



# Top 12 reasons why Canada needs a ZEV mandate

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**Passenger vehicle emissions are significant:** In 2020, transportation accounted for 24% of Canada's greenhouse gas emissions—the second largest source after oil and gas, at 26%... and that's just downstream emissions. When we add upstream emissions, transportation accounts for approximately **30%** of Canada's total GHGs, making it the **#1** source of GHG emissions in the country.

According to a 2019 report from the International Energy Agency, Canada's Light Duty Vehicle Fleet ranks **#1** in the world for average fuel consumption and GHG emissions *per kilometer driven*. Passenger vehicle emissions account for **46%** of Canada's transportation emissions. Between 2005 and 2019, GHG emissions from Canada's light-duty fleet increased by 7.5%. While 2020 saw passenger vehicle emissions in Canada fall below 2005 levels for the first time because of the COVID pandemic, emissions from pickup trucks, vans, and SUVs still rose by 20%.

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**A national ZEV mandate will ensure that EVs built in Canada, with the support of Canadian taxpayers' money, are available to Canadian consumers:** If the government of Canada does not implement a stringent ZEV mandate, we may relive the 2011 situation where both the federal and Ontario governments financially supported the production of electric vehicles (Toyota RAV4 EV) to the tune of \$70 million each... only to have all of them shipped directly to the U.S. market. Though Ontario offered EV buyers an \$8,500 purchase rebate, Canadian consumers could not buy them because California had a ZEV mandate, but not Canada. The billions of dollars recently invested by the governments of Canada, Ontario and Quebec to fund the assembly of ZEVs and ZEV parts domestically must not be destined to benefit only U.S. consumers and U.S. GHG emission reductions.

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**A ZEV mandate will provide market predictability to the industry and make Canada a more attractive market for innovative companies:** In June 2021, the federal government announced that it would require 100% of car and passenger truck sales to be zero-emission by 2035. Since then, billions of dollars of investments in the EV supply chain have been announced by companies from all over the world and more announcements should be made in the months and years to come. For companies investing in Zero Emission cars, trucks, chargers, batteries, critical minerals, and other EV-related sectors, knowing in advance where the market will be between now and 2035 makes Canada a more secure market, which stimulates short-, medium- and long-term investments in this up and coming industry, therefore securing high paying sustainable jobs for Canadians for decades to come.

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**A National ZEV mandate will help lower air pollution, save billions of dollars and thousands of Canadian lives:** According to Health Canada (2021), air pollution's economic impact is estimated at \$120 billion a year and 15,300 premature deaths, 8 times the death toll of car accidents. Since the two most important sources of air pollution are transportation and oil & gas, accelerating Zero Emission Vehicle adoption through a ZEV mandate will help save thousands of lives and billions of dollars.

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**A Canadian ZEV mandate will not “de-couple” the US-Canada market:** The U.S.-Canada market already bifurcated into ZEV and non-ZEV states and provinces years ago. Fifteen US states, which together account for 36% of new U.S. car sales, and two provinces have already adopted a ZEV mandate modelled after California's. Adding the rest of Canada would put 43% of the U.S.-Canada car market under a ZEV mandate. If Canada does not align with the leading ZEV states, it will end up lacking in ZEV supply as manufacturers will prioritize these states instead of our national market.

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**Canada is falling behind its global peers on ZEV sales:** In its Global EV Outlook 2022 report, the International Energy Agency (IEA) states that in 2021, global electric car sales more than doubled to 6.6 million, representing 9% of the total car market. China's EV market share rose to 16% and Europe's to 17%, with individual European countries far surpassing that percentage. In Norway, 86% of new car sales were electric, while in Germany, EV share was 25%. Meanwhile, Canada's ZEV sales share sat at 5.5% in 2021, well below the global average.

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**BEV and PHEV supply is still limited because OEMS prioritize regulated markets:** While a recent study commissioned by Transport Canada found an 81% increase in BEV, FCV and PHEV inventory availability in Canada between 2020-2021, supply is still limited. A majority (55%) of dealerships don't have a single BEV, FCV or PHEV in stock. Outside of B.C., Quebec, and Ontario, this percentage rises to an astounding 82% of dealerships. Wait times are getting worse, with delays ranging from 6 months to 3 years for most models. Some automakers have even stopped taking pre-orders for EV models at this time, because demand far outpaces supply.

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**A policy approach that relies on the U.S.-Canada vehicle emission standards alone is insufficient:** The U.S. EPA released its final “Revised 2023 and Later Model Year Light-Duty Vehicle GHG Emissions Standards” in December 2021. These rules will play an important role in Canada's baseline policy mix by driving near-term GHG emission reductions in internal combustion engine vehicles. But they will not be sufficient to achieve Canada's ZEV ambitions and GHG emission reduction. First, the U.S. vehicle emission standards are not nearly as stringent as other global leaders', like the EU. The EU's current emission standards require fleet average emissions of 80.8 grams of CO<sub>2</sub>/km by 2025 while the EPA's updated vehicle emission standards require fleet average emissions of 111 grams of CO<sub>2</sub>/km by that same year. The EPA indicates that “conventional powertrains” are expected to make up most of the compliance pre-2026, and the U.S. will rely on post-2026 regulations to do the heavy lifting on EVs. Indeed, the EPA expects these final rules to deliver only 17% EV sales by 2026.

With mandatory targets of at least 20% ZEV sales by 2026, 60% by 2030, and 100% by 2035, Canada needs additional measures to reflect and achieve its greater ZEV ambitions. Second, a policy approach that relies on the U.S.-Canada vehicle emission standards alone makes Canada dependent on regulatory, legal, and electoral outcomes in the U.S.

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**A national ZEV mandate will ensure Canada meets its ZEV sales and GHG reduction**

**targets:** Canada's Emission Reduction Plan (ERP) offers the first-ever policy pathway to cut emissions 40% below 2005 levels by 2030 and projects the transportation sector will achieve an 11% reduction in greenhouse gas emissions from 2005 levels by 2030. One of the key policies put forward in the ERP to successfully achieve its targets is a national ZEV mandate. A national ZEV mandate will drive faster ZEV uptake over the next decade, reduce domestic passenger vehicle emissions, and help ensure Canada meets its 2030 and 2035 sales targets by making ZEVs more available across the country. It also provides an insurance policy against a scenario in which the U.S. is unable to implement sufficiently ambitious post-2026 vehicle emission regulations or does implement them but a future president decides to roll them back.

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**EV rebates are not enough:** While a ZEV mandate is absolutely necessary for Canada to reach its targets, EV rebates are also a key component for EV adoption for the short term. It's important to note though that higher rebates do not necessarily mean more sales. For example, although the BC rebate is lower than those of PEI and NB, EVs sales are much higher in the western province because of its stringent ZEV mandate.

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**Infrastructure deployment is also important... but it needs to be based on credible**

**data.** Two studies published by ICCT and NRCan in 2022 have established that we need to accelerate public charging infrastructure deployment. The needs are estimated at approximately 200,000 public chargers (L2 and DCFC) by 2030 and 450,000 by 2035. Although more investments will be required, the \$900 million announced by the federal government in its 2022 budget coupled with growing private investments are all positive signs for the future of infrastructure development in Canada.

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**Education and training are also important:** Even with the exponential growth in demand for EVs, more work needs to be done to help Canadians understand how Zero Emission Vehicles operate on a daily basis. In addition, the traditional auto industry workers need to be thoroughly trained in order to be able not only adapt to this new industry but to profit from that once in a generation opportunity.



Read the white paper:

**How Canada can design a truly effective zero-emission vehicle mandate**