BACKGROUND NOTE



Canada-South Korea Critical Mineral Supply Chain Co-operation

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Canada and South Korea have built a dense policy framework for critical minerals co-operation since 2023. The central issue is whether there exists commercial viability: Can the two countries finance mines, build processing capacity, and sign binding contracts that hold up under price swings and Chinese export controls? How quickly the two countries can turn agreements into operating projects will decide whether the partnership delivers supply security.

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A Strategic Imperative Under Pressure

Critical minerals have become instruments of geoeconomic leverage. China has imposed export controls in successive tranches: gallium and germanium in July 2023, graphite products in October 2023, antimony in August 2024, and tungsten, tellurium, bismuth, molybdenum and indium in February 2025. On November 9, 2026, Beijing extended the pause on its broader October 2025 rare-earth controls to January 10, as part of a wider suspension of trade countermeasures during negotiations with Washington. Yet relief is temporary, and it depends on U.S.–China bargaining outcomes rather than on any structural change.

Few economies are as exposed to external shocks as South Korea. Its net import reliance on critical minerals exceeds 99.7 per cent. Semiconductors, Korea's leading export, are particularly vulnerable: China's share of South Korea's gallium imports rose from 43 per cent in 2020 to 98 per cent in 2024, and Beijing classifies 30 of Korea's 33 designated critical minerals as strategic or export-controlled items. Canada has already demonstrated how it can help alleviate South Korea's dependence on China. After China's 2023 controls, Korea's germanium imports diversified rapidly, and Canada became the dominant supplier.

From Agreements to Architecture

The bilateral framework has thickened steadily. The 2023 MOU on Critical Mineral Supply Chains, the Clean Energy Transition and Energy Security created a dedicated channel for co-operation, and the 2024 CSP Action Plan added implementation commitments. In January 2026, the two countries' industry ministers signed an MOU on future mobility that established the Canada–Korea Industrial Cooperation Committee, linking automotive supply chains with critical minerals co-operation. In June, the two governments agreed to develop a joint critical minerals stockpiling plan by the end of 2026. Multilateral channels also reinforce this work. At the 2026 G7 Summit in Évian, leaders broadened the Canada-led alliance launched in 2025 into the Critical Minerals Resilience and Production Alliance, and South Korea was among the partners signalling intent to work with Canada on stockpiling.

Key Areas for Further Co-operation

1. CORPORATE ANCHORS: POSCO FUTURE M AND LG ENERGY SOLUTION

The two flagship South Korean investments in Canada show what the partnership has achieved and how far it has had to adapt.

POSCO Future M and General Motors are building a plant in Bécancour, Quebec, to make cathode materials, a core component of electric vehicles batteries. This joint venture, Ultium CAM, is 85 per cent owned by POSCO and 15 per cent by GM and received about C$300 million in federal and Quebec support in 2023. Its ambitions have since shrunk. In October 2025, the partners confirmed the first phase would go ahead: a plant able to produce 30,000 tonnes of cathode material a year, enough for hundreds of thousands of electric vehicles (EV) batteries. They put the second phase on hold. It would have more than doubled cathode output, adding 33,000 tonnes a year, and built a 45,000-tonne precursor plant. Precursor is the intermediate material, made from refined nickel, cobalt and manganese, that is turned into cathode. Vale, in turn, dropped a planned nickel sulphate plant that would have supplied the expansion. Without these facilities, the Bécancour site is likely to rely on imported inputs rather than minerals processed in Canada. Pre-production testing began in 2025, but as of October 2026 the plant had not confirmed commercial production. That puts it two to three years behind its original schedule.

LG Energy Solution has taken a different path. Its NextStar Energy plant in Windsor, Ontario, was built to make EV batteries. As EV demand slowed, it began producing batteries for energy storage systems (ESS), which store electricity for power grids and large facilities. LG Energy Solution bought out its partner Stellantis and started a battery pack line in June 2026. Total investment now exceeds C$5 billion, with more than 1,300 direct employees. Most importantly, in October 2026, the company signed a binding multi-year offtake agreement to buy lithium ore from Elevra Lithium's mine in Quebec. This is the clearest example yet of a South Korean manufacturer committing to purchase Canadian mine output.

These two cases point to a shift in which minerals matter most. Batteries for energy storage typically use a lithium-iron-phosphate design that needs no nickel or cobalt. As a result, Canadian lithium and graphite may become more important to South Korean buyers than nickel and cobalt.

2. DEFENCE SUPPLY CHAINS

The October 2025 Security and Defence Co-operation Partnership extended mineral co-operation to defence inputs. In June 2026, Prime Minister Mark Carney and President Lee Jae-myung launched negotiations on a Canada–Korea Defence Cooperation Agreement covering defence science, technology and materiel. Minerals and components such as rare-earth magnets, tungsten, and

gallium are a natural focus for this co-operation. These inputs are central to modern military systems: rare-earth magnets power guidance and steering systems, gallium is essential to advanced radar, and tungsten is used in armour-piercing munitions. All three remain subject to Chinese export licensing, so secure allied supply bears directly on South Korea's expanding arms exports and on Canada's NORAD modernization.

3. BRITISH COLUMBIA'S ROLE

British Columbia brings a distinct mix of resources, institutional ties and Pacific access, but unlike Quebec and Ontario, where South Korean battery investment has clustered, it has yet to attract significant Korean industrial investment. Its opportunity is to serve as a Pacific gateway, linking northwestern B.C.'s copper, rare-earth, and nickel projects directly to South Korean processors and end-users rather than through North American auto supply chains.

- **Resources.** B.C. is Canada's largest copper producer and its only producer of molybdenum. When the province signed a statement of co-operation with Korea's state-owned KOMIR in 2023, KOMIR noted that B.C. holds minerals on South Korea's top 10 strategic list, including nickel, rare earths, graphite, and manganese, and pledged to help Korean firms enter Canada.
- **Project pipeline.** B.C.'s Critical Minerals Office helps promising mining projects to get ready for environmental review and permitting, including early engagement with Indigenous and local communities. In February 2026, the province added three projects: Northisle's North Island (copper and gold), Surge Copper's Berg (copper, molybdenum, and silver) and Defense Metals' Wicheeda (rare earths). B.C. also aims to become the first province to set fixed timelines for exploration permits, giving companies more certainty about how long approvals will take.
- **Existing South Korean footholds.** In mining, Korea Zinc holds a 50 per cent stake, alongside Teck, in the early-stage Cirque zinc-lead-silver project in northeastern B.C. In energy, KOGAS owns five per cent of LNG Canada in Kitimat and joined the partners' September 2026 decision to proceed with the Phase 2 expansion. South Korea plans to import at least 1.4 million tonnes of Canadian LNG a year once Phase 2 reaches full production, expected in the early 2030s.

Constraints and the Road Ahead

Four constraints will shape the next phase. Each also points to where co-operation can be targeted.

- **The processing gap.** Visible progress in graphite purification, rare-earth separation, nickel sulphate and commercial recycling remains limited. Canadian ore refined elsewhere adds little to South Korea's supply security. Pairing contracts such as the Elevra deal with domestic conversion capacity would deliver much more.
- **Uncoordinated finance.** Canadian project finance and South Korean overseas-resource funds have supported individual transactions but are rarely assembled around the same project with a committed buyer. A shared project pipeline under the Industrial Cooperation Committee could close that gap.
- **Shifting demand.** The move from EV to ESS batteries changes which minerals and projects are commercially viable. Partnership priorities should follow actual offtake demand rather than earlier EV-era assumptions.
- **Near-term policy windows.** The joint stockpiling plan is due by year-end, and China's suspension lapses on January 10. Both create an opening to define rules for stockpile ownership and to link the stockpile to early-stage Canadian production. Meanwhile, the Bank of Canada continues to flag North American trade as a major source of uncertainty, which strengthens the case for supply arrangements anchored in Korean demand rather than U.S. market access alone.

CONCLUSION

From Strategic Alignment to Dependable Supply

The policy architecture is largely in place. The partnership will now be judged by what it delivers. So far, memoranda have outpaced binding contracts, and South Korean investment has favoured downstream manufacturing over mines and processing.

The next phase should be selective: a small number of projects that combine a Canadian resource, a viable processing route, and a committed Korean buyer, with public finance tied to private investment and clear milestones. Long-term offtake agreements such as the LGES–Elevra contract can anchor these projects, and the stockpiling plan can buffer against disruption. Shocks will persist, but patient capital, processing investment, and credible demand can make the partnership durable.