# How Canadian miner Coniagas will power Quebec's green shift and EV future



Electric vehicles need electricity, and that requires the mining and refining of many critical metals for the construction of electric plants, EV batteries, and the enormous amount of wiring involved.

Disseminated on behalf of: Coniagas Battery Metals Inc.

- Critical minerals are essential in our transition to a green economy, used in making everything from electric vehicle batteries to wind turbines.
- China's control of critical minerals complicates supply

chains. Domestic sourcing of raw ore and its processing into metal pure enough for EV battery manufacture is crucial.

 Coniagas Battery Metals is pursuing a "feed first" strategy, establishing an environmentally sound processing facility near ports, rail, and labour in Quebec to tap into international feedstock supply, while exploring a nearby property with the potential to supply cobalt, nickel, and copper.

A few dozen specific minerals are essential to the global shift towards electrification and away from using fossil fuels for energy — copper, nickel, cobalt, and other minerals used in making everything from electric vehicle batteries to modern circuitry. Without them, there is no green economy.

In a <u>report published last year</u>, the federal government identified 31 "critical minerals" and set out a strategy for making Canada "a global supplier of choice for critical minerals and the clean digital technologies they enable."

The fact is, however, meeting that goal will require billions of dollars of investment in new mines to extract the ore and facilities in which to process them. Wood Mackenzie recently estimated that even under the least aggressive scenario, demand for nickel will grow by 65 per cent in the coming years, copper by 85 per cent, and cobalt by 167 per cent.

Complicating matters is that China has sewn up much of the supply, purchasing numerous mines and smelters as well as related transportation networks. China now controls about 97 per cent of global smelting and refining capacity, according to Wood Mackenzie.

Quebec-focused junior miner, <u>Coniagas Battery Metals Inc.</u> (TSX.V: COS) has a plan to meet the need for a domestic supply of several critical minerals with operations in Quebec and what they call a "feed first" strategy.

"Canada can be a global powerhouse in this transition away from fossil fuels," Coniagas president and CEO Frank Basa says. "We have the resources here in Canada, the infrastructure, the skillset, the power."

# Coniagas adopting 'feed-first' strategy to kick off processing



(Left): Nickel, copper, and cobalt ore from mining operations; (Right): Cobalt sulphate produced by Coniagas' Re-20x Process—materials essential for making batteries that power electric vehicles.

Basa says that around the world vast stockpiles of raw ore containing critical minerals sit unprocessed, largely because they are in oxide form rather than the sulfide form smelters require. Working with concentrate brokers, Coniagas is considering securing rights to more than 29 million tonnes of this feedstock, with average grades of 1.5 per cent copper and 0.5 per cent cobalt.

"There's a lot of this stuff around, and you can buy it below market value," he says.

The process can extract minerals from such ores with better

environmental metrics and economics. Called Re-20x, the process is high sophistication low tech and can be operated in countries with challenging operating conditions. The process is hydrometallurgical, requiring no smelting, and operates with zero discharge.

"What they want is security. To be able to produce lowcost electric vehicles, you have to have certainty of product. We want to be leaders in that."

— Frank Basa, president and CEO, Coniagas Battery Metals Inc.

Re-20x is also cost-effective, as it doesn't require the heavy concrete construction and furnaces used in traditional smelters, instead relying on less expensive storage tanks, berms, and hoppers. Its largest cost is transporting ore to the site, which is why which is why building near a port and rail is crucial.

\$8 million dollars was invested to develop the process, which can be used to extract metal from raw ore or recycled batteries. It is currently being used in two facilities recycling EV and other batteries to separate metals for remanufacture.

"It's designed to be built anywhere," Basa says. "It doesn't require a high degree of technical expertise."

#### The Quebec advantage — access to St.

#### Lawrence, rail, and labour

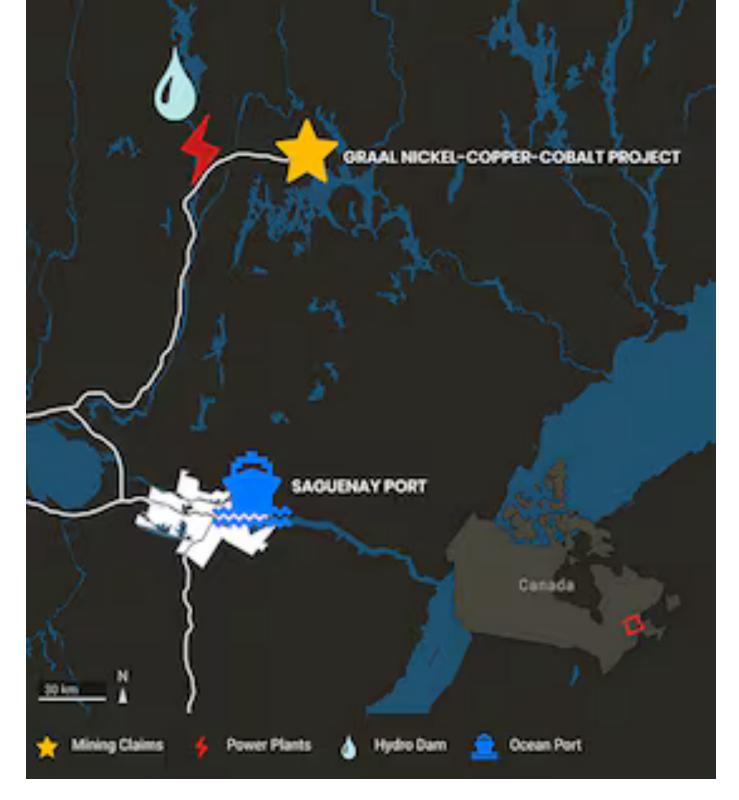
Basa says he's worked with Investissement Quebec to identify property near the Port of Saguenay, near the St. Lawrence River and its easy access to the Atlantic Ocean, that would be suitable for a facility — close to the port and rail, with plenty of green hydropower available. Not to mention communities with ready skilled labour.

They plan to build the site in collaboration with SGS Quebec, with a capacity of 200 to 500 tonnes of cobalt ore per month and the ability to scale up over time by adding additional processing lines.

Why Quebec? Basa says that unlike other provinces, which can delay projects with arduous permitting processes, the province's investment firm makes it easy, ensuring companies like Coniagas can rapidly secure permits and find property suitable for facilities.

"Quebec is doing things the right way," he says. "They're talking to us and helping us get it done."

### Local ore supply supports secure, longterm processing



Saguenay Port location is ideal to receive offshore ores via ocean freighters for processing, has an abundant supply of low-carbon hydropower, and is also close to and connected by road transportation to Coniagas' Graal mineral deposit.

The international supply of raw ore oxide will of course eventually run out, so Basa and his team are also pursuing their own mining operation nearby. Located north of their

proposed Re-20x site in the Lac Suzanne region known to be rich in metallic deposits, the company's 6,000 hectare Graal property is showing potential for nickel, copper, and cobalt — all critical minerals.

Test drilling was initially conducted by the previous owners, Virginia Mines and SOQEUM, between 1996 to 2004, showing reasonable concentrations of all three metals near the surface. After acquiring rights to the property, Coniagas conducted \$6 million in drill tests in 2022 and 2024, mapping a six-kilometre strike length with good metallic grades near the surface and indications of a more concentrated deposit at depth, near the bottom of a large formation.

The firm is raising funds for additional drilling at the site, going to depth and further mapping the near-surface mineralization to determine how much of the metals are present and where they are. They are currently consulting with local First Nations.

Coniagas is planning additional drilling, metallurgical testing and consultations with First Nations to usher Graal towards a maiden NI 43-101 resource estimate over the near term. <a href="https://t.co/gWPxBYe15Y">https://t.co/gWPxBYe15Y</a>

— Coniagas Battery Metals (@coniagasmetals) <u>October</u>
<u>4, 2024</u>

The underground reserve of metallic ore is large, so hitting the deeper concentration won't be as challenging as it might be with a gold deposit. Based on tests done to date, the site might contain up to 10 million tonnes of cobalt, plus copper and nickel.

Once the site is mapped with drilling, they plan to proceed with an open-pit mine and possibly some underground mining, depending on test results.

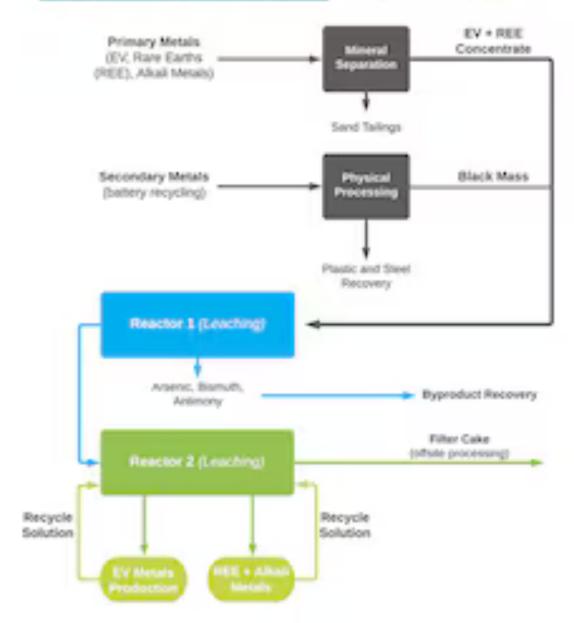
Assuming the Graal site comes online, it would provide a steady supply of feedstock to the company's Re-20x facility, just a short distance away, supplementing the material shipped in from international ports. It would also be able to take in ore from other mines in Quebec and Ontario, as well as recycled batteries.

Once fully operational, the processing facility would employ perhaps 120 people, the mine another 200.

Ultimately, the company aims to be a long-term supplier of cobalt, nickel, and copper to the EV sector from domestic operations.

#### A move away from smelting

## RE-20X PROCESS FLOW SHEET



Re-2Ox — a 100% hydrometallurgical refining process for both mined and recycled minerals, producing cobalt and nickel sulphates that meet the specifications of EV manufacturers which want low-carbon alternatives to smelting.

Being a zero-emissions operation sets them up for the long term.

Vehicle makers are increasingly moving away from sourcing metals from smelters, which use huge furnaces that

contribute to carbon pollution in the atmosphere. Nissan, for example, has told metal providers it would like to <u>phase out using newly mined metals</u>, preferring to use those recovered from batteries and other sources through hydrometallurgical processes to reduce the environmental footprint of its EVs.

While the economics of extracting materials from recycled batteries are not currently there, increasing demand from companies like Nissan is changing that.

"There's a secondary life to these batteries," Basa says. "We are in the early days of moving away from smelting, which is an old process going back hundreds of years."

What manufacturers need, however, is the secure long-term supply of the metals they require to make vehicles, without having to navigate Chinese control.

"What they want is security," Basa says. "To be able to produce low-cost electric vehicles, you have to have certainty of product. We want to be leaders in that."

The key to that is to control both the supply and production of those critical minerals at domestic sites. With Graal and its proposed Re-20x facility, Coniagas has strong potential to help fill that growing demand.

To learn more about Coniagas Battery Metals, visit its website <a href="here">here</a>, or find it online:

- <u>Facebook</u>
- X / Twitter
- <u>LinkedIn</u>
- <u>YouTube</u>