December 17, 2021

Hon. Chrystia Freeland Deputy Prime Minister and Minister of Finance House of Commons Ottawa, Ontario K1A 0A6

Cc: Hon. Randy Boissonnault, Minister of Tourism and Associate Minister of Finance

Dear Deputy Prime Minister Freeland,

As members of the Canadian Battery Task Force, we are writing to share our perspective on the measures required for Canada to compete in the rapidly growing global market for battery electric vehicles. Please accept this letter as our priority recommendations for the 2022 federal budget.

The Canadian Battery Task Force

The Canadian Battery Task Force is an industry-led coalition created to advance Canada's domestic battery industry. We bring together experts from across the battery supply chain—including mining, battery manufacturing, vehicle parts and assembly, labour, academia, and battery recycling. Our goal is to help inform policies and programs that support battery supply chain development to maximize their impact, and set Canada up to lead on the production of sustainable battery materials and technology, good job creation, and inclusive economic development. The Task Force is co-chaired by Clean Energy Canada, a think tank based at Simon Fraser University focused on accelerating the clean energy transition, and Accelerate, Canada's new Zero-Emission Vehicle Supply Chain Alliance.

Strategic Context

The Government of Canada clearly recognizes the importance of electric vehicle and battery manufacturing for Canada's future prosperity. While Canada's "mines to mobility" advantage is <u>acknowledged</u>, efforts to support projects along the supply chain have been insufficient to meet the scale of the opportunity and the speed at which other countries are moving to capture it.¹

We understand that Canada is also working within a challenging U.S.-Canada trade relations context, with the U.S. proposing "Buy American" EV tax credits that will negatively impact Canadian auto workers and the country's prospects for attracting new EV and battery-related investments. The Canadian Battery Task Force proposes government pursue a two-track approach that: (i) continues to advocate a North American strategy which acknowledges the

¹ The EU plans to become self-sufficient on batteries by 2025 and has put forward over <u>€6 billion</u> to build out Europe's battery supply chain. With <u>38 battery plants</u> planned or in construction, the EU is on track to <u>capture 20%</u> of global battery market share by 2025. U.S. states are offering massive incentive packages to land battery cell manufacturing facilities. Biden's new <u>Infrastructure Investment and Jobs Act</u> allocates over US\$6 billion to battery supply chain development, and his Build Back Better Plan proposes <u>US\$50 billion more</u> to help auto companies transition.

deeply integrated nature of our supply chains, and works together to build a world-class EV and battery industry that leverages each country's strengths to compete globally; and (ii) aggressively advances "no-regrets" measures to build up capacity along the domestic battery supply chain to strengthen Canada's negotiating position. This approach would position Canada as a meaningful partner in the broader North American EV and battery supply chain transformation, and increase the U.S.'s receptivity to Canada's concerns over the proposed "Buy American" provisions.

Recommendations

To maximize near-term battery opportunities and strengthen our position when engaging with the U.S., the Canadian Battery Task Force recommends the following.

I. Ensure the Net-Zero Accelerator Fund can rise to Canada's battery opportunity

In Canada, the public discourse has focused on the importance of obtaining a large-scale battery cell manufacturing facility. While critical, there are significant opportunities in the upper and midstream of the supply chain that require the government's attention. Benchmark Minerals Intelligence, an independent Price Reporting Agency, <u>has stated</u> that Canada's biggest opportunity for value generation is in developing midstream capacity that feeds into regional manufacturers. The government must also continue to actively seek out opportunities to invest in and grow our domestic ZEV assembly capacity as a means to drive component part manufacturing along the supply chain.

Moreover, Strategic Innovation Fund decisions have long and unpredictable lead times, making Canada a hard jurisdiction to grow in. Companies that are looking to scale up fast and are under competitive pressure to move forward are forced to set up shop in other countries that can accommodate their needs—even if they were attracted to Canada for other reasons. Quicker and more predictable decision-making is required to keep pace with our competitors.

To address these issues, we recommend that Canada:

- <u>Recommendation 1</u>: Speed up timelines and set predictable deadlines for funding decisions under the Net-Zero Accelerator Fund.
- <u>Recommendation 2:</u> Ensure the Net-Zero Accelerator Fund is accessible to projects in the upper and midstream stages of the battery supply chain (e.g. mineral processing, precursor material production, and cathode/anode manufacturing) to help complement regional operations in cell manufacturing, EV assembly, and battery recycling.
- II. Accelerate the discovery and development of new battery minerals production

The <u>World Bank forecasts</u> up to 500% increases in the production of multiple mineral and metal inputs required to produce the clean technologies—including EV batteries—essential to limiting global temperature rise to two degrees Celsius.

Canada is one of the very few countries in the world where all key battery minerals—including nickel, cobalt, manganese, lithium and graphite—are currently at economically viable concentrations, and production is among the <u>lowest carbon-intensity</u> globally on a supply chain basis.

The remote location of deposits presents challenges. Over half of Canadian nickel and cobalt—two metals that make up 60-80% of current EV batteries—is mined at diesel-reliant, off-grid mines at a higher cost. <u>Research has found</u> remote exploration is 2-6 times more expensive, remote mine construction 2-2.5 times more expensive, and remote mine operation up to 60% more expensive than non-remote operations. Addressing these challenges will require the development of key infrastructures, zero-emission technologies, and clean energy sources in Canada's north, thus supporting the development both of the upstream part of the battery value chain and of local communities.

Looking forward, to retain the current share of global nickel production in line with World Bank projections, <u>seven new mines, two smelters, and one refinery</u> will need to come online. For other critical minerals, even greater ambition is needed. Many of these mines will require *Impact Assessment Act* (IAA) approvals before being built. Building Canadian capacity in the upper and midstream stages of the supply chain, such as battery materials and component production, can feed into downstream Canadian production of battery cells and EVs. To address some of these challenges and position our material production as the cornerstone of the North American EV value chain, the government of Canada should:

- <u>Recommendation 3</u>: Double the Mineral Exploration Tax Credit for critical minerals to help support the next generation of mines and prioritize the exploration for battery minerals.
- <u>Recommendation 4</u>: Create a policy and investment environment that recognizes the essential role of off-grid critical minerals mines to support battery-driven decarbonization, including through the establishment of a dedicated off-grid industrial decarbonization fund tailored to the unique realities of Canada's Arctic.
- <u>Recommendation 5</u>: Ensure the *Impact Assessment Act* is implemented in a manner that creates greater predictability and accelerated timelines for both permitting future mines, and for value-added mineral, metal, and battery material manufacturing facilities which are essential to Canada's critical mineral supply chain objectives.² All projects must still meet the highest environmental, social, and governance standards, including Indigenous consultation and partnership.

² For context, the last major metal mine to be built in Canada–Voisey's Bay, a nickel mine–took 13 years from discovery to first production.

III. Grow the domestic market for EVs, batteries, and their input materials

EV uptake in Canada trails other markets like the EU and China. While EVs currently make up 5% of all new passenger vehicles sold in Canada today, countries like the U.K. and Germany are seeing market shares of 23% and 30%, respectively, in recent months. Canada must do more to catch up. Specifically, we recommend that federal government:

• <u>Recommendation 6</u>: Invest additional resources into the iZEV rebate program in an amount that is proportional to U.S. investments.

Going Forward

Canada has a chance to establish itself as a major player in the global battery industry, but the window of opportunity is now.

Our recommendations are focused on specific actions that Canada can take in the 2022 federal budget. These recommendations must be part of a Strategic Action Plan on Batteries or a national battery strategy that identifies where Canada is best-positioned to compete, focuses Canada's efforts, and coordinates policies and investments to build capacity in those target sectors. This is the approach our key competitors and largest trading partners have taken, including the U.S. and the EU.

As the leading industry voice on building Canada's battery supply chain, the Canadian Battery Task Force is here to help provide any additional support or advice we can to help Canada enter this fast-growing, global market.

Sincerely,

Signing members of the Canadian Battery Task Force:

Matt Beck, Battery Metals Association of Canada/Delphi Group	Daniel Breton, Electric Mobility Canada
Angelo DiCaro, Unifor	Moe Kabbara, Dunsky Energy Consulting
Joanna Kyriazis, Clean Energy Canada	Jean-Christophe Lambert, Lithion Recycling
Camille Lambert-Chan, Propulsion Quebec	Brendan Marshall, Mining Association of Canada
Frank So, E-One Moli Energy (Canada)	Adrian Tylim, Blue Solutions