



Environmental and Affordability Considerations for Applying Tariffs to Chinese Electric Vehicles

Submission to: *Consultations on Potential Policy
Responses to Unfair Chinese Trade Practices in
Electric Vehicles*

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Summary Recommendations

1. *Take a Balanced Approach: Use Tariffs to Level the Playing Field And Secure Canada's Place in the EV Supply Chain, But Don't Shield Legacy Automakers from Meaningful Competition So Consumers Can Get Access to Affordable EVs*
2. *Minimize Disruption of EV Supply in the Transition Period*
3. *Use Preferential EV Purchase Incentives to Level the Playing Field and Avoid Unnecessarily Raising Prices*
4. *Compensate for Losses in EV Market Affordability As a Result of Tariffs With Supplementary Policy Actions Aimed at Reducing EV Prices, With a Focus on Used EVs*

Executive Summary

It's a foregone conclusion that Canada will soon join the European Union and the United States in applying a tax on consumers who buy low-priced electric vehicles from China.

When discussing this issue, the debate is often premised on the idea that there is a trade-off between Canadians getting access to affordable electric vehicles, thus speeding up our net-zero transition, – versus the need to protect the jobs and investments in Canada's fledgling EV auto sector.

We believe that Canada can do both.

It's in nobody's interest for any one country to dominate the electric vehicle supply chain, especially not one that is a geopolitical adversary of our closest ally, the United States. It is in our own economic, environmental and security interests to build up an electric vehicle industry in Canada that delivers good jobs with union wages.

It is important to recognize that the only reason why low-priced electric vehicles from China pose any kind of threat to this industry is because the legacy automakers in North America have so far refused to bring affordable electric vehicle models to market.

The reason? They make far higher profits on the sale of ever-larger gasoline SUVs and pickup trucks. It is in the interest of their shareholders to slow the transition as much as possible by keeping electric vehicles to a niche, luxury market so they can focus on selling gas guzzlers instead.

However, this business model could be disrupted if Chinese companies - who have cracked the code on making the 'Model T' of affordable electric cars (BYD's Seagull) - begin serving people demanding affordable EVs that traditional automakers have long neglected.

The important question to answer is whether excessively high tariffs on Chinese electric vehicles helps the gasoline car industry at the expense of our climate ambitions and the EV industry's chances of long term competitiveness.

If high tariffs enable automakers to slow down the transition to electric vehicles, our EV industry becomes weaker - not stronger.

Allowing competition - at a managed level - could prove a useful antidote. Before the announcement of European Union tariffs, the growth of sales of Chinese EVs in Europe prompted carmakers like Stellantis and Renault to offer more budget models in Europe like the Citroën ë-C3 and the Renault 5 E-Tech.

Ultimately, nobody wants China to take over the electric vehicle market. Rather, we want every automaker to offer their own affordable EV for sale. The danger lies in excessively hiking tariffs, which could remove the competitive incentive for North American automakers to innovate, catch up and introduce budget models of their own.

Of course, competition should be done on a level playing field – we shouldn't allow lower wages in China to undermine the bargaining power of Canadian auto workers. Though automaking is a very capital-intensive and highly automated industry, which means that the issue of wages alone is not why China can make such low-priced EVs.

China and Canada have both been giving subsidies to automakers. The main difference is that China has been doing this for far longer than us. Their internal market is also fiercely competitive, and a price war has forced Chinese companies to go to ever-greater lengths to innovate and drive down costs.

While North American automakers have used the heft of government support to offload the costs of electrification onto taxpayers while rewarding stockholders with share buybacks and dividend increases, Chinese automakers have instead used those subsidies to drive down EV prices for consumers.

If Canada is making the choice of shutting out competition and not allowing the market to drive down electric vehicle prices, there needs to be a plan for the government to step up with its own industrial strategy to achieve a “made-in-Canada” affordable EV. There are many places Canada could start, from policies designed to build-up a healthy used EV market, to reforming consumer incentives and even adding affordability conditions to the subsidies we are giving automakers.

We can't lose sight of the fact that getting affordable electric cars into people's hands isn't something that is optional. It is essential to achieving our climate goals.

Without Competition, Will Canadian EV Buyers Be Left Behind?

Canadians currently have no options to buy a new electric vehicle (EV) priced below approx. \$40,000 CAD. The price of electric vehicles available on the Canadian market is frequently cited by consumers in surveys as the primary barrier they face in purchasing an electric vehicle.¹ Cutting electric vehicle prices to an affordable range that is lower than comparable internal

¹ This is applicable to the vast majority of surveys, but the most frequently cited examples are those conducted by J.D. Power.

combustion engine (ICE) vehicles is an important task for driving up EV adoption and driving down carbon emissions.²

Competition is an important method of changing market structure in a more sustainable direction. Currently, Chinese competition in Europe is driving a significant increase in the availability of lower-priced EV models from traditional automakers. For example, the Renault 5 E-Tech will be coming to the European market at a price point of €25,000 EUR, equivalent to \$36,750 CAD. Stellantis' Citroën brand will soon introduce an electric ë-C3 starting at €23,300 EUR (\$34,250 CAD) in the European market. In each case, Chinese competition in Europe was indicated by the automakers as being responsible for the introduction of these models. Neither of these vehicles are currently bound to be sold in North America.

In fact, when looking at announcements of forthcoming budget EV models, the difference between the European and North American markets could not be more stark in both the number of confirmed models and their confirmed budget price point;

Entry-Level Budget EV models Coming to Europe

Automaker	Model Name	Expected Price (European Market)	Launch Date
Stellantis	Citroën ë-C3 ³	€23,300 EUR (\$34,250 CAD)	2024
Stellantis	Fiat e-Panda ⁴	€25,000 EUR (\$36,750 CAD)	2024
Renault	5 e-Tech ⁵	€25,000 EUR (\$36,750 CAD)	2024
Renault	Twingo EV ⁶	€20,000 EUR (\$29,500 CAD)	2026

² Rebekah Young (2023) A Luxury We Cannot Afford to Squander: North America Needs to Back Radically Cheaper Electric Vehicles. Scotiabank.
<https://www.scotiabank.com/ca/en/about/economics/economics-publications/post.other-publications.insights-views.electric-vehicle-demand--october-11--2023-.html>

³ Albertina Torsoli (2023) Stellantis Sees €23,300 Citroën EV as Answer to China's BYD, Nio. Bloomberg.
<https://www.bloomberg.com/news/articles/2023-10-17/stellantis-sees-23-300-citroen-ev-as-answer-to-china-s-byd-nio>

⁴ Reuters (2024) Fiat launches new Panda with EV version priced under 25,000 euros
<https://www.reuters.com/business/autos-transportation/fiat-launches-new-panda-with-ev-version-priced-under-25000-euros-2024-07-11/>

⁵ Albertina Torsoli (2024) Renault's Latest EV Includes Wicker Basket For Baguettes. Bloomberg.
<https://www.bloomberg.com/news/articles/2024-02-26/renault-sends-25-000-revamp-of-r5-city-car-into-ev-race>

⁶ Gilles Guillaume (2024) Renault's Ampere starts development of new electric Twingo, sources say. Reuters.
<https://www.reuters.com/business/autos-transportation/renaults-ampere-starts-development-new-electric-tingo-sources-say-2024-04-02/>

VolksWagen	ID. 2all ⁷	€25,000 EUR (\$36,750 CAD)	2026
VolksWagen	ID. 1 ⁸	€20,000 EUR (\$29,500 CAD)	2027
Hyundai	Inster ⁹	€20,000 EUR (\$29,500 CAD)	2024
Kia	EV2 ¹⁰	Not Announced	2025

Entry-Level Budget EV models Coming to North America

Automaker	Model Name	Expected Price (North American Market)	Launch Date
General Motors	Chevrolet Bolt EUV	Not Announced	2025
Tesla	Model 2 ¹¹	\$25,000 USD	Cancelled?

Note: Reuters reported that Tesla's '\$25,000' EV was being scrapped and replaced by a robotaxi, although Elon Musk has since disputed this on X (formerly Twitter). According to a recent Musk biography, the mercurial billionaire wanted to completely remove mirrors, pedals and the steering wheel but was eventually convinced by other executives to make a robotaxi and the Model 2 on the same vehicle platform.¹²

In an investor call in February 2024, Stellantis CEO Carlos Tavares indicated that the threat of Chinese competition was the primary driver of their increased offering of electric vehicle models;

“Do we want Chinese carmakers to take a significant share of the U.S. market in the next 20 years, or the next 10 years? How do we prevent that from happening beyond all the protectionist decisions, which are out of my reach? Well, by making our consumers happy.” - Stellantis CEO Carlos Tavares¹³

⁷ VolksWagen Newsroom (2023) World premiere of the ID. 2all concept: the electric car from Volkswagen costing less than 25,000 euros
<https://www.volkswagen-newsroom.com/en/press-releases/world-premiere-of-the-id-2all-concept-the-electric-car-from-volkswagen-costing-less-than-25000-euros-15625>

⁸ Electrek (2024) Volkswagen announces production start date for its most affordable \$20K ID.1 EV.
<https://electrek.co/2024/03/14/volkswagen-announces-production-start-date-20k-id-1-ev/>

⁹ Andrea Malan (2024) Hyundai will launch a 20,000-euro mini EV in Europe, reports say. Automotive News.
<https://europe.autonews.com/cars-concepts/hyundai-casper-will-rival-vw-renault-fiat-low-cost-electric-cars>

¹⁰ The Verge (2024) Kia's more affordable EV2 is getting ready to undercut Tesla.
<https://www.theverge.com/2024/4/19/24135116/kia-ev2-ev-affordable-cheap-electric-tesla-model-2>

¹¹ Reuters (2024) Exclusive: Tesla scraps low-cost car plans amid fierce Chinese EV competition
<https://www.reuters.com/business/autos-transportation/tesla-scraps-low-cost-car-plans-amid-fierce-chinese-ev-competition-2024-04-05/>

¹² Electrive (2023) Musk biography reveals plans for compact model and robot taxi on the same platform.
<https://www.electrive.com/2023/09/11/musk-biography-reveals-plans-for-compact-model-and-robot-taxi-on-the-same-platform/#:~:text=The%20planned%20compact%20model%20is,already%20made%20in%20May%202023.>

¹³ Associated Press (2024) Carmaker Stellantis CEO wary of Chinese offensive as market moves into electric vehicles. <https://apnews.com/article/italy-earnings-stellantis-carmaker-d07aee44f4db68d109f7276d1c547ddf>

The availability of budget models is an important consideration when making the decision over tariff levels on Chinese electric vehicles. Removing competitive pressures altogether could create a situation where legacy automakers have little incentive to bring the same budget EV models they are introducing in Europe to the Canadian market.

When Will North American Automakers Supply Affordable EVs?

Legacy automakers often claim that the North American market is different from Europe, dominated by demand for SUVs and trucks, with little demand for budget electric vehicle models. If that were true, they would not be campaigning for protectionist measures to prevent those kinds of models being supplied to North America.

The North American vehicle market currently operates as an internal-combustion engine (ICE) dominated oligopoly.¹⁴ Oligopolies are characterized by high barriers to entry (such as tariff barriers, capital investment requirements and significant economies of scale), few market participants, firms with significant price-setting power, and abnormally high long-run profits. In an automotive oligopoly, firms are able to influence prices by their control over vehicle supply. Currently, legacy automakers use their oligopolistic market power to shift supply to their most profitable vehicles, gasoline powered SUVs and trucks.¹⁵

These more profitable vehicles also face tariff protection (a 25% import tariff) in the United States (the so-called 'Chicken tax'), and less stringent EPA (light truck) regulatory requirements for vehicle emissions (in both Canada and the United States).

“I think the chicken tax is one of the most important determinants of how the industry looks today and how it operates today in the U.S.” - John Krafcik, former CEO of Hyundai.¹⁶

This market structure, created by longstanding US trade and regulatory policy, has made American automakers accustomed to facing little competition in the light truck market, and as a result they have developed a specialization in these more profitable ICE vehicles. The proliferation of SUVs as a vehicle class is primarily intended to turn passenger cars into a protected class of vehicle, as most SUVs are classified as Light Trucks. This is why we have seen Ford, Stellantis and General Motors discontinue making compact sedan ICE cars entirely.¹⁷ Stellantis stopped in 2016. Ford stopped in 2018. General Motors stopped in 2023 with the demise of the Malibu. The only sedan consumers can buy from a US automaker as of the time of writing is a luxury Cadillac. There are no affordable models.

¹⁴ Giulio Mattioli, Cameron Roberts, Julia K. Steinberger, Andrew Brown, (2020) The political economy of car dependence: A systems of provision approach, Energy Research & Social Science, <https://doi.org/10.1016/j.erss.2020.101486>.

¹⁵ Weber, Isabella & Wasner, Evan. (2023). Sellers' inflation, profits and conflict: why can large firms hike prices in an emergency?. Review of Keynesian Economics. 11. 183-213. 10.4337/roke.2023.02.05.

¹⁶ NPR (2015) How A Tax On Chicken Changed The Playing Field For U.S. Automakers. <https://www.npr.org/2015/06/19/415671756/how-a-tax-on-chicken-changed-the-playing-field-for-u-s-automakers>

¹⁷ Zipper, David (2024) Detroit killed the sedan. We may all live to regret it. <https://www.fastcompany.com/91123174/detroit-killed-the-sedan-we-may-all-live-to-regret-it>

This market structure has historically led North American automakers to embrace lower-profit electric vehicles at a snail's pace. While in more recent years, legacy automakers have begun to offer electric vehicle models to comply with more stringent regulatory requirements for fleetwide carbon emissions, these models have been relegated to targeting a small, niche luxury market. This is because these automakers have only had to compete with Tesla, which aims to primarily serve that market, and because keeping these vehicles produced at low volumes means the cost structures aren't amenable to mass-producing lower priced models. Making EVs at low production volumes is typically done at factories with mixed assembly lines for both gas and electric cars, which are wildly cost inefficient compared to EV-dedicated setups intended for high-production volumes.¹⁸

For automakers like Ford, who have specialized in making trucks in a protected market, the transition to EVs has flipped their traditional business model on its head. For gas vehicles, larger SUVs and trucks don't cost much more to manufacture, but can command a much higher price, and be more profitable on a unit basis. But making large electric vehicles in the same way only increases costs, due to the battery, making these kinds of vehicles priced at impractically high levels for the average consumer.

“The larger the vehicle, the bigger the battery, the more pressure on margin because customers will not pay a premium for those larger batteries.” - Ford CEO Jim Farley.¹⁹

The transition to EVs to North American automakers ultimately means margin compression, giving up the super-profits that they are accustomed to, making smaller sedan cars that they've previously abandoned, and competing on the world stage in a market they aren't protected in. It's no wonder why they are reluctant to make the shift. It is up to policymakers to help guide them in the right direction.

A Made-In-Canada Affordable EV is Not the Focus of Canadian Industrial Policy

The automakers Canada has partnered with for Inflation Reduction Act (IRA)-matching production subsidies currently have no plans to introduce low-priced EV models in North America with those subsidies. The confirmed EV models being assembled or supplied with Canadian-built components include; a delivery van not meant for passenger transportation; the ultra-expensive Hummer EV and the expensive Dodge Charger electric muscle car. Little has been confirmed otherwise for product plans that might indicate that an affordable EV for the masses is being made in Canada.

¹⁸ BCG (2020) Shifting Gears in Auto Manufacturing.

<https://www.bcg.com/publications/2020/transformative-impact-of-electric-vehicles-on-auto-manufacturing>

¹⁹ InsideEVs (2024) Why Ford's CEO Thinks Small, Cheap EVs Are The Future.

<https://insideevs.com/news/727810/ford-small-ev-trucks-farley/>

Status of Major EV and Battery Production Plans in Canada

Canadian EV/battery production project and location	Electric vehicle model or part	Date production expected to start	Current Status
Stellantis - Windsor, Ontario ²⁰	Electric Dodge Charger	Two-door models will be available late 2024, and four-door models are set to arrive early 2025.	As planned.
Ford - Oakville, Ontario	Possibility of electric Super Duty truck production	“Later this decade”	Paused indefinitely. Initially planned for late 2024, then pushed to 2027 ²¹ , now canceled. ²²
Honda - Aliston, various locations ²³	Analysts speculate two new electric crossover models by early 2028. Will also include a cathode active material and precursor processing plant and a separator plant through joint ventures.	2028	As planned.
General Motors, Ingersoll CAMI Plant ²⁴	BrightDrop electric delivery vans	Production is ongoing	Production was halted October 2023, restarted in April 2024
Toyota	N/A	N/A	N/A
General Motors - St Catharines ²⁵	Electric motors	2025	Paused Indefinitely

²⁰ Automotive News (2024) More than minivans, Dodge Charger to be built in Windsor, Ont., analyst forecasts.

<https://canada.autonews.com/production/new-dodge-charger-ev-built-windsor>; <https://www.dodge.ca/en/chargerreveal>

²¹ CBC (2024) Ford delays start of EV production at Oakville plant until 2027

<https://www.cbc.ca/news/canada/toronto/ford-delay-oakville-ev-plant-1.7163251>

²² Globe and Mail (2024) Ford Motor Co.'s Oakville plant to turn out large gas-powered pickup trucks by summer of 2026

<https://www.theglobeandmail.com/business/article-ford-motor-cos-oakville-plant-to-turn-out-large-gas-powered-pick-up/>

²³ Windsor Star (2024) Honda building two EV crossovers, multiple new Ontario plants — auto analyst

<https://windsorstar.com/news/local-news/honda-building-two-ev-crossovers-multiple-new-ontario-plants-auto-analyst> ;

<https://hondanews.ca/en-CA/releases/northwind-project>

²⁴ Detroit News (2023) GM Ontario plant to halt BrightDrop assembly from October into spring

<https://www.detroitnews.com/story/business/autos/general-motors/2023/09/15/battery-module-delays-halt-brightdrop-zevo-production-gm-ontario-plant/70869358007/>

²⁵ St. Catharines Standard (2024) General Motors reassessing plan to build electric vehicle motors in St. Catharines

https://www.stcatharinesstandard.ca/business/niagara-region/general-motors-reassessing-plan-to-build-electric-vehicle-motors-in-st-catharines/article_350ad608-7569-5b3f-8f0c-3a0b8adc3f8e.html

General Motors-Posco - Becancour, Quebec	Cathode active materials that will power the Chevrolet Silverado pickup truck and GMC Hummer EV	2025	As Planned
Umicore - Kingston, Ontario ²⁶	Battery components	2025	Paused indefinitely.
Northvolt - Saint-Basile-le-Grand, Quebec	Battery cells and cathode active material	2026	Northvolt is currently undergoing a “strategic review” that will determine the timelines of its various projects. ²⁷
Stellantis / LG Energy, Windsor, Ontario ²⁸	Battery cells	End of 2024	As Planned
Volkswagen -, St Thomas, Ontario	Battery cells	2027 ²⁹	As Planned

The commitment of these automakers to follow through on Canadian EV production announcements, even with a massive government subsidy in place, is also shaky. Ford delayed, then recently cancelled plans for electric truck production in Oakville. General Motors has indefinitely paused production of electric motors in St. Catharines.

The longer traditional automakers face no competition in the budget EV market segment, the longer they are able to delay production ramp-up plans for their own competing alternatives and continue profiting from selling gas guzzlers instead. This continues their strategy of ‘building EVs to demand’ while intentionally suppressing demand with limited offerings and high prices.

Toyota, the traditional supplier of budget ICE vehicles, is in talks with the Canadian government.³⁰ However, Toyota is among the carmakers with the greatest hostility towards the shift to EVs. Global non-profit InfluenceMap finds that “Japanese automakers (Toyota, Honda, Suzuki) are the least prepared for an electric vehicle transition and are engaging the hardest

²⁶ CBC (2024) Company halts construction of \$2.7B battery project in eastern Ontario.

<https://www.cbc.ca/news/canada/ottawa/electric-battery-project-umicore-ontario-1.7276431>

²⁷ Automotive News (2024) Northvolt says it will continue EV battery plant project near Montreal ‘as planned’.

<https://canada.autonews.com/electric-vehicles/northvolt-says-it-will-continue-ev-battery-plant-project-near-montreal-planned>

²⁸ Windsor Star (2023) Stellantis battery technology centre begins to rise from ground in Windsor.

<https://windsorstar.com/news/local-news/stellantis-battery-technology-centre-begins-to-rise-from-ground-in-windsor>

²⁹ VW (2023) Volkswagen-backed PowerCo SE reaches significant milestone in St. Thomas gigafactory project.

<https://www.newswire.ca/news-releases/volkswagen-backed-powerco-se-reaches-significant-milestone-in-st-thomas-gigafactory-project-882950896.html>

³⁰ Globe and Mail (2023) Toyota Canada asking Ottawa for assistance as it plans for shift to EVs.

<https://www.theglobeandmail.com/politics/article-toyota-canada-asking-ottawa-for-assistance-as-it-plans-for-shift-to/>

against it,” with global advocacy strategies promoting policies to lock in a longer-term role for ICE-powered vehicles.³¹

No automaker currently plans to make a budget EV in Canada. The investments announced thus far continue the traditional pattern of the footprint of vehicle manufacturing in Canada being done by foreign companies, primarily making premium, higher cost brands for export to other markets (primarily the United States), while Canadian consumers mostly rely on imported vehicles to fill the ‘affordable’ segment of the market.³² For ICE vehicles, affordable entry-level models are often imported from Japan and South Korea. This includes well-known household names like the Toyota Corolla and the Hyundai Elantra. The only budget ICE model currently made in Canada is the Honda Civic.

Unless the federal government aims to change this pattern with an industrial strategy aimed at making a ‘made-in-Canada’ affordable EV, Canada risks creating a double standard by which it allows imports to continue to play the role of filling the budget market segment for gasoline vehicles but not electric vehicles.

Policy Tools to Hold Automakers Accountable

There are three primary policy tools that governments can use to influence corporate behaviour; 1) Industrial policy (subsidies, tariffs, taxes, state ownership), 2) regulations and 3) market-based competition.

The decade following the 2008 financial crisis is where the divergence of EV industrial policies between China and Western countries began. China developed an industrial strategy aimed at technologically ‘leapfrogging’ the West by skipping over the internal combustion engine and specializing in the electric powertrain before their competitors could. In contrast, Ford and General Motors were rescued by the Canadian and American governments, but little to no conditions or direction as to their environmental conduct were given. The federal government would instead sell their shares of General Motors at a loss. The result today has been China becoming the first to introduce the budget EV model, while the business model for legacy automakers in the West has been to ask governments to subsidize the price of their low volume, luxury EV models so they could instead focus on their primary interest in selling more profitable gasoline SUVs and trucks.³³

Fortunately, this business calculus for legacy automakers is now beginning to change due to a shift in industrial policy in western countries and increasingly stringent regulatory requirements mandating the shift to electric vehicles. Unfortunately, many automakers have used the

³¹ InfluenceMap (2024) Automakers and Climate Policy Advocacy: A Global Analysis.

<https://influencemap.org/report/Automakers-and-Climate-Policy-Advocacy-A-Global-Analysis-27906>

³² ISED (2023) “Vehicles Made in Canada”

<https://ised-isde.canada.ca/site/canadian-automotive-industry/en>

³³ Reuters (2023) GM could reap billions by building combustion trucks and SUVs through 2035.

<https://www.reuters.com/business/autos-transportation/gm-could-reap-billions-by-building-combustion-trucks-suvs-through-2035-2023-06-13/>

opportunity of EV production subsidies becoming available following the *Inflation Reduction Act* to offload the cost of electrification onto taxpayers. Instead of using these subsidies to drive down costs for consumers, they have increased free cash flow returns to investors with share buybacks and dividend increases.³⁴

Fortunately, regulatory requirements such as President Biden's vehicle emissions standards and Canada's Electric Vehicle Availability Standard, and the EU's 2035 internal combustion engine phase out offer significant hope that legacy automakers will be forced to change their business practices and introduce budget EV models in North America. Economic modelling conducted for Environmental Defence and Equiterre in 2022 by Simon Fraser University's (SFU) Sustainable Transport Action Research Team (START) found that Canada's *electric vehicle availability standard* would be able to cut EV prices by 20% on average below the business as usual price trajectory.³⁵ ZEV mandates alone induce automakers to bring more budget models to market, alter pricing across their vehicle fleet (whether that is mark-ups, leasing and financing terms, etc) to boost EV demand and meet compliance requirements. It also induces significant growth in R&D spending to cut EV costs. However, SFU START's model only simulates a single, domestic Canadian market-encompassing automaker rather than dynamic competition across borders and foreign markets.

A core concern for the environmental community is that there continues to be significant policy uncertainty over whether these rules will remain in place in the event of a change in government in Canada and/or the United States. If Canada simply follows the US approach of completely shutting out Chinese automakers with a 100%+ tariff, there remains the distinct possibility of a future scenario where no accountability mechanisms exist to apply downward pressure on EV prices, whether it be regulatory requirements or market-based competition.

Does China 'Play By the Rules?'

It is important to recognize that desirable competition which produces better outcomes for consumers should be done on a level playing field. China has been accused of not playing on a level playing field with western automakers due to excessive subsidies given to their industry by the Chinese government, the use of 'overcapacity', trade-distortionary 'non-market practices,' 'dumping', and poorer labour standards. We offer a perspective on these issues below;

1. Overcapacity

³⁴ Reuters (2024) GM cuts EV production forecast, approves \$6 billion share buyback. <https://www.reuters.com/business/autos-transportation/general-motors-board-approves-new-6-billion-share-buyback-plan-2024-06-11/>

³⁵ Axsen, J., & Bhardwaj, C. (2022). Modelling a zero-emission vehicle standard and subsidies in Canada's light-duty vehicle sector (2023-2035). Prepared for Environmental Defence and Équiterre by the Sustainable Transportation Action Research Team (START), Simon Fraser University. https://environmentaldefence.ca/wp-content/uploads/2022/11/Clean_Car_Standard_Technical_Report_FINAL-ENG-.pdf

Overcapacity is when factories' production capacity is under-utilized due to weak demand. Trade conflicts emerge when in response to weak demand for products in an internal market, export markets are sought out to find new sources of demand. The top Chinese exporters of EVs, BYD and SAIC are close to working at full capacity for example, according to Rhodium Group.³⁶

Due to China's economic model and policy habits, economic stimulus is provided through supply-side production supports rather than demand-side boosts to household consumption through a traditional welfare state.³⁷ Before the reform and opening up period, Maoist China's primary method of providing social security was known as the 'iron rice bowl', which gave guaranteed job security at state-run firms.³⁸ But since reforms in the 1990s, workers have lost these guaranteed benefits, and the Chinese government has not compensated with a greater extension of social security and household income support through pensions and unemployment benefits. This is what many analysts attribute to the imbalance in the Chinese economy, relying on exports for growth because its own internal market isn't strong enough to support growth through increased consumption.³⁹

The use of exports to find foreign markets for high levels of production of a commodity is quite common. For example, Germany is a country which makes far more vehicles than its internal market can absorb, and therefore they rely on auto exports. Canada shares this aspiration.

The Chinese economy remains imbalanced, and Chinese policymakers should aim to improve living standards and domestic consumption. But there is nothing inherently wrong with China being an auto-exporting nation, so long as this growing dominance in the sector does not replace Canada's own manufacturing footprint. But for other developing countries with no domestic auto industry to protect, the proliferation of affordable EVs into their markets can only bring good news.

2. Subsidies

Subsidies come in many forms. The Center for Strategic and International Studies (CSIS) recently published a widely cited analysis finding that China government support to its auto sector from 2009 to 2023 cumulatively totaled \$230.9 billion.⁴⁰ However, the same analysis found that \$187.9 billion of this funding went to the buildout of charging infrastructure, and to consumers in the form of sales incentives, consumption tax exemptions to boost domestic EV adoption.

³⁶ Rhodium Group (2024) Overcapacity at the Gate.
<https://rhg.com/research/overcapacity-at-the-gate/>

³⁷ Ibid.

³⁸ Ringen, Stein; Ngok, Kinglun (2013) : What kind of welfare state is emerging in China?, UNRISD Working Paper, No. 2013-2, United Nations Research Institute for Social Development (UNRISD), Geneva

³⁹ Rhodium Group (2024) No Quick Fixes: China's Long-Term Consumption Growth.
<https://rhg.com/research/no-quick-fixes-chinas-long-term-consumption-growth/>

⁴⁰ CSIS (2024) The Chinese EV Dilemma: Subsidized Yet Striking
<https://www.csis.org/blogs/trustee-china-hand/chinese-ev-dilemma-subsidized-yet-striking>

Canada should draw a distinction between state aid in the form of direct capital and operating support to firms and legitimate climate policy aimed at increasing EV adoption and reducing carbon emissions. It is in Canada's interests to encourage the most polluting countries on the planet, like China, to reduce their carbon emissions. Placing economic sanctions on them in the form of tariffs on the basis that they invested in EV charging infrastructure undermines global climate action. It is also in Canada's interests not to punish China for directly subsidizing the domestic consumption of electric vehicles, which serves to alleviate China's problems with overcapacity.

Tariffs levied on the basis of state subsidies should be evidence-based. Canada should launch an investigation, similar to the EU, and analyze exactly how much Chinese firms currently benefit from state production subsidies. These amounts should be compared to Canada's own production subsidies before calculating the application of tariffs on the grounds of state subsidies. The European Union's investigation required firms to open up their books to investigators, and levied punitive tariffs to firms that didn't.⁴¹ For BYD, arguably the most competitive firm, tariffs were levied on the order of 17.4% due to state subsidies, not more than 100%.⁴²

3. Non-Market Practices

All climate policies aimed at encouraging electric vehicle adoption are by their very nature market-distortionary. An automotive market dominated by gasoline vehicles (created in part by a historically technology neutral policy regime), must be distorted deliberately to drive down EV prices and replace gasoline vehicle sales with zero emissions vehicle sales. Replacing internal combustion engine (ICE) vehicles with zero emission vehicle sales is a necessary task for reducing carbon emissions and meeting global climate objectives. For this reason, there is nothing inherently wrong with market-distortionary climate policies, whether they be trade, regulatory or fiscal.

The problem Canada is confronting is that China is simply far better at distorting its light-duty vehicle market than Canada is. China has deliberately created an automotive market which has cutthroat competition, and frequent price wars have forced Chinese companies to go to ever-greater lengths to innovate and drive down costs. One of the ways in which market leader Build Your Dreams (BYD) has accomplished cost reductions is through battery innovation and complete vertical integration of its supply chain.⁴³ BYD specializes in making its own critical components in-house, including their batteries and semiconductors.⁴⁴ Profit margins are also much lower, with earnings comprising about 2% of revenues compared to Tesla's 10% in 2021.

⁴¹ SCMP (2024) Inside the EU's blockbuster Chinese EV probe: 'the whole supply chain is subsidised'. <https://www.scmp.com/news/china/diplomacy/article/3266406/whole-supply-chain-subsidised-inside-eus-blockbuster-chinese-ev-probe>

⁴² European Commission (2024) Case AS689 - New battery electric vehicles for passengers <https://tron.trade.ec.europa.eu/investigations/case-view?caseId=2684>

⁴³ Bloomberg (2021) How China's Car Batteries Conquered the World. <https://www.bloomberg.com/opinion/articles/2021-12-02/how-china-s-car-batteries-conquered-the-world>

⁴⁴ Bloomberg (2022) Chinese EV Maker BYD Aims to Conquer World Markets as the Un-Tesla. <https://www.bloomberg.com/news/articles/2022-08-17/byd-electric-cars-try-competing-with-tesla-through-low-price>

One of the methods that China controls inflation and prices throughout its economy is through state-managed buffer stocks of key 'systemically important' consumer and industrial commodities. The Chinese state uses the market mechanism to buy commodities and stockpile them when planners believe the market price is too low, and sells off parts of its buffer stocks into the market when prices become too high.⁴⁵ In this manner, they manage to influence market prices and mitigate inflationary pressures. President Biden has done something similar with the Strategic Petroleum Reserve to mitigate American gas prices. This is a core feature of the Chinese planned economy, and it allows the Chinese government to develop the EV supply chain, for example by guaranteeing forward prices to critical mineral miners to ensure production comes online despite the vagaries of fluctuating global commodity price cycles. Canada and its allies should learn from this practice to develop its own EV supply chain, as has been proposed by some experts.⁴⁶

4. Dumping

Dumping occurs when a country or company exports a product at a price that is lower in the foreign importing market than the price in the exporter's domestic market. In the case of exported Chinese electric vehicles, they are sold at higher prices in export markets than the domestic Chinese market.⁴⁷ This makes the charge of 'dumping' not true.

Table 4. EV MODELS PRICE IN SELECTED MARKETS COMPARED WITH LOCAL MARKET

Brand	Model	Price in foreign market		Price in China	Price premium
BYD	Dolphin	UK	£30,195	€ 12,947	178%
		The Netherlands	€ 35,490		174%
		Germany	€ 32,990		155%
	Seal U comfort	UK	NA	€ 21,769	NA
		The Netherlands	€ 42,990		97%
		Germany	€ 41,990		93%
	Atto 3 Comfort	UK	£37,195	€ 17,923	147%
		Netherlands	€ 38,990		118%
		Germany	€ 37,990		112%
SAIC	MG4 Electric 64kWh	UK	£29,495	€ 17,939	96%
		The Netherlands	€ 35,785		99%
		Germany	€ 39,990		123%
Geely	Polestar 3	UK	£52,950	€ 38,470	64%
		The Netherlands	€ 55,200		43%
		Germany	€ 52,275		36%

Source: BBVA Research based on Electric Vehicle Database

⁴⁵ Isabella Weber (2021) How China Escaped Shock Therapy: The Market Reform Debate.

⁴⁶ Contingent Supply: Why Spodumene Reserves May Be the Key to a More Secure Lithium Supply Chain. <https://www.employamerica.org/researchreports/contingent-supply-why-spodumene-reserves-may-be-the-key/>

⁴⁷ BBVA (2024) China | EV sector: forging ahead amid intensifying Headwinds. https://www.bbva.com/wp-content/uploads/2024/06/202406_Chinese-EV-sector_forging-ahead-amid-intensifying-headwinds.pdf

5. Labour Standards

On Thursday, May 11, 2023, *Bill S-211: An Act to enact the Fighting Against Forced Labour and Child Labour in Supply Chains Act* received Royal Assent.⁴⁸ Canada should use the powers given by this legislation to prohibit the importation of goods manufactured with forced labour or child labour entirely from Canada, regardless of its origin.

China does not have a system of free and fair collective bargaining, and suppresses wages as part of its development strategy. The imposition of tariffs on the issue of wages alone is justified to correct the imbalance between Canadian and Chinese auto workers. Canada should determine how much this wage differential contributes to a vehicle's final product price when levying a tariff. Some commentary suggests that due to the highly-automated and capital-intensive nature of the auto industry, wages comprise less than 20% of a vehicle's final product price,⁴⁹ but this should be determined by greater investigation.

6. Controls on Chinese Automotive Foreign Direct Investment

If a Chinese automaker wishes to set up a factory in Canada, employ Canadian workers, and 'play by our rules' governing labour standards and environmental sustainability. Canada should not say no to new EV jobs.

7. Privacy Protections

There are concerns about the information collected by new electric vehicles, as these are high-tech products, with many cameras, and are more similar to smartphones than traditional automobiles. Canada should apply privacy protections for consumers in a consistent manner across all automakers, as the collection of information is not unique to a single country or firm. Additional requirements, such as keeping data stored in North-American based servers, could be put in place on national security grounds. Ultimately, rules can be put in place to prevent abuse and protect consumer privacy more broadly that do not require the complete restriction of imports of electric vehicles from China.

Full Recommendations

1. *Take a Balanced Approach: Use Tariffs to Level the Playing Field And Secure Canada's Place in the EV Supply Chain, But Don't Shield Legacy Automakers from Meaningful Competition So Consumers Can Get Access to Affordable EVs*

Apply tariffs in a manner that targets an 'acceptable price point' for the entry of Chinese EV models in the Canadian market. This 'acceptable price point' should create an even

⁴⁸ Library of Parliament (2022) Legislative Summary of Bill S-211: An Act to enact the Fighting Against Forced Labour and Child Labour in Supply Chains Act and to amend the Customs Tariff.

https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/LegislativeSummaries/441S211E

⁴⁹ John Cassidy (2024) Car Wars: Is China's electric-vehicle industry a threat to the U.S., or something to learn from? New Yorker. <https://www.newyorker.com/news/the-financial-page/is-china-electric-vehicle-industry-a-threat-to-the-us>

playing field with the budget EV models becoming available from traditional automakers in comparable markets where Chinese competition exists, like Europe. The objective of setting this tariff level should be to allow for ‘managed competition’ to occur, both protecting Canadian auto jobs and investments, while encouraging traditional automakers to introduce competitive budget EV models of their own in North America.

Chinese EVs shipped into the European market are sold at a significant price premium compared to the Chinese market, making these exports highly lucrative.⁵⁰ A Rhodium group analysis suggests that for the European market, tariffs on the order of 40-50% would be required to wipe out profit margins of Chinese exporters, and make it unattractive to supply vehicles to the EU market.⁵¹ However, tariffs on the order of 20-30% would slow down and limit Chinese EV market share. Analysis from Spanish investment bank BBVA, estimates that the tariffs currently envisioned by EU regulators would limit the market share of Chinese EV makers to 15% by 2030 in the European market.⁵²

This analysis suggests that Canada could find a ‘sweet spot’ based on the cost structure and profit margins of Chinese EV firms to allow entry into the Canadian market, with a ‘price floor’ in mind and calibrate tariffs to enable managed competition, while limiting overall market share. This could mean tariffs in a similar range as those imposed in the EU, of 20%-30%.

Canada could, for example, target tariff levels to allow China’s BYD to sell the Seagull model at a \$30,000 CAD price point in the Canadian market. This would be a substantial increase from the \$14,000 CAD price point the model sells for in China, but still lower priced than every EV model currently available to Canadians. It would be approximately the same price as a new gas-powered Honda Civic.

Accounting for the federal iZEV incentive of \$5000 becoming only eligible for non-Chinese automakers, this would place a model like Stellantis’ ë-C3 at a small price advantage, before accounting for provincial purchase incentives, which vary by jurisdiction. In this scenario, Canada could encourage provinces with their own incentive programs to also exclude Chinese automakers. Canada could also escalate trade barriers in the future if further innovation in China makes Chinese EVs fall below their target price, with an import quota limiting the Chinese EV market share to a ceiling of 15-20%.

2. Minimize Disruption of EV Supply in the Transition Period

⁵⁰ BBVA (2024) China | EV sector: forging ahead amid intensifying Headwinds.
https://www.bbva.com/wp-content/uploads/2024/06/202406_Chinese-EV-sector_forging-ahead-amid-intensifying-headwinds.pdf

⁵¹ Rhodium Group (2024) Ain’t No Duty High Enough.
<https://rhg.com/research/aint-no-duty-high-enough/>

⁵² BBVA (2024) China | EV sector: forging ahead amid intensifying Headwinds.
https://www.bbva.com/wp-content/uploads/2024/06/202406_Chinese-EV-sector_forging-ahead-amid-intensifying-headwinds.pdf

Tesla plays an outsized role in EV supply to the Canadian market. The Model 3 accounted for 18% of iZEV rebates in 2023. Raising the price of the Model 3 or reducing its availability in Canada (even temporarily) through tariffs could have significant impacts on EV uptake. Indeed, Tesla vehicles have historically played an outsized role in supporting EV uptake in Canada, accounting for up to 60% of sales in certain provinces in certain years. Placing sudden tariffs on these vehicles could potentially be extremely disruptive, unless a transition period is introduced.

For this reason, we recommend allowing a grace period between when tariffs are announced and implemented. This grace period should allow fulfillments of existing orders and give time for automakers like Tesla to shift supply from its Shanghai factory to US-based factories such as Texas or California.

Canada should only apply tariffs on electric vehicles where final assembly has occurred in China. Canada should not apply tariffs to other input components or subcomponents for electric vehicles such as batteries or battery cells, as this could disrupt existing legacy automaker partnerships with suppliers such as with CATL to make batteries for EVs with final assembly in North America.

3. Use Preferential EV Purchase Incentives to Level the Playing Field and Avoid Unnecessarily Raising Prices

Canada should first level the playing field between Chinese electric vehicle (EV) manufacturers and legacy automakers by first implementing policies that do not raise EV prices. By first adding trade-distortionary preferences to Canada's zero-emissions vehicle incentive program (iZEV), tariffs can then be set at a lower level to mitigate price and affordability impacts. Combined together, these measures should be aimed at leveling the playing field to allow for 'managed competition' rather than shutting out Chinese electric vehicles from the Canadian market entirely.

The federal Incentives for Zero-Emission Vehicles (iZEV) Program offers up to \$5,000 to individuals purchasing new zero-emission vehicles from registered dealerships in Canada. Between 2019 and 2023, annual incentive requests rose from around 34,000 to 114,000. S&P Global Mobility predicts zero-emission vehicles will account for 25 per cent of Canada's new market share by 2025, well above Canada's ZEV sales target of 20% by 2026.⁵³ Modelling suggests that continuing existing subsidies until 2035 in line with Canada's ZEV sales regulatory requirements will cost nearly \$27.3 billion as sales volume expands to 100% of all new vehicles by 2035.⁵⁴

⁵³ S&P Global Mobility. (2023). Canadian automotive insights.

https://cdn.ihsmarket.com/www/prot/pdf/1123/EVCanadian-Newsletter-Q3-2023-2-page-with-JC-questions_Chris.pdf

⁵⁴ Aksen, J., & Bhardwaj, C. (2022). Modelling a zero-emission vehicle standard and subsidies in Canada's light-duty vehicle sector (2023-2035). Prepared for Environmental Defence and Équiterre by the Sustainable Transportation Action Research Team (START), Simon Fraser University. https://environmentaldefence.ca/wp-content/uploads/2022/11/Clean_Car_Standard_Technical_Report_FINAL-ENG-pdf

It is clear that meeting Canada's ZEV sales targets significantly affects the fiscal sustainability of EV incentive programs in the medium to long term. When first established, these programs primarily served a small market of early adopters and facilitated the business case for the development of what was once a nascent technology. As Canada and the rest of the world moves into the mass-adoption phase of what is now a mature technology, the role of these programs in the zero-emissions vehicle policy landscape must change. It is in the interests of the long-term fiscal sustainability of these programs to narrow their eligibility criteria to serve a more targeted role that can be reliably maintained for the longer-term.

Economic modelling has found that the presence of ZEV mandates alone induce automakers to bring more budget models to market, alter pricing across their vehicle fleet (whether that is mark-ups, in-house leasing and financing terms, etc) to boost EV demand and meet regulatory compliance. It also induces significant growth in R&D spending to cut EV costs. However, when a ZEV mandate is combined with subsidies, economic modelling suggests that EV purchase incentives cease to be effective at increasing EV adoption, as they subsidize sales that are already required to be made. Automakers instead respond by reducing spending they otherwise would have made on R&D to cut vehicle prices and expand ZEV profit margins.⁵⁵ In effect, they slacken efforts to cut prices on their own as the government is taking care of this for them.

To combat the perverse incentives this creates for the auto industry to capture the value of this incentive, reform of the iZEV program should include a focus on MSRP price limits for eligible vehicles. Industry analysts have observed how ZEV prices are influenced by the price limits set by the federal government for eligible vehicles under the iZEV program.⁵⁶ Gradually lowering the existing price limits could encourage automakers to bring more affordable EVs to the Canadian market by creating a strong market signal to cut prices in order to maintain vehicle model eligibility.

As regulatory requirements become the primary driver of ZEV sales, the role of incentives should shift to target affordability for consumers, address trade competitiveness concerns and function as part of Canada's broader industrial policy landscape. We recommend reforming the iZEV program to reflect its new role and to keep the program fiscally sustainable over the long-term;

We Recommend Expanding Eligibility for iZEV By;

- Making used EVs eligible for the program.

We Recommend Offsetting the Cost of Keeping This Program for the Long-Term By;

- Applying a 'sustainability criteria' test for vehicle model eligibility based on production emissions. This sustainability criteria should reward EVs with lower production emissions and penalize EVs with higher production emissions, similar to criteria introduced by the

⁵⁵ Ibid.

⁵⁶ Kennedy, D. (2023) How ZEV rebates might be affecting MSRPs of green vehicles. AutoNews. <https://canada.autonews.com/electric-vehicles/how-zev-rebates-might-be-affecting-msrps-green-vehicles>

French Government.⁵⁷ EV models with production emissions similar to those made in China and worse should not become eligible for the incentive;

- Eliminating incentives for Plug-In Hybrid Vehicles;
- Recovering costs from high-income households by deeming incentive amounts as taxable income for those in the top 2 highest income tax brackets (\$173,205 and up). This will keep point-of-purchase eligibility hassle-free while effectively imposing an income test to the program;
- Create forward price-guidance for automakers by reducing the MSRP price cap for iZEV incentive eligibility by \$5000 each year from 2025 to 2028. This would mean an MSRP price cap of \$50,000 in 2025 to \$45,000 by 2026, \$40,000 by 2027 and \$35,000 by 2028.

4. *Compensate for Losses in EV Market Affordability As a Result of Tariffs With Supplementary Policy Actions Aimed at Reducing EV Prices, With a Focus on Used Vehicles*

If Canada plans to forgo market-based competition as a driver of lower EV prices, other non-market policy actions are needed to compensate for this loss of market-based pressure to drive down EV prices and ensure continued growth of EV adoption. This should primarily focus on the used vehicle market, as this is where the vast majority of low and middle income people make their car purchases. The majority of new car buyers are affluent people and corporate fleets.

In the absence of Canadian data, and using data from the United States national household travel survey (as outlined by ICCT⁵⁸) as a proxy, we can see that the vast majority of car purchases by low and middle income households are not new vehicles. As we descend the income ladder, households own fewer vehicles, the vehicles they do own are more likely to be older, and they are more likely to be cars instead of light trucks. This is why any discussion on vehicle affordability for middle and low income households should begin with the used vehicle market, and the availability of compact, lower-priced models.

Vehicle Ownership Characteristics by Household Income (United States)					
Household Income	<\$25,000	\$25,000 – \$50,000	\$50,000 – \$75,000	\$75,000 – \$150,000	>\$150,000
Vehicles Owned	1.1	1.7	2.1	2.4	2.5

⁵⁷ T&E (2023) France’s eco-bonus shows how we can promote cleaner made-in-Europe EVs. <https://www.transportenvironment.org/articles/frances-eco-bonus-shows-how-we-can-promote-cleaner-made-in-europe-evs>

⁵⁸ ICCT (2021) When might lower-income drivers benefit from electric vehicles? Quantifying the economic equity implications of electric vehicle adoption. <https://theicct.org/sites/default/files/publications/EV-equity-feb2021.pdf>

Proportion of vehicles purchased new	33%	33%	32%	38%	50%
Average Vehicle Age (years)	12.6	11.3	10.6	9.4	8.2
Proportion cars (vs. light trucks)	58%	54%	51%	50%	51%

This pattern is consistent across comparable developed countries where data exists. In the UK for example, 80% of all vehicle purchases are done in the used vehicle market.⁵⁹

For most poor households in North America, the affordability problem is not particularly in purchasing a vehicle, but in fact holding onto it.⁶⁰ This is because the high operating costs of car ownership and monthly bill payments for insurance, gas, etc. can mean that chronic financial insecurity leads to ephemeral car ownership status if faced with unpredictable events such as job loss or a suddenly high repair bill due to vehicle breakdown.⁶¹ This highlights how ensuring an adequate supply of more affordable models of zero-emission vehicles, which have lower operating costs compared to gasoline cars, reaches the used vehicle market, where low and middle income households make most of their vehicle purchases.

An unpublished, forthcoming study by DesRosiers automotive funded by Transport Canada into the Canadian used vehicle market (procured by the Canadian ZEV council affordability working group, which Environmental Defence co-chairs), finds that corporate fleets, in particular car rental companies, are key drivers of used vehicle supply. A significant portion of the business income of car rental firms comes from strategically buying and selling cars, not just renting them. Car rental firms will typically cycle through their entire fleet of new vehicles within 9 months of buying them brand new.

Car rental firms in Canada are currently far behind the rest of the consumer automotive market in terms of EV sales share of new light duty vehicles, and thus are not driving significant used EV supply. This undermines accessibility of EVs at lower prices for the vast majority of Canadian consumers. One key barrier is that there is no standardized provision of EV battery health information, which makes it difficult to price the retained value of these vehicles.⁶² This

⁵⁹ Green Finance Institute (2024) Used EV Market: The Key to Unlocking Net Zero

<https://www.greenfinanceinstitute.com/wp-content/uploads/2024/06/The-Key-To-Unlocking-Net-Zero.pdf>

⁶⁰ Klein, N.J., & Smart, M.J. (2017). Car today, gone tomorrow: The ephemeral car in low-income, immigrant and minority families. *Transportation*, 44, 495-510.

⁶¹ Cogan, Marin (2023) The impossible paradox of car ownership. Vox.

<https://www.vox.com/23753949/cars-cost-ownership-economy-repossession>

⁶² Green Finance Institute (2024) Used EV Market: The Key to Unlocking Net Zero

undermines the business model of car rental firms, which rely on reliable market information to make buying and selling decisions for their fleets.

Another barrier is that lack of reliable information to price retained value in EVs drives up leasing costs. There is currently a strong misalignment between leasing costs and the actual retained value of EVs.⁶³ With a vehicle lease, the consumer does not own the car, but instead is paying the dealership for the right to use it for a set period of time, with monthly payments. The cost of the payments is based on the expected depreciation of the vehicle when it is returned to the dealership, rather than the total purchase price of the vehicle, which makes this option more affordable than financing. At the end of the lease period, the consumer has the choice to return the vehicle (usually trading it in to lease a new vehicle) or purchase it. Higher lease costs reduce vehicle supply into the used EV market and undermine accessibility. Paradoxically, falling prices for new EVs increases leasing costs by increasing the depreciation of older EV models. This makes the iZEV program's bias for new vehicles (and exclusion of used vehicles) potentially market distortionary, and contributing to higher lease prices.

To promote EV affordability, rather than focusing on the MSRP of new vehicles, the Government of Canada should focus on the used market and lowering leasing prices by targeting the cost of monthly payments. The Government of France recently launched a program aimed at subsidizing the leasing costs for budget EV models made in France.⁶⁴ However, quickly oversubscribed, this program was discontinued. Canada should consider implementing a similar program, over the long-term, with a broader income eligibility criteria, focused on budget, leased electric vehicles.

We Recommend that the Canadian Government Develop a Made-in-Canada Affordable EV Strategy. This strategy should include a package of measures designed to drive down EV prices in Canada and ensure people can get their hands on more affordable electric vehicles. Measures should include;

- A. Expanding the iZEV program to include used EV purchases.
- B. Regulatory EV procurement mandates for corporate car fleets which are key drivers of used vehicle supply, such as rental car companies. At minimum, these firms should be required to keep pace with the rest of the market, and procure EVs at the same regulated sales targets outlined in Canada's *Electric Vehicle Availability Standard*.
- C. Requiring automakers to provide standardized EV battery health information, helping consumers make more informed choices while aiding the used EV market to more accurately price the retained value of vehicles and lower lease costs.
- D. Attaching strings to future Canadian EV production subsidies that require automakers to bring budget EV models to the Canadian market.
- E. Launching an EV Social Leasing Program, learning from the French model.

<https://www.greenfinanceinstitute.com/wp-content/uploads/2024/06/The-Key-To-Unlocking-Net-Zero.pdf>

⁶³ T&E (2023) Used electric cars are hot, leasing deals are not. An analysis of used car prices in Europe.

https://www.transportenvironment.org/wp-content/uploads/2023/03/Report-on-BEV-resale-values_UPDATED-27.03.23.pdf

⁶⁴ Electrek (2023) Cheap EVs for everyone: France launches 'social leasing' at €40/month.

<https://electrek.co/2023/12/18/cheap-evs-for-everyone-france-launches-social-leasing-at-e40-month/>