

EV Tariffs Alone Will Not Secure Canadian Competitiveness



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On August 26, Canada announced that it is matching US tariffs on Chinese electric vehicles, steel, and aluminum.¹ This means 100% tariffs will be imposed on EVs as of Oct. 1st and 25% tariffs on steel and aluminum as of Oct. 15th.² This announcement was expected, due to the integrated nature of North American automotive supply chains. However, these measures on their own will not secure the long-term success of Canada's EV sector. To effectively advance Canada's competitiveness, these tariffs should be embedded within a comprehensive industrial policy.

While tariffs and subsidies are important tools, effective industrial policy requires a multifaceted approach.³ The goal of industrial policy is to create globally competitive industries. To do that, you need to make strong investments in the knowledge and manufacturing base for technology. From an industrial policy perspective, the main effect of the recent tariffs on Chinese-made EVs is to buy time for Canada and its western allies to play innovation catch-up in driving down the cost/performance ratio for domestically produced EVs. So what is the plan to use that time to make American and Canadian industry competitive? And what elements need to be added to North American industrial policy to make that a realistic goal?

Most coverage of the announcement has focused on the main rationale for the tariffs: the fact China generously subsidized their electric vehicle industry,⁴ enabling Chinese firms to offer Canadian consumers artificially low sticker prices. Leaders from government and the opposition have cited subsidized over-supply and unfair labour and environmental practices as the primary rationale for the tariffs.⁵ The Government's announcement notes that "China's intentional, state-directed policy of overcapacity and lack of rigorous labour and environmental standards threaten workers and businesses in the EV industry around the world and undermine Canada's long term economic prosperity."⁶

However, less focus has been placed on a larger, more uncomfortable truth: the competitiveness gap cannot be solely attributed to unfair subsidies and labour practices, as Chinese battery and electric vehicle firms have developed some of the most innovative products and production

processes in the world.⁷ Chinese entities have grown their global share of patents in the field of electric propulsion from 2.4 percent in 2010 to 26.9 percent in 2020 and today account for 65.4 percent of high-impact research publications in electric batteries.⁸ In short, 'Made in China' is no longer synonymous with inferior technology.

China's EV innovation 'leapfrogging' is a result of a 15-year industrial strategy to position its firms at the technological frontier.⁹ Industrial policy helped their firms through the commercialization valley of death in the 2010s, including R&D grants, loans, local content requirements for purchase incentives, and strategic use of municipal transit bus procurement.¹⁰ Many subsidies were ratcheted down in the 2020s, such as ending the 'battery whitelist' (2015-2019) that ensured only Chinese batteries were eligible for subsidies,¹¹ as well as ending buyer rebates in 2023.¹² China's use of EV joint venture requirements ensured technology transfer from foreign direct investment to domestic firms. China is not alone in using industrial policy to secure EV leadership. The technological leadership of the Japanese, Korean and European firms that Canada has attracted EV investments from is a product of their governments' own deliberate, decades-long innovation strategies. While Canada cannot emulate some of China's more heavy-handed approaches, it should adopt the fundamental goal of positioning domestic firms at the frontier of next-generation battery and EV technologies.

What lessons can be learned to ensure that Canadian firms will be the next generation of global EV innovation leaders? Accelerate, Canada's zero emission vehicle supply chain alliance, recently published Canada's Battery Innovation Roadmap, which outlines a strategy to establish Canada as a global leader in battery technology by 2035.¹³ The roadmap offers an in-depth analysis of Canada's current position in the global battery landscape and details key actions needed to build a thriving battery ecosystem. The roadmap addresses critical areas including innovation infrastructure, industrial policy, and skills development. It is designed to guide policymakers, industry leaders, and researchers in collaborative efforts to maximize Canada's potential in the rapidly evolving battery sector.¹⁴

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Accelerate summarizes the main recommendations from Canada's Battery Innovation Roadmap¹⁵ as follows:

Strategic Investments: The roadmap proposes a \$3 billion investment in battery innovation, creating a financial working group to enhance funding mechanisms, and expanding Canada's battery R&D centers with increased NRC funding. New research centers and demonstration facilities would also be established.

National Battery Alliance: Central to the strategy is a National Battery Alliance, a public-private partnership to synchronize efforts and support ongoing strategic advancement. This alliance would unite key government, industry, and academia players to drive Canada's battery technology initiatives.

Whole-of-Government Coordination: Create a small, nimble, government problem-solving 'tiger' team (8-10 people) for battery innovation consisting of two representatives each from Finance, NRCan, and ISED, and one each from CIC, CGF, PMO, and PCO.

Workforce Development: The plan aims to train over 10,000 skilled professionals by 2035 through skill mapping, international and educational partnerships, training programs, and research fellowships.

Economic and Security Resilience: The roadmap aims to increase the number of Canadian-owned battery firms, establish production clusters, and develop a Battery Ecosystem Dashboard. Reducing dependency on foreign imports by enhancing our domestic battery technology capacity and supply chains strengthens Canada's national security and economic resilience.

Intellectual Property (IP) Strategy: The strategy includes IP education, support for start-ups, a fast-tracked IP strategy, and encourages patent sharing to safeguard Canadian innovations.

International Collaboration and Innovation Network: The roadmap proposes international research partnerships, a manufacturing innovation network, a meaningful demonstration fund, start-up partnerships, and streamlined regulatory processes.

Standards and Policy Integration: The roadmap calls for developing new battery material standards, integrating programs into policy, tailoring EDC programs for exports,

and supporting recycling innovation centers and research on advanced materials and chemistries.

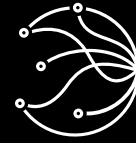
Canada's EV industrial policy should be built in lockstep with American-led efforts to build a North American trading bloc, and to 'friendshore' the supply chains for electric vehicles among like-minded allies.¹⁶ This will involve coordination between trade and environmental policies, such as exploring carbon border adjustment mechanisms to place less environmentally harmful North American battery materials on an even playing field with Chinese alternatives. However, it must also be emphasized that following the Americans means much more than matching tariffs and production tax credits for foreign direct investment. The US Inflation Reduction Act and Bipartisan Infrastructure Law has invested billions into its Department of Energy labs and scale-up funding via R&D demonstration and loan funding (Loan Programs Office).

Canada must also integrate its industrial policy with allied nations for the upstream elements in the battery supply chain to break free from China's stranglehold on critical mineral and battery materials. The good news is that this is possible. Research from The Johns Hopkins Net Zero Industrial Policy Lab found that known mineral reserves in the US, Canada, the UK, and Australia can meet North American demand for critical minerals this decade.¹⁷

Canada's long-term approach to building an EV supply chain cannot be reactive, inducing allied innovation leaders to set up branch plants while blocking imports of superior Chinese technology with the use of tariffs. Instead, we need to be proactive, focusing on technological leapfrogging and positioning Canadian firms for future success. After all, Canada isn't lacking in innovation; we've invented many EV battery technologies, but lacked the industrial policy to scale up the firms the way China, Korea, and Japan did.

Ceding North American technological leadership is more expensive in the long run than embracing a forward-thinking innovation and scale-up strategy to ensure Canadian firms are the ones with the superior products who can expand production and exports globally. The cost of current battery plant incentives for foreign direct investment is evidence enough of that. In sum, the use of tariffs should be viewed as one part of a larger, strategic industrial policy.

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