CRITICAL MINERALS

WHAT ARE CRITICAL MINERALS?

Minerals deemed critical vary by country. The United States classifies 35 minerals as critical because they are:
- essential to economic and national security,
- from vulnerable supply chains, or
- a key part of the manufacturing of a product. 1

TOP INDUSTRIES THAT RELY ON CRITICAL MINERALS
1. Telecommunications and electronics
2. Energy
3. Defence
4. Aerospace
5. Transportation

WHY IMPORT CRITICAL MINERALS?

- Domestic supply cannot meet the demand of the American market.
- Mines have shut down because minerals are cheaper to produce abroad.
- Certain mineral deposits have not been found in the United States. 4

CRITICAL MINERALS ARE EVERYWHERE

Lithium is used to create batteries.
Helium is used in MRIs.
Uranium is used in radiation therapy.
Potash is used in fertilizer.
Indium is used to make LCD screens.
Strontium is used in fireworks.

U.S. CRITICAL MINERAL SUPPLIERS

With only 10 supplying countries, U.S. supply is vulnerable to foreign export reductions, trade disputes, civil unrest, and natural disasters. 6

13/35 critical minerals are imported from China. 7

China has threatened to use these minerals as leverage in trade disputes. Shortages in these critical minerals would hit American businesses, the American government, and American industries such as the defence sector and the healthcare system. 8

Sources:
2. Ibid.
5. Ibid.
6. Ibid.
7. Ibid.
CRITICAL MINERALS

CANADA-U.S. PARTNERSHIP

Canada is the top supplier of aluminum, cesium, rubidium, indium, potash, tellurium, and uranium for the United States.\(^9\)

52% of Canada's mineral and metal exports are to the United States.\(^{10}\)

83% of all potash consumed in the US comes from Canada.\(^{11}\)

25% of America's uranium supply is imported from Canada.\(^{12}\)

100% of all cesium consumed in the United States comes from Canada.*\(^{13}\)

STABLE TRADING PARTNERS

The United States is trying to strengthen supply chains for critical minerals with stable trading partners: \(^{14}\) \(^{15}\)

- Australia, Canada, and the United States are working together to address current and future mineral shortages.
- Canada and Australia are also helping the United States with geologically mapping and mineral information sharing practices.
- Canada and the United States have a joint-action plan to secure mineral supply, future industry competitiveness, and supply chain resilience and reliability.

SECTION 232

U.S. tariffs will not be implemented against Canadian uranium companies - for the time being. \(^{16}\)

FUTURE MINERAL SHORTAGES

As the world invests in cleaner technologies - electric vehicles, wind turbines, and solar panels - future markets and mineral shortages are predicted for cobalt, lithium, and copper.

BY 2050\(^{17}\)

7x increase in demand for cobalt.

11x increase in demand for lithium.

275%-350% increase in demand for copper.

Sources:
10. Ibid.
*The Manitoba mine ceased operations in 2015. The US has been importing cesium from stockpiles.
Québec is actively mining eight critical minerals. They are also exploring their potential to mine other critical minerals.

**MINES AND PROJECTS, QUÉBEC**

- Cobalt
- Graphite
- Lithium
- Niobium
- Platinum Group Metals
- Rare Earth Elements
- Vanadium
- 49th Parallel

**PLAN NORD**

- Launched by Québec in 2011 to develop communities north of the 49th parallel.
- Québec plans to improve current telecommunications and infrastructure, which will facilitate mine development.

**TOP MINERAL-PRODUCING PROVINCES**

- **Ontario**
  - $10.1 billion mineral production value
- **Québec**
  - $10.0 billion mineral production value
- **British Columbia**
  - $9.7 billion mineral production value

Sources:
*For the full list of active mines and advanced projects visit: https://buff.ly/2PcFlw*