

EV Availability **Standard Pathways**

Quantifying the Affordability, Health, and Climate Benefits of EV Adoption





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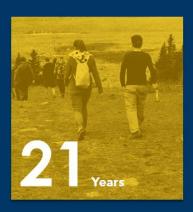


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About Dunsky







Dunsky supports leading governments, utilities, corporations and others across North America in their efforts to accelerate **the clean energy transition**, effectively and responsibly.

With deep expertise across the Buildings, Mobility, Industry and Energy sectors, we support our clients in two ways: through rigorous **Analysis** (of technical, economic and market opportunities) and by designing or assessing **Strategies** (plans, programs and policies) to achieve success.



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Executive Summary

On September 5, 2025, the Government of Canada announced a 60-day review of its Electric Vehicle Availability Standard (EVAS). This policy requires carmakers to sell an increasing proportion of zero-emission vehicles (ZEVs) in Canada over time. The government's EVAS review aims to ensure the framework "continues to reflect market realities, remains effective for Canadians, and does not place undue burden on automakers." This review comes at a **pivotal moment** for Canada's automotive and climate policy landscape.

This report is intended to support the EVAS review and national discussion on the policy. It outlines different policy options, quantifies their likely impacts on a range of government objectives, and **provides an evidence base to contribute towards sound policy decisions**. Dunsky leveraged our recent collaboration with Electric Mobility Canada to forecast Canadawide EV adoption, Powering Up,² as the foundation for the modelling.

Based on our analysis, we found that:

- 1. Maintaining the original EVAS would **provide Canadians with \$45B in additional fuel savings** by 2035 (equivalent to \$1,750 annually for each Canadian EV driver) while also cutting upfront EV purchase costs.
- 2. An original or adjusted EVAS is the most **reliable** way to meet Canada's climate targets, achieving **44 MT CO2e in cumulative emission reductions or more** by 2035 compared to removing the policy.
- **3.** A strong and certain EVAS is the **most affordable way for the federal government** to meet EV adoption targets. Alternative measures can maintain these benefits, including putting \$3.7B towards rebates, applying EU-level duties to bring in more affordable EV models, or a combination of these tools.

The original EVAS provides the most certainty and benefits. Should the current EVAS be adjusted, further government involvement would be needed **to preserve a portion of the affordability, climate and health benefits** forecast under the pre-review policy. There are policy tools available to retain a significant portion of these benefits, with each scenario offering opportunities and trade-offs, as outlined in the following figure.

² Electric Mobility Canada. <u>Powering Up</u>. Accessed online October 20, 2025.



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¹ Prime Minister of Canada. 2025. <u>Prime Minister Carney launches new measures to protect, build, and transform Canadian strategic industries</u>.

Scenario	Certainty of meeting EV adoption targets	Consumer affordability Fuel savings	Consumer affordability Upfront cost	Health benefits	GHG emission reduction level	Government fiscal efficiency
1. ORIGINAL Standard	•	•	•	•	•	•
2. ADJUSTED Standard	•	•				•
3. REBATES	•	•	•	•		•
4. EU-LEVEL DUTIES	•	•	•			•
5. MULTI- PRONGED	•	•	•			•
6. NO SUPPORT	•	•	•	•	•	•

Legend: ● Very High ● High ● Moderate ● Low

A combined measure approach, including an adjusted EVAS, limited purchase rebates, and reduced EV duties, tackles multiple barriers to EV adoption, achieving the highest benefits outside of the original EVAS at a relatively low cost to the federal government.

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1. Context

On September 5, 2025, the Government of Canada announced a 60-day review of its Electric Vehicle Availability Standard (EVAS). The current EVAS requires at least 20% of new light-duty vehicle (LDV) sales - which include passenger cars, SUVs, and light trucks - to be zero-emission vehicles (ZEVs) by 2026. The requirement increases to 60% by 2030 and 100% by 2035. The review aims to ensure the framework "continues to reflect market realities, remains effective for Canadians, and does not place undue burden on automakers."

The History and Purpose of EVAS

The federal government promulgated regulations giving effect to EVAS in December 2023. The regulations were intended to help reduce greenhouse gas (GHG) emissions from Canada's transportation sector while fostering a strong domestic electric vehicle (EV) supply chain and the buildout of a robust EV charging network.⁴

The pace of EV adoption will be a decisive factor in achieving Canada's climate targets. The transportation sector accounts for nearly a quarter of national GHG, and light-duty vehicles account for roughly half of Canada's emissions from this sector. ^{5,6}The current EVAS policy provides a strong regulatory tool to ensure that Canada remains on track to decarbonize road transportation.

The EVAS framework is designed to ensure a high level of EV availability across Canada. While EV availability is generally improving, a November 2024 report prepared by Dunsky for Transport Canada found that it is still inconsistent across Canadian provinces and across automakers.⁷

A Changing Global Landscape

This review comes at a pivotal moment for Canada's automotive and climate policy landscape. Electric vehicle sales are rising rapidly worldwide, transforming the global automotive sector and reshaping investment flows across North America, Europe, and Asia. Canada's automotive industry, a vital component of the national economy, now stands at the intersection of major global and domestic shifts. Recent changes in US industrial and trade policy, including new tariffs and diminishing US government support for EVs, have created

⁷ Transport Canada. 2024. Estimating inventories in Canada: 2024 update.



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³ Prime Minister of Canada. 2025. <u>Prime Minister Carney launches new measures to protect, build, and transform Canadian strategic industries</u>.

⁴ Environment and Climate Change Canada. 2023. <u>Canada's Electric Vehicle Availability Standard</u> (<u>regulated targets for zero-emission vehicles</u>). Accessed online October 22, 2025.

⁵ Environment and Climate Change Canada. 2025. <u>Greenhouse gas emissions: Canadian Environmental Sustainability Indicators</u>. Most recent data is available from 2023.

⁶ Environment and Climate Change Canada. 2023. <u>Canada's Electric Vehicle Availability Standard</u> (<u>regulated targets for zero-emission vehicles</u>). Accessed online October 22, 2025.

significant uncertainty in the auto sector and the broader economy. The US approach contrasts with efforts to bolster EV adoption in other markets, such as continued EV incentives in the European Union and China. This landscape has prompted Canada to re-evaluate its strategic position in the evolving global market.

Domestic Auto Sector

The Canadian auto sector represents a major source of Canadian jobs. According to the Canadian Vehicle Manufacturers' Association, auto manufacturing contributes over 603,500 direct and indirect jobs in Canada. At the same time, over 90% of cars manufactured in Canada are exported to foreign markets⁸. Because EVAS and the other policies contemplated in this report are focused on domestic auto *sales* rather than domestic auto *production*, they are not expected to have a significant negative impact on the domestic automaker industry.

Canada's EV supply chain is expanding rapidly, creating thousands of jobs and positioning the country as an emerging leader in critical minerals extraction, battery production, and EV services. As highlighted in Electric Mobility Canada's recent report, nearly half of the transportation sector's GDP and employment is expected to come from electric mobility by 2035.9

An Affordability Crisis

Canadians are facing an affordability crisis, with transportation representing an important share of household expenditures at 13%.¹⁰ Ensuring that the transition to zero-emission mobility supports affordability and accessibility is therefore a key public policy challenge.

Given the importance of the policy and the rapidly evolving landscape, Dunsky Energy + Climate Advisors (Dunsky) is providing updated analysis of the implications of changes to the EVAS on EV adoption and impact metrics of affordability, emissions, and health. This report aims to contribute credible analysis to support well-informed decisions on this important policy.

2. Study Goal and Approach

This study aims to support the EVAS review process and national discussion on the policy. The analysis quantifies the impacts of the current EVAS framework and compares them to alternative policy scenarios. This study does not provide policy recommendations.

¹⁰ Statistics Canada. 2024. <u>Transit vs. driving: What are households spending?</u> Accessed online October 22, 2025.



⁸ Canadian Vehicle Manufacturers' Association. <u>Facts about the automotive industry in Canada</u>. Accessed online October 22, 2025.

⁹ Electric Mobility Canada. 2025. <u>Electrifying progress: A complete economic outlook of the Canadian EV industry</u>.

Methodology

We leveraged Dunsky's proprietary EVA Model¹¹ as well as our recent collaboration with Electric Mobility Canada to model Canada-wide EV adoption, Powering Up,¹² as the basis for this report.

The detailed methodology for Powering Up can be found <u>here</u>. Further details on the assumptions applied in this study are provided in the Appendix.

3. Scenarios Explored

In this study, we explore the original policy benefits but recognize that there has already been a change in the policy design with the 2026 target delayed to 2027. Therefore, our scenarios included alternate EVAS designs and other tools in this changing context.

We explored six scenarios that outline a range of possible futures for EVAS.

1. ORIGINAL Standard

This scenario assumes that the EVAS is implemented with the original targets outlined before the review. Specifically, the policy requires at least 20% of new LDV sales to be ZEVs by 2026. 60% by 2030 and 100% by 2035. No purchase rebates are assumed in this scenario.

2. ADJUSTED Standard

This scenario assumes that EVAS is modified to a new set of targets. The new targets would require at least 50% of new LDV sales to be ZEVs by 2030 and 90% by 2035. No purchase rebates are assumed in this scenario.

3. REBATES (no standard)

This scenario assumes that the EVAS policy is removed entirely. The primary policy tool to support EV adoption is upfront purchase rebates funded by the federal government.

The rebates provided per vehicle are reintroduced at the levels under the latest iZEV program, and ramp down until they are phased out to \$0 in 2031. We assume that 75% of EVs sold are eligible for the rebate. The value of the rebates per vehicle are outlined in

Table 1.

¹² Electric Mobility Canada. <u>Powering Up</u>. Accessed online October 20, 2025.



¹¹ Dunsky Energy + Climate Advisors. <u>EVA™ Electric Vehicle Adoption Model</u>. Accessed online October 22, 2025.

Table 1. Purchase rebate values under REBATES scenario

Vehicle	2026	2027	2028	2029	2030
BEV	\$5,000	\$4,000	\$3,000	\$2,000	\$1,000
PHEV	\$3,750	\$2,750	\$1,750	\$750	0

4. EU-LEVEL DUTIES (no standard)

This scenario assumes that the EVAS policy is removed entirely and there are no upfront purchase rebates from the federal government.

This scenario seeks to improve the affordability of EVs by aligning the standards and duties on affordable EVs from other markets, such as from China, with those defined in the European Union (EU). The EU requires a standard 10% import duty on EVs as well as additional company-specific duties ranging from 7.8% to 35.3% ¹³ We developed EV price forecasts based on EU-level duties on Chinese EVs and other affordable EVs available in the EU market. We also assumed that the duties alignment would occur in 2026, with the diffusion into the Canadian market based on availability and consumer acceptance ramping up slowly through 2030.

5. MULTI-PRONGED

This scenario includes a combination of policy measures by the federal government. A modified EVAS would require at least 50% of new LDV sales to be ZEVs by 2030 and 90% by 2035.

The federal government also funds upfront purchase rebates that phase out to \$0 in 2031, at a lower per-vehicle rebate amount compared to Scenario 3. The value of the rebates per vehicle are outlined in Table 2.

Table 2. Purchase rebate values under MULTI-PRONGED scenario

Vehicle	2026	2027	2028	2029	2030
BEV	\$2500	\$2000	\$1500	\$1000	\$500
PHEV	\$1250	\$750	250	\$0	\$0

¹³ European Commission. December 2024. <u>EU Commission imposes countervailing duties on imports of battery electric vehicles (BEVs) from China.</u>



The federal government also aligns with the EU-level duties, as described in Scenario 4.

6. NO SUPPORT

This scenario assumes that the EVAS policy is removed entirely, there are no upfront purchase rebates, and the federal government makes no changes to EV duties.

Charging infrastructure inputs for each scenario were developed based on the Powering Up project. Scenarios that include EVAS capture the increased certainty this policy provides for public and private organizations considering investments in charging infrastructure, allowing charging networks to grow in anticipation of demand from EV adoption levels that are guaranteed by legislated targets. For scenarios without EVAS, investments in charging infrastructure are more limited, with charging networks growing in response to demand, leading to slower overall deployment and a less favourable charging experience constraining EV adoption.

EVAS Targets and Flexibilities

EVAS currently includes a variety of "flexibilities" for automakers, including trading credits with other automakers, early action credits, and credits for investment in charging infrastructure. These flexibilities have not been explicitly modeled in our analysis. As such, the EVAS targets included in Scenarios 1, 2 and 5 should be seen as the effective EV market share targets after any flexibilities are taken into account. If existing or new flexibilities result in a further reduction in the effective EV market share targets, we would expect a similar reduction in the benefits estimated in this analysis.

The six scenarios are summarized in Table 3.

Table 3. Scenario description overview

	Government Measures					
Scenario	Require EVAS	Fund Purchase Rebates	Align with EU-Level Duties			
1. ORIGINAL Standard	Original EVAS	-	-			
2. ADJUSTED Standard	Reduced EVAS 50% by 2030 90% by 2035	-	-			
3. REBATES (no standard)	-	Yes, phased out by 2030	-			
4. EU-LEVEL DUTIES (no standard)	-	-	Yes			
5. MULTI-PRONGED (2+3+4)	Reduced EVAS 50% by 2030 90% by 2035	Yes, reduced rebate value relative to Scenario 3	Yes			
6. NO SUPPORT	-	-	-			

4. Results

4.1 EV Adoption

EV adoption in Canada ranges widely under the scenarios.

Without support (Scenario 6), the market will continue its shift to EVs over internal combustion engine (ICE) vehicles thanks to global technology advancements, with EVs reaching 69% of new sales in 2035. This growth in EV adoption is achieved slowly, taking several years to rebound from the drop in policy support in 2025 and only achieving 29% of new sales in 2030.

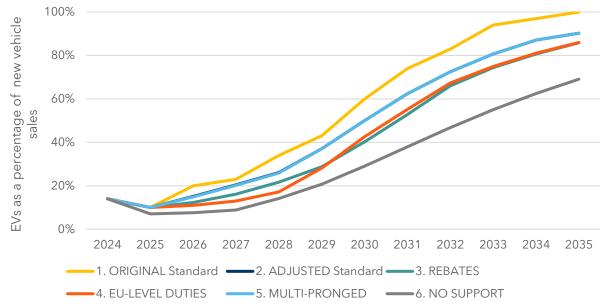
This expected trend can be accelerated with various policy measures, as shown in Figure 1.

For REBATES and EU-LEVEL DUTIES, we see a similar EV adoption pathway reaching 86% of total sales in 2035. In REBATES, the return of purchase incentives increases the level of adoption, particularly in the earlier years, as EVs reach price parity with ICE vehicles. In EU-LEVEL DUTIES, the alignment with EU standards and duty levels enables additional affordable EV models to come to the Canadian market, albeit with a more gradual ramp-up over the next 3-5 years as new EV brands and models are established.

EV adoption in both the ADJUSTED Standard and MULTI-PRONGED scenarios reach 90% in 2035 and follows the same path based on the targets established in these scenarios. Both scenarios achieve the same levels of adoption, although with automakers relying more heavily on plug-in hybrid electric vehicle (PHEV) sales to achieve compliance under the ADJUSTED Standard scenario, whereas improved affordability in the MULTI-PRONGED scenario leads to greater battery electric vehicle (BEV) adoption.

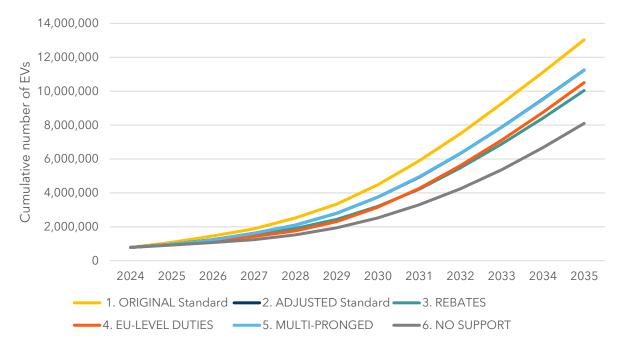
The ORIGINAL Standard outlines adoption levels under the pre-review EVAS regulation requirements, meeting 100% of vehicle sales by 2035.

Figure 1. Annual EV sales



The pace of EV adoption slows significantly in the near-term across all scenarios relative to the current EVAS requirement, due primarily to the pause in the Federal iZEV rebate program in 2025, which also impacts the cumulative EV adoption values shown in Figure 2.

Figure 2. Cumulative EV sales



This change in adoption levels impacts the associated benefits achieved in each of the scenarios relative to the original EVAS requirement.

4.2 Consumer Affordability: Fuel Savings

Canadians who drive EVs save a significant amount of money on fuel costs. We quantified these savings under each scenario based on the cumulative net savings from charging with electricity compared to fueling with gasoline.

The ORIGINAL Standard can achieve \$45B in additional cumulative fuel savings by 2035, relative to the NO SUPPORT scenario. This reflects roughly \$1,750 in annual savings for the average Canadian EV driver.

While no other scenario can achieve the same affordability improvements, important savings can be achieved relative to no support, as shown in Figure 3. Scenarios that accelerate EV adoption bring those annual savings to more Canadians sooner.

A MULTI-PRONGED approach provides \$30B in fuel savings in the same period, as the multiple policies enable more Canadians to drive electric earlier. The ADJUSTED Standard can achieve \$25B by 2035 in savings, an EU-LEVEL DUTIES approach achieves \$19B, and REBATES achieves \$17B in cost savings.

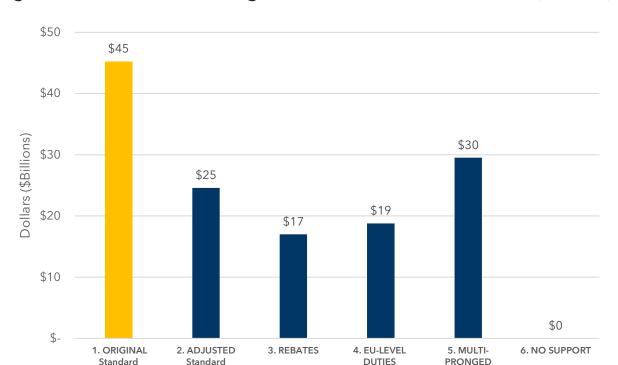


Figure 3. Incremental Fuel Savings Relative to NO SUPPORT Scenario (\$ Billion)

4.3 Consumer Affordability: Upfront Vehicle Costs

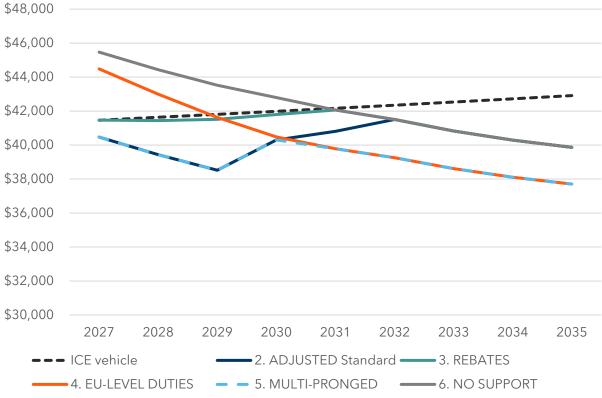
While EV prices are expected to reduce over time, each scenario presents opportunities to accelerate these price reductions and achieve price parity with ICE vehicles earlier. To determine the upfront cost, we modelled the average consumer price of a battery electric vehicle (BEV) over time. These values are compared to our forecast cost of an ICE vehicle. When the cost of an EV converges with the ICE cost forecast, EVs have reached price parity.

Aside from the original EVAS, the highest near-term cost savings are achieved in the ADJUSTED Standard and the MULTI-PRONGED scenarios, presented in Figure 4. From 2027 through 2029, the average BEV upfront cost drops by approximately \$5,000 below our baseline BEV price forecast, coming in below the price of ICE vehicles. A BEV price below those of ICE vehicles helps to overcome other real and perceived barriers constraining adoption of BEVs in the near term, such as range anxiety and lack of awareness. After 2032, our baseline BEV price forecast already achieves price parity, and the BEV prices begin to align between these scenarios.

The REBATES scenario reduces the upfront cost through purchase incentives, creating a consumer upfront cost that is at price parity, and approximately maintains price parity over the following years as rebates are gradually reduced in parallel with declining baseline BEV prices.

The EU-LEVEL DUTIES scenario is slower to reduce upfront costs given the time expected for these EVs to become available to Canadian consumers. In the long-term, however, this scenario produces the highest savings relative to ICE vehicles, reaching a \$2,300 per vehicle savings relative to the other modelled scenarios in this study, and \$5,200 below ICE vehicles in 2035.

Figure 4. Average BEV Price \$48,000



Impact of EVAS on Vehicle Prices

By establishing legislated targets for EV sales, EVAS requires automakers to take actions that will ensure they hit those targets. These can include reducing vehicle prices. Our findings suggest that, on average, automakers would need to accelerate EV price reductions compared to our baseline EV price forecast in order to achieve the targets we investigated. While we do not specify how these price reductions would be achieved, they could be realized through the introduction of more affordable EV models, cost reductions achieved through innovation and economies of scale, or reduced profit margins.

A multi-pronged approach that includes both EVAS and modest government rebates reduces the price reductions required on the part of automakers.

While not explicitly modeled here, EVAS currently also includes a variety of flexibilities for automakers, including trading credits with other automakers, early action credits, and credits for investment in charging infrastructure. While these can help to take some pressure off automakers, any resulting reduction in the effective EV market share targets would reduce the associated benefits of the policy.

4.4 GHG Emission Reductions

Greenhouse gases (GHGs) are primary contributors to climate change. Passenger cars and light trucks account for about 40% of the transportation sector's emissions. The EVAS outlined a regulatory tool to achieve significant emission reductions from light duty vehicles, in the order of 362 MT CO2e in cumulative emissions by 2050.¹⁴

Our analysis explored emission reductions under each scenario, shown as the incremental emissions reduced by 2035, relative to a no support scenario. While our analysis focuses on GHG emissions out to 2035, the trajectory of EV adoption in the near-term has a much larger influence on the cumulative GHG reductions out to 2050. This influence is because each EV bought by 2035 will be on the road for an average of 15 years and generates GHG emission reductions throughout its useful life.

By 2035, the ORIGINAL Standard would achieve 69 MT CO2e of cumulative emission reductions, relative to the NO SUPPORT scenario.

Under any modified policy approach, the adoption of EVs is delayed, and therefore, ICE vehicles continue to operate and produce emissions. Therefore, no other scenario reaches the same level of emission reduction as the current regulation.

However, MUTLI-PRONGED achieves the next largest reduction level at 44 MT CO2e, as the mixture of approaches tackles multiple market barriers and accelerates EV adoption earlier than other scenarios, reaping additional emission reductions.

On its own, an ADJUSTED Standard provides important emission reductions at 39 MT CO2, as the requirement provides certainty in the transition. Emissions reductions in this scenario are somewhat reduced compared to the MULTI-PRONGED scenario as a result of automakers leaning more heavily on plug-in hybrid sales for EVAS compliance in absence of other measures.

Reduced EV duties in Scenario 4 address upfront cost over time, but the emission reductions, at 28 MT CO2e, are delayed. Emission reductions from this approach are achieved at a higher rate only after Chinese EVs have become more widely available and accepted in Canada. The REBATES approach achieves similar levels of emissions reductions, albeit somewhat lower because rebates are phased out by 2031, leading to slightly lower EV adoption in the long term compared to EU-LEVEL DUTIES.

¹⁴ Canada Gazette. 2023. <u>Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations: SOR/2023-275</u>. Part II, Volume 157, Number 26.



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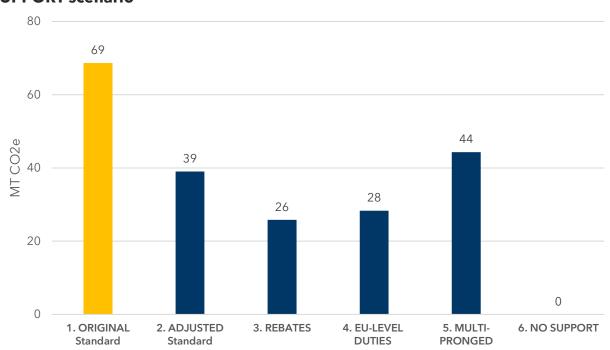


Figure 5. Incremental cumulative emission reductions in 2035 relative to NO SUPPORT scenario

The Government of Canada applied a different methodology and timeline in calculating the original standard's emission reduction potential of 362 MT CO2e by 2050. Therefore, we cannot make a direct comparison to this estimate. However, the modelling shows that a change from the current policy would lead to increased GHG emissions; this increase would need to be offset elsewhere if Canada is to meet its national and international climate commitments.

4.5 Health Benefits

Emissions reductions provide important human health benefits, in addition to their climate action benefits. These benefits include 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. ¹⁵ Acknowledging that these benefits have tangible impacts on Canadians' quality of life and lifespan, the focus of our current analysis is limited to the near-term economics impacts of the health benefits for each scenario.

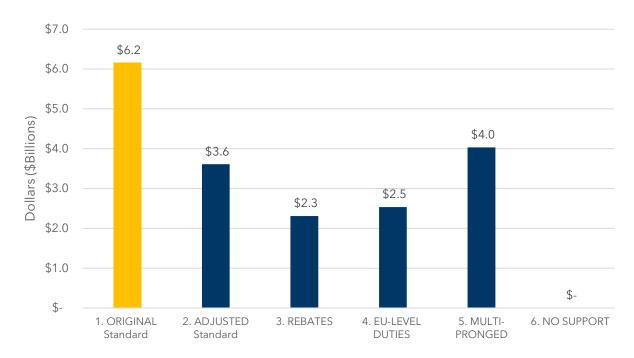
Under the ORIGINAL Standard, Canadians would experience \$6.2B in cumulative health benefits by 2035 relative to a NO SUPPORT scenario (Figure 6).

¹⁵ The Atmospheric Fund. 2025. <u>The Economic Health Benefits of the EV Availability Standard</u>.

A MULTI-PRONGED approach would see \$4.0B in benefits. ADJUSTED Standard can achieve \$3.6B in benefits, whereas the REBATES and EU-LEVEL DUTIES scenarios achieve \$2.3B and \$2.5B, respectively.

The differences between scenarios for health benefits is due to the same drivers outlined in the GHG Emission Reduction section, as the benefits are directly correlated to the emissions of critical air contaminants (e.g., PM2.5, NO_x, VOCs, NH₃) which affect health outcomes.

Figure 6. Cumulative incremental health benefits in 2035 relative to NO SUPPORT scenario (\$ Billions)



Long-term Health Benefits Study

The Atmospheric Fund (TAF) recently published an open letter outlining the health benefits under a changing EVAS out to 2050¹⁶. While we have aligned aspects of the methodology and key inputs with the TAF study, the results are not directly comparable. TAF looked at long-term health benefits out to 2050 whereas Dunsky assessed near-term impacts out to 2035, focusing on the incremental benefits relative to our NO SUPPORT scenario as a baseline.

Given that the total number of EVs in circulation will continue to increase significantly after 2035 as older ICE vehicles are retired, the annual accumulation of benefits will continue to

¹⁶ The Atmospheric Fund. 2025. *The Economic Health Benefits of the EV Availability Standard*.



increase until 2050, leading to a significant increase in cumulative benefits over the 2050 time horizon. When considering annual benefits in 2035 (rather than cumulative benefits discussed above), we expect \$3.7B in health benefits under the ORIGINAL standard scenario when considering all vehicles on the road in 2035. While we have not modeled EV adoption and associated benefits beyond 2035, we estimate that the annual health benefits could more than double between 2035 and 2050 assuming the fleet is entirely electric by then.

4.6 Government Spending

The cost to the federal government is an important consideration in any policy design. Our modelling assessed the total cost to the federal government based on the cost of upfront cost rebates provided to consumers under each scenario.

Three scenarios support accelerated EV adoption, relative to NO SUPPORT scenario, at no cost to the government. The ORIGINAL Standard approach does not have a direct cost to the government. Similarly, an ADJUSTED Standard, while not achieving the same level of EV adoption or associated benefits, has no cost to the government. EU-LEVEL DUTIES also requires a change in regulation, which does not have a direct cost.

A REBATES approach has the highest government costs at cumulative \$3.7B by 2030 (Table 4). This cost is driven by the significant investment needed to accelerate adoption by reducing consumer costs through rebates alone.

A MULTI-PRONGED approach reduces the government cost to \$2.2B, while generating greater EV adoption and other benefits than Scenarios 2 to 4. The cost reduction is driven by the fact that the EVAS requirements and reduced duties work to reduce upfront costs, allowing a lower government rebate level to achieve a similar reduction in upfront cost.

Table 4. Federal Government costs over time by scenario (\$Billions)

Scenario	2026	2027	2028	2029	2030	Total
3. REBATES	\$795	\$828	\$835	\$719	\$484	\$3.7B
5. MULTI-PRONGED	\$430	\$478	\$454	\$484	\$341	\$2.2B

5. Key Insights

The original EVAS regulation provides the most certainty in meeting EV adoption targets and achieves the highest benefits across all scenarios. Any modification in the regulation delays EV adoption and reduces the affordability, climate benefits, and health benefits for Canadians. No alternate scenario modelled achieves the same level of benefits.

However, policy tools are available to retain a significant portion of these benefits. A combined intervention approach, including a modified EVAS, limited purchase rebates, and reduced EV duties tackles multiple barriers to EV adoption, achieving the highest benefits outside of the original EVAS at a relatively low cost to the federal government. An adjusted EVAS on its own can also achieve important benefits as the requirement provides clear market direction and requirements, at no direct cost to government.

Removing EVAS entirely increases the uncertainty of reaching EV adoption targets. A focus on rebates (Scenario 3) can address upfront cost barriers, but at significant cost to government. Reducing duties on Chinese EVs can make the most significant reduction in upfront consumer costs in the long run. However, EV adoption and its associated benefits under this scenario will not manifest immediately as the effects of the regulatory shift will take time to diffuse through the Canadian market.

The NO SUPPORT scenario will see EV adoption in the long-term albeit at a slower pace, as the national and international markets transition. However, Canadians will pay more in fuel costs and in upfront vehicle costs. Canada will not achieve its planned levels of emission reductions, putting it further off course from its climate commitments, while in parallel losing significant health benefits.

If the original EVAS were to be adjusted, additional government measures could be implemented to preserve many of the affordability, climate and health benefits forecast under the pre-review policy.

We qualitatively summarized the impacts across scenarios in Table 5.

Table 5 Summary of key benefits across scenarios

Scenario	Certainty of meeting EV adoption targets	Consumer affordability: Fuel savings	Consumer affordability: Upfront cost	Health benefits	Level of GHG emission reductions	Government fiscal efficiency
1. ORIGINAL Standard	•	•	•	•	•	•
2. ADJUSTED Standard	•	•	•	•	•	•
3. REBATES	•	•		•	•	•
4. EU-LEVEL DUTIES		•		•	•	•
5. MULTI-PRONGED	•		•			•
6. NO SUPPORT	•	•	•	•	•	•

Legend: ● Very High ● High ● Moderate ● Low

While the original EVAS provides the most certainty and benefits, government intervention is needed to preserve a portion of the affordability, climate, and health benefits forecast under the pre-review policy. There are policy tools to retain a significant portion of these benefits. A combined intervention approach, including an adjusted EVAS, limited purchase rebates, and reduced EV duties, tackles multiple barriers to EV adoption, achieving the highest benefits outside of the original EVAS at a relatively low cost to the federal government.

Appendix: Assumptions

The following assumptions were applied in this study:

- Dunsky leveraged our recent, year-long efforts to forecast Canada-wide EV adoption,
 Powering Up¹⁷ as the foundation for the modelling.
- Vehicle forecast sources include Statistics Canada. New motor vehicle registrations, quarterly, by geographic level¹⁸, Statistics Canada. Vehicle registrations, by vehicle type and fuel type¹⁹, and Natural Resources Canada. Comprehensive Energy Use Database: Transportation Sector, Canada²⁰. Assume vehicle ownership remains constant and vehicles on the road align with population projections from Statistics Canada's M1 scenario²¹.
- Canada-wide annual driving distances are assumed to be 13,000 km, leveraged from Natural Resources Canada and assumed constant out to 2035.
- Average vehicle lifetime is assumed to be 15 years.
- Dunsky's projected electricity rates by province in real dollars starting at 0.155 \$/kWh.
 These are provincially blended \$/kWh rates including energy, transmission, distribution, and associated fees, but excluding taxes. Includes both residential and smaller commercial electricity rates. Electricity rate forecasts assume an annual growth rate of 1% and no carbon tax.
- Gas prices forecasted using Canada's Energy Future 2023 report, Canada net zero transportation costs²².
- ZEVs include fully-electric or battery-electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs). Assume non-plug-in hybrids are not eligible under federal rebates and EVAS targets, as they greatly reduce emissions savings, fuel savings, and health benefits.
- PHEVs are assumed to drive 75% of kms with electric powertrain.

²² Canada Energy Regulator. 2023. <u>Canada's Energy Future 2023: Energy Supply and Demand Projections to 2050.</u>



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¹⁷ Electric Mobility Canada. Powering Up. Accessed online October 20, 2025.

¹⁸ Statistics Canada. 2025. New motor vehicle registrations, quarterly, by geographic level.

¹⁹ Statistics Canada. 2025. Vehicle registrations, by type of vehicle and fuel type.

²⁰ Natural Resources Canda. <u>Comprehensive Energy Use Database</u>. <u>Transportation Sector</u>, <u>Canada</u>.

²¹ Statistics Canada. 2025. <u>Population Projections for Canada (2024 to 2074)</u>, <u>Provinces and Territories (2024 to 2049)</u>.



"NO DISCLAIMERS" POLICY

This report was prepared by Dunsky Energy + Climate Advisors, an independent firm focused on the clean energy transition and committed to quality, integrity and unbiased analysis and counsel. Our findings and recommendations are based on the best information available at the time the work was conducted as well as our experts' professional judgment.

Dunsky is proud to stand by our work.