

Shared Principles for the Development of a Battery Supply Chain in Canada

Canadian Battery Task Force

July 27, 2021

The Government of Canada has acknowledged our country's opportunity to become a global leader in the production of batteries. Building Canada's battery-supply chain is both a sprint and a marathon, requiring short-term plays and long-term planning — but the biggest risk is not leaving the starting line. And while the federal government acknowledged the opportunity in its [A Healthy Environment, A Healthy Economy](#) plan and has taken some initial steps, Canada is still very much in starting territory.

More action is needed to build our domestic industry, and Canada's window of opportunity to enter the battery market is now. With known deposits of critical metals and minerals, responsibly produced resources, abundant clean electricity, a skilled workforce, a cutting-edge battery R&D (research and development) ecosystem, and proximity to a well-integrated North American market, Canada can lead on sustainable battery material and technology production.

The Canadian Battery Task Force is an industry-led initiative created to deliver advice to Canadian governments on how to develop a domestic battery supply chain. We are guided by the following principles:

- ❖ **Principle 1: Set an ambitious vision.** Canada has many of the ingredients needed to produce batteries and their input materials and parts. But we need to set out an ambitious vision to guide industrial development. Members of the Task Force believe in this battery vision for Canada: *By 2030, Canada is a global leader in clean, innovative battery technology and strategic materials production and recycling, and is a hub for sustainable battery production in North America.*

- ❖ **Principle 2: Move fast and go big.** Canada has a chance to establish itself as a major player in the global battery industry, but we must act swiftly and ambitiously to seize this opportunity given the scale of this opportunity and the speed at which other countries are moving to capture it. If we don't, other countries will fill the gap in meeting the growing demand for EVs and secure the advanced manufacturing jobs, intellectual property, and other economic gains that come with it.

- ❖ **Principle 3: Take a full supply chain approach.** The global battery industry is growing fast. Uncertainty around technology, investment flows, and new players entering the market make it difficult for one sector in the supply chain to scale up without similar actions occurring up- and downstream. To reduce risk and increase the chances of success for companies along the supply chain, Canada must build out various parts of its battery supply chain simultaneously. A full supply chain approach encompasses the complete material and production process sequence, as well as developing a rich and healthy supply of battery technology solutions, innovations, and talent. A broad and deep ecosystem with a community of collaborating players and partners—while being more or less competitors—is viewed as the basis for sustaining technology and production leadership.

- ❖ **Principle 4: Prioritize Canada's unique mineral resource strengths.** Canada is the only country in the Western Hemisphere that has all the critical minerals required to manufacture EV batteries. Proximity to critical metal and mineral reserves is a big advantage as EV and battery

companies move to localize supply chains, decrease the distance heavy batteries need to travel, and vertically integrate to drive down production costs. Canada's access to metal and mineral resources is a key strength and one of the major value propositions the country can highlight for global companies and investors to attract battery-related investment. Canada must prioritize and leverage this advantage by establishing and scaling up a secure, complete, and sustainable critical minerals supply chain domestically. It must also ensure Canadian companies have access to strategic materials and minerals for economic, environmental, geopolitical, and national security reasons.

- ❖ **Principle 5: Focus on value creation.** When it comes to batteries, Canada must break from history and do more than extract and supply raw materials to other jurisdictions. Instead, Canada must capture the value, jobs and economic opportunity in downstream parts of the EV supply chain too. This means positioning itself to supply the growing North American market with batteries and their input materials and parts. It also means standing up Canadian battery technology and R&D by leveraging existing leadership in solid state batteries and recycling, improving Canada's track record of converting battery-related technology and R&D into mass production and manufacturing, and focusing on the development of advanced battery manufacturing techniques to support manufacturers.

- ❖ **Principle 6: Tap Canada's clean battery advantage.** Canada's responsibly sourced resources and clean electricity grid give it a competitive edge as automakers increasingly look to source ethical materials and reduce emissions across the lifecycle of the vehicles they produce. Canada must tap this advantage and aim to produce the cleanest batteries in the world, including by building up a world-class battery recycling industry.

- ❖ **Principle 7: Take a North-American perspective.** Canada may be a relatively small market on its own, but the integrated nature of North American vehicle supply chains comes with considerable advantages. Canada and the U.S. must build on their existing *Joint Action Plan on Critical Minerals* and *Roadmap for a Renewed U.S.-Canada Partnership* and work together in building the necessary supply chains so that both countries can lead on battery development and production.

- ❖ **Principle 8: Channel resources strategically.** Key stages of the supply chain exist in between raw materials and battery integration into vehicles—namely, refined and precursor materials and components and active materials. These are big supply chain gaps for Canada and arguably Canada's greatest opportunities for value creation. Canada must build capacity in these areas—and fast.

Developing Canada's battery supply chain and manufacturing capacity will anchor our existing auto sector, ensure we capture the jobs and value created in the transition to electric vehicles, and support the growth of new jobs and industries in the clean energy economy.

We look forward to contributing further ideas to the design of specific policies, programs, and initiatives focused on developing Canada's battery supply chain within and outside of government as they take shape.