

OCTOBER 14, 2025

THE HONOURABLE JULIE DABRUSIN, P.C., M.P.
MINISTER OF ENVIRONMENT AND CLIMATE CHANGE CANADA
HOUSE OF COMMONS
OTTAWA, ONTARIO K1A 0A6

The Economic Health Benefits of the EV Availability Standard

Dear Minister Dabrusin:

On behalf of a group of health, air-quality, and climate organizations, we urge the Government of Canada to uphold a strong Electric Vehicle Availability Standard (EVAS) as a pro-consumer regulation that delivers substantial public-health, climate, and economic benefits. Weakening EVAS beyond the one-year delay would diminish health and climate gains, undermine private-sector investment in charging infrastructure, and erode the policy certainty that industry relies upon.

EVAS should be understood as part of a broader package that expands consumer choice, lowers total cost of vehicle ownership, and strengthens Canada's auto-sector competitiveness. International trends make the stakes clear: in 2024, electric vehicles accounted for more than [20% of new car sales](#) globally, with even higher shares in leading markets. Countries without strong domestic policies risk becoming refuges for outdated technologies while consumers elsewhere benefit from greater availability and lower prices. A robust Canadian EVAS ensures that drivers here can access affordable, reliable, and diverse vehicle options when and where they need them.

We ask that:

- The revised Regulatory Impact Analysis Statement (RIAS) clearly quantify health benefits using Health Canada's 'Benefits per tonne' data;
- Any implementation flexibility remain limited to the one-year delay already announced;
- The enabling affordability measures—most notably the prompt renewal of federal rebates and complementary consumer supports—be brought forward alongside EVAS;
- The federal trade and recognition policies reduce tariffs and barriers on safe, lower-cost EVs from the European Union and China; and
- That the regulation include regular reviews to ensure it remains evidence-based and aligned with market conditions.

The health impacts of the EVAS need to be transparent

The health case for EVAS is compelling and should be presented transparently in the RIAS. By accelerating the shift from internal-combustion vehicles to cleaner electric models, EVAS is projected to generate more than [\\$90 billion in health benefits](#), help avoid up to 11,000 premature deaths, and reduce 362 megatonnes of greenhouse-gas emissions over the next 25 years. These benefits are not abstract; they translate into fewer asthma attacks, reduced risks of lung cancer and cardiopulmonary disease, lower hospital utilization and health-care costs, and measurably cleaner air in Canadian communities. In 2023, The Atmospheric Fund (TAF) estimated these benefits using Health Canada’s published “benefits-per-tonne” methodology. We welcome Environment and Climate Change Canada’s September 12 commitment to review these health benefits in the revised RIAS and encourage a full presentation of the analysis so Canadians understand how this policy improves their health and quality of life.

A one-year delay will cost Canadians \$8 billion in health benefits

Delays carry real costs. TAF’s scenario analysis indicates that the one-year postponement already implemented will forfeit approximately \$8 billion in health benefits and 36 megatonnes of carbon emissions reductions, with compounded losses if long-term targets are weakened or pushed further into the future (see five scenarios in Appendix). Aligning federal targets with Quebec’s recent changes would produce costs roughly equivalent to the one-year delay. Beyond the health and climate toll, policy softening would chill private investment in charging infrastructure. Regulatory certainty remains the single most important catalyst for sustaining the pace and scale of network build-out; dilution of EVAS would force the government to shoulder higher costs while eroding industry confidence.

Enabling policy is needed to ensure affordability and competitiveness

Affordability and access must be addressed directly and promptly. The decline in Canadian EV sales in 2025 followed the sudden cancellation of the federal iZEV rebate and the withdrawal of some provincial incentives. Earlier this year, the Government signaled that rebates would return, but as of October 2025 they have not been reinstated, dampening consumer purchases as households wait for clarity. Renewing rebates—paired with targeted measures such as [awarding additional compliance credits](#) for vehicles priced below \$40,000 or offering zero-interest financing options—would support both consumers and automakers while preserving the integrity of the regulation.

While it sits outside the narrow scope of this regulatory review, we also note that trade and recognition policies affect affordability; reducing Chinese tariffs on compliant, lower-cost EVs and recognizing EU-approved models would give Canadians access to safe, economical choices during an affordability crunch.

To ensure EVAS remains responsive and evidence-driven, we recommend scheduled reviews at five-year intervals to assess market conditions, consumer uptake, technology advances, and industry readiness. This would provide flexibility to refine the policy without weakening its long-term signal or compromising public health outcomes.

EVAS delivers large, measurable gains for health, the climate, and the economy. It offers the certainty investors need, the affordability consumers expect, and the cleaner air and reduced disease burden Canadians deserve. We welcome the opportunity to meet with you and your officials to discuss these recommendations and to share the detailed analysis and methodology that underpin our assessment in the Appendix.

Sincerely,

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Appendix A - Monetizing Health Impacts

In 2023, TAF estimated the health co-benefits of the ZEV sales mandate using Health Canada's benefits per tonnes (BPTs) of reduced air pollutants emissions metrics¹. BPTs represent a monetary value of the source emissions reduction and are useful proxies to assess how changes in emissions from a given source in a particular region can benefit human health.

The table below summarizes the cumulative health impacts (billion \$) of the original ZEV mandate compared with a set of alternative scenarios. These scenarios explore different combinations of delaying the start year and shifting or weakening backend targets.

Scenario	Policy Timeline	Cumulative Health Benefits Savings (Billions \$)	Net Change Health Benefits Savings (Billions \$)
Original ZEV mandate Scenario (Baseline)	20% in 2026, 60% in 2030, 100% by 2035	91.9	-
One year Delay - Shifted Timeline Scenario	20% in 2027, 100% by 2036	83.8	-8.1
One year delay + weakened backend Scenario	20% in 2027, 80% by 2035	71.3	-20.6
One year delay + delayed backend Scenario	20% in 2027, 100% by 2040	72.1	-19.8
Weakened backend Scenario + No more ban on sales of new gasoline vehicles in 2035	60% in 2030, 90% in 2035	83.5	-8.4

¹Health Canada. "Health Benefits Per Tonne of Air Pollutant Emissions Reduction," 2022. Available: https://publications.gc.ca/collections/collection_2022/sc-hc/H144-111-2022-eng.pdf

Methodology

Region Selection

In 2023, TAF estimated the health benefit of reducing air pollution resulting from the ZEV sales mandate across three major regions: southwestern British Columbia (SWBC) and the Windsor-Quebec City Corridor (WQCC) which represent 65% of Canada's population as well as 83% of total new passenger vehicle sales, and 74% of new truck sales in Canada. This approach follows Health Canada's recommendations of limiting the use of BPTs to these three regions as gaseous BPTs are highly impacted by proximity to population and thus are not transferable to less populated areas.

Pollutant Selection

On-road traffic is the main source of criteria air contaminants (CACs) such as PM_{2.5}, NO_x, VOCs, and NH₃, which after released, go through a set of chemical transformations in the atmosphere and convert to ambient PM_{2.5}, O₃, and NO₂. There is robust scientific evidence of the adverse health effects of PM_{2.5}, O₃, and NO₂ pollutants which are most consistently associated with mortality in epidemiological studies.

Calculation Process

TAF estimated the monetized health impacts of the ZEV sales mandate based on the following steps:

1) Projected new passenger car and light truck sales between 2026

TAF obtained the 2021 Statistics Canada new passenger car and truck sales which includes light and heavy trucks, buses, vans, minivans and SUVs. We projected new passenger automobile and light truck sales to 2050 by using population growth as proxy. Also, we assumed 50% of the truck sales are light-duty trucks including pick-up trucks, vans, minivans and SUVs.

2) Projected the ZEV passenger car and light truck sales between 2026-2050

- a) We projected the incremental ZEV sales between 2026-2050 based on the Canada's original 2030 emissions reduction plan: 20% of sales are ZEV by 2026, 60% by 2030 and 100% by 2035. The plug-in hybrid electric vehicle (PHEV) penetration of passenger automobiles and light trucks is modeled as 45% for 2026, 30% for 2027 and 20% for 2028 and beyond, following the Canada's PHEV's penetration assumptions.
- b) (2025 update): We projected incremental ZEV sales between 2026-2050 under three different scenarios to test how changes in the ZEV sales mandate - such as delaying the target start and weakening/shifting later targets - would affect the cumulative health benefit savings compared to the original scenario.

² Health Canada. "Health Impacts of Air Pollution in Canada," 2019. Available: [H144-51-2019-eng.pdf \(publications.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/91-520-x/91-520-x2022001-eng.htm)

³ The most recently reported year is 2021.

⁴ Statistics Canada. "New motor vehicle sales by type of year," 2023. Available link.

⁵ Statistics Canada. "Population Projections for Canada," 2023. Available: <https://www150.statcan.gc.ca/n1/pub/91-520-x/91-520-x2022001-eng.htm>

⁶ Government of Canada. "Canada Gazette, Part I, Volume 156, Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations," 2023. Available: <https://www.gazette.gc.ca/rp-pr/p1/2022/2022-12-31/html/reg1-eng.html>

3) Quantified the carbon impact of ZEV passenger car and light truck implementation

For 2026, we used annual carbon emissions of 3.7 tCO₂eq for internal combustion engine (ICE) passenger cars, 1.1 tCO₂eq for electric passenger cars, 4.2 tCO₂eq for light-duty ICE trucks, and 1.6 tCO₂eq for electric trucks (estimated by TAF). We assumed a fuel efficiency improvement of 30% by 2050 (applied a lower fuel efficiency improvement rate between 2026-2050 compared to Canada's federal light-duty vehicle regulations 41% projected rate for 2010-2025). We adopted the gasoline emissions factor of 0.00232 tCO₂eq/L to estimate the quantity of gasoline and diesel savings.

Please note that using the above process, the total carbon emissions reduction of the ZEV sales mandate across the SWBC and WQCC regions (where the BPT can be used) is estimated to be 374 MtCO₂eq. This captures the total emission reductions of operating the purchased ZEVs between 2026-2050. This is below Canada's estimated ZEV carbon emission reduction is 430 MtCO₂eq because of the regional constraints. The SWBC and WQCC captures 65% of Canada's population, 83% of total new passenger vehicle sales, and 74% of new truck sales in Canada.

4) Quantified the change in air pollutant emissions resulting ZEV passenger car and light truck sales.

Air pollution reductions were calculated based on a reduction of gasoline consumption from light-duty passenger cars and trucks (LDPV-car and LDPV-truck). We used the CAC emissions factors in Table 1 to estimate the annual air pollutant impacts of gasoline. Since the vehicle kilometer travelled was not available, we relied on the fuel efficiency of 0.06 L/km for LDPV-car and 0.1 L/km for LDPV-Truck starting in 2026 and adopted a fuel efficiency improvement of 30% by 2050.

⁷ Government of Canada. "Canada Gazette, Part I, Volume 156, Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations," 2023. Available: <https://www.gazette.gc.ca/rp-pr/p1/2022/2022-12-31/html/reg1-eng.html>

⁸ Canada Energy Regulator. "Market Snapshot: Trucks account for larger share of new vehicle sales" 2016. Available [link](#).

⁹ Government of Canada. "Canada Gazette, Part I, Volume 156, Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations," 2023. Available: <https://www.gazette.gc.ca/rp-pr/p1/2022/2022-12-31/html/reg1-eng.html>

¹⁰ Government of Canada. "Fuel consumption ratings tool," 2023. Available: <https://fcr-ccc.nrcan-rncan.gc.ca/en>

TABLE1-CRITERIA AIR CONTAMINANTS EMISSION FACTORS

Fuel Type	Sector	Unit	PM _{2.5}
Gasoline	LDPV-Car	g/km	0.01
Gasoline	LDPV-Truck	g/km	0.01

5) Calculated the health BPTs of air pollutant reductions

The BPTs reported by Health Canada represent the monetary value of health impacts per tonne of emissions reduced. While the BPTs are limited to the SWBC and WQCC regions, actual health impacts are not limited to these areas and impact the entire Canadian population. BPTs associated with PM_{2.5} are by far the largest in magnitude and associated risk compared to the other emitted pollutants. BPTs for the gas-phase pollutants (NO_x, VOCs, NH₃) are impacted by local weather conditions and the local atmospheric mix of reactive pollutants and can vary considerably by region.

Table 2 summarizes Health Canada's BPTs in the two regions for the 2015 base case. Health Canada used the estimates of monetized valuations for mortality and morbidity based on source year (1996, 1997, or 2007) and adjusted for inflation using the Statistics Canada's Consumer Price Index (CPI). Once the 2015 currency year values were determined, they estimated the BPTs for the 2015 year. We used CPI values¹ for 2015 and 2022 to estimate the 2022 BPTs.

TABLE 2-BPTS FOR 2015 AND 2022

	2015 CAD		2022 CAD
	BPT (\$/tonne)		BPT (\$/tonne)
Emitted pollutant	SWBC	WQCC	SWBC
Primary PM _{2.5}	410,000	520,000	489,668
NO _x	(140)	15,000	(167)
VOC	13,000	3,900	15,526

In addition to limiting the use of BPTs to the SWBC and WQCC regions, Health Canada also recommends limiting the BPTs to small-to-moderate emission changes (up to 10% against baseline year for each pollutant). We used Canada's 2020 air pollutant emissions inventory (APEI)² for the regions as the baseline and we compared the estimated on-road emissions reduction potential in 2026. The change against the 2020 baseline was within the 10% threshold for all reported pollutants.

6) Estimated the monetized health impacts of ZEVs implementation

Using the information from Steps 1-5, we estimated each year's monetized health impacts (\$/year) between 2026-2050 using the following equation:

$$A = B \times C \times D$$

- A. monetized health impacts (\$/year)
- B. annual gasoline fuel savings (L/year), calculated by emission modelling
- C. emission factors (tonnes/L gasoline or diesel), using Table 1
- D. BPTs (\$/tonne per year), using Table 2

¹¹ Statistics Canada. "Consumer Price Index, annual average not seasonally adjusted," 2023. Available [link](#).

Table 3 summarizes the cumulative monetized health impacts of newly purchased vehicles including the operational emission savings over the life of the EV vehicles between 2026 and 2050. The cumulative monetized health co-benefits of these two regions is \$92B.

TABLE 3-CUMULATIVE HEALTH IMPACTS (\$)

Emitted pollutant	SWBC	WQCC	Emitted pollutant
Primary PM _{2.5}	17,516,325,303	2,594,387,343	Primary PM _{2.5}
NO _x	32,130,923,417	-56,179,229	NO _x
VOC	9,026,717,976	5,647,095,533	VOC
NH ₃	21,895,406,629	3,163,887,003	NH ₃
Total	91,918,563,976		

Key Assumptions

- TAF assumed that NO_x, PM_{2.5}, NH₃ and VOC composition will not change significantly year over year, thus keeping the same state of atmospheric mix of reactive pollutants.
- There is no established linear correlation between BPTs and population growth and mortality, therefore it is difficult to project how BPTs change in future years. BPTs analysis here is assumed not to be impacted by population growth between 2022-2050. Thus, actual health impacts may be larger than the reported numbers in this analysis.
- Monetized health impacts estimated via BPTs represent an annual economic value (\$/year). While TAF used the Consumer Price Index to determine the 2022 BPTs, a future projection of the index is not available.
- TAF estimated the increase of electricity consumed resulting from operating EVs to be 243TWh. However, Health Canada has not estimated the BPTs associated with electricity power generations, so the increase in air pollution due to additional electricity generation is excluded from the analysis.

¹² Government of Canada. "Canada's Air Pollutant Emission Inventory," 2023. Available: <https://open.canada.ca/data/en/dataset/falc88a8-bf78-4fcb-9c1e-2a5534b92131>

Appendix B - Greenhouse Gas Impacts

TAF estimated the cumulative GHG savings of the ZEV sales mandate using. The table below summarizes the cumulative GHG savings (Mt) of the original ZEV mandate compared with a set of alternative scenarios. These scenarios explore different combinations of delaying the start year and shifting or weakening backend targets.

ECCC's modelling for the ZEV mandate in the Canada Gazette Part I¹³ initially showed 430 Mt of cumulative GHG reductions. However, ECCC's public backgrounder¹⁴ and Canada Gazette Part I¹⁵ for the final EV Availability Standard later reported 362 Mt of cumulative reductions. This final number reflects updated modelling and assumptions used in the final RIAS and benefit calculation.

Scenario	Policy Timeline	Cumulative GHG Savings (Mt)	Net Change Cumulative GHG Savings (Mt)
Original ZEV mandate Scenario (Baseline)	20% in 2026, 60% in 2030, 100% by 2035	362	-
One year Delay - Shifted Timeline Scenario	20% in 2027, 100% by 2036	326	-36
One year delay + weakened backend Scenario	20% in 2027, 80% by 2035	280	-82
One year delay + delayed backend Scenario	20% in 2027, 100% by 2040	277	-85
Weakened backend Scenario + No more ban on sales of new gasoline vehicles in 2035	60% in 2030, 90% in 2035	330	-32

Methodology

TAF estimated the carbon impacts of the ZEV sales mandate based on the following steps:

3) Projected new passenger car and light truck sales between 2026-2050

TAF obtained the 2024¹⁶ Statistics Canada new passenger car and truck sales which includes light and heavy trucks, buses, vans, minivans and SUVs¹⁷. We projected new passenger automobile and light truck sales to 2050 by using population growth as proxy¹⁸. Also, we assumed 47% of the truck sales are light-duty trucks including pick-up trucks, vans, minivans and SUVs.

¹³ [Canada Gazette, Part I.](#)

¹⁴ ECCC's [Public Backgrounder](#).

¹⁵ [Canada Gazette part II.](#)

¹⁶ The most recently reported year is 2024.

¹⁷ Statistics Canada. "New motor vehicle sales by type of year," 2023. Available [link](#).

¹⁸ Statistics Canada. "Population Projections for Canada," 2023. Available: <https://www150.statcan.gc.ca/n1/pub/91-520-x/91-520-x2022001-eng.htm>

4) Projected the ZEV passenger car and light truck sales between 2026-2050

We projected the incremental ZEV sales between 2026-2050 based on the Canada's original 2030 emissions reduction plan: 20% of sales are ZEV by 2026, 60% by 2030 and 100% by 2035¹⁹. The plug-in hybrid electric vehicle (PHEV) penetration of passenger automobiles and light trucks is modeled as 45% for 2026, 30% for 2027 and 20% for 2028 and beyond, following the Canada's PHEV's penetration assumptions²⁰.

We projected incremental ZEV sales between 2026-2050 under three different scenarios to test how changes in the ZEV sales mandate - such as delaying the target start and weakening/shifting later targets - would affect the cumulative health benefit savings compared to the original scenario.

5) Quantified the carbon impact of ZEV passenger car and light truck implementation

For 2026, we used annual carbon emissions of 3.7 tCO₂eq for internal combustion engine (ICE) passenger cars, 0.4 tCO₂eq for electric passenger cars, 4.2 tCO₂eq for light-duty ICE trucks, and 0.6 tCO₂eq for electric trucks (estimated by TAF). We assumed a fuel efficiency improvement of 30% by 2050 (applied a lower fuel efficiency improvement rate between 2026-2050 compared to Canada's federal light-duty vehicle regulations 41% projected rate for 2010-2025)²¹. We adopted the gasoline emissions factor of 0.00232 tCO₂eq/L to estimate the quantity of gasoline and diesel savings.

Using the above process, the total carbon emissions reduction of the ZEV sales mandate across Canada is estimated to be 362 MtCO₂eq. This captures the total emission reductions of operating the purchased ZEVs between 2026-2050 and matches Canada's estimated ZEV carbon emission reduction.

Key Assumptions

- **Truck sales share assumption:** TAF assumed that 47% of truck sales are light-duty trucks (including pickup trucks, vans, minivans, and SUVs). In reality, this share is much higher—up to 85%—and more realistically in the 60-65% range. However, since the goal was to align total GHG savings with ECCC's estimated 362 Mt, we applied a lower share.
- **Fuel efficiency improvement assumption:** We assumed a 30% improvement in fuel efficiency by 2050, applying a lower rate of improvement between 2026 and 2050 compared to Canada's federal light-duty vehicle regulations, which project a 41% improvement for 2010-2025. There is no updated or clearly stated long-term improvement rate in Canadian regulatory documents.

¹⁹ Government of Canada. "Canada Gazette, Part I, Volume 156, Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations," 2023. Available: <https://www.gazette.gc.ca/rp-pr/p1/2022/2022-12-31/html/reg1-eng.html>

²⁰ Government of Canada. "Canada Gazette, Part I, Volume 156, Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations," 2023. Available: <https://www.gazette.gc.ca/rp-pr/p1/2022/2022-12-31/html/reg1-eng.html>

²¹ Canada Energy Regulator. "Market Snapshot: Trucks account for larger share of new vehicle sales" 2016. Available [link](#).