Is the Auto Industry on Track?

Examining auto sector compliance pathways for achieving the 2030 vehicle emissions target

September 2026

Chandan Bhardwaj

PEMBINA Institute

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The Pembina Institute
#802, 322 – 11 Avenue SW
Calgary, AB T2R 0C5
403-269-3344

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These acknowledgements are part of the start of a journey of several generations. We share them in the spirit of truth, justice and reconciliation, and to contribute to a more equitable and inclusive future for all.

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Executive summary

In early 2026, the federal government in Canada announced its plan to amend the vehicle emissions standard (VES) regulation, which sets annual fleet-wide greenhouse gas (GHG) emissions targets for automakers. Early, unconfirmed reports suggest the proposed Canadian emission targets under the amended VES could start at 170 grams of carbon dioxide equivalent per mile travelled (g/mile) in 2027 and decline to 74 g/mile by 2035, with an interim 2030 target of 120 g/mile. According to the government's announcement, the amended regulation aims to put Canada on track to achieve 75% electric vehicle (EV) sales by 2035. Relatedly, Canada has committed itself to reducing its greenhouse emissions by 45–50% below 2005 levels by 2035.

Pembina Institute modelling published after the federal VES announcement found that reducing light-duty vehicle emissions by 45% to 50% below 2005 levels and achieving 75% EV sales by 2035 would require a stronger VES trajectory, including an interim 2030 target of 100 to 105 g/mile.

In this analysis we examine whether Canada's auto industry can comply with the emissions trajectory described in early VES reports (120g/mile by 2030) and whether a stronger emissions trajectory (100 to 105 g/mile by 2030), consistent with Canada's 2035 EV sales goal and emissions reduction target, is achievable through available compliance pathways.

We find that under a business-as-usual case, the Canadian auto industry could realistically achieve a 2030 VES target of 120 g/mile using multiple compliance techniques. In a typical year up to 2030, reduction in fleet-wide emissions could be achieved through:

- 10% to 20% reduction from improved internal combustion engine vehicle fuel economy
- 20% to 30% reduction from increased hybrid powertrain adoption
- 0% to 10% reduction from vehicle downsizing, including a growing share of smaller and lighter vehicles
- 40% to 70% reduction from increasing zero-emission vehicle (ZEV) adoption, with ZEVs reaching up to 30% of new vehicle sales

These percentages represent the estimated share of the emissions reductions required to meet the VES trajectory that could come from each pathway. While fuel economy improvements and hybrid powertrain adoption will have a noticeable contribution, increased ZEV adoption is the dominant pathway for achieving the proposed target. Under the business-as-usual case, very little emissions reduction will be achieved via vehicle downsizing.

The VES also offers certain compliance flexibilities or allowances for actions such as reducing refrigerant leakage, improving air conditioner efficiency, incorporating innovative technologies (e.g. efficient exterior lights) and the ability to bank credits. Automakers can use these flexibilities to partially substitute for the main compliance pathways for reducing emissions to meet the standard.

The fact that automakers can meet the 120 g/mile target by 2030 does not mean the target is sufficient to meet Canada's broader climate and electrification goals. Canada will most likely miss its commitment of reducing GHG emissions by 45% to 50% below 2005.[1] The 120 g/mile 2030 VES target is also unlikely to support the governments stated goal of 75% of EV sales by 2035.

As noted, meeting the 2035 GHG emissions reduction target (and relatedly the goal of 75% EV sales) will require the VES target to be 100 to 105 g/mile by 2030. This could be achieved with different compliance pathways:

- A modest increase to a 35% ZEV share, even if the current light truck and car sales mix remains unchanged relative to the business-as-usual case.
- Alternatively, shifting the sales mix toward more car sales (vs. light trucks), even if ZEV sales follow a business-as-usual trajectory of 30% by 2030.

Combining both strategies (higher ZEV sales with a greater share of car sales) could further reduce emissions below 100 g/mile by 2030.

Not all automakers perform equally. Toyota, Hyundai and Kia are likely to over comply. Ford, FCA (Stellantis), GM and Honda fall marginally short. Gain of sales share by pure EV players (e.g., Tesla, Lucid, Rivian, Volvo (Polestar), Chinese automakers) help reduce overall emissions and ensure industry-wide compliance. Automakers that fall short can continue to purchase credits from those that exceed their targets, as they have in recent years. To encourage domestic manufacturing, the government could also allow automakers producing vehicles in Canada to purchase credits at discounted prices.

Overall, we find that the expected 120 g/mile target appears achievable for the industry under a business-as-usual case. However, policies should not be judged by how easily they can be met, but whether they achieve the outcomes they are designed to deliver. A stronger trajectory of 100 to 105 g/mile by 2030 would remain achievable for automakers while providing a more credible pathway to achieving Canada's 2035 EV sales target and broader transportation electrification goals.

[1] This report focuses on the light-duty vehicle sector. It is assumed here the economy-wide target of 45% to 50% emissions reduction below 2005 levels is applied uniformly across all sectors, including light-duty vehicles.

1. Introduction

Since 2011, Canada has in place the Passenger Automobile and Light Truck Greenhouse Gas Emission (GHG) Regulations, also known as the vehicle emissions standard (VES). The VES sets annual fleet-wide emissions targets for automakers, measured in grams of carbon dioxide (CO_2) equivalent per mile travelled (g/mile).[2] In December 2023, the federal government amended the regulation to include requirements that automakers must sell an increasing number of zero-emission vehicles (ZEVs) over time.[3] These requirements, known as the Electric Vehicle Availability Standard, require that ZEVs represent at least 20% of new model year 2026 light-duty vehicles offered for sale, 60% for model year 2030, and 100% for model year 2035 and beyond.[4]

On February 5, 2026, the federal government announced its plan to amend the regulation to repeal these ZEV sales requirements and replace it with a more technology neutral approach.[5] As such, pending official clarification, the regulation is expected to fall back to its pre-2023 approach of targeting annual fleet-wide emissions targets for automakers. According to the February 2026 announcement, the amended regulation aims to put Canada on track to achieve 75% electric vehicle (EV) sales by 2035.[6] Relatedly, Canada has committed itself to reducing its greenhouse emissions by 45–50% below 2005 levels by 2035.[7]

Early, unconfirmed reports suggest the proposed Canadian emission targets under the amended VES could start at 170 g/mile in 2027 and decline to 74 g/mile by 2035.[8] Under these reports,

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[2] Government of Canada, *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations*, SOR/2010-201. (Hereafter referred to as "Federal VES standard.") https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=104

[3] Government of Canada, *Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations*, SOR/2023-275. https://gazette.gc.ca/rp-pr/p2/2023/2023-12-20/html/sor-dors275-eng.html

[4] Government of Canada, *Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations*, *Canada Gazette,* Part I, 160, no. 33 (2026), https://gazette.gc.ca/rp-pr/p1/2026/2026-08-15/html/reg2-eng.html

[5] *Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations* (2026).

[6] Prime Minister of Canada, "Prime Minister Carney launches new strategy to transform Canada's auto industry," February 5, 2026. https://www.pm.gc.ca/en/news/news-releases/2026/02/05/prime-minister-carney-launches-new-strategy-transform-canadas-auto

[7] Government of Canada, "Canada's 2035 emissions reduction target." https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/2035-emissions-reduction-target.html

[8] CPAC, "PM Mark Carney Announces New Auto Strategy," video, February 5, 2026 (35:50). https://www.cpac.ca/headline-politics/episode/pm-mark-carney-announces-new-auto-strategy--february-5-2026?id=02f8685d-7b02-4d01-8120-8e75a3cc9921

the 2030 target would be 120 g/mile, which aligns with the emissions standard adopted by the U.S. Environmental Protection Agency (EPA) in 2024 (Table 1). Those U.S. standards were repealed in 2025 following a change in U.S. administration.

Table 1. Annual GHG targets for the VES by the U.S. EPA under the Biden administration

Annual targets (g/mile)	2027	2028	2029	2030	2031	2032 and later
Cars	139	125	112	**99**	86	73
Light trucks	184	165	146	**128**	109	90
Total fleet	170	153	136	**120**	102	85

Data source: U.S. EPA[9]

Pembina Institute modelling published in March 2026 found that reducing light-duty vehicle emissions by 45% to 50% below 2005 levels would require a stronger VES trajectory, including a **2030 target of 100 to 105 g/mile** and a 2035 target of 40-62 g/mile or lower (Table 2). This interim 2030 VES target of 100 to 105 g/mile would also put Canada on track to achieving the 75% EV sales share by 2035 with high confidence.

Table 2. Annual GHG targets for the VES in Canada

Annual targets (g/mile)	2027	2030	2035
Proposed by the federal government (unconfirmed)	170	**120**	74
Required to meet Canada's target of reducing GHG emissions by 45% to 50% below 2005 levels (also helps achieve 75% EV sales goal by 2035)	170	**100 to 105**	40 to 62

Data source: Pembina Institute[10]

As noted earlier, one of the government's stated objectives is to use the VES to accelerate the transition to ZEVs by encouraging automakers to bring more EV models to the Canadian market. Increasing EV availability will improve consumer choice by offering a wider range of EVs across various price points, strengthen competition, reduce vehicle costs over time and lower transportation costs for Canadians. It is also essential to reducing emissions from Canada's transportation sector, the country's second largest source of GHG emissions.

[9] U.S. EPA, "Final Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles," April 2024, https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model

[10] Chandan Bhardwaj, *Getting the Vehicle Emissions Standard Right* (Pembina Institute, 2026). https://www.pembina.org/pub/getting-vehicle-emissions-standard-right

Electrifying transportation is central to Canada's broader energy transition. As vehicles shift from gasoline to electricity, transportation is expected to become one of the largest sources of new electricity demand over the coming decades. This transition will support investment in electricity infrastructure, charging networks, and the skilled workforce needed to build and maintain them. A VES that does not meaningfully increase EV adoption risks slowing progress toward these broader economic objectives.

The VES, by design, is technology neutral and offers automakers flexibility to reduce emissions through the most cost-effective pathways available. These pathways include improving fuel economy in internal combustion engine vehicles, redesigning vehicle components (e.g., refrigeration equipment or air conditioning systems), or increasing sales of ZEVs, such as battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs).[11] The key questions are therefore not only if the VES offers adequate flexibility that Canada's auto industry can comply with the emissions regulation that is expected to be proposed, but whether that regulations emissions trajectory is ambitious enough to achieve the policy's stated electrification and climate objectives.

A common concern with any policy change in this area is its impact on automakers. This analysis examines whether Canada's auto industry can comply with the emissions trajectory described in early VES reports and whether a stronger emissions trajectory, consistent with Canada's 2035 emissions reduction target (and EV sales goal), is achievable through available compliance pathways.

We conduct a bottom-up assessment of the industry's compliance trajectory by examining the current state of Canada's light-duty vehicle market and identifying a selected group of automakers for detailed analysis (Section 2). We then review the compliance pathways available to automakers under the VES (Section 3) and assess emissions trajectories for each to determine whether the industry can achieve the reported 2030 target of 120 g/mile, as well as a more ambitious 2030 target of 100 to 105 g/mile, which our previous modelling found would be required to put Canada on track to achieve its emissions reduction and 75% EV sales goals (Section 4). Section 5 summarizes the results for industry-wide compliance.

We focus on 2030 because it is a critical interim milestone for achieving longer-term emission reductions through 2035 and beyond. We are unaware of any other similar, publicly available study on this important Canadian auto sector policy question.

[11] The regulations allow companies to report 0 g/mile for electric vehicles, fuel cell vehicles, and the electric portion of PHEVs (when PHEVs operate as electric vehicles).

2. Canada's light-duty vehicle market

Canada's light-duty vehicle market is dominated by eight automaker groups that together account for approximately 80% of total market share. These include five automakers that manufacture vehicles in Canada: FCA (Stellantis), Ford, GM, Honda and Toyota. Other major market participants are Hyundai and Kia. We also include an eighth group representing pure BEV manufacturers, such as Tesla, Rivian, Lucid, Volvo (Polestar) and Chinese automakers, which have been steadily increasing their share of the Canadian market. Since January 2026, the federal government has allowed the entry of approximately 50,000 Chinese BEVs annually as part of the relaxation of tariffs on China.[12] Together, these eight groups represent the vast majority of Canada's light-duty vehicle market and provide a representative basis for assessing industry-wide capacity to comply with VES.

Table 3 shows the 2025 vehicle sales shares for each group. Ford and GM each accounted for approximately 16.5% of light-duty vehicle sales, followed by Toyota at 12.5%. FCA, Honda, Hyundai and Kia each held between 5% and 8% of the market, while pure BEV manufacturers collectively accounted for approximately 3%.

Vehicle market shares have changed over time (Figure 1). Among light trucks, FCA's market share declined from 23% in 2011 to 7% in 2024, while Ford's fell from more than 20% to approximately 15%. GM maintained a relatively stable share of around 16%. In the passenger car market, Ford and GM experienced larger declines, with each falling from 10% to approximately 6% over the same period. By contrast, Toyota, Honda, Hyundai and Kia have largely maintained stable market shares despite year-to-year fluctuations.

Collectively, these seven incumbent automakers have lost market share as new entrants have entered the Canadian market. Their combined share of the passenger car market declined from 67% in 2011 to 57% in 2024, while their share of the light truck market fell from 85% in 2011 to 70% in 2024. Tesla and other emerging BEV manufacturers now account for approximately 3% of the market, and Chinese BEVs permitted under the federal government's 2026 policy are expected to add a further 3%.

[12] Prime Minister of Canada, "Prime Minister Carney forges new strategic partnership with the People's Republic of China focused on energy, agri-food, and trade," January 16, 2026. https://www.pm.gc.ca/en/news/news-releases/2026/01/16/prime-minister-carney-forges-new-strategic-partnership-peoples

For this analysis, we project that pure BEV automakers will likely grow to occupy 8% to 10% of the total light-duty vehicle market by 2030, while the seven incumbent automakers largely hold their 2025 market share.

Table 3. Market shares of selected automakers in Canada's light-duty vehicle market

Automaker group	2025 share	2030 share (est.)
FCA (Stellantis)	6%[13]	5% to 6%
Ford	16.5%[14]	15% to 16%
GM	16.5%[15]	15% to 16%
Honda	7%[16]	7% to 8%
Hyundai	8%[17]	8% to 10%
Kia	5%[18]	5% to 7%
Toyota	12.5%[19]	12% to 13%
Pure BEV automakers (e.g., Tesla, Volvo (Polestar), Rivian, Lucid, Chinese companies)	~3%[20]	~8% to 10%

[13] Automotive News Canada, "Stellantis' fall: A decade-long sales drop in Canada to 6% market share from 15.4%," January 29, 2026. https://www.autonews.com/stellantis/anc-stellantis-market-share-decline-canada-0122/

Stellantis, "FCA Canada Reports Fourth-quarter and Full-year 2025 Sales Results," January 5, 2026. https://media.stellantisnorthamerica.com/newsrelease.do?id=27360&mid=1

[14] Ford, "Ford Canada 2025 Sales Highlights." https://www.fromtheroad.ford.com/ca/en/articles/2026/ford-canada-2025-sales-highlights

[15] GM, "GM Leads Canadian Auto Sales for Third Straight Year as Mid-Size SUVs Drive Growth." https://news.gm.ca/en/home.detail.html/Pages/news/ca/en/2026/jan/0105_gm-leads-canadian-auto-sales-for-third-straight-year.html

[16] Honda, "Honda Civic retains the title of Canada's best-selling car for 2025." https://hondanews.ca/en-CA/releases/release-cf005034e20eb27505fd8e6bbb091bc0-honda-civic-retains-the-title-of-canadas-best-selling-car-for-2025

[17] Hyundai, "Hyundai and Genesis Canada make history, again! Record-breaking sales in 2025 means best year ever in Company History." https://www.hyundainews.ca/releases/4465?lang=en_CA

[18] Kia, "Kia Canada achieves another all-time sales record in 2025 with nearly 1.5 million units sold to date," https://www.kia.ca/en/about-kia/news/kia-canada-achieves-all-time-sales-record-in-2025

[19] Toyota, "Record electrified vehicle sales power Toyota Canada Inc. to record sales in 2025," https://media.toyota.ca/en/releases/2026/record-electrified-vehicle-sales-power-toyota-canada-inc--to-rec.html

[20] Good Car Bad Car, "Tesla Sales Figures – Canadian Market: Monthly and Yearly Sales Figures for Tesla in Canada." https://www.goodcarbadcar.net/tesla-canada-sales-figures/

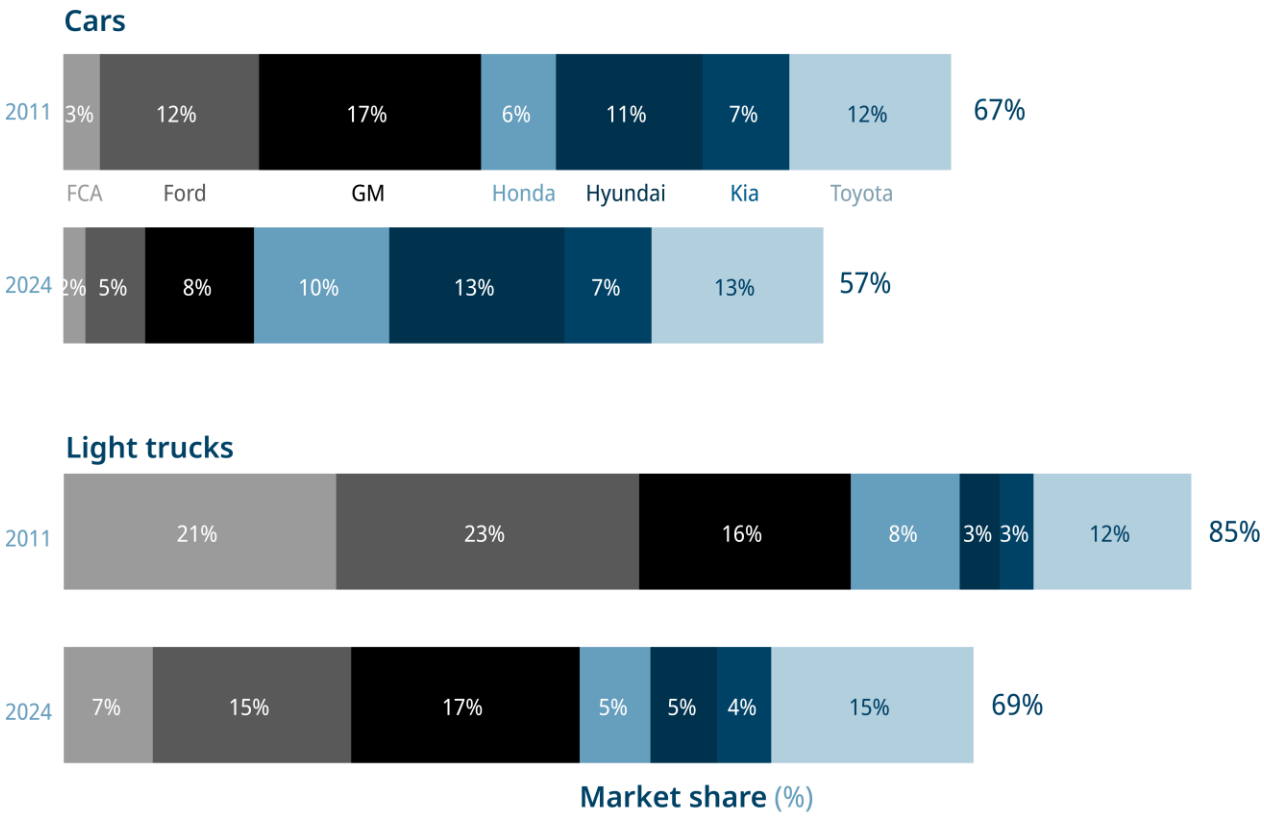

Figure 1. Market shares of selected automakers from 2011 and 2024 for cars and light trucks

Data source: Government of Canada[21]

[21] Government of Canada, Greenhouse gas emissions performance data for the 2011 and 2024 model year light-duty vehicle fleets, Table A-1: production volumes by company. Available at https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=104

3. VES compliance

A VES requires the automaker to reduce emissions from their vehicles by meeting increasingly stringent annual emissions targets. As the targets become more stringent over time, the amount of emissions a fleet is allowed to generate decreases.

Since 2011, Canada has aligned its VES with the U.S. As such, standards in Canada have changed with every change in administration in the U.S.: Obama-era, Trump-era, Biden-era, and finally the removal of the policy in 2025. This policy flip-flop creates uncertainty. Instead, Canada should seek to establish its own VES to provide long-term regulatory certainty to automakers, dealers, buyers, charging infrastructure developers, utilities, and startups in the EV ecosystem.

The VES, which has been in place in Canada since 2011, remains in effect following the repeal of the Electric Vehicle Availability Standard. It is currently aligned with the Biden-era U.S. EPA emissions standards and sets different standards for cars and light trucks based on vehicle footprint, measured in square feet (sq. ft.) (Figures 2 and 3). In general, the standard target for light trucks is 20% less stringent than for cars. For example, the 2026 model year target value is 114.3 g/mile for cars of footprints up to 41 sq. ft.[22] However, the 2026 target value for light trucks of the same size is 141.8 g/mile.

The VES also sets different targets within a category according to vehicle size and footprint. For both cars and trucks, the target increases with increasing size but levels off for the largest vehicles.

[22] The Government of Canada uses the term 'passenger automobiles' to refer to cars, to distinguish them from light trucks.

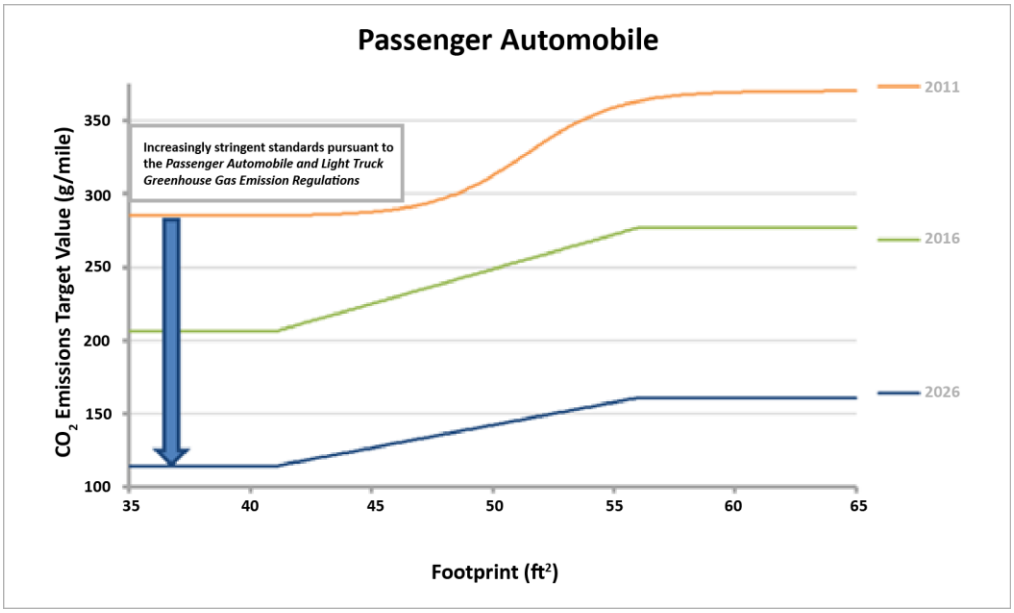

Figure 2. 2011 to 2026 targets for cars

Source: Government of Canada[23]

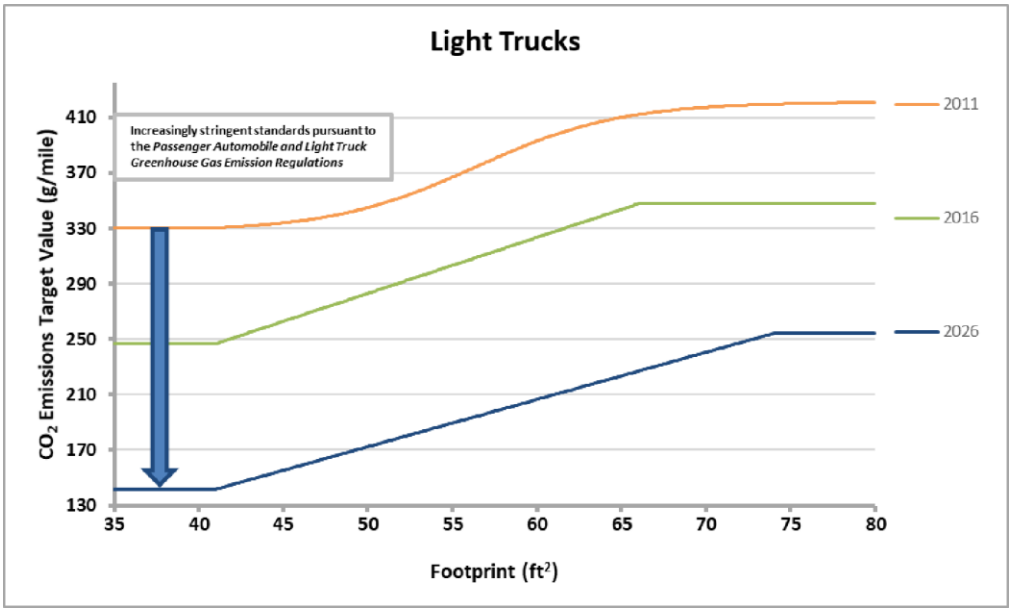

Figure 3. 2011 to 2026 targets for light trucks

Source: Government of Canada[24]

[23] Government of Canada, *Greenhouse Gas Emissions Performance for the 2024 Model Year Light-Duty Vehicle Fleet* (2026), Figure 2. https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/greenhouse-gas-emissions-performance-model-year-2024.html

[24] *Greenhouse Gas Emissions Performance for the 2024 Model Year Light-Duty Vehicle Fleet*, Figure 3.

3.1 Compliance pathways

Academic literature[25] and our modelling studies[26] show that automakers can employ a variety of strategies to comply with the VES. These include (but are not limited to), improving fuel economy, sales mixing, downsizing, adopting zero-emission vehicle technology, and compliance flexibilities. These strategies, in order of historical importance, are discussed in greater detail below.

3.1.1 Fuel economy improvements

Fuel economy improvements in internal combustion engine vehicles drove the bulk of emissions reductions between 2011 and 2020.[27] Automakers made aerodynamic improvements to vehicle design, used aluminium instead of steel to make lighter vehicles, and incorporated new technologies such as continuously variable transmission, turbochargers, and hybrid electric powertrains.[28] Research suggests further emissions reductions of more than 20% may still be

[25] For example: Kate S. Whitefoot and Steven J. Skerlos, "Design incentives to increase vehicle size created from the U.S. footprint-based fuel economy standards." *Energy Policy* 41 (2012). https://doi.org/10.1016/j.enpol.2011.10.062

Jason M. Luk, Bradley A. Saville, and Heather L. MacLean, "Vehicle attribute trade-offs to meet the 2025 CAFE fuel economy target," *Transportation Research Part D: Transport and Environment* 49 (2016). https://doi.org/10.1016/j.trd.2016.09.005

Koichiro Ito and James M. Sallee, "The economics of attribute-based regulation: Theory and evidence from fuel economy standards," *Review of Economics and Statistics* 100.2 (2018). https://doi.org/10.1162/REST_a_00704

Mathias Reynaert, "Abatement strategies and the cost of environmental regulation: Emission standards on the European car market," *The Review of Economic Studies* 88.1 (2021). https://doi.org/10.1093/restud/rdaa058

Benjamin Leard, Joshua Linn, and Katalin Springel, "Vehicle attribute tradeoffs and the distributional effects of US fuel economy and greenhouse gas emissions standards," (accepted 2025). https://www.journals.uchicago.edu/doi/abs/10.1086/738879

[26] Jonn Axsen and Chandan Bhardwaj, "Policy can downsize passenger vehicles and cut climate emissions." *Environmental Research Letters* (2026). https://iopscience.iop.org/article/10.1088/1748-9326/ae41d0/meta

Chandan Bhardwaj and Jonn Axsen, "How Stringent Should Vehicle Emission Standards Be? Simulating Impacts on Greenhouse Gas Emissions, Zero-Emissions Vehicle Sales, and Cost-Effectiveness," *Canadian Public Policy* 50.1 (2024). https://doi.org/10.3138/cpp.2023-002

[27] U.S. EPA, *2020 EPA Automotive Trends Report* (2021). https://www.epa.gov/sites/default/files/2021-01/documents/420r21003.pdf

[28] Ford Motor Company, "Ford Motor Company (F) Q2 2023 Earnings Call Transcript," July 28, 2023. Available at https://www.fool.com/earnings/call-transcripts/2023/07/28/ford-motor-company-f-q2-2023-earnings-call-transcr/

U.S. EPA, "Final Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles," 146.

Goderich Toyota, "2026 Toyota RAV4 vs. Previous Generation: A Fuel Economy Cost Comparison," September 2025, https://www.goderichtoyota.com/en/news/view/2026-toyota-rav4-vs-previous-generation-a-fuel-economy-cost-comparison/149083

possible.[29] For example, other automakers will be able to apply hybrid powertrain technology to their vehicles as Toyota has opened access to its patent, and this may lead to significant improvements in fuel economy.[30]

3.1.2 Sales mixing

Cars typically generate fewer emissions compared to light trucks and SUVs. For example, a Toyota Land Cruiser (light truck) emits 380 g/mile, while Toyota Corolla (car) emits only 265 g/mile.[31] Thus, automakers can reduce fleet-wide emissions by selling more cars than light trucks. Figure 4 shows the share of cars sold by automakers as a percentage of their total vehicle sales (comprising cars and light trucks) between 2011 and 2024. On average, car share declined from 40% in 2011 to 15% in 2024. FCA, Ford and GM, in particular, have a very high (~90%) share of light trucks. Honda, Hyundai, Kia and Toyota sell between 30% to 45% cars, though Toyota, Hyundai and Kia have seen steep declines (~30%) in car shares in recent years. Honda stands out as one firm that has shown a relatively slow decline in car shares. Their car share in 2024 was 40%, down from 60% a decade ago. These results demonstrate that firms have not employed sales mixing as a primary strategy for compliance with the VES. On the contrary, automakers have increased light truck sales. This is at least partly attributable to the fact that the VES standards targets are less stringent for light trucks than for cars (as described in the

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Evan Riley, "Still Unique After All These Years: A History of the Honda CR-V," Ralph Honda, September 11, 2025, https://ralphhonda.com/blog/still-unique-after-all-these-years-a-history-of-the-honda-cr-v

Orleans Honda, "The Evolution of the Honda Civic," April 26, 2023, https://www.orleanshonda.com/the-evolution-of-the-honda-civic/

Jim Burke Ford, "Ford F-150 MPG | All Model Years." https://www.jimburkeford.com/ford-f-150-mpg-research/

U.S. EPA, *2020 EPA Automotive Trends Report*.

[29] *Greenhouse Gas Emissions Performance for the 2024 Model Year Light-Duty Vehicle Fleet*,

Cinzia Tornatore and Luca Marchitto, "Advanced technologies for the optimization of internal combustion engines." *Applied Sciences* 11.22 (2021). https://www.mdpi.com/2076-3417/11/22/10842

Rolf D. Reitz et al., "IJER editorial: The future of the internal combustion engine," *International Journal of Engine Research* 21, no. 1 (2020). https://journals.sagepub.com/doi/full/10.1177/1468087419877990#bibr5-1468087419877990

Zongyu Yue and Haifeng Liu, "Advanced research on internal combustion engines and engine fuels," *Energies* 16.16 (2023). https://www.mdpi.com/1996-1073/16/16/5940

[30] Kevin F. Brown, "Toyota to grant open patent access to drive industry uptake of hybrid vehicle technology: why it's important," April 20, 2019. https://www.linkedin.com/pulse/toyota-grant-open-patent-access-drive-industry-uptake-kevin-f-brown/

[31] U.S. Department of Energy, fueleconomy.gov, "Find and compare cars." 2026 Toyota Land Cruiser and 2026 Toyota Corolla.
https://fueleconomy.gov/feg/PowerSearch.do?action=noform&path=1&year1=2026&year2=2026&make=Toyota&baseModel=Corolla&srchtyp=ymm&pageno=1&rowLimit=50

previous section). Multiple studies have shown that footprint-based standards, such as those in place in Canada, create an incentive to sell light trucks over cars.[32]

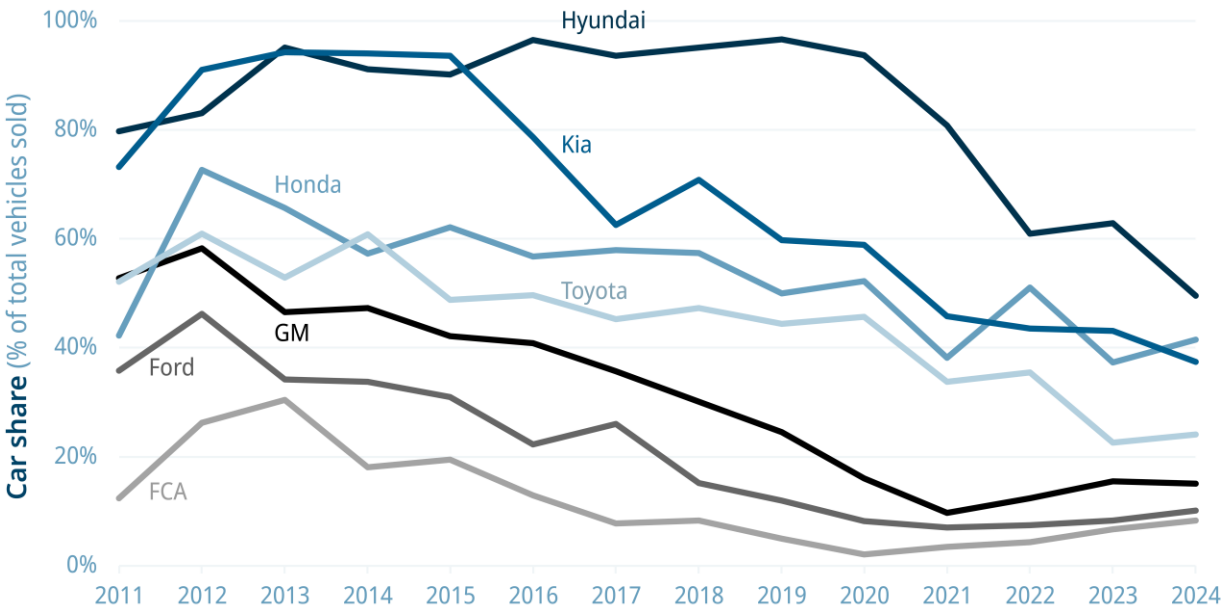

Figure 4. Share of cars as % of total light-duty vehicles sold by selected automakers

Data source: Government of Canada[33]

3.1.3 Downsizing

Automakers can also reduce emissions by vehicle downsizing: either by reducing the size of vehicles or by increasing the share of smaller vehicles in total sales. Smaller vehicles typically emit fewer emissions. For example, a 2026 Honda Civic Sedan emits 156 g/km (or 250 g/mile) while a slightly bigger Honda Civic Hatchback emits 164 g/km (or 262 g/mile).[34] However, in practice, most firms have either maintained or increased vehicle size (Figure 5). GM stands out as the only firm that reduced its footprint. The VES design is partly to blame for this. As shown in Figures 2 and 3, smaller vehicles are also subject to stricter standards. Automakers can emit more emissions per vehicle if they sell bigger vehicles.

[32] Whitefoot, "Design incentives to increase vehicle size created from the U.S. footprint-based fuel economy standards."

Ito, "The economics of attribute-based regulation: Theory and evidence from fuel economy standards."

[33] Government of Canada, Greenhouse gas emissions performance data for the 2011 through 2024 model year light-duty vehicle fleets, Table A-1: production volumes by company.

[34] Natural Resources Canada, "Fuel consumption ratings search tool: Fuel consumption report: 2026 Honda Civic Sedan", https://fcr-ccc.nrcan-rncan.gc.ca/en/VehicleReport/30697

Natural Resources Canada, "Fuel consumption ratings tool: Fuel consumption report: 2026 Honda Civic Hatchback", https://fcr-ccc.nrcan-rncan.gc.ca/en/VehicleReport/30695

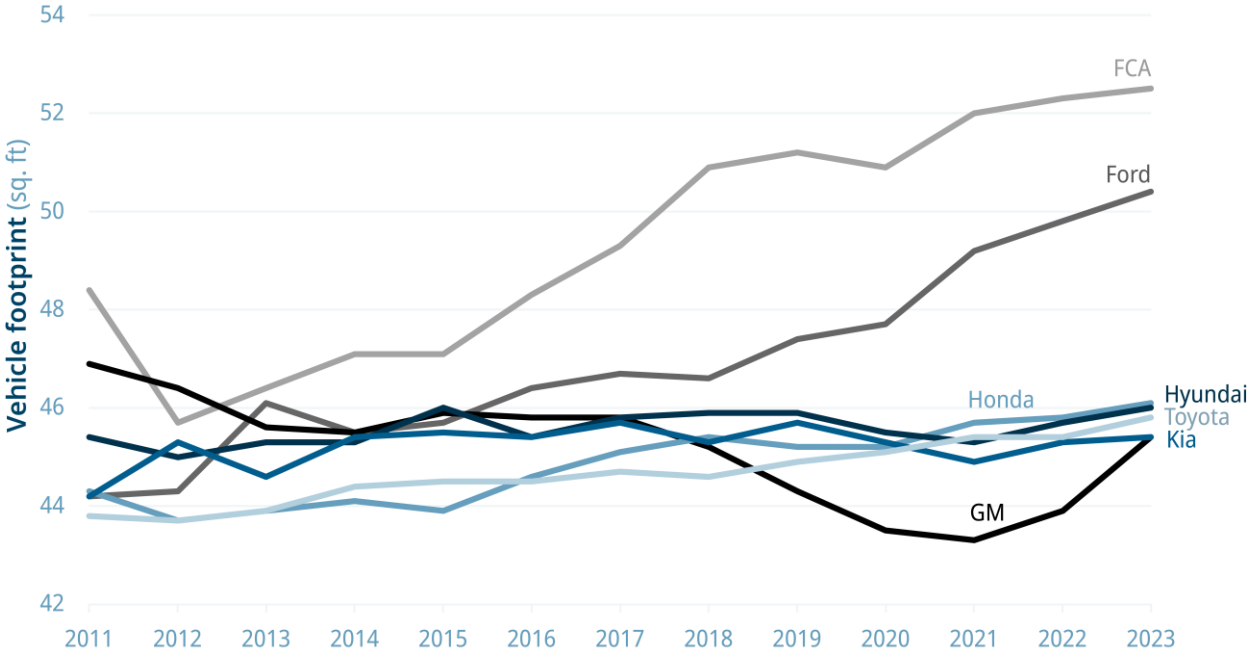

Figure 5. Changes in average car footprint for selected automakers

Data source: Government of Canada[35]

3.1.4 ZEV technology adoption

Firms could comply with the VES by producing more fuel efficient and less emitting drivetrain vehicle types, such as zero-emission vehicles (ZEVs), which include battery electric vehicles and plug-in hybrid elenctic vehicles. Battery electric vehicles have zero tail-pipe emissions (0 g/mile). Plug-in hybrids still have some tail-pipe emissions, though they emit about 60% less than internal combustion engine vehicles, which run on fossil fuels. A larger share of ZEVs will reduce fleet-wide emissions. This has been a key compliance mechanism. All automakers except Honda have increased the share of ZEVs in their total sales (Figure 6). By 2024, ZEVs comprised 16% for FCA, 11% for Ford, 9% for GM, 25% for Hyundai, 20% for Kia, and 11% for Toyota. Honda has been a laggard with (<1%) ZEV sales. Note that the removal of the ZEV purchase rebates in 2025 led to a decline in ZEV sales. However, sales have picked up since and Q1 results for GM, Toyota, Hyundai, and Kia show robust ZEV sales growth in the first quarter of 2026.[36]

[35] Government of Canada, Greenhouse gas emissions performance data for the 2011 through 2024 model year light-duty vehicle fleets, Table 3: average footprint.

[36] GM, "GM Remains Canada's Sales Leader in Q1 2026, Driven by Strength in SUVs, and EVs and Full-Size Pickup Leadership," media release, April 1, 2026.
https://news.gm.ca/en/home.detail.html/Pages/news/ca/en/2026/apr/0401_gm-sales.html

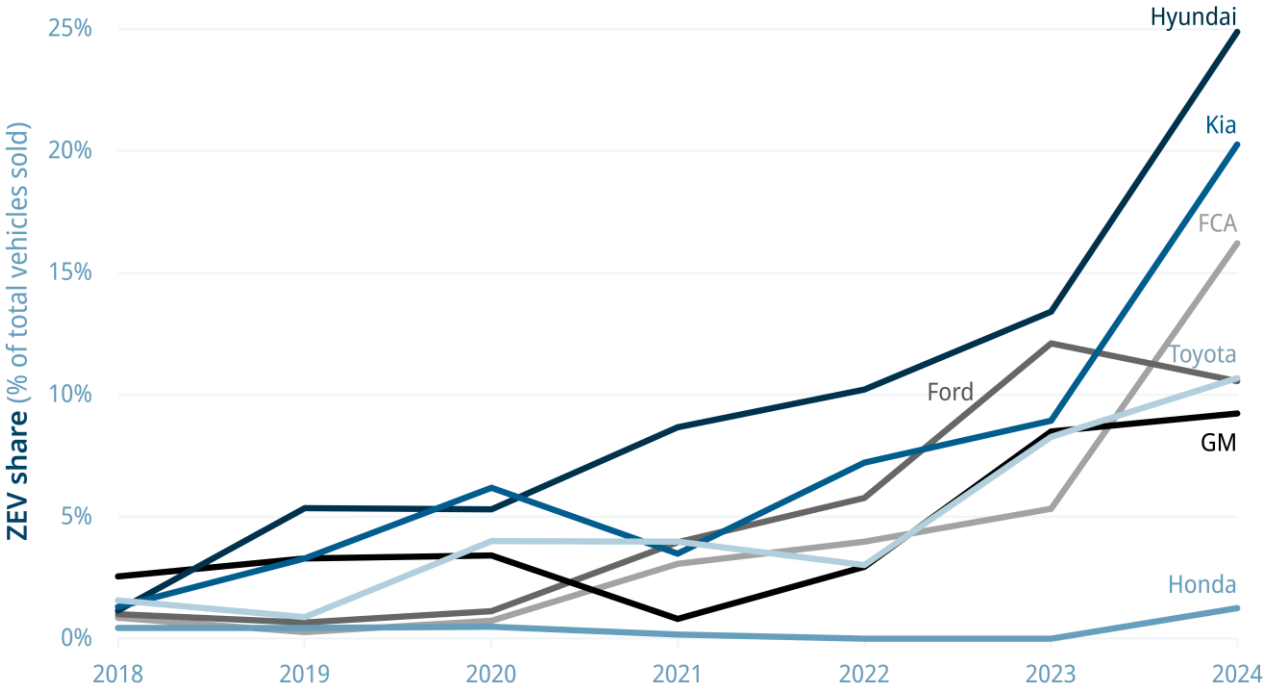

Figure 6. Share of ZEVs as % of total vehicles sold by selected automakers

Data source: Government of Canada[37]

3.1.5 Compliance flexibilities

The VES offers certain compliance flexibilities or allowances that automakers can use as complementary measures to meet the standard. The credits earned from compliance flexibilities are deducted from a company's actual fleet-wide emissions to give the "compliance value." The compliance value is compared to the annual prescribed targets to assess if the company earns credits (over-complies) or is in a deficit (under-complies) with the regulation that year.[38] Some compliance flexibility measures are discussed here, and their cumulative potential impact on the VES is illustrated in Figure 7.

Hyundai, "Hyundai Auto Canada Corp. Achieves Record March as EV Interest Builds, while Genesis Pushes Toward a Strong Q1," media release, April 3, 2026. https://www.hyundainews.ca/releases/4483

Toyota, "Toyota Canada Releases March and Q1 Sales Results," media release, April 1, 2026. https://media.toyota.ca/en/releases/2026/toyota-canada-releases-march-and-q1-sales-results.html

Kia, "Kia Canada records its best ever Q1 in company's history," media release, April 4, 2026. https://www.wheatonkia.ca/en/news/view/kia-canada-records-its-best-ever-q1-in-companys-history/124826

[37] Government of Canada, Greenhouse gas emissions performance data for the 2011 through 2024 model year light-duty vehicle fleets, Table 9. Production volumes of BEVs and Table 10. Production volumes of PHEVs.

[38] Calculated as Compliance value = Actual emissions – Sum of all compliance flexibilities

- **Refrigerant leakage** — Refrigerants used in air conditioning systems contribute to global warming. The VES rewards automakers for improved air conditioning system design that minimizes refrigerant leakage. Automakers can earn credits of 12.6 g/mile for cars and 17 g/mile for light trucks.
- **Air conditioning efficiency** — Improvements to the efficiency of vehicle air conditioning can reduce CO_2 emissions. The VES allows automakers to earn up to 5 g/mile for cars and 7 g/mile for light trucks for reducing emissions by improving AC efficiency.
- **Innovative technologies**, such as waste heat recovery, high efficiency exterior lights, aerodynamic improvements, engine idle start-stop, and thermal controls, can improve vehicle efficiency and in turn reduce CO_2 emissions. The VES offers allowances for the use of such technologies, where the total allowance (or equivalent credit value), is capped at 10 g/mile.
- **Pickup truck specific allowances** -—The VES also offers certain allowances for the use of hybrid electric technologies in full-size pickup trucks. In 2024 Ford and Toyota were granted 1.1 g/mile and 0.4 g/mile under this allowance category. As the adoption of hybrid technologies increases, we conservatively assume companies could earn up to 2 g/mile in 2030 via this allowance feature (Figure 7).
- **ZEV multipliers** — Until 2024, the regulation assigned multipliers for BEVs, PHEVs and FCEVs (hydrogen fuel cell electric vehicles). Under this rule, one BEV is counted as 1.5 while calculating a company's compliance value for the overall fleet. We assume these credits or multipliers will be removed for 2027 and later years.
- **Banked and carryover credits** —The VES allows automakers to over-comply in the initial years and earn credits that can be banked (or carried over) to offset deficits in later years. As of 2024, the total banked credits in the system are 32 million, with 4.8 million added in 2024, 3.3 million added in 2023, 3.6 million added in 2022, and 3.2 million credits generated in 2021. As a conservative estimate, we assume another 2 million credits could be added each in 2025 and 2026 (cumulatively 4 million over the 2 years). The total banked credits would then be 36 million by the time the revised VES comes into effect in 2027. Since the regulation allows credits to be banked for up to five years, the 36 million credits could be used and carried over until 2030. Based on the formula used by the VES regulations, our calculations show that, on average, banked and carryover credits provide an allowance of 25 g/mile for each year until 2030.

Incorporating the impact of all of the above compliance flexibilities means that the effective target automakers have to comply with is less stringent than the prescribed target. The

combined industry-wide average of actual carbon-related exhaust emissions from all light-duty vehicles in 2030 is 176 g/mile. For 2030, the combined impact of the compliance flexibilities is 57 g/mile. Subtracting compliance flexibilities from actual emissions gives the compliance value of 119 g/mile (Figure 7).

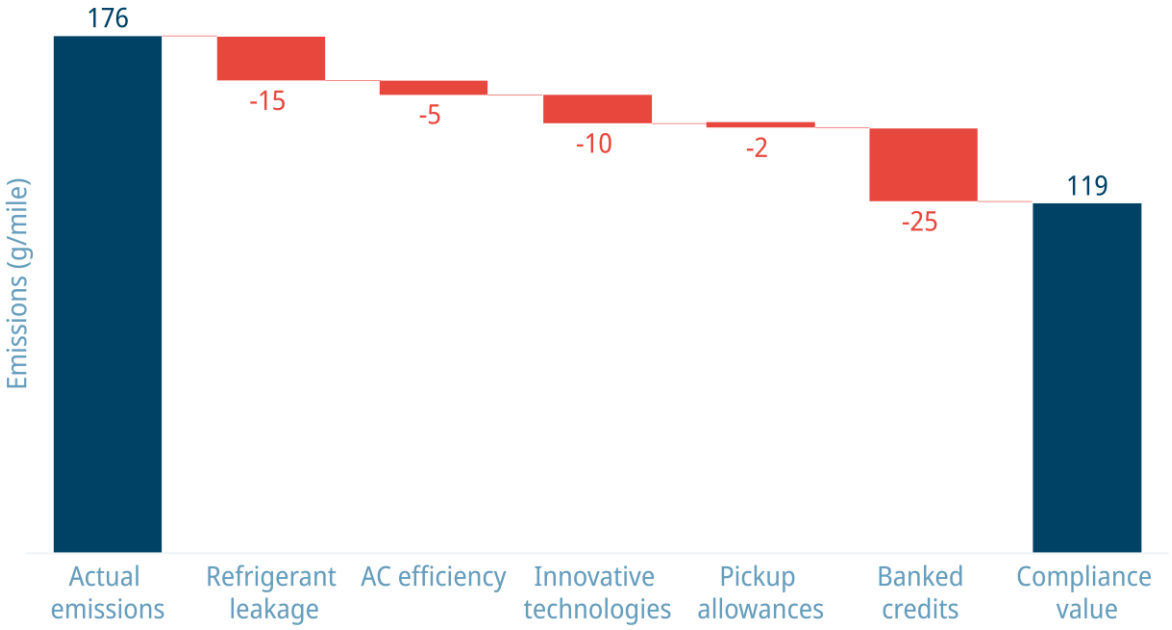

Figure 7. Impact of different compliance flexibilities on industry-wide VES target

4. Policy compliance by different automakers

Next, we consider the case of selected automakers to assess how likely each firm is to achieve the reported 2030 target of 120 g/mile (or the required target of 100 to 105 g/mile). Figures 8 to 14 show average carbon related exhaust emissions from cars and light trucks between 2011 and 2024 for FCA, Ford, GM, Honda, Hyundai, Kia and Toyota.[39] The solid line shows actual historical emissions up to 2024. The data for historical emissions is drawn from the annual inventory of *Greenhouse Gas Emissions Performance for Light-duty Vehicle Fleet* maintained by the Government of Canada.[40] Also shown are emissions projections till 2030 (dotted lines).

For projections, we assume progress in emissions reductions similar to historical rates. We assume that under a business-as-usual case, the automakers continue to reduce emissions over the next six years between 2024 and 2030 at the rates they have reduced emissions for each of the two time periods 2011 to 2017 and 2017 to 2024, since the implementation of the VES in 2011. The estimated compliance values shown in the graphs account for each automaker's specific compliance flexibilities as well as the combined (car and light truck) emissions values for each automaker, estimated based on their historical breakdown between cars and light trucks (assumed to remain unchanged).[41] Also, we assume each automaker will continue to earn credits under the different compliance flexibilities (e.g. refrigerant leakage, AC efficiency, innovative technologies) in line with their performance in recent years (2021 to 2024).

4.1 FCA

For a large part of the last decade (2011 to 2017) FCA was slow to reduce fleet-wide emissions (Figure 8). Over this period, emissions from light trucks declined by 1% while emissions from cars increased by 1%. Between 2017 and 2024, there was progress in the light trucks segment and emissions declined steadily by 15% over this period. Emissions from cars increased from 310 g/mile in 2017 to 350 g/mile in 2023, before seeing a sharp decline in 2024. Between 2023

[39] The VES treats emissions from BEVs as 0 g/mile. Hence, emissions trajectory for pure BEV automakers remains unchanged at 0 g/mile and is not depicted separately.

[40] Federal VES standard.

[41] For most automakers, the fleet composition (i.e. the split between the sales of cars and light trucks) has remained largely unchanged. Here the compliance value depicted in the graphs captures the automaker's historical fleet breakdown. In some cases (e.g. FCA), however, the fleet composition changed drastically in recent years, so it is difficult to predict the long-term trajectory of their fleet composition. In such cases, we discuss alternative fleet composition effects, depicting compliance value for one representative fleet composition trajectory.

and 2024, FCA car sales in Canada reduced from 9,000 to 7,500, and ZEV sales jumped to 4,145, such that ZEV share was >50% of total car sales, causing emissions to drop sharply. The FCA example demonstrates that firms can employ sales mixing effectively (when they so choose) to reduce fleet-wide emissions in the short term. Using compliance flexibilities (e.g. banked credits and other allowances discussed in Section 3), FCA can expect to lower its compliance value by 50 g/mile by 2030. If FCA reduces emissions from light trucks by 15% between 2024 and 2030 (similar to 2017 to 2024), and if average car emissions remain constant at 2024 levels, the combined fleet-wide compliance will be 192 g/mile by 2030 (assuming FCA's current 90:10 share split between light trucks and cars). FCA can improve this to 143 g/mile by changing the split to 70% light trucks and 30% cars. FCA will likely miss the 2030 target of 120 g/mile on its own, though it can continue to purchase credits from other automakers in the market (e.g. Toyota who are likely to exceed their respective target) to achieve compliance. FCA used this approach in previous years, purchasing about one million credits in 2021, 6,000 each in 2022 and 2023, and 3,000 in 2024.

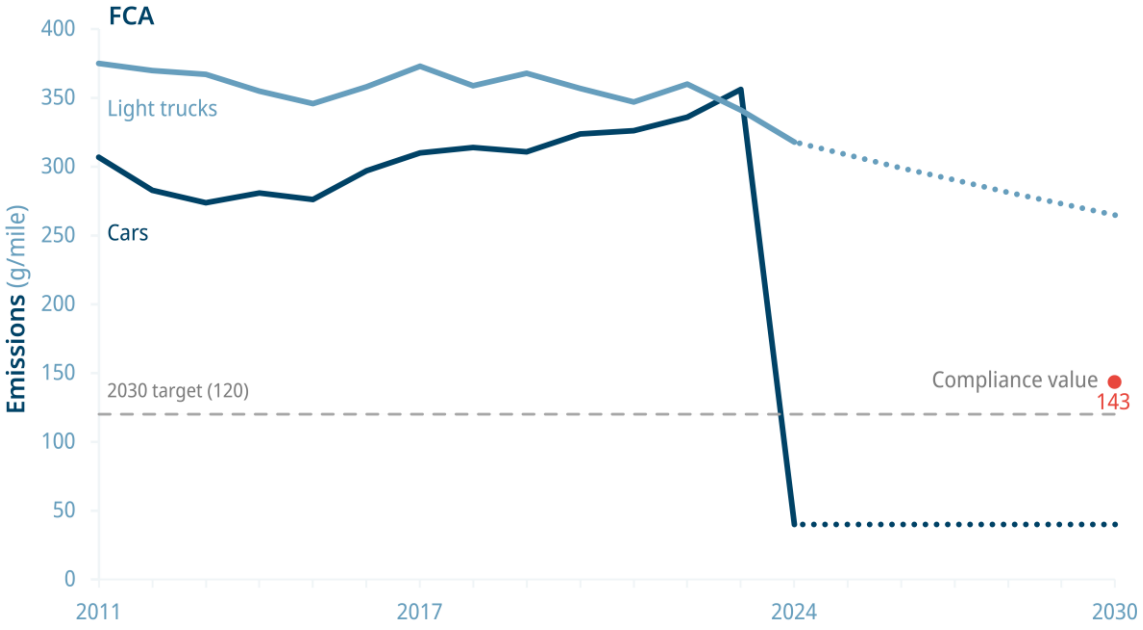

Figure 8. Changes in emissions from cars and light trucks over time (FCA)

4.2 Ford

Over the seven-year period between 2017 and 2024, Ford reduced emissions from cars by 61% and 17% from light trucks (Figure 9), reaching a low of 40 g/mile for cars in 2023 (before rising to 99 g/mile in 2024) and 291 g/mile for light trucks. Assuming rates of annual emissions improvement between 2024 and 2030 remain similar to historical rates, Ford can expect to reach 250 g/mile for light trucks and 52 g/mile for cars by 2030. Combined, the fleet-wide emissions will likely be 210 g/mile. Including compliance flexibilities lowers compliance value to 144 g/mile with an 80:20 split between light trucks and cars, and 124 g/mile with a 70:30 split. Thus, Ford is expected to nearly achieve the 120 g/mile target. It can offset any shortfall by purchasing credits from other automakers, as it has done in the past. Ford purchased two million credits each in 2022 and 2023.

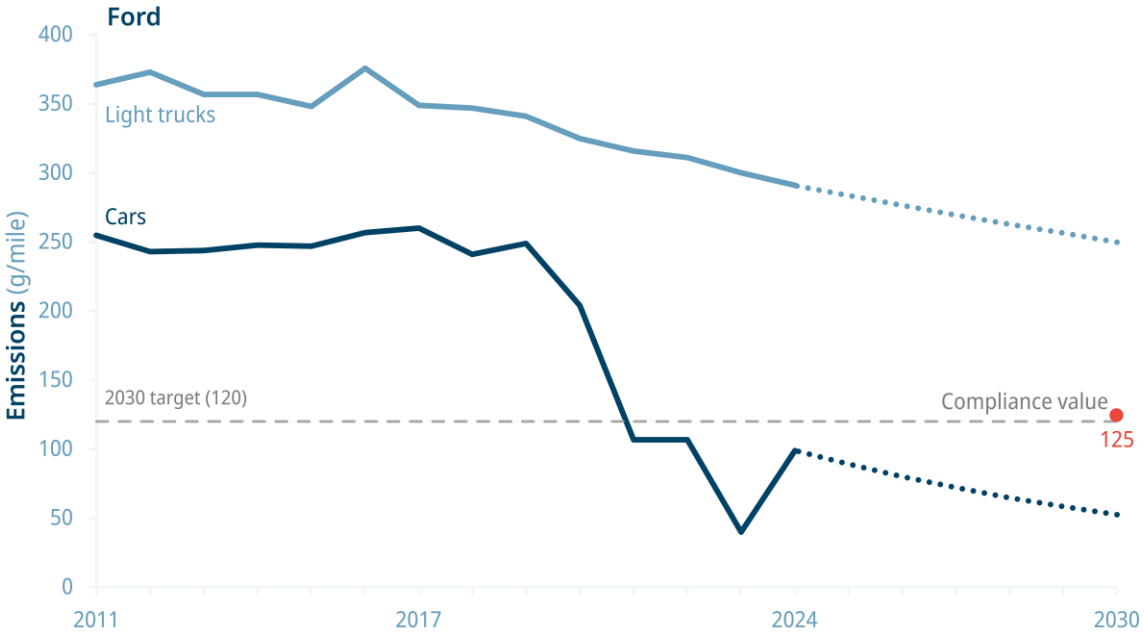

Figure 9. Changes in emissions from cars and light trucks over time (Ford)

4.3 GM

In the six-year period between 2011 and 2017, GM achieved a 30% decline in emissions from cars (Figure 10). It topped that with a 50% decline in emissions between 2017 and 2023. For light trucks, the decline has been more gradual at about 2% annually since 2011. Assuming GM reclaims its 2023 emissions level by 2030 for cars and continues the historical rate of decline for light trucks, the firm will achieve 103 g/mile for cars and 244 g/mile for trucks. GM's banked credits and compliance flexibilities worth about 64 g/mile lower compliance value to 159 g/mile (assuming 80:20 split between light trucks and cars), and 138 g/mile (for a 70:30 split between light trucks and cars). So, GM will likely miss the 120 g/mile 2030 target by a small margin, which can be compensated by the purchase of credits from other automakers in the market. GM has used this approach in recent years, purchasing one million credits in 2022, 1.9 million in 2023 and two million in 2024.

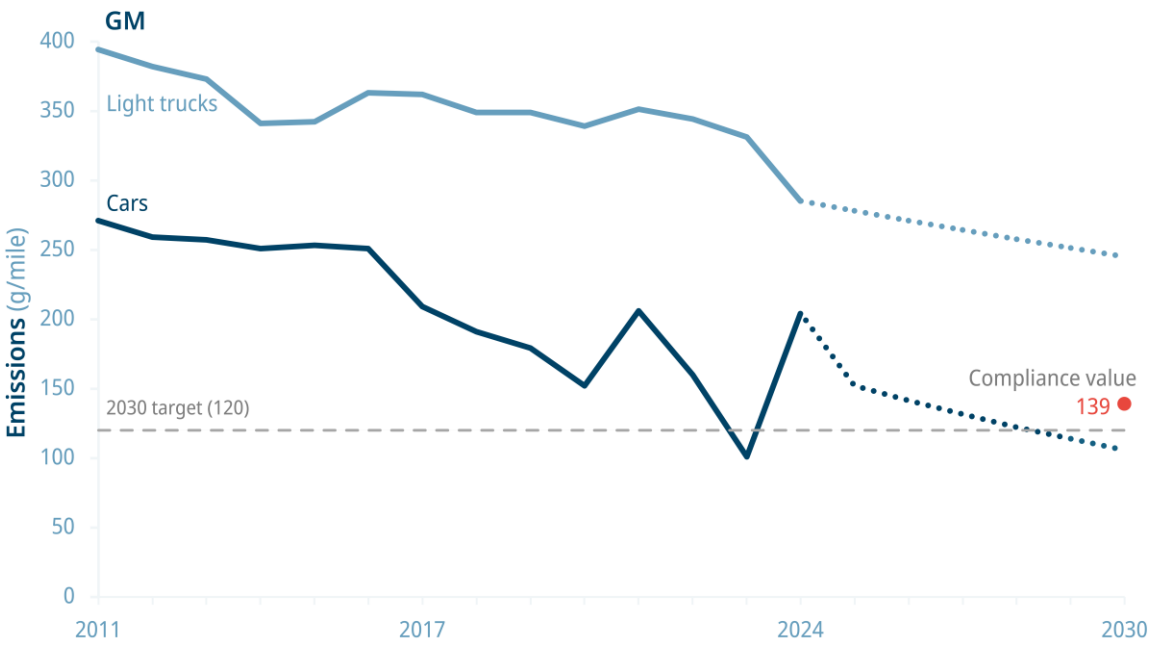

Figure 10. Changes in emissions from cars and light trucks over time (GM)

4.4 Honda

Honda saw good progress in the early years of implementation of the regulation (Figure 11). For both cars and light trucks, the emissions dropped by over 15% between 2011 and 2017. Between 2017 and 2024, emissions dropped by 14% for light trucks. However, emissions from cars increased by 1%. If Honda returns to its historic rates of progress (between 2011 and 2017) for both cars and light trucks, it reaches 192 g/mile for trucks and 174 g/mile for cars by 2030. The firm's banked credits and compliance flexibilities worth 37 g/mile lower the overall compliance value to 148 g/mile. Honda will likely not be able to comply with the 2030 target on its own. However, there are (and will be) enough credits in the system that they could purchase from other automakers in the market (e.g. Toyota, Tesla). The government may also create compliance flexibilities where automakers manufacturing in Canada could purchase credits at discounted prices.

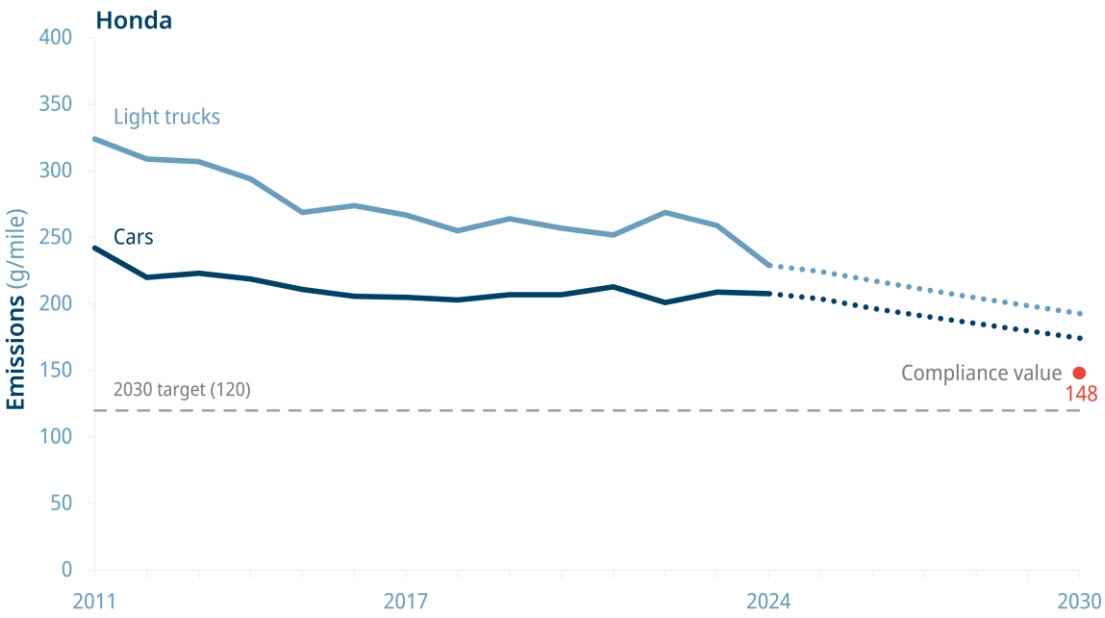

Figure 11. Changes in emissions from cars and light trucks over time (Honda)

4.5 Hyundai

Hyundai was slow to pick up pace on reducing emissions which remained largely flat for the initial years (2011-17) (Figure 12). Since 2017, the firm has achieved a more than 25% reduction in both cars and light trucks till 2024, reaching 95 g/mile for cars and 240 g/mile for light trucks. Progressing at this rate they can expect to reach 70 g/mile for cars and 175 g/mile for trucks by 2030. Due to over compliance in 2023 and 2024 they have banked credits as well. The firm's banked credits and compliance flexibilities will likely be around 53 g/mile in 2030 (even higher if they continue to accumulate more credits to 2030). Accounting for compliance flexibilities, their compliance value is 69 g/mile by 2030; that is, Hyundai is expected to exceed the 2030 target, with excess credits to sell to other automakers or bank for future use.

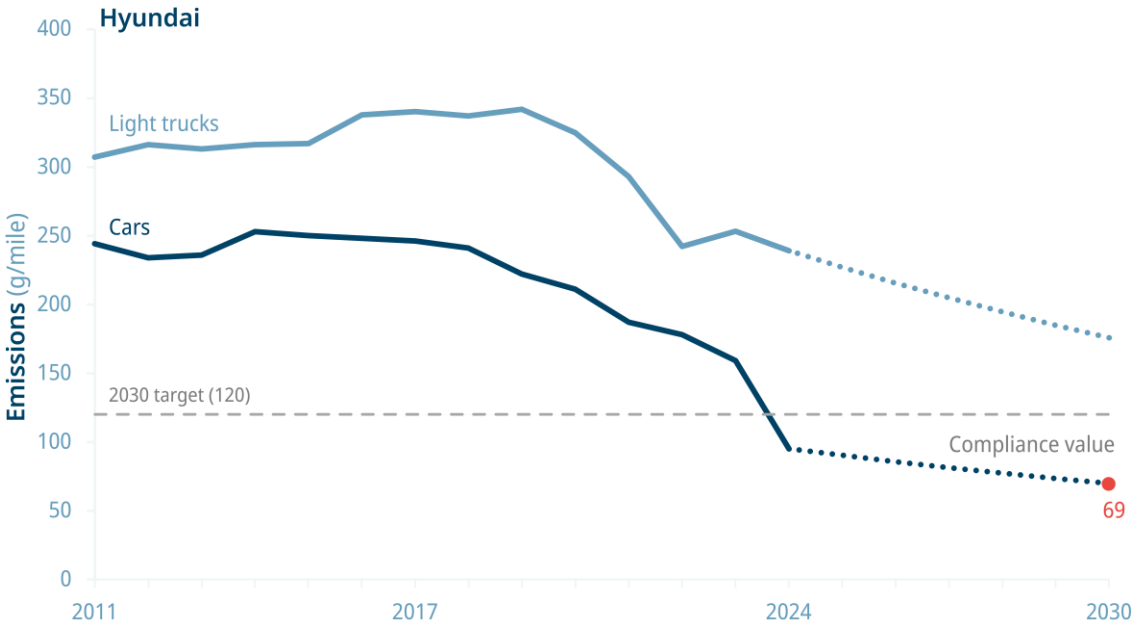

Figure 12. Changes in emissions from cars and light trucks over time (Hyundai)

4.6 Kia

The story for Kia, subsidiary of Hyundai, is similar to its parent company. Due to the introduction of several plug-in hybrid and battery electric models to their fleet, Kia has rapidly improved its vehicle emissions profile (Figure 13). If they come close to replicating their progress in the last few years (over 20% reduction in both segments), the firm will reach 80 g/mile for cars and 200 g/mile for light trucks by 2030. Including flexibilities reduces their compliance value to 110 g/mile by 2030, meaning Kia is expected to meet the 2030 target and could have credits available to sell or bank for future use.

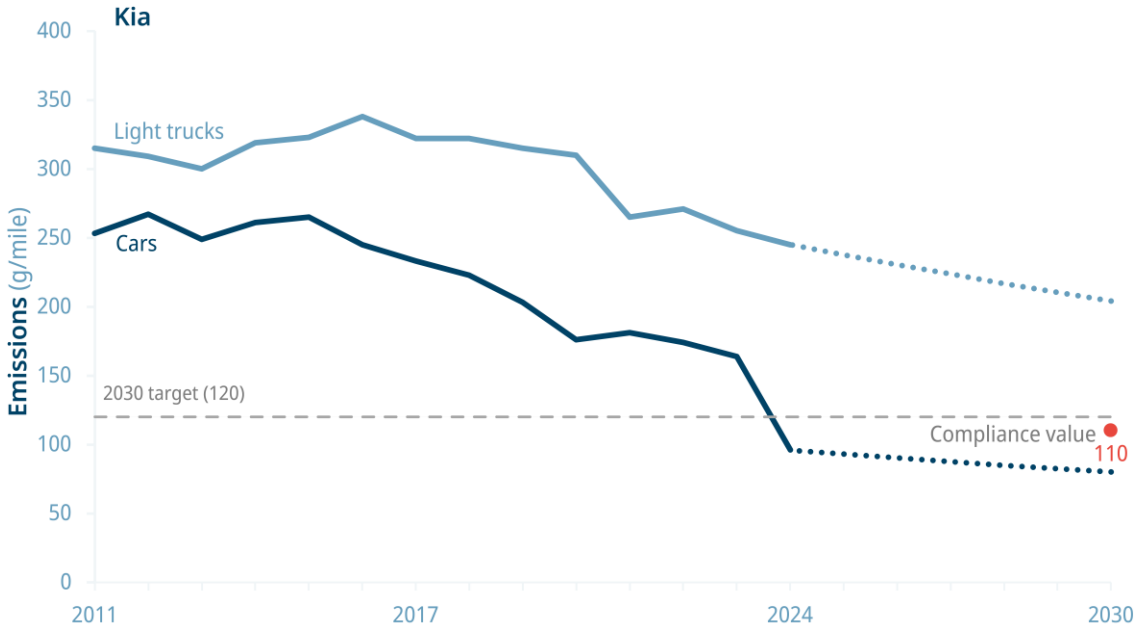

Figure 13. Changes in emissions from cars and light trucks over time (Kia)

4.7 Toyota

Toyota has reduced emissions from both its car and light truck fleets by 30% between 2017 and 2024 (Figure 14). If they maintain even half as good a progress rate (~18% reduction between 2024 and 2030), they will comfortably exceed the 2030 target. The company has over 5 million banked credits as of 2024. Combined with flexibilities, the total allowances amount to 63 g/mile. Deducting flexibilities from actual emissions, their compliance value reaches 93 g/mile, which is well below the 120 g/mile target. Toyota is therefore expected to exceed the 2030 target and have credits available to carry forward of sell to other automakers.

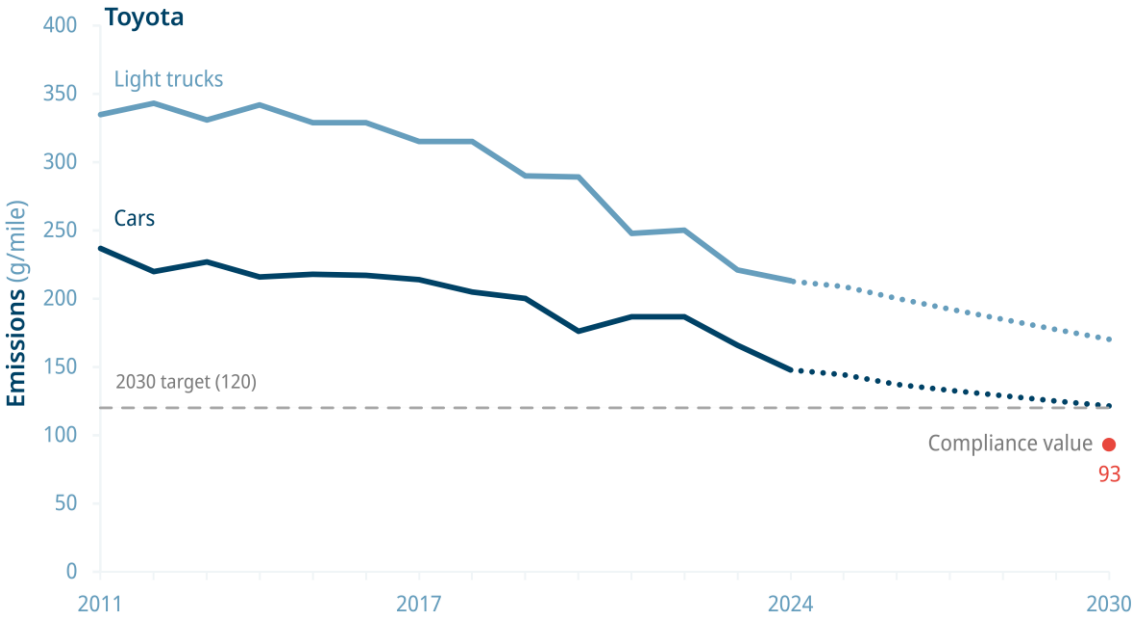

Figure 14. Changes in emissions from cars and light trucks over time (Toyota)

4.8 Tesla and other pure BEV automakers

As noted BEVs are assumed to emit 0 g/mile. Thus, pure BEV automakers earn credits they can sell to other automakers. Each BEV automaker earns over 100 credits for every vehicle sold (e.g. 120 g/mile (target) - 0 g/mile= 120 credits earned in 2030). For example, Tesla sold roughly 50,000 BEVs in Canada in 2022, 67,000 in 2023 and 49,000 in 2024. As such, it generated about 3.3 million credits in 2022, 4 million in 2023 and 2.9 million in 2024, credits which can be purchased by other automakers. It is true that most EVs sold in Canada are produced outside the country. To encourage domestic manufacturing, the government may create compliance flexibilities where automakers producing vehicles in Canada could purchase these credits at discounted prices.[42]

[42] Each credit represents 1 Mg CO_2e (one metric tonne, or one million grams of carbon dioxide equivalent) of emissions reductions. Current credit prices are not publicly available. For reference, in 2011 automakers could purchase credits from the Receiver General of Canada for $20 per Mg CO_2e (equivalent to $20 per credit) to offset an emissions deficit.

Government of Canada, "Greenhouse gas emissions performance for 2011 to 2016 light-duty vehicles: Section 3.2 Credits purchased from the Receiver General." https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/greenhouse-gas-emissions-performance-2011-2016.html#toc16

5. Pathways to meet emissions targets

As noted in the introduction, based on available information about the expected VES framework, the light-duty fleet-wide GHG target could begin at 170 g/mile in 2027 and decline by approximately 30% to 120 g/mile by 2030 (roughly a 10% annual decline in emissions). We also noted that Canada's stated objective is that the VES regulation should be geared toward seeing EVs make up 75% of auto sales by 2035. However, we have in earlier work determined that a stronger trajectory of 100 to 105 g/mile by 2030 is required to meet this goal. Here, we aggregate/summarize the findings from the previous section to assess how likely Canada's auto industry is to achieve the reported 2030 target of 120 g/mile (and the required target of 100 to 105 g/mile).

Reaching the reported target of 120 g/mile

Our analysis finds that the 120 g/mile target is achievable under a business-as usual case. The industry-wide compliance value is calculated using the sales-weighted average of emissions and compliance values from individual automakers. Under the business-as-usual case, the automakers are assumed to continue to reduce emissions between 2024 and 2030 at the rates they have reduced emissions for each of the two time periods (2011-2017) and (2017-2023) examined since the implementation of the VES in 2011. Under the business-as-usual case, in a typical year, the reduction in fleet-wide emissions could be achieved through:

- 10% to 20% reduction from improved internal combustion engine vehicle fuel economy
- 20% to 30% reduction from increased hybrid powertrain adoption
- 0% to 10% reduction from vehicle downsizing, including a growing share of smaller and lighter vehicles
- 40% to 70% reduction from increasing ZEV adoption, with ZEVs reaching up to 30% of new vehicle sales

These percentages represent the estimated share of the required emissions reduction attributed to each pathway. While fuel economy improvements and hybrid powertrain adoption will have noticeable contribution, increased ZEV adoption, likely to reach 30% new vehicle sales by 2030

under the business-as-usual case, is the largest factor in achieving or exceeding the proposed targets. Very little emissions reduction will be achieved via vehicle downsizing. [43]

Reaching a target for new sales share of 30% ZEVs should be achievable for the Canadian auto industry. Globally, ZEV sales reached 25% of new vehicle sales in 2025 and have grown by more than 10 times since 2014.[44] If automakers selling in Canada increase ZEV sales in line with global trends, the industry would reach approximately 27% to 30% ZEV sales by 2030, under the business-as-usual case.

Automakers already have access to the technologies needed to increase ZEV availability in Canada. Canada represents only about 2% of the global light-duty vehicle market, meaning automakers must already meet stronger vehicle efficiency policies in other markets to remain competitive. These global markets have accelerated investment in ZEV technology, with automakers expanding EV production, partnering with local manufacturers and forming joint ventures to respond to growing demand and comply with policies such as China's EV requirements and the European Union's more stringent emissions standards.

This suggests that the Canadian auto industry will be able to achieve 120g/mile target under business-as-usual conditions and is not likely to be negatively impacted by a revision of the VES. However, it also highlights the lack of ambition in the reported emissions trajectory. If the industry can comply with the regulation largely by following trends already underway, the VES is unlikely to create a strong incentive for automakers to bring substantially more EVs to the Canadian market. In that case, the regulation may achieve compliance without delivering the market transformation needed to meet Canada's own clean transportation objectives.

Reaching the required target of 100 to 105 g/mile

Table 4 demonstrates two pathways for achieving the recommended 100 to 105 g/mile target by 2030. As a reminder, business-as-usual case features a 30% ZEV share, and the current vehicle sales mix is maintained, with light trucks accounting for approximately 85% of new light-duty sales and cars accounting for 15%. Combined with available compliance flexibilities, this results in an industry-wide compliance value of 119 g/mile by 2030.

The first pathway is increasing ZEV adoption. If automakers are collectively able to reach a modestly higher ZEV target of 35% by 2030, while maintaining the current 85:15 light truck-to-car sales mix, the industry-wide compliance value will be approximately 105 g/mile. This

[43] As noted in section 2, automakers can employ compliance flexibilities like banked credits, reducing refrigerant leakage, and improving air conditioner efficiency to partially offset action on the dominant pathways for reducing emissions. Compliance flexibilities can help reduce the industry-wide compliance value, or in other words effectively lower VES stringency by 57 g/mile by 2030 (Figure 7).

[44] IEA, "Global EV Outlook 2026." https://www.iea.org/reports/global-ev-outlook-2026/trends-in-electric-cars

incremental ZEV share increase could be achieved by allowing more imported (e.g. Chinese) EVs, or if domestic manufacturers restart their previously proposed EV projects (e.g. Honda),[45] or a combination of both.

The second pathway is shifting the vehicle sales mix toward more cars. Maintaining a business-as-usual 30% ZEV share trajectory by 2030, while increasing the share of cars from 15% to 20% (an 80:20 light truck-to-car split), the automakers would reduce the industry-wide compliance value to approximately 112 g/mile. Increasing the car share further, say to 30% (a 70:30 light truck-to-car split), would reduce it further to approximately 102 g/mile.[46]

These results demonstrate that the recommended 100-105 g/mile target can be achieved through realistic changes in technology adoption and vehicle sales.

Combining a modest increase in ZEV sales with shifts in the vehicle sales mix could further reduce emissions to below 100 g/mile by 2030.

Table 4. Auto industry compliance with the VES 2030 targets under different pathways

Industry average emissions in 2030 (g/mile)	Actual emissions (A)	Compliance flexibilities (B)	Compliance value (C=A–B)
Effect of ZEV adoption (light trucks: cars (85:15)			
ZEV share = 30% (business-as-usual)	176	57	119
ZEV share = 35%	162	57	105
Effect of sales mix shifting to increase car share (ZEV share = 30%)			
Split = light trucks: cars (85:15) (business-as-usual)	176	57	119
Split = light trucks: cars (80:20)	169	57	112
Split = light trucks: cars (70:30)	159	57	102
Combined effect of ZEV adoption and sales mix shifting			
Split = light trucks: cars (70:30) + ZEV share = 35%	154	55	99

[45] Honda Canada News, "Honda Plans to Establish Comprehensive Electric Vehicle Value Chain in Ontario, Canada," media release, April 25, 2024. https://hondanews.ca/en-CA/releases/northwind-project

Abby Hughes, "Honda indefinitely suspends $15B EV plant in Ontario," *CBC News*, May 14, 2026, https://www.cbc.ca/news/business/honda-suspends-ev-plant-indefinitely-9.7199175

[46] An industry-wide 70:30 light truck to car split is not impossible; a few automakers (notably Honda, Kia and Hyundai) have maintained a 60:40 light truck to car split over years, as shown in Figure 4.

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