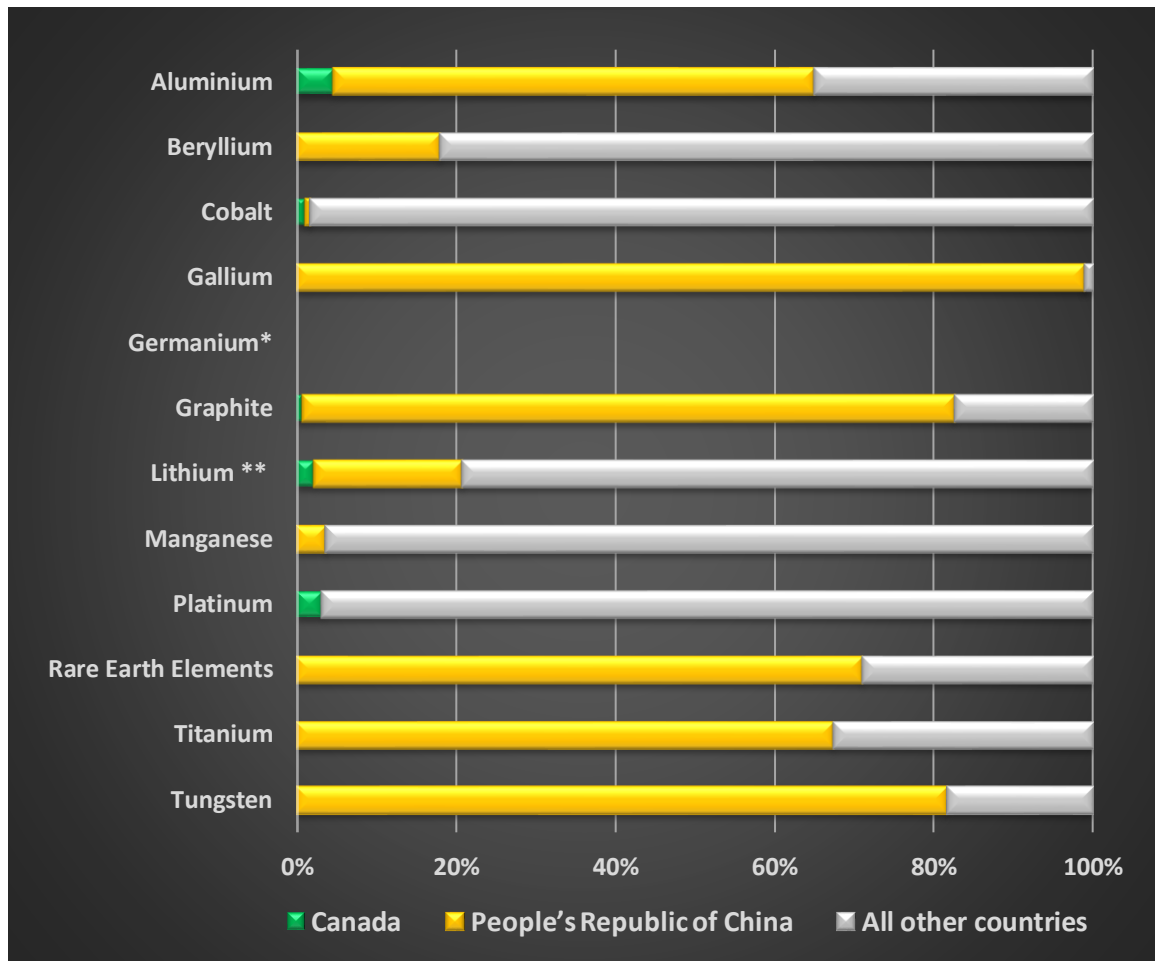
Identifying Concentration Risks

Control over each stage of a critical mineral's supply chain has become a significant determinant of economic and defence resilience; witnesses expressed concerns with the PRC's dominance of the production, processing and refining of many critical minerals, including those with strategic defence applications and limited substitutes.² [Photinie Koutsavlis](#) highlighted that the PRC controls 85% to 90% of the global supply of certain minerals that underpin advanced weapon systems. Figure 4 illustrates – for 2024 – the PRC's and Canada's share of global production of NATO's 12 defence-critical raw materials.

2 Following their extraction, critical minerals move through complex supply chains. Various treatment methods are used as the metals and minerals are processed and refined into precursors that become manufacturing inputs. See Government of Canada, [The Canadian Critical Minerals Strategy](#), 2022.



Figure 4—Production Shares of NATO Defence-Critical Raw Materials, 2024



Note: *According to the U.S. Geological Survey, "Germanium was known to have been processed or recycled commercially in only a few countries, including the United States, Belgium, Canada, China [the People's Republic of China], Germany, and Russia, with China being the leading producer of germanium. Because most producers do not publicly report germanium production, global production data were limited." See: U.S. Geological Survey, *Mineral Commodity Summaries 2026*, March 2026, p. 89. **Total lithium production excludes U.S. production. Data were withheld for proprietary purposes.

Source: Calculations based on U.S. Geological Survey, *Mineral Commodity Summaries 2026*, March 2026. Accessed in May 2026.

Witnesses outlined the vulnerabilities associated with relying on a single jurisdiction for strategic materials. [Christopher Hernandez-Roy](#) warned that "the threats to the supply chain are the real vulnerability," adding that the "heavy dependence on non-trusted or adversarial jurisdictions for mining, processing and refining is exposing defence

industries to geopolitical risk, trade disruptions and coercive leverage.” [Michael Gullo](#), the Business Council of Canada’s Vice-President of Policy, asserted that the risks to critical mineral supply chains “are increasing due to foreign price manipulation, export controls, rising military demands and limited inventories.” In [Michael Gullo’s](#) opinion, “NATO partners are currently over-reliant on China’s market dominance and powerful ability to exert export controls over inputs necessary for national defence purposes.” Characterizing Canada’s mineral processing capacity as a “strategic vulnerability,” [Dr. Mykytczuk](#) explained that “dependence on foreign-controlled processing exposes Canada and our allies to supply disruption, export controls and geopolitical pressure.”

Examining Foreign Investment, Ownership and Control

Witnesses discussed foreign investment in Canadian mining resources, particularly in the context of maintaining sovereign control over critical mineral supply chains, and cautioned that national security risks arise when Canada’s ability to scale defence-critical minerals rapidly is constrained. [Dr. Michael Byers](#) – Professor at the University of British Columbia – argued that the predominant concern for Canada is “whether we would be able to say no in the event that a foreign-owned mining company were to choose to ship that resource out of Canada, even if it were needed here,” such as rare earth elements for the production of fighter jets. To guard against such situations, [Dr. Steyn](#) proposed exercising “vigilance when it comes not only to Chinese investments but also to those by the U.S. Department of Defense, or Department of War, particularly when they come tied to 100% offtake agreements.”³

Moreover, when describing risks for Canada that could result from foreign investment in the country’s critical minerals sector, witnesses drew attention to the PRC’s mining activities in other countries. [Dr. Steyn](#) detailed the PRC’s “infrastructure-for-concessions model,” indicating that the country has used this model to acquire strategic control over mining operations and key infrastructure abroad, particularly in Africa and Latin America. [Christopher Hernandez-Roy](#) suggested that the PRC’s investments in electrical grids and ports in Peru could be leveraged to “restrict trade flows, not only within the region but also to North America. Potentially, they can be used for denial of area, operations or refuelling.”

Witnesses also commented on the vulnerability of Canadian firms to foreign influence. [Heather Exner-Pirot](#), the Macdonald-Laurier Institute’s Director of Energy, Natural

3 Offtake agreements are generally concluded between “fully operational mining companies looking to secure the sale of their mine output and buyers who are interested in satisfying their demand for a particular commodity, such as refiners, smelters or importers.” See Canadian Mining Journal, “[Offtake Agreements and Financing Mine Projects](#),” 1 June 2024.



Resources and Environment, asserted that small and junior mining operations in Canada – especially those with limited access to capital – could be particularly susceptible to foreign influence, with ownership stakes potentially exploited to serve broader strategic aims. For instance, Heather Exner-Pirot explained that, “if you had a project, for example in the Arctic, and there was Chinese influence, they could use their leverage to do monitoring or jamming or have some presence in the Arctic that might interfere, for example, with NORAD [North American Aerospace Defense Command].”

As well, witnesses raised concerns that companies may use complex corporate structures to obscure true ownership. [Christopher Hernandez-Roy](#) cited research that found “a number of copper companies in South America are held by other companies that are held by other companies that are, in fact, specifically designed to hide their Chinese ownership,” which is a situation that has become “a widespread practice.” [Rodrigue Turgeon](#), Mining Watch Canada’s National Program Co-Lead, called for increased clarity about the Government of Canada’s position on foreign ownership of critical minerals, and suggested that the Government should avoid “collaboration with foreign entities hostile to Canada’s actual security” by denying access to the country’s critical minerals. In a [brief](#) submitted to the Committee, Hudson Lester – the Northwest Territories and Nunavut Chamber of Mines’ General Manager for Nunavut – underscored the need to ensure “long-term strategic control” over Canada’s minerals, and emphasized that foreign investment must align “with national security objectives, Indigenous rights, and allied supply chains.” In the [brief](#), Hudson Lester also advocated for stronger screening processes to assess potential foreign influence, and identified key considerations, including access to geoscience and operational data, as well as control over ports, roads and logistics systems.

Moreover, witnesses referred to the Government of Canada’s authority, under the *Investment Canada Act*, to review investments proposed or made by state-owned enterprises and other foreign entities. [Photinie Koutsavlis](#) indicated that, through that statute, the Government has blocked and unwound investments, thereby making it “very clear that Chinese investment will find it very difficult to penetrate into Canadian mining companies.” [Christopher Hernandez-Roy](#) suggested that “minerals that are critical to our national well-being and certainly to our defence” should be safeguarded and “protected against any sort of foreign ownership, or at least reviewed against any foreign ownership.”

According to witnesses, the ongoing development of new *Investment Canada Act* regulations presents an opportunity to strengthen the statute’s application to Canada’s critical minerals sector. [Dr. Byers](#) commented that, through the *Investment Canada Act*, “[the Government of] Canada can stop a foreign investment and [can] also stop the

export of a product during a time of crisis.” However, Dr. Byers proposed that existing regulations should be amended to ensure that a “national security review [can] happen any time a foreign company wants to buy into [the] Canadian critical minerals [sector].” [Cristina Pekariuk](#) argued that the *Investment Canada Act*’s regulations should expand the definition of the term “sensitive sector” to include all foreign investments in “critical and strategic minerals” projects in order to automatically trigger a national security review and remove the investment thresholds that typically apply. Moreover, Cristina Pekariuk pointed to the inactive Beaver Brook antimony mine located in Newfoundland – which is PRC-owned – as an example of a situation in which foreign ownership is exercising coercive control over Canadian resources, and called for the *Investment Canada Act*’s regulations to address this “gap.”

Assessing Arctic Infrastructure Deficits

Critical minerals, geopolitics and defence converge sharply in Canada’s Northern and Arctic region, particularly in the context of increasing strategic competition and climate-driven access to the North’s vast resources. Emphasizing that dual-use infrastructure can strengthen defence readiness and deliver benefits to northern communities, [Jeff Gaulin](#) contended that “[n]orthern mining infrastructure is security infrastructure.” [Hudson Lester](#) affirmed that the “same infrastructure that enables mining, ports, roads, power systems, air access and communications is what allows Canada to operate securely in the North.”

Witnesses contended that, although mining is both costly and time-intensive throughout Canada, these challenges are compounded in the Arctic region. [Hudson Lester](#) remarked that, “at two to two and a half times the cost” and about a 14-year timeline, the cost associated with opening a mine in the North is “extreme.” In addition to “regulatory red tape,” Hudson Lester cited limited transportation, communication and energy infrastructure as major impediments to mining activity in the Arctic. [Hudson Lester](#) mentioned that a “North of 60” tax credit could help to offset the significant costs of developing and operating mines in Canada’s Northern and Arctic region. From [Dr. Byers](#)’ perspective, improved infrastructure – such as roads and ports – would attract greater mining investment to the Arctic, and two specific needs were specifically identified: an “all-weather road to Grays Bay in Nunavut”; and a “hydroelectric line to Baker Lake and Rankin Inlet.”

As well, witnesses highlighted limited energy infrastructure as a particular impediment to mining operations in Canada’s Northern and Arctic region. [Sean Boyd](#), Agnico Eagle Mines Limited’s Chair of the Board of Directors, said that mining companies in the region depend on a limited “two to three month barge season” during which all materials – including diesel, which is the region’s primary energy source – must be delivered. Given



the long distances between electricity generating facilities in Canada's North, [Heather Exner-Pirot](#) suggested that "[e]lectricity is maybe the main bottleneck to expanding northern mines right now." Asserting that "grid modernization" would improve "operational certainty" across the Arctic, [Hudson Lester](#) contended that such efforts "should be recognized as strategic resilience projects, not just regional economic development." That said, given the considerable costs of expanding transportation, energy, defence and mining infrastructure in the North, Hudson Lester recognized the importance of leveraging dual-use infrastructure to ensure that government, industry and communities benefit.

Witnesses referenced recent federal efforts to address long-standing Arctic infrastructure deficits. Recalling the Government of Canada's March 2026 announcement relating to federal spending in Canada's Arctic, [Wendy Hadwen](#) reported that the \$32 billion allocated to Forward Operating Locations "include[s] some infrastructure for airfields, hangars, ammunition and fuel facilities, buildings, equipment, warehousing, IT [information technology], general support and roads." Stressing the need to translate policy intentions into "real production," [Photinie Koutsavlis](#) acknowledged that the 2025 federal budget "supports dual-use infrastructure in northern and remote regions," thereby "strengthening logistics and supply chains that serve both economic and security objectives."

Moreover, witnesses drew attention to Arctic-related aspects of the Defence Industrial Strategy. While supportive of the strategy's emphasis on Arctic sovereignty, [Sean Boyd](#) suggested that "Canada's approach to Arctic defence must be part of a broader socio-economic strategy that understands sovereignty as being fundamentally about people, communities, the strength of communities and the opportunities that exist in communities." In Sean Boyd's view, achieving the appropriate balance between socioeconomic benefits and security objectives through spending on dual-use infrastructure in the Arctic is possible, but it will require "tremendous partnerships."

Outlining Barriers in Canada's Mining Industry

Witnesses underscored that long timelines for the development of new mining projects are a significant barrier for Canada's mining industry, with impacts on the country's critical mineral development and production. [Cristina Pekarik](#) described development timelines as a "binding constraint," explaining that – in Canada – the average time between discovering a mineral deposit and producing the mineral is between 15 and 16 years. According to Cristina Pekarik, when compared to major foreign competitors, the timeline in Canada is – on average – up to 26 months longer.

Another barrier that witnesses identified pertains to Canada's processing and refining capacity. [Dr. Mykytczuk](#) suggested that, in many cases, Canadian minerals are often exported for processing and refining before being imported into Canada as manufactured products or incorporated into advanced technologies. In [Photinie Koutsavlis'](#) opinion, "a lot of the defence-related critical minerals are actually found in the smelting and processing parts of the value chain." [Christopher Hernandez-Roy](#) said that processing and midstream capacity represents one of the most "acute bottlenecks" in critical mineral mining in Canada, and mentioned that developing critical mineral processing and refining capabilities takes time and often results in defence procurement timelines being missed. [Dr. Mykytczuk](#) argued that – from a national security perspective – domestic processing capabilities, as well as innovative and integrated supply chains, are vital.

Furthermore, witnesses commented that labour conflicts are a barrier for Canada's mining industry. [Michael Gullo](#) underscored the need to ensure that the country's critical mineral supply chains remain responsive to the needs of customers, and noted that labour disputes in the mining industry or the transportation sector can affect the reliability and security of those supply chains, as well as the ability to deliver goods in a timely manner. In Michael Gullo's view, Canada is among the Organisation for Economic Co-operation and Development's (OECD's) worst countries in days lost to labour disruptions. Providing an example, Michael Gullo noted that the 62 work stoppages in Canada's transportation sector in 2023 and 2024 combined, involving close to 20,000 employees, disrupted critical mineral supply chains.

Witnesses also highlighted financing constraints as a barrier for Canada's mining industry, and emphasized the extent to which defence-critical mineral projects are capital-intensive, involve advanced technologies and financial risks with public-sector and private-sector investments being essential for such projects. [Christopher Hernandez-Roy](#) explained that the U.S. *Defense Production Act's* (DPA's) Title III confers "grant-making authority to invest in critical mineral projects, mostly to get them off the ground in both the United States and Canada," and urged the Government of Canada to "establish its own version of a U.S. DPA Title III to co-invest in defence-critical minerals, signalling government commitment and encouraging private capital." [Photinie Koutsavlis](#) advocated the de-risking of mining projects in Canada, referred to the Critical Minerals Sovereign Fund as an "important program" in this regard, and proposed that "expanding the Canadian exploration expense to include technical and feasibility studies would help de-risk early-stage projects and strengthen the future pipeline of mines."

According to witnesses, Canada needs to mine more critical minerals and to do so more rapidly. [Jeff Gaulin](#) urged the country to move with "greater urgency" to extract critical minerals, arguing that "having minerals in the ground does not secure our future; only



producing them does.” In Jeff Gaulin’s opinion, Canada is currently not extracting enough minerals to keep its refineries competitive. Jeff Gaulin provided the example of Vale Base Metals in Sudbury, Ontario, which mined 80,000 tonnes of nickel within the last year but had to import 16,000 tonnes to make its refineries operate efficiently, with this situation arising despite Sudbury having the world’s second-largest nickel sulfide deposit.

Moreover, witnesses discussed a barrier relating to commercial standards and practices that vary across foreign jurisdictions. [Michael Gullo](#) suggested that Canada’s mining industry faces unfair competition from foreign producers that benefit from an “intentional, state-directed policy of overcapacity and oversupply,” as well as a lack of rigorous labour and environmental standards.

Aligning Mining Production and Defence Requirements

Witnesses focused on the alignment of the priorities and activities of Canada’s mining industry with those of the defence industry and its military, and identified the complexity and unpredictable nature of domestic and global defence markets as a significant challenge for the mining industry. [Christopher Hernandez-Roy](#) asserted that, although civilian demand for critical minerals continues to be the greatest influence on markets, the domestic and global defence markets’ demand for such minerals has been growing in recent years. That said, [Christopher Hernandez-Roy](#) also pointed out that defence markets do not always provide clear information about the specific minerals that defence companies need, the amounts of certain minerals that are required or the timelines that must be met. Moreover, Christopher Hernandez-Roy emphasized that the classification of some information, the complexity of defence procurement processes and the shifting nature of threat assessments also contribute to the unpredictability of defence markets.

Furthermore, witnesses discussed the impacts of the growing links between defence priorities and mining activities. [Christopher Hernandez-Roy](#) observed that these interconnections indicate that “miners are increasingly operating within a geopolitical, as well as a commercial, calculus.” As well, Christopher Hernandez-Roy drew attention to a lack of policy and regulatory alignment between Canada’s mining industry and both domestic and foreign defence clients. Explaining that defence procurement authorities, industrial policy agencies and mineral-related regulatory bodies in Canada and other jurisdictions often have different mandates, timelines and levels of tolerance for risk, Christopher Hernandez-Roy suggested that the existence of political consensus about the need to prioritize access to defence-critical minerals “does not automatically translate into faster permitting processes or clearer regulatory decisions.” Christopher Hernandez-Roy acknowledged that the “defence-driven strategic intent” to develop, build and procure new and more advanced defence technologies using critical minerals

has been “accelerating” worldwide, but cautioned that “the institutional, commercial and industrial mechanisms needed to translate that intent into predictable demand, bankable projects and resilient supply chains are still catching up.”

Witnesses also referred to the need to integrate defence research and development with the critical minerals sector to support domestic defence production. Recognizing that Canada has “ample supplies” of critical minerals, [Heather Exner-Pirot](#) asserted that the country has lost much of its expertise and knowledge regarding how to “translate raw materials into energetics, munitions and products needed for weapons.” Heather Exner-Pirot asserted that, over the last three decades, Canada has “shunned research for military purposes,” adding that – during that period – the Government of Canada “did not allow” financing for domestic defence companies, “lost internal government capability” in defence laboratories, and “precluded” the Natural Sciences and Engineering Research Council of Canada from funding research focused on offensive military technology. According to Heather Exner-Pirot, reinvesting in defence research and development would make Canada more self-sufficient and innovative in having its critical minerals used as production inputs in advanced weapons and military equipment, thereby creating a “more value-add capability in Canada in defence supply chains.”

CANADA'S CRITICAL MINERAL RESILIENCY: THE PATH FORWARD

Canada's abundant raw resources, coupled with its high environmental and governance standards, position the country to play a pivotal role in supporting multilateral efforts to diversify critical mineral supply chains while strengthening Canada's own resiliency. To support these efforts, witnesses encouraged Canada to: become a primary supplier of critical minerals to meet domestic and allied needs; adopt a “Canada first” approach to critical minerals; revise its definition of the term “critical minerals”; enhance its processing and refining capabilities; develop critical mineral stockpiles; recycle legacy waste and develop brownfields; invest in critical mineral research and development; build a mining workforce; streamline approval and regulatory processes; and embed Indigenous partnerships and environmental stewardship into critical mineral projects and related efforts.

Becoming a Primary Supplier to Meet Domestic and Allied Needs

Witnesses advocated deeper cooperation between Canada and trusted partners to reduce the country's reliance on the PRC for defence-critical minerals. According to [Photinie Koutsavlis](#), “[i]nternational cooperation can add real value when it helps reduce concentration risks and bring projects into production.” In [Michael Gullo's](#) view, partnering with “like-minded countries that share our values and our commitments” to



build resilient critical mineral supply chains can “mitigate the risks posed by [the PRC] and other foreign actors.”

As well, witnesses noted that Canada has strong potential to be a supplier of defence-critical raw materials to the other NATO countries. [Christopher Hernandez-Roy](#) suggested that Canada should position itself as “a cornerstone of national security and defence-critical mineral supply” for itself and for its allies. In particular, Christopher Hernandez-Roy emphasized that Canada has deposits of all of NATO’s 12 defence-critical raw materials that are considered essential for defence manufacturing, and added that the country is in “active production” of not only most of those minerals, but also other minerals that the U.S. Department of Defense and the European Union (EU) consider to be critical. [Isabella Chan](#) indicated that Canada is not currently mining three of the defence-critical raw materials on NATO’s list: beryllium, manganese and tungsten. At the same time, Isabella Chan pointed out that there are “two advanced projects” in the country regarding tungsten, and identified the capability to scale up production of cobalt, gallium and germanium. [Jeff Gaulin](#) claimed that “Canada is the only country that can reliably supply both the CAF [Canadian Armed Forces] and NATO with both nickel and cobalt, from mining to refining, inside a trusted, geopolitically aligned jurisdiction.” In [Heather Exner-Pirot’s](#) opinion, Canada’s defence policy should focus on targeted interventions in “manipulated” markets, such as the markets for minerals with important defence and industrial applications that the PRC has “intentionally monopolized,” such as gallium, germanium, graphite and rare earth elements.

Witnesses also focused on the benefits of expanding Canada’s international collaboration regarding critical minerals. [Christopher Hernandez-Roy](#) commented that deeper trade ties between Canada and the EU would “hedge against the effects of over-dependence when it becomes used as a tool of coercion.” [Michael Gullo](#) called for a whole-of-government approach to “unlock” Canada’s “immense potential” to become the “primary supplier” of critical minerals to the other NATO countries. In addition to NATO’s rearmament agenda, [Jeff Gaulin](#) highlighted European defence and security frameworks – such as the EU’s Security Action for Europe (SAFE) Instrument⁴ – as mechanisms that could be leveraged to capitalize on the EU’s potential as a destination for Canadian critical mineral exports.

4 The European Union’s (EU) [Security Action for Europe \(SAFE\) Instrument](#) is a €150 billion loan program managed by the European Commission to support and expedite defence procurement by EU member states. In February 2026, Canada was the first non-EU country to join the SAFE Instrument. The agreement between the Government of Canada and the EU allows Canadian defence companies to participate in EU defence procurement projects financed through the SAFE Instrument. See Global Affairs Canada, [“Agreement between the European Union and Canada concerning participation under the SAFE Instrument,”](#) February 2026.

Moreover, witnesses highlighted the extent to which international partners are looking to Canada to be a trusted source of critical minerals. [Wendy Hadwen](#) indicated that the NATO countries and such partners as Japan, South Korea and Ukraine “expect Canada not only to have potential but also to deliver scaled, reliable production that strengthens our collective resilience” concerning critical minerals. To meet allied demand for critical minerals and to respond to the most pressing vulnerabilities, [Christopher Hernandez-Roy](#) proposed an evaluation of Canada’s ability to increase production of certain defence-critical minerals and the identification of “where bottlenecks and choke points exist” in their supply chains.

Furthermore, witnesses pointed out recent initiatives that Canada and its allies have implemented to accelerate international cooperation on building resilient supply chains for critical minerals. [Photinie Koutsavlis](#) described two initiatives announced during Canada’s G7 presidency in 2025 – the [Critical Minerals Action Plan](#) and the [Critical Minerals Production Alliance](#) – as having “significant promise,” and elaborated that “the [G7] has begun operationalizing projects by coordinating public and private capital, securing offtake arrangements and reducing concentration risks across trusted partners.”

Referring to “56 new investments, partnerships and measures under the production alliance,” [Isabella Chan](#) suggested that Canada is positioning itself as a “trusted supplier” of critical minerals by working to understand allied demands, including for critical minerals dominated by the PRC. Isabella Chan highlighted two offtake arrangements into which the Government of Canada has recently entered: with Rio Tinto for scandium, a rare earth element that is “a key input into high-performance aluminum alloys for drones, missiles, and other advanced applications”; and with Nouveau Monde Graphite for graphite, a “key input in marine hulls and other structural components to enhance stealth capabilities.” As well, [Isabella Chan](#) referred to the [Global Partnership Initiative](#), which is as a mechanism that enables co-investments in projects and access to technologies available in other countries. In this regard, Isabella Chan noted that the initiative supported “the Focus Graphite project,” which allowed Canada to adopt Ukrainian technology for graphite purification.

Witnesses also drew attention to the issue of critical mineral resiliency in North America, and urged Canada and the United States to discuss this resiliency, including in the context of discussions about the *Canada–United States–Mexico Agreement*. [Michael Gullo](#) underscored that Canada can be a “serious supplier” to North American markets “across a number of different energy supply chains, inclusive of critical minerals, nuclear and uranium.” Proposing that “[m]inerals themselves could become a form of defence currency,” [Christopher Hernandez-Roy](#) described critical minerals as “one of the aces in Canada's hand when it comes to the United States.”



That said, witnesses cautioned that substantial domestic efforts are still required to build the resilience that Canada needs to meet its own demand for critical minerals and to supply allies in a reliable manner. [Heather Exner-Pirot](#) observed that “the number one thing” that Canada can do to build resilient supply chains for critical minerals “is to be more competitive so that our allies naturally want to buy from us.” [Michael Gullo](#) contended that Canada requires a new vision for exporting its goods, and emphasized that 60% of Canada's GDP relies on international trade. Noting that Canada's per capita spending on trade infrastructure lags behind that in such countries as Australia and Sweden, Michael Gullo encouraged Canada to develop a national trade infrastructure strategy that brings together all levels of government and the private sector, and that contains a plan for transforming trade “ambitions” into actions through more infrastructure spending.

Adopting a “Canada First” Approach

Although witnesses often asserted that Canada should become a “trusted supplier” of critical minerals to its allies, some also encouraged the country to meet its own needs before supplying those minerals to foreign countries. According to [Dr. Steyn](#), Canada's priority should be to meet domestic demand and then to provide critical minerals to the other NATO countries. Dr. Steyn recalled that, during the Second World War, Canada positioned itself as the world's largest supplier of minerals to meet the needs of its own armed forces first — and then those of its allies — and contended that Canada's approach should be similar today: focus on meeting its own needs first. In Dr. Steyn's view, Canada should do everything it can to ensure that its armed forces and its defence industry are supplied with all of the critical minerals they need so that the country can become more self-sufficient in developing military technologies, especially “now that we can no longer take U.S. protection or benevolence for granted.”

Acknowledging that Canada does not produce every critical mineral, witnesses encouraged the Government of Canada to work multilaterally to ensure that Canada can reliably access the minerals that the country does not have. [Dr. Steyn](#) proposed that Canada should “look to the global south for alliances” to secure such access.

Revising Canada's Definition of “Critical Minerals”

According to witnesses, Canada should consider revising its definition of the term “critical mineral” to account for shifting geopolitical realities and defence needs. [Dr. Steyn](#) claimed that, with the current definition, the geological potential to produce a mineral must exist in order for it to be considered a critical mineral. In Dr. Steyn's opinion, the definition should instead focus on minerals that are vital for “the energy transition, the digital

transition, critical infrastructure, agriculture, aerospace, advanced manufacturing, and, most importantly, national security and defence.” [Heather Exner-Pirot](#) agreed with the need to reconsider Canada’s definition, noting the existence of a “clear distinction among minerals that are important to the economy and trade, minerals that are important to electrification and minerals that are essential to defence and industrial processes but [that] have been intentionally monopolized by China.” In this context, [Dr. Steyn](#) suggested that “Canada needs to have a definition of not only critical minerals but also strategic minerals.” Dr. Steyn advocated the development of a “clear and transparent” methodology for identifying critical minerals in accordance with the latest scientific advances and called for revisions to Canada’s 2021 critical minerals list to reflect these advances.

Enhancing Processing and Refining Capabilities

Witnesses underscored the need to enhance Canada’s processing and refining capabilities in relation to critical minerals, arguing that doing so is essential to ensure the country’s self-sufficiency and to become a trusted supplier to the other NATO countries and additional partners. [Witnesses](#) noted that Canada produces or refines 10 of NATO’s 12 defence-critical raw materials, including aluminum, cobalt, germanium, graphite, lithium, platinum and titanium. Pointing to the Defence Industrial Strategy’s commitment to develop processing technologies, [Isabella Chan](#) stated that Canada is undertaking targeted spending designed to strengthen domestic processing and refining capabilities to support critical mineral supply chains. Isabella Chan also observed that, in addition to its “significant upstream resource base, Canada also has the potential to expand midstream and downstream capacity.”

As well, witnesses drew attention to the need to improve Canada’s refining technologies. [Christopher Hernandez-Roy](#) said that Canada is currently developing such technologies, and provided the example of a Kingston, Ontario, business whose proprietary technology enables rare earth elements to be refined in a way that – when compared to more traditional refining methods – is less harmful to the environment. In Christopher Hernandez-Roy’s view, such innovative technologies are beneficial not only for developing refining capabilities for rare earth elements in Canada, but also for developing “rare earth capacity that’s cleaner than anything that’s made in China.” In this context, Christopher Hernandez-Roy referred to the progress being made with the Saskatchewan Research Council’s rare earth elements facility, Rio Tinto’s scandium production plant in Quebec and Ucore Rare Metals’ Kingston, Ontario facility.



Developing Stockpiles

Witnesses emphasized the importance of stockpiles in building secure and stable supply chains for critical minerals. [Wendy Hadwen](#) referred to Canada's involvement in a "high visibility project at NATO" that is focused on stockpiling critical minerals for defence purposes.⁵ According to Wendy Hadwen, the project was launched in June 2025 to "help facilitate access to a sufficient supply of critical raw materials for defence, such as lithium, titanium and rare earth elements," as well as to "help make NATO less vulnerable to supply shocks and [to] reduce reliance on external providers."

Witnesses expressed concern that Canada does not currently have any stockpiles of critical minerals, and characterized the need to establish such stockpiles as an urgent priority. [Dr. Steyn](#) suggested that it is "quite shocking" that – unlike some other countries – Canada currently has no critical mineral stockpiles, and provided two comparisons: the United States recently announced a stockpile valued at \$12 billion and Australia's stockpile has a value of \$1.2 billion. In [Dr. Steyn's](#) opinion, the Government of Canada should "make haste with the establishment of the critical minerals stockpile that was announced in budget 2025." [Isabella Chan](#) indicated that "Canada is leveraging the Defence Production Act to stockpile critical minerals essential to defence applications and reduce supply risk." Moreover, [Michael Gullo](#) argued that Canada should create a "critical mineral reserve for niche metals" that are vital for defence purposes and for which there is "fragility in supply and market mechanisms."

Furthermore, witnesses highlighted the benefits of stockpiling critical minerals, although they had differing views about whether the Government of Canada should build and maintain critical mineral stockpiles or whether the private sector should do so. [Photinie Koutsavlis](#) said that such stockpiles could support projects through providing: "a set price to a company for the offtake of their product"; capital; investor confidence; and reduced risk. As well, Photinie Koutsavlis stated that government stockpiling of critical minerals would help Canada to develop reliable supply chains for its defence industry and would contribute to the amount of defence spending, thereby helping the country to meet its NATO defence expenditure target. However, recognizing that developing large government stockpiles could be expensive, [Christopher Hernandez-Roy](#) suggested

5 Canada participates in the North Atlantic Treaty Organization (NATO) Critical Minerals High Visibility Project, as part of the [Alliance's multinational capability cooperation](#) efforts. The project is "focused on the joint acquisition, storage, transportation and management of stockpiles of defence critical raw materials." See Government of Canada, "[Canada's Critical Mineral Strategy: Progress update](#)," 27 February 2026; and NATO, "[NATO Allies step up multinational capability delivery cooperation](#)," 24 June 2025.

that Canadian defence companies could have stockpiles for their own production, with federal tax incentives to “encourage private companies to stockpile.”

Witnesses also mentioned that stockpiling critical minerals in Canada could be complicated. However, [Heather Exner-Pirot](#) argued that a stockpile is “not the solution” for most critical minerals, explaining that a stockpile would both disrupt the normal functioning of the market and be too expensive and difficult to manage. Moreover, observing that Canada would be stockpiling some critical minerals that the country does not have the capability to process and refine, Heather Exner-Pirot proposed that Canada should focus on building its critical mineral processing and refining capacity in coordination with manufacturers and refiners, as well as with allies.

Recycling Legacy Waste and Developing Brownfield Mines

Witnesses asserted that the Government of Canada should both make investments in recycling legacy waste from existing mines and encourage “brownfield” mine development rather than opening new “greenfield” mines.⁶ [Dr. Steyn](#) encouraged Canada to invest in “circular mining” to extract critical minerals from abandoned mine tailings, or the residue of mining, to get “value from waste.” Indicating that Canada could recover significant quantities of minerals – including cadmium, rare earth elements and scandium – from those tailings, Dr. Steyn suggested that re-opening inoperative mines could be beneficial for Canada from an economic, energy transition and national security perspective. [Jeff Gaulin](#) contended that innovative new processing capabilities could enable Canada to extract more minerals from its waste rock and tailings, adding that there is “more value and more security to extract from today’s mines.”

Furthermore, witnesses argued that recycling legacy waste would help to strengthen Canada’s critical mineral supply chains. [Dr. Mykytczuk](#) asserted that Canada has more than 10,000 mine waste and tailings deposits, with these deposits containing recoverable amounts of cobalt, copper, nickel, rare earth elements and other critical minerals, and representing “significant elemental reserves” of critical minerals. Providing an example, Dr. Mykytczuk noted that legacy tailings located in Sudbury, Ontario are estimated to contain nickel valued at between \$8 billion and \$10 billion, adding that a similar situation also exists in relation to cobalt and copper in the Sudbury region.

6 In this context, brownfield development refers to extending the life and expanding the capacity of existing mine sites, as well as re-opening inoperative mine sites. It leverages established infrastructure, known geological data and permits, thereby offering faster returns and lower risk when compared to “greenfield” mining projects. Greenfield mining projects entail the development of new mines.



As well, witnesses commented on mine waste valorization.⁷ [Dr. Mykytczuk](#) argued that, from a national security perspective, this valorization should be “reframed as a latent strategic mineral reserve available for near-term development.” Furthermore, Dr. Mykytczuk highlighted some of the strategic advantages of valorizing mine waste: provide near-term domestic sources of critical minerals; have a cost that is lower than that associated with developing new mines; and reduce energy intensity. Acknowledging that the Government of Canada has started to realize the benefits of recycling legacy waste through such initiatives as Natural Resources Canada’s “mining value for waste” program,⁸ [Dr. Mykytczuk](#) claimed that more could be done to reinforce the national security importance of such recycling activities. Dr. Mykytczuk proposed that the Government should treat mine waste valorization as a “strategic reserve strategy” and “recognize mineral processing and recovery as sovereign defence capabilities.”

Moreover, witnesses focused on changes to federal tax measures that would support brownfield mine development. Highlighting the potential for such mines to help meet Canada’s critical mineral production and processing goals, [Photinie Koutsavlis](#) mentioned that – as currently structured – the “investment tax credit is of minimal value to brownfield expansions, because qualifying expenses are much reduced at an existing mine site.” [Jeff Gaulin](#) suggested that “[e]xpanding the investment tax credits to include mine development expenses for brownfield mines would be the fastest and most capital-efficient way to increase mineral output from existing mines, leveraging workers, infrastructure and equipment already in place.”

Investing in Research and Development

Witnesses encouraged the Government of Canada to invest in critical minerals–related research and development to accelerate defence innovation, and emphasized the need for new technologies to improve domestic production and refining capabilities for critical minerals. [Heather Exner-Pirot](#) suggested that investing in such research and development would make Canada more self-sufficient and innovative in using critical minerals in advanced weapons and military equipment, and would create “more value-add capability in Canada in defence supply chains.” Similarly, [Dr. Mykytczuk](#) advocated both investing in “secure university and applied research infrastructure

7 Mine waste valorization is the process of converting mining residues – such as tailings, slag and waste rock – into valuable products or resources.

8 This program focuses on re-processing mine tailings, slag and waste rock to recover cobalt, gold, nickel and other critical minerals.

supporting defence-relevant mineral innovation” and embedding “mineral and materials expertise within defence research advisory structures.”

As well, witnesses highlighted the role of universities and colleges in critical minerals–related research and development. [Dr. Mykytczuk](#) explained that these institutions conduct the “discovery research” that supports the development of new mineral recovery technologies, adding that they also “train the engineers, metallurgists, material scientists and skilled trades required for sovereign capability.” In Dr. Mykytczuk’s opinion, through operating “piloting facilities,” these institutions play an important role in “[moving] technologies from lab discovery to industrial deployment.” Dr. Mykytczuk claimed that Canada has “a strong and growing capability in metallurgy, mineral characterization, or AI applied to process optimization, technologies such as biomining, and cold region mining systems,” all of which “intersect directly” with defence priorities relating to critical minerals supply chain resilience, advanced materials and energy security.

Witnesses also commented on spending aimed at enhancing innovation in Canada’s mining industry. [Michael Gullo](#) encouraged the Government of Canada to undertake such spending, noting that leveraging critical minerals and other resources can both create a “generational opportunity” to guide technological progress and help Canada to move beyond exporting unprocessed commodities. Asserting that Canada’s innovation policies require a “shot in the arm,” Michael Gullo observed that Canada’s investments in mining research and development are among the lowest in the OECD countries. Michael Gullo added that Canadian research often is not commercialized, and noted that Canada holds only about 2% of the world’s mining patents, whereas China’s proportion exceeds 70%.

Moreover, witnesses proposed ways in which Canadian research and development, innovation and intellectual property relating to critical minerals could be protected. [Dr. Mykytczuk](#) urged the Government of Canada to “ensure [that] Canadian intellectual property arising from mineral innovation is protected within procurement and commercialization frameworks.” [Jim Balsillie](#), Founder of the Centre for International Governance Innovation, encouraged the Government to establish a sovereign patent pool for critical minerals–related research to ensure that the residual patent rights and intellectual property of Canadian companies remain in Canada and are not transferred to foreign countries if those companies are acquired by foreign entities. [Jim Balsillie](#) proposed that the Prime Minister’s Office or the Privy Council Office should establish an economic council or a secretariat with expertise in intellectual property, technological research, computing data and AI to set standards and strategies so that Canada can better compete with other countries in critical minerals–related innovation, as well as research and development, and protect its related intellectual property.



Witnesses also suggested that Canada should focus on new technological research relating to the extraction of critical minerals from legacy waste. [Dr. Steyn](#) commented that “there is a lot of research that still needs to go into the processing” of the country’s “vast reserves” of legacy waste. According to Dr. Steyn, the technology to extract minerals from legacy waste is still under development and requires additional research before it is perfected. [Jeff Gaulin](#) agreed, adding that the challenge is whether extracting minerals from mine tailings can be done “at scale and at [the] cost that a customer wants.”

Building a Mining Workforce

Recognizing that employees in Canada’s minerals industry play a crucial role in helping to supply domestic and foreign defence industries with the critical mineral inputs for manufacturing the weaponry and other military products that safeguard national defence and security, witnesses emphasized the need to ensure that these employees are appropriately educated and trained. [Dr. Mykytczuk](#) stressed the importance of universities and colleges in educating and training the industry’s workforce, including the engineers, metallurgists, material scientists and skilled trades workers that Canada needs in order to maintain a sovereign mining capability. According to Dr. Mykytczuk, “a strong defence industrial base is built not only on factories, laboratories and piloting facilities, but also on classrooms.” Dr. Mykytczuk proposed that the Government of Canada should “align critical minerals workforce development with the Canada Defence Skills Agenda” outlined in the Defence Industrial Strategy, which discusses the expansion and training of Canada’s defence sector workforce.

Witnesses focused specifically on the size of the critical minerals sector workforce. [Michael Gullo](#) suggested that the sector has an employee “deficit,” and emphasized the current difficulties experienced when attempting to attract the “right talent” to the sector. In Michael Gullo’s opinion, there is a need to “scale up” the sector’s workforce if Canada wants to produce and export more critical minerals in the coming years. [Sean Boyd](#) agreed that Canada will require more highly skilled workers to help increase the country’s output of critical minerals and to work on new mining projects, including in Canada’s North.

Streamlining Approval and Regulatory Processes

Witnesses emphasized the need to streamline approval and regulatory processes for critical mineral projects in order to meet certain goals: advance Canada’s critical minerals sector, expedite project timelines, and facilitate the delivery of critical minerals to domestic and foreign markets. [Michael Gullo](#) called on Canada to “ramp up” its ability to identify, approve and start critical mineral projects, pointing out that – according to a

recent report published by S&P Global⁹ – Canada currently has the world's third-longest lead time for mining projects. Noting that smelting and refining are essential for the resilience of critical mineral supply chains, Michael Gullo explained that “many of [Canada's] approval processes pre-empt new builds or even expansions and upgrades” of mining projects. In Michael Gullo's opinion, Canada's federal, provincial, territorial and municipal governments should collaboratively develop mutual recognition agreements that expedite mining projects through a “one project, one assessment” approach, with a project that is deemed to be essential for Canada and its allies' national security interests having streamlined approval and regulatory processes.

Moreover, witnesses underscored the advantages of streamlining approval and regulatory processes for critical mineral projects. [Sean Boyd](#) explained that overlapping approval processes and the sequential movement of files through various regulatory bodies are a challenge for the mining industry. In Sean Boyd's view, a more streamlined process – whereby files would be reviewed simultaneously by the various regulatory bodies – would help to accelerate approvals for critical mineral projects, thereby saving time and financial resources. [Isabella Chan](#) suggested that investors are seeking more timely approval processes and regulatory certainty. According to Isabella Chan, the Government of Canada is currently working with its provincial and territorial counterparts to develop a “one project, one review” process, with cooperative agreements between the Government of Canada and some provincial governments currently finalized and with work under way on draft agreements with other provincial governments. As well, Isabella Chan noted that one goal of the recently created federal Major Projects Office is accelerating processes so that timely final decisions about projects can be made. Indigenous Peoples' views and partnership will be integral to the success of a “one project, one review” process.

Embedding Indigenous Partnerships and Environmental Stewardship

In briefs submitted to the Committee, witnesses recognized that developing critical minerals for national defence and security purposes entails considerable risks and opportunities for Indigenous communities, partly because many mineral reserves and mining projects are located in, or border, their traditional territories. In particular, the briefs drew attention to the direct – and profound – impacts that infrastructure development, economic activity and resource-related environmental degradation can have on these communities. The [Opaskwayak Cree Nation](#) indicated that “improper or

9 See: Paul Manalo, “[From 6 Years to 18 Years: The Increasing Trend of Mine Lead Times](#),” S&P Global, 11 April 2025.



insufficient consultation” with First Nations can have “immediate and long-lasting implications.” The [Assembly of First Nations](#) highlighted that “First Nations have disproportionately borne environmental and social harms from mining and resource extraction,” and referred to the “intergenerational consequences that First Nations continue to bear due to both historic and ongoing mining operations on their traditional territories” resulting from “the legacy of abandoned or aging infrastructure, contaminated sites and altered ecosystems.” The [Opaskwayak Cree Nation](#) asserted that resource extraction and development must occur in full partnership with Indigenous communities, and in “a manner that best ensures the health and safety of our lands, water, peoples and future.”

As well, in briefs submitted to the Committee, witnesses underlined the importance of both establishing “genuine partnerships” within critical mineral projects and ensuring equitable decision making. The [Opaskwayak Cree Nation](#) identified a need for Canada to consider “appropriate models” for Indigenous economic participation. Adding that “[r]eal economic participation goes well beyond dedicated contracting or employment opportunities,” the Opaskwayak Cree Nation argued that this participation should extend “up to and including equity and ownership positions.” The Opaskwayak Cree Nation also stressed that “true security can only be achieved when Indigenous rights are honoured, infrastructure gaps are closed and First Nations are included as equity owners and stewards of ‘the greater good.’”

Furthermore, in briefs submitted to the Committee, witnesses emphasized that Indigenous inclusion in critical mineral projects must be treated as a national security imperative. The [Opaskwayak Cree Nation](#) underscored that national security “is inextricably linked to the sovereignty, health and economic participation of the Indigenous Peoples whose lands host these resources,” and added that “Canada’s critical minerals strategy must respect Indigenous jurisdiction, advance reconciliation and strengthen national security.” The [Assembly of First Nations](#) called on the Government of Canada to adhere fully to the *United Nations Declaration on the Rights of Indigenous Peoples* in relation to all critical mineral activities.

Moreover, witnesses commented on efforts to protect Canada’s natural environment from the “overconsumption” of critical minerals. [Rodrigue Turgeon](#) contended that “clean air and clean water are vital to Canada’s national security,” and urged the Government of Canada to “close the door” to both seabed mining and the use of nuclear energy for military purposes. Highlighting that Canada is regarded as a leader concerning both environmental sustainability and First Nations reconciliation, [Dr. Mykytczuk](#) argued that “we simply can’t meet the demands of decarbonization and defence by leaving a massive environmental legacy.”

THE COMMITTEE'S CONCLUSIONS AND RECOMMENDATIONS

In recent years, the weaponization of resources and supply chains has made access to critical minerals a growing priority for industries, governments and militaries. Vital to the development of advanced weapon systems, critical minerals are currently in high demand worldwide. Numerous factors – including intensifying geopolitical tensions, a deteriorating international security environment, rising defence expenditures and the intensifying development of sophisticated military technologies – have made the production and supply of critical minerals a strategic battleground.

Canada possesses the resources on which the world increasingly depends. As numerous countries – including many NATO countries – prioritize efforts to reduce their dependence on the PRC for defence-critical minerals and to enhance the resiliency of critical mineral supply chains, there is an opportunity for Canada to become a reliable, secure and stable supplier during this time of global uncertainty. Canada must act urgently and strategically to overcome existing challenges in order to avoid ceding to others the opportunity to become one of the world's key suppliers of critical minerals to trusted jurisdictions.

Foreign investment plays an important role in Canada's economic growth and prosperity. However, ensuring that foreign investment in the domestic mining industry does not compromise the country's sovereign control over the resources needed for its defence is paramount. The national security reviews that occur under the *Investment Canada Act*, particularly in relation to critical minerals, are crucial for safeguarding Canada's interests.

Moreover, preserving security and stability in the Arctic is essential for Canada's national defence, as well as the security of its allies. That said, Arctic sovereignty entails more than a military presence alone. Accelerating critical mineral development in the region as a national security imperative requires partnerships between and among communities, industry and government, supported by multipurpose infrastructure.

Although closer cooperation with allies can help to reduce the defence and security risks associated with resource dependence, it cannot eliminate them. Deeper international engagement concerning critical minerals must be complemented by renewed efforts to enhance sovereign industrial capabilities. Strengthening Canada's resiliency on the critical mineral front requires secure supply chains characterized by sustained production, robust processing and refining capacity, a skilled workforce, advanced research and development, adequate dual-use infrastructure, and durable domestic and international partnerships.

Delivering on these priorities will require deliberate, strategic and long-term investments. By building critical mineral resilience today, Canada can become a critical



minerals “powerhouse,” thereby strengthening national defence and contributing to allied security in the years ahead.

In light of the foregoing, the Committee recommends:

Recommendation 1

That the Government of Canada continue prioritizing domestic processing, refining, and midstream capacity for critical minerals as a strategic component of Canada’s defence industrial base and allied supply-chain resilience.

Recommendation 2

That the Government of Canada use existing instruments to prioritize defence-critical mineral projects where targeted support can help advance commercially viable projects and strengthen Canadian and allied supply-chain resilience.

Recommendation 3

That the Government of Canada continue to strengthen domestic capacity across the critical minerals value chain, while deepening cooperation with NATO, the G7, and trusted allies to support resilient and diversified supply chains for defence-critical minerals, including through coordinated approaches to establish and maintain a critical minerals stockpile, as defined by NATO.

Recommendation 4

That the Government of Canada prioritize near-term opportunities to increase supply of defence-critical minerals, including brownfield expansions, mine-waste (tailings) recovery, and other lower-risk projects that can advance more quickly using existing infrastructure and community support, seeking to expand investment tax credits to mining recycling activities.

Recommendation 5

That the Government of Canada invest in research, commercialization, circular mining, and workforce development across the critical minerals and rare earth elements value chain, including in mineral processing, recycling, mine-waste recovery, and advanced materials for defence applications.

Recommendation 6

That the Government of Canada support strategic transportation, energy, and trade-enabling infrastructure development, particularly in northern and remote regions, to strengthen Canada's long-term economic and security resilience and make Canadian-owned mines more attractive to investors.

Recommendation 7

That the Government of Canada work with industry, provinces and territories, Indigenous partners, and trusted allies to identify priority defence-critical minerals and assess, on a case-by-case basis, because strategic importance can vary significantly across different minerals, requiring tailored approaches, where Canada is best positioned to strengthen upstream, midstream, or downstream capacity.

Recommendation 8

That the Government of Canada, in partnership with industry, provinces and territories, Indigenous partners, and trusted allies, assess priority defence-critical minerals where domestic processing and refining are not currently commercially viable, and, where appropriate, use targeted public-private partnerships and regulatory frameworks to support the development of strategic domestic refining capacity essential to national security and supply-chain resilience, including in cases where market conditions alone do not support the required capabilities.

Recommendation 9

That the Government of Canada continue to strengthen its approach to foreign investment and strategic control in the critical minerals sector, ensuring that decisions affecting defence-critical mineral assets appropriately consider national security, economic resilience, and long-term sovereignty, building on approaches Canada has previously taken in strategically important sectors.

Recommendation 10

That the Government of Canada position itself as a cornerstone of NATO-critical mineral supply for Canada and its allies.

Recommendation 11

That the Government of Canada establish a clear and transparent methodology for identifying minerals essential to national security, defence, energy and digital transitions,



and critical infrastructure and adopt a definition of “strategic minerals”; and that the Canadian critical minerals list (2021) be updated accordingly and reviewed every two years to reflect the latest scientific advances and geopolitical realities.

Recommendation 12

That the Government of Canada prioritize securing Canada’s domestic critical mineral needs first, before supplying NATO allies through our established agreements while ensuring sufficient domestic resilience and supply security and maintaining Canada’s reliability as an allied supplier.

Recommendation 13

That the Government of Canada seek agreements with other countries to secure minerals that Canada does not have.

Recommendation 14

That the Government of Canada use our critical minerals to strengthen Canada’s economic resilience, trade diversification and strategic partnerships.

Recommendation 15

That the Government of Canada advance economic reconciliation by enabling Indigenous and local communities to access equity stakes in major strategic mineral projects.

Recommendation 16

That the Government of Canada adopt a "one project, one review" model through mutual recognition agreements between governments to accelerate project approvals.

Recommendation 17

That the Government of Canada establish *Investment Canada Act* regulations that ensure that investments in the Canadian critical minerals sector made by foreign state-owned- or influenced enterprises from adversarial jurisdictions, are subject to a national security review regardless of the value of the investment.

Recommendation 18

That the Government of Canada establishes mechanisms to protect Canadian intellectual property and critical mineral innovations.

Recommendation 19

That the Government of Canada establish structured collaboration between the Department of National Defence, Natural Resources Canada, industry, Indigenous partners, academia and mining stakeholders to align defence-critical minerals needs, logistics and technical expertise.

APPENDIX A: LIST OF WITNESSES

The following table lists the witnesses who appeared before the committee at its meetings related to this report. Transcripts of all public meetings related to this report are available on the committee's [webpage for this study](#).

Organizations and Individuals	Date	Meeting
As an individual	2026/02/09	24
Michael Byers, Professor		
Center for Strategic and International Studies	2026/02/09	24
Christopher Hernandez-Roy, Deputy Director and Senior Fellow, Americas Program		
University of Calgary	2026/02/09	24
Elizabeth Steyn, Associate Dean, Graduate Studies, Faculty of Law		
Business Council of Canada	2026/02/23	25
Michael Gullo, Vice President, Policy		
Mining Association of Canada	2026/02/23	25
Photinie Koutsavlis, Vice President, Economic Affairs and Climate Change		
NWT and Nunavut Chamber of Mines	2026/02/23	25
Hudson Lester, General Manager, Nunavut		
Vale Base Metals	2026/02/23	25
Jeff Gaulin, Vice President, Corporate Affairs		
As an individual	2026/03/09	26
Jim Balsillie, Founder, Centre for International Governance Innovation		
Agnico Eagle Mines Limited	2026/03/09	26
Sean Boyd, Chair of the Board of Directors		

Organizations and Individuals	Date	Meeting
Laurentian University Nadia Mykytczuk, Executive Director, Goodman School of Mines	2026/03/09	26
Macdonald-Laurier Institute Heather Exner-Pirot, Director, Energy, Natural Resources and Environment	2026/03/09	26
MiningWatch Canada Rodrigue Turgeon, Lawyer, National program Co-Lead	2026/03/09	26
As an individual Cristina Pekarik, Economics and Resource Policy Expert	2026/03/23	28
Department of National Defence Wendy Hadwen, Assistant Deputy Minister, Policy-Industry	2026/03/23	28
Department of Natural Resources Isabella Chan, Senior Assistant Deputy Minister, Lands and Minerals Sector	2026/03/23	28

APPENDIX B: LIST OF BRIEFS

The following is an alphabetical list of organizations and individuals who submitted briefs to the committee related to this report. For more information, please consult the committee's [webpage for this study](#).

Arianne Phosphate Inc.

Assembly of First Nations

Laurentian University

MiningWatch Canada

NWT and Nunavut Chamber of Mines

Opaskwayak Cree Nation

Pekarik, Cristina

Saskatchewan Industrial and Mining Suppliers Association

REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the committee requests that the government table a comprehensive response to this report.

A copy of the relevant *Minutes of Proceedings* ([Meetings Nos. 24 to 26, 28, and 40 to 42](#)) is tabled.

Respectfully submitted,

Charles Sousa
Chair

Supplemental Opinion from the Conservative Party of Canada

This Supplemental Report reflects the views of the Conservative Members of Parliament who serve on the Standing Committee on National Defence (“NDDN”): MP James Bezan, Vice Chair of NDDN (Selkirk—Interlake—Eastman), MP Jeff Kibble (Cowichan—Malahat—Langford), MP Cheryl Gallant (Algonquin—Renfrew—Pembroke), and MP Scott Anderson (Vernon—Lake Country—Monashee).

Introduction

As referenced in the report, this study examined the nexus between national defence, national security, and Canada’s critical minerals sector, with a specific focus on securing access to critical minerals that underpin Canada’s defence capabilities, support essential defence technologies, and strengthen strategic resilience and energy security.

The most important message conveyed to the committee is that reliable access to critical minerals is vital to maintaining military readiness and sustaining technological superiority. Witnessed stated that dependence on the People’s Republic of China (PRC) has exposed vulnerabilities and highlighted the importance of secure and resilient critical mineral supply chains.

Therefore, we strongly support Recommendation 1 and Recommendation 2 in the report.

Observations

During this study, the committee heard testimony from witnesses regarding the importance of strengthening Canada’s domestic capacity across the critical minerals value chain and establishing a critical mineral stockpile. Dr. Elizabeth Steyn stated that the golden standard of a stockpile is one that can “withstand a five-year war effort”.

Therefore, we fully support Recommendation 3 and additionally recommend:

That the Government of Canada assist industry to establish a critical mineral stockpile that can last up to five years.

Additionally, witnesses highlighted the importance of having stockpiles of oil. Christopher Hernandez-Roy asserted that “we should have a certain stockpile of oil. The United States has had a strategic petroleum reserve for decades”.

Therefore, we recommend:

That the Government of Canada maintains a strategic petroleum reserve to protect against global supply challenges.

The committee heard testimony on the challenge of mining and resource extraction in Canada due to approval processes, regulatory red tape, and bureaucracy. Michael Gullo noted that “Canada has the third-longest lead time in the world for mining projects” and that “many of our approval processes pre-empt new builds or even expansions and upgrades.” Sean Boyd asserted that “the challenge we face as an industry is the overlap of the approvals that are required and the sequential movement of files through the various regulatory approval bodies”. Chrisina

Pekarik highlighted that over the last 10 to 15 years, competitors have reduced the scale of permitting required, while Canada's submissions required to establish a mine have grown. Additionally, Hudson Lester noted that this challenge is even greater in northern and remote regions, stating that "it takes about 14 years to create a mine in Nunavut. That's due to the regulatory red tape and the bureaucracy".

Witnesses asserted that lack of infrastructure and energy bottlenecks further exacerbates this challenge. Heather Exner-Pirot identified access to electricity as "probably the biggest barrier" for moving northern projects ahead, noting that some mines must curtail production due to insufficient power infrastructure. To help address this challenge, Michael Gullo argued that Canada "require[s] a national trade infrastructure strategy that brings together all levels of government and the private sector so that we can turn our trade ambition into action through higher levels of investment."

Therefore, Conservative members make the following four additional recommendations:

That the Government of Canada removes anti-resource, anti-pipeline, and tanker ban legislation and policies to reduce costly regulatory burden and enable mining and resource extraction.

That the Government of Canada establishes a mineral tax credit to offset the significantly higher costs of mining in northern and remote regions.

That the Government of Canada aggressively supports infrastructure development, such as all-weather roads, small modular reactors, ports, and hydroelectric transmission lines to remote areas in the Northern and Arctic Regions, to make Canadian-owned mines more attractive to investors

That the Government of Canada develop a national trade infrastructure strategy to bring together all levels of government and private sector investment.

The committee heard testimony advocating that Canada should identify specific value chain opportunities to capitalize on. Michael Gullo asserted that Canada and Canadian companies should conduct "commodity-by-commodity assessment[s]" to determine where "the value chain opportunities are and where Canada can either fill a gap and create long-run growth through increased demand or bolster an existing capacity".

Therefore, we recommend:

That the Government of Canada conduct commodity-by-commodity assessments to identify specific value chain opportunities where Canada can capitalize and fill gaps for its allies.

The committee heard testimony regarding the opportunity to procure defence equipment based on Canadian critical minerals. Jeff Gaulin argued that Canada should "seek some reciprocity" in procurement so if Canada purchases equipment from other country, part of that equipment "should have some Canadian minerals. He added "for things like Canadian nickel in particular,

and other Canadian critical minerals, there is a tremendous opportunity for us to manufacture and/or to partner and procure equipment that is based on Canadian critical minerals.”

Therefore, Conservatives recommend:

That the Government of Canada prioritize reciprocity in defence procurement, requiring that military equipment purchased by Canada contains Canadian mineral content.

Witnesses proposed ways in which Canadian research and development, innovation and intellectual property relating to critical minerals could be protected. Jim Balsillie proposed that the Prime Minister’s Office or the Privy Council Office should establish an economic council or secretariat with expertise in intellectual property, technological research, and computing data and AI to set standards and strategies so that Canada can better compete with other countries in critical minerals related innovation, as well as research and development, and protect its related intellectual property. Heather Exner-Pirot asserted that Canada has lost much of its expertise and knowledge regarding “how to translate raw materials into energetics, munitions and products needed for weapons”. She asserted that Canada has “shunned research for military purposes,” adding that Canada “did not allow” financing for domestic defence companies, “lost internal government capability” in defence laboratories, and “precluded” that Natural Sciences and Engineering Research Council of Canada from funding research focused on offensive military technology.

Therefore, we strongly support Recommendation 18 and further recommend:

That the Government of Canada, particularly the Prime Minister’s Office, establish an economic council or the equivalent position of a secretariat within the Privy Council’s Office, whose mandate is to integrate matters of national defence policy with digital transformation, artificial intelligence, and technological innovation, in order to build value-added intellectual property.

That the Government of Canada restore internal government capability in defence labs and allow federal funding through Natural Sciences and Engineering Research Council of Canada for research into kinetic military technologies

The committee heard testimony advocating for restricting or prohibiting the involvement of adversarial nations, particularly the People’s Republic of China (PRC), in Canada's critical minerals sector and infrastructure development. Witnesses describe foreign ownership in these sectors as a "documented intelligence risk" and a threat to national sovereignty. Rodrigue Turgeon argued that Canada should act according to its identified security threats by "avoiding collaboration with foreign entities hostile to Canada’s actual security" and "denying them access to so-called critical minerals". Cristina Pekarik identified foreign ownership gaps as a major concern, naming China’s critical minerals acquisition strategy as a "direct national security concern". She recommends that Canada "close the security and supply disruption gaps before they become crises" by strengthening Investment Canada Act regulations to prevent adversarial nations from controlling sensitive projects. Dr. Elizabeth Steyb urged Canada to "exercise vigilance when it comes... to Chinese investments". She points out that many mines considered "Canadian" are already effectively controlled by Chinese interests. Finally, Christopher

Hernandez-Roy warned that allowing adversarial penetration into critical infrastructure, such as ports and electrical grids, is a "huge risk" because these entities can be used for "economic coercion" or restricted trade flows during a crisis.

As such, Conservative MPs recommend:

That the Government of Canada prohibits the financing and construction of any project involving the extraction of critical minerals and infrastructure development by any business or entity which are associated with the People's Republic of China and other adversarial nations.

Conclusion:

In providing our observations and supplementary recommendations, the Conservative committee members thank the House of Commons analysts and clerks for their hard work in adding to the completion of this report. This supplemental report is by no means a way to cast doubt on their work but rather to highlight the shortcomings of the report adopted by a majority of committee members.

Respectfully,

James Bezan, MP Selkirk—Interlake—Eastman, Vice Chair of NDDN

Jeff Kibble, MP Cowichan—Malahat—Langford

Cheryl Gallant, MP Algonquin—Renfrew—Pembroke

Scott Anderson, MP Vernon—Lake Country—Monashee

Supplementary Report by the Bloc Québécois

Study on the Nexus Between National Defence, National Security and the Critical Minerals Sector

The Bloc Québécois welcomes the report's call to boost the production of critical minerals. It wishes to reiterate its support for the development of a sovereign production and processing capacity for these minerals, which have become essential to maintaining our modern military capabilities.

The Bloc Québécois, however, opposes the recommendations contained in the Committee's report that call on the federal government to encroach on the areas of jurisdiction of the provinces and Quebec. The call for "workforce development" in the field of critical minerals extraction (Recommendation 5) constitutes an undue expansion of federal powers.

The Committee's report also recommends that the federal government support large-scale infrastructure projects—particularly in the energy sector—in remote regions. The Bloc Québécois agrees with the Committee on the urgency of establishing such infrastructure. However, we believe it is necessary to pursue these objectives while clearly defining the limits of federal authority, in order to respect the sovereignty of the provinces, Quebec, and Indigenous communities, which must have the choice to support or reject the federal government's initiatives.

Unlike the recommendations regarding the extraction of critical minerals (7 and 8), which acknowledge the need to collaborate with these authorities, it appears that the sovereignty of the provinces, Quebec, and Indigenous communities becomes a secondary issue when it comes to infrastructure development. Finally, the Bloc Québécois is concerned about the environmental impacts of this recommendation, given that it suggests the development of energy infrastructure without specifying the type of infrastructure or the type of energy involved.

