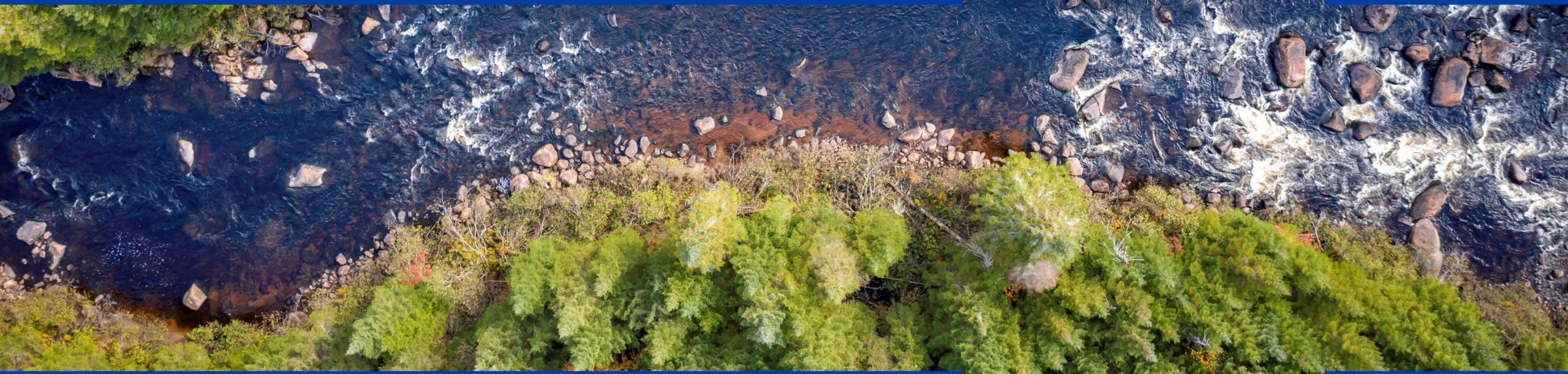
Green battery production.
It’s all powered by **Québec.**

For a stable and secure supply
from North America to the world



Investissement Québec International

Québec

Why invest in battery manufacturing in Québec?

A strategic location within the North American EV market, with efficient intermodal transportation services

Lowest electricity rates in North America and most reliable grid, **powered by 99% renewable energy**

World class innovation hub, with **40+ research organizations,** such as Hydro-Québec's Center of Excellence

Numerous free trade agreements facilitating trade between battery manufacturers and OEMs

Abundant natural resources essential for battery production: Lithium, graphite, titanium, phosphate, cobalt, etc.

Strong government support and many **attractive tax credits and incentives**

Proximity to "Auto Alley" rail links and **~65% of North America's cell manufacturing capacity**

A sustainable ecosystem with a clean and traceable supply chain, an ethical exploitation of mineral resources, etc.

Nearly 30% cost advantage on salaries for battery manufacturing employers

An economy built on a strong foundation favorable to the development of the battery industry

Strong government support for the industry with the implementation of a battery strategy

Many attractive and stable incentive programs: R&D, tax incentives, electricity rebates, etc.

Québec is No. 1 for vehicle electrification in Canada* thanks to numerous public policies to promote the electrification of transportation

Stable political landscape focused on supporting the energy transition and their actors

Foreign-investor friendly jurisdiction in OECD country with strong credit ratings (Aa2 credit rating for Québec)

Aerial view of the industrial park of Bécancour © Olivier Croteau

National Assembly of Québec

* Registration of zero-emission vehicles in Canada, 2020.
Source: Statistics Canada, 2021; Moody's, 2019.

Québec located strategically within the North American EV market

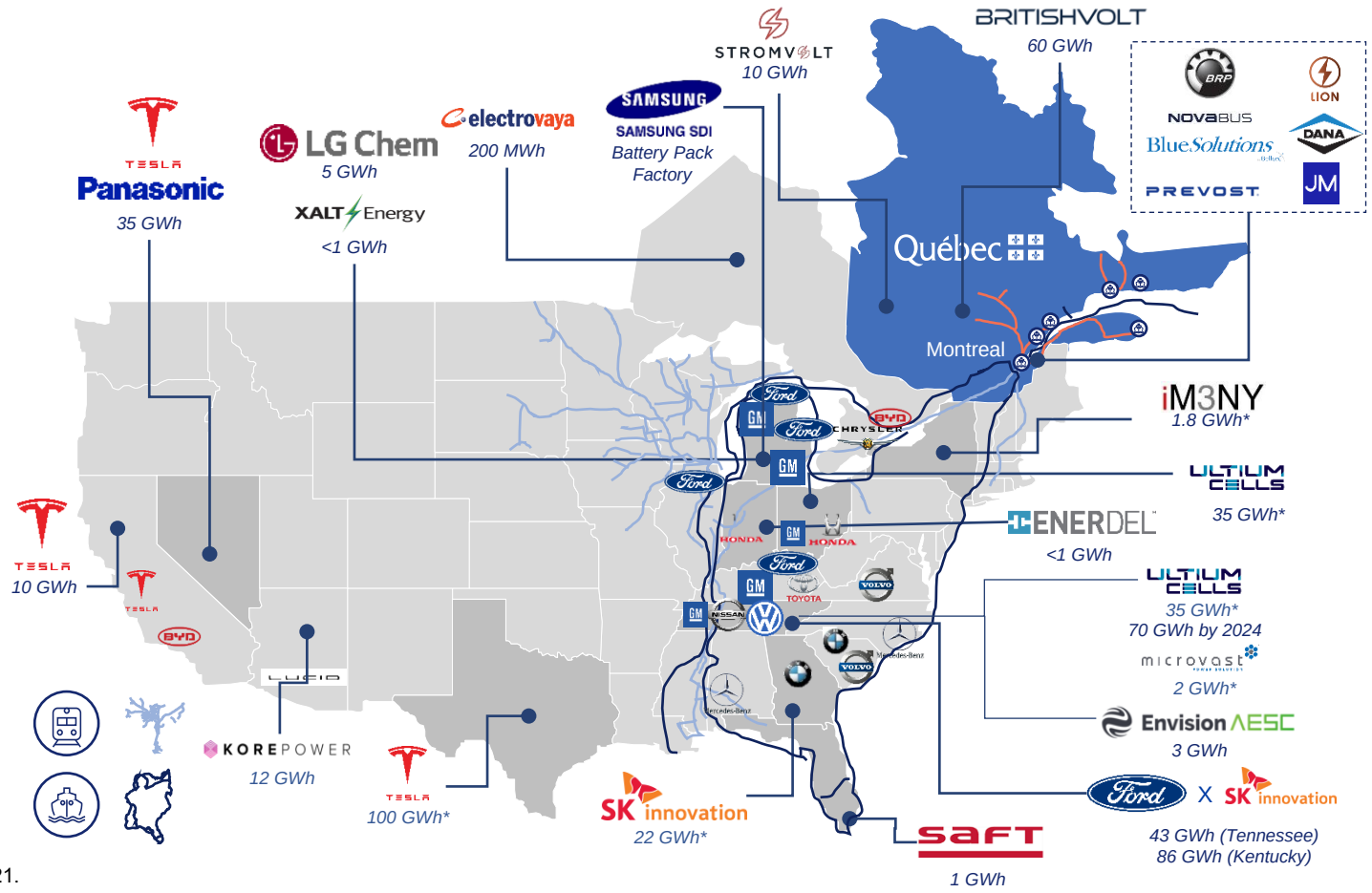
Tariff-free trade with battery and OEM manufacturers providing security from supply chain disruption and mitigating geopolitical risks

In the U.S. through the **CUSMA**
In APAC through the **CPTPP**
In the EU through the **CETA**
In South Korea through the **CKFTA**

Proximity to "Auto Alley" rail links and **~65% of North America's cell manufacturing capacity**

Multiple deep-sea ports with the shortest route from Europe to North America

North American battery cell manufacturing landscape
Company announcements, 2019-2021



* Announced Capacity.
Source: Québec Government Market Study, "Bloomberg Electric Vehicle Outlook", 2019 and 2021.

All key mineral resources for battery manufacturing can be mined locally

Ethical and green operations

- **Ethical exploitation of mineral resources**, such as cobalt production
- **Development of revolutionary transformation processes**, such as the elimination of all GES directly related to aluminum production (Elysis project)

A strategic location within the manufacturing supply chain

- **Lower transport costs due to the region's own mining supply**
- Reduction of dependence on material imports from Asia and Australia
- **Security of supply through IQ's participation in key operations and projects**, reducing the material supply deficits expected from 2023

Among the world's largest deposits and producers

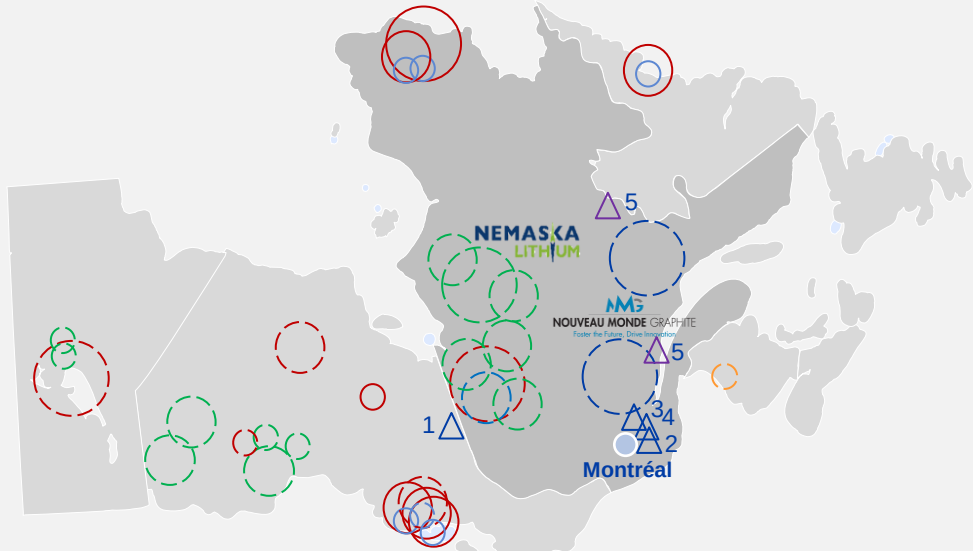
4th aluminum producer (Québec)

5th nickel producer (Canada)

8th cobalt producer (Canada)

3rd lithium deposit (Québec-Nemaska)

Maps of the presence of mineral resources and exploitation



Source: AluQuébec, 2020; Government of Canada, "Nickel facts", 2019; US Geological Survey, "World Mine Production and Reserves", 2021; Propulsion Québec, 2019; S&P Market Intelligence, Québec Government Market Study.

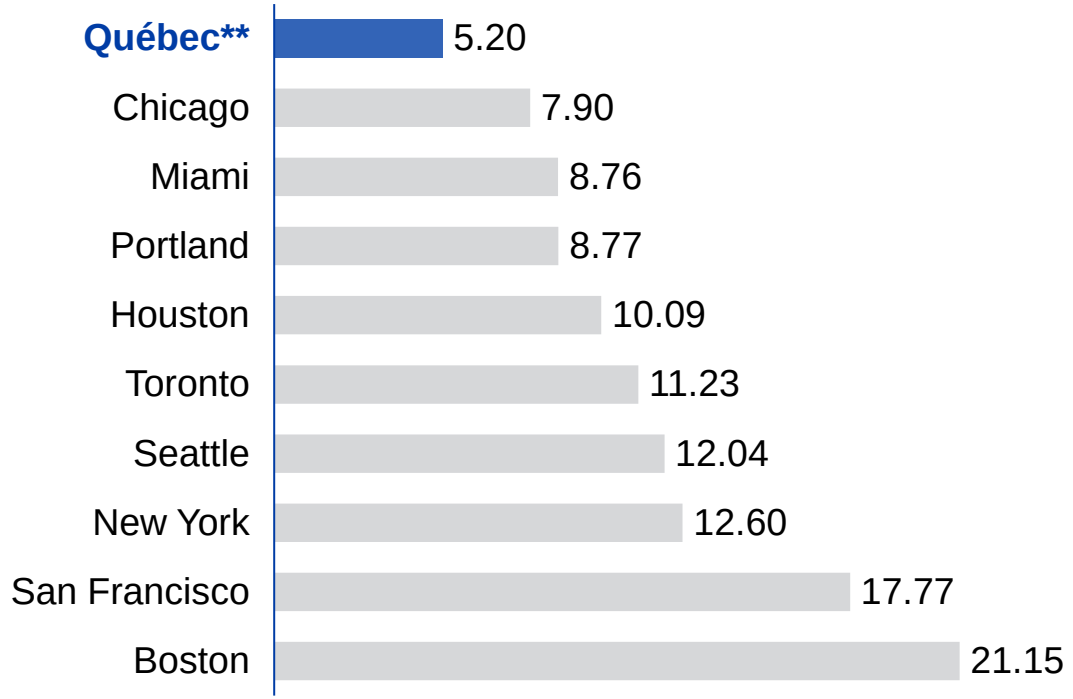
Leveraging Québec's low-cost hydropower to meet OEMs' net zero carbon targets

No. 1 in North America for the lowest and most stable rates for large power consumers

- Hydro-Québec, a Crown corporation, **is one of the world's leading hydropower producers**
- **99%** of the electricity in Québec is produced from **clean, renewable sources**
- **Preferential rates** also granted to **large consumers of energy**

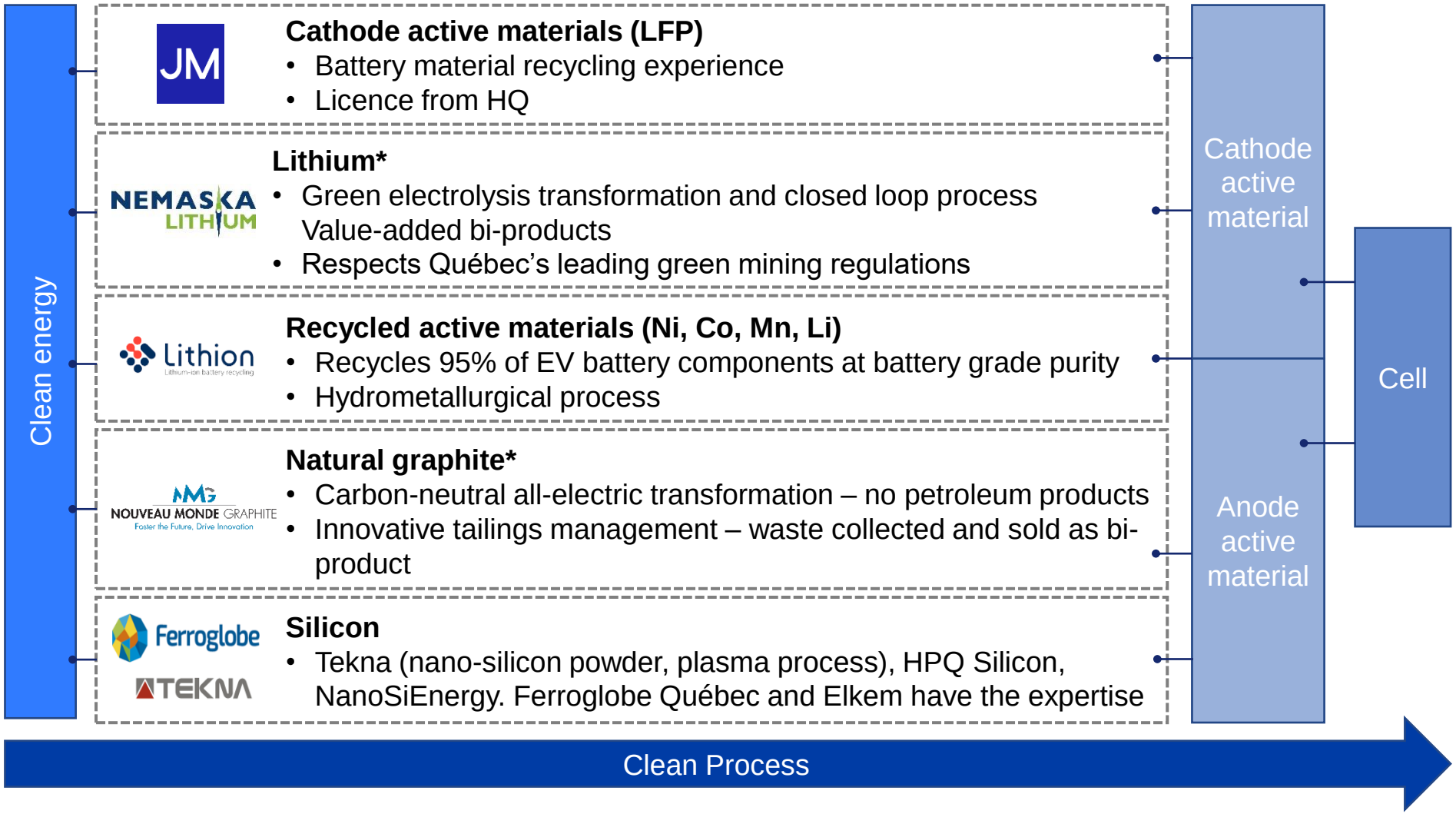
Average electricity rates–Large power customers*, ¢/kWh (before taxes), CA$

Selected metropolitan areas in Canada and the U.S., April 2020



* According to Hydro-Québec's estimate based on 3,060,000 kWh of usage, 5,000 kW of power and a 85% load factor.
** The electricity rate is the same for all of Québec; there is no rate variation based on region or municipality.
Source: Hydro-Québec, "Comparison of Electricity Prices in Major North American Cities–Rates in effect April 1, 2020".

Developing a uniquely clean and traceable supply chain



Traceability is key

- Québec's goal is to become the **1st location in North America to provide traceability for green batteries**
- Québec is home to OPTEL Group, a leading global provider of traceability systems, and many more!

OPTEL

* In development.
Source: Ministère de l'Énergie et des Ressources naturelles, "Québec Plan for the Development of Critical and Strategic Minerals 2020-2025 (QPDCSM)", 2021.

A world class innovation hub for battery materials with more than 40 R&D players across the entire value chain

- **Hydro-Québec's Center of Excellence in Transportation Electrification and Energy Storage a leader in battery technology**
- **Among the Top 10 in the world for IP related to Lithium-ion battery** and **40+ years experience in R&D** for electric transportation and storage
- **Access to 2000+ patents, of which 110+ are related specifically to the battery and 60+ licenses provided**
- **+250 scientific publications** by over 100 researchers with exclusivity rights available
- **Local and international R&D partnerships**, such as the U.S. Army Research Laboratory on Li-ion cells or Lawrence Berkeley National Laboratory

Hydro Québec

Examples of research centers and consortium

CRITM vecteur de transformation métallique
PRIMA
CIRRELT
alu Québec Grappe de l'aluminium | CeAl Centre d'expertise sur l'aluminium
Calogy solutions
FPInnovations
Canada NRC·CNRC
Investissement Québec CRIQ
InnovÉÉ Innovation en énergie électrique
INRS Institut national de la recherche scientifique
Institut du véhicule innovant / Innovative Vehicle Institute
CNETE CÉGEP DE SHAWINIGAN
Centre de Technologie Minérale et de Plasturgie inc.
CTA CENTRE DE TECHNOLOGIES AVANCÉES
LibTech

Source: IREQ, 2021; Center of Excellence in Transportation Electrification and Energy Storage, 2021.

A large pool of skilled workers and many students ready to take over

Example of occupations related to the sector (all industries combined)	**Employees, 2019**
Production supervisor	**28,700**
Industrial, manufacturing and mechanical engineering technologists and technicians	**18,800**
Mechanical, electrical and electronic engineers	**18,400**
Industrial electricians and electromechanics	**15,500**
Machinists and machining and tooling inspectors	**13,300**
Electronic and electrical engineering technicians	**11,700**
Assemblers and testers in the manufacture of electrical and electronic equipment, appliances and accessories	**11,000**
Supervisors in manufacturing and assembly	**10,900**
Chemists and chemical engineers	**5,600**
Industrial and manufacturing engineers	**5,200**
Production logistics coordinators	**2,700**
Supervisors in metal and mineral processing	**1,800**

– And many more!

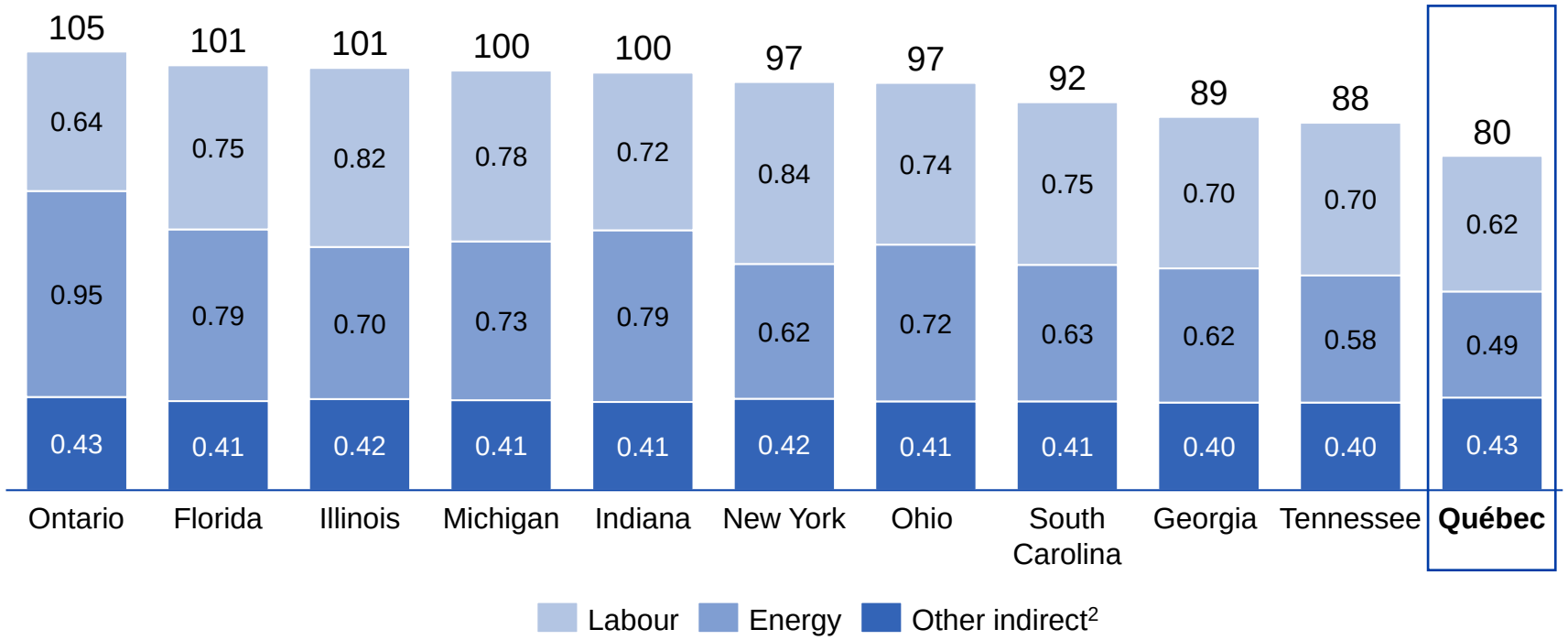
- **A large pool of workers skilled in manufacturing, electronics and chemistry**
- **Close to 18,000 students enrolled in battery manufacturing-related programs** (chemistry, chemical engineering, electrical engineering, mechanical engineering, physics engineering)
- **18 universities** and **nearly 140 colleges**, with campuses spread out over Québec, such as:

McGill, Université de Montréal, UQÀM Université du Québec à Montréal, Université Concordia, Université Laval, Université de Sherbrooke, Polytechnique Montréal, UQTR Université du Québec à Trois-Rivières, ÉTS Le génie pour l'industrie, CÉPROCQ Centre d'études des procédés chimiques du Québec Collège de Maisonneuve

Source: Statistics Canada, special compilation based on data from Labour Force Survey, 2019; Ministère de l'Éducation et de l'Enseignement supérieur, 2021

Some of the lowest operating costs in Canada and the United States

Cathode[1] cost by location in 2030 (base case),
% of estimated Michigan Total Costs



20-25%
lower costs of operation costs[3] than Ontario, Michigan and Ohio achieved through Québec's low energy cost

Note: [1]Assuming NMC 8.1.1.; [2]Includes chemicals processing and waste disposal; [3]Except raw material costs.
Source: Market Study for the Québec Government, 2020.

A cost-advantage of nearly 30% on salaries for battery manufacturing employer

Median annual salaries (USD*) for 5 occupations in the battery manufacturing sector
Selected U.S. and Canadian cities, 2021

	Montréal	Cleveland	Austin	Reno	Albany	Detroit	San Francisco
Battery Scientist	**$74,004**	$102,725	$105,404	$94,631	$103,882	$101,184	$121,100
Production Engineer	**$64,336**	$88,162	$89,424	$81,024	$89,145	$86,629	$103,537
Battery Engineer	**$55,588**	$86,566	$87,669	$79,534	$87,513	$85,029	$101,618
Logistics analyst	**$49,664**	$58,907	$59,315	$56,834	$62,286	$57,764	$74,017
Maintenance Worker	**$42,301**	$54,532	$51,002	$51,891	$54,982	$54,962	$68,740

* Salaries based on five years of experience in the battery manufacturing industry NAICS 335910).
Average exchange rate of September 2021: 1US$ = 1.2671 CA$.
Source: ERI, October 2021.

Attractive custom-made financial incentives and support to maximize project returns

Initial investment

- **Strategic Innovation Fund:** Contributes **up to 50%** of eligible expenses for a **project of at least $20M**
- **Québec's custom-made financial stimulus packages:** equity, debt, loan, etc., according to project's specifications

Tax incentives - Ongoing operation

- **Tax Credit for Investments and Innovation (C3i):** **Tax credit from 20% to 40%** of the value of production equipment or computer equipment and software package purchases
- **Tax Holiday for Large Investment Projects (C2i):** Provides a **15-year tax exemption** on earnings and contributions to the Health Services Fund contributions for **projects over $100M ($50M in some regions)**

Electricity rebates - Ongoing operation

- **Electricity Discount Program – Ministère des Finances:** Grants a **reduction of up to 20% of electricity invoice** for a maximum of 4 years for companies billed at rate "L"

R&D tax incentives - Ongoing operation

- **Tax Credit for Scientific Research and Experimental Development (SR&ED):** Entitles company to a **15% tax credit from Canada and a 14% refundable credit* from Québec** on all wages and subcontracting fees
- **Tax Holiday for Foreign Experts and Researchers:** Tax holiday for foreign experts through a **Québec tax exemption** over a maximum of five years on a degressive scale

– And many more!

What is Québec's battery strategy?

- Low carbon, stable and renewable energy
- Among the lowest energy costs in the world
- Significant critical and strategic mineral (CSM) resources and flagship projects under development
- Environmentally friendly refining processes
- Leading R&D ecosystem
- Leading scientific expertise in the battery sector (many majort patents)
- Skilled, educated and bilingual workforce
- Among the lowest costs of living in North America
- Stable and secure geopolitical environment

1. **Mineral resource development (upstream development)**
   - Consolidation of upstream activities (mining and refining) to supply precursors and battery component producers
   - Support for technological innovation to develop clean processes

2. **Downstream development of local production capacity for value-added battery components to supply the North American and European EV value chains**
   - **Key words: SAFETY, STABILITY, DURABILITY**
   - Strategic partnership with a major industrial player
   - Importance of stability throughout the value chain *(Global Battery Alliance* battery passport*)*

3. **End-of-life battery management (circular development)**
   - North American collaboration based on the *hub* and *spoke* model
   - Management processes in place for CSM "urban depots" (e.g., batteries and magnets at end of life

Recent major announcements in Québec

솔루스 첨단소재
Solus Advanced Materials

Solus Advanced Materials to Break Ground for Battery Copper Foil Plant in Canada in July

- February 2022

- The first Korean battery copper foil producer to build a plant in North America (Granby, Québec)
- Mass production of copper foils for battery anodes at the plant is planned in the 2nd half of 2024
- The site includes a copper foil factory established in 2001 by Circuit Foil Luxembourg

BASF
We create chemistry

BASF Acquires Site for North American Battery Materials and Recycling Expansion in Canada

- March 2022

- Bécancour, Québec chosen for its future cathode active materials (CAM) and recycling site
- The site allows for ample space to expand up to 100 kt CAM/year with potential for fully integrated (PCAM) supply
- Project commissioning in 2025

gm | posco CHEMICAL

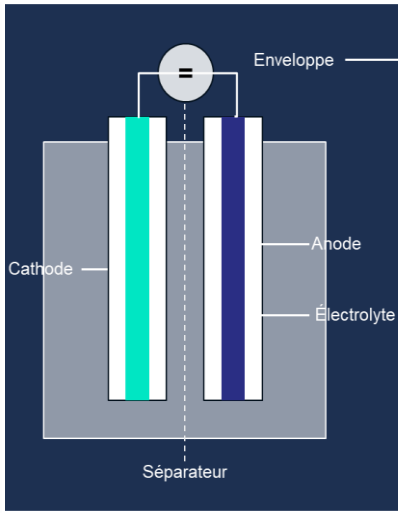
GM Expands its North America-Focused EV Supply Chain with POSCO Chemical in Canada

- March 2022

- JV between GM and POSCO Chemical to build a facility in Bécancour, Québec, estimated at US $400M for the production of cathode active materials (CAM) for GM's Ultium batteries
- Construction begins immediately
- The site allows for future expansion opportunities

Building a circular and Québec-based supply chain

Raw materials	Precursors	Active materials	Cell	Assembly	Vehicle integration	Recycling
Lithium • North American Lithium / CATL • Nemaska Lithium • Sayona Mining • Galaxy Resources • Critical Elements Lithium Corp **Graphite** • Mason Graphite • Nouveau Monde Graphite • Focus Graphite **Nickel and Cobalt** • Waterton Global Resource • Canadian Royalties • Glencore, Vale (Ontario, Newfoundland and Labrador) • Electra BMC **Silicon** • Silicium Québec **Aluminium** • Québec Aluminium **Copper** • Glencore	**Lithium** • Nemaska Lithium **Graphite** • Nouveau Monde Graphite **Nickel** • Vale	• Nano One Materials (former Johnson Matthey Facility) BASF The Chemical Company gm Solus Advanced Materials	• Bolloré / Blue Solutions	• Lion Electric (2023) • Ingeniarts (UgoWork)	• Various local players in the transportation sector (trucks, buses scooters, snowmobiles, etc.), such as: • BRP • Lion Electric • Volvo group (Novabus) • Taiga Motors	• Lithion Recycling/Seneca



IQI your strategic partner to set up your business in Québec

Financing

Support Services

Technological Support

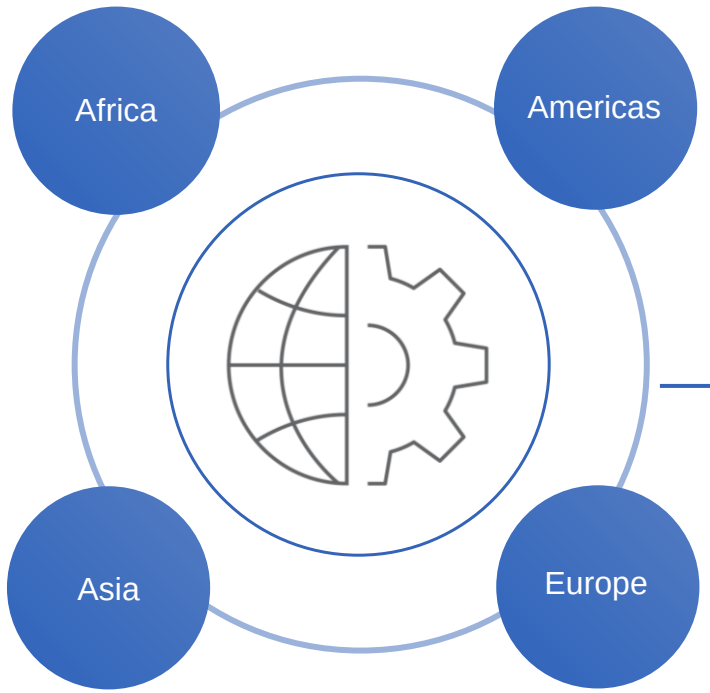
International

Offices located across Québec's 17 administrative regions

Over 1,000 employees

working to create, attract and grow businesses in Québec and global markets

About Investissement Québec International



Investissement Québec International

International businesses:
Setting up and growing in Québec

Québec businesses:
Developing or increasing exports

+ 30 offices in
19 countries and
6 Canadian cities

Québec's network of economic partners

Our support services

Business intelligence

- Information on Québec's business environment and strategic industries
- Comparative data on operating costs

Site prospecting

- According to stringent criteria
- Regional teams covering the entire province

Financing

- Financing solutions
- Government incentive programs

Business network

- Contact with qualified business partners
- Access to government agencies

Local sourcing

- Identification and qualification of local suppliers

Manufacturing technology support

- 100+ engineers and technical experts
- Topics: productivity; digital transformation; environmental performance; product innovation and conformity

Export assistance

- Market validation
- Networking with foreign partners and clients

Investquebec.com

Centre-ville de Montréal

Investissement Québec International

Québec