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Environment and Climate Change Canada

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## **Re: Mid-Term Evaluation of Canada's Light-Duty Vehicle Greenhouse Gas Emission Regulations**

We are writing in response to the Government of Canada's request for comments on the mid-term evaluation of Canada's light-duty vehicle greenhouse gas emission regulations for the 2022-2025 model years.<sup>1</sup>

With approximately C\$6 billion in assets under management, NEI Investments' approach to investing incorporates the thesis that companies can mitigate risk and take advantage of emerging business opportunities by integrating best environmental, social and governance (ESG) practices into their strategies and operations. It is through this lens that we provide the following comments.

### **Comments on Canada's Key Consultation Questions<sup>2</sup>**

*What levels of vehicle technology costs and payback timelines are reasonable for compliance with the existing 2022 to 2025 standards?*

We believe the question of what costs and payback timelines are reasonable is a very material topic for investors, both at a macro level (broad economic growth) and at a micro level (company-specific impacts). We believe the evidence supports the conclusion that the existing standards will have a net positive impact for both those factors.

The Regulatory Impact Analysis Statement issued in 2014 estimated that the monetary savings generated through lower fuel consumption would lead to a payback period of two to four years to pay back the increased cost of fuel saving technologies.<sup>3</sup> The average Canadian owns a single vehicle for around nine years.<sup>4</sup> Based on the projected payback period most consumers will see a net benefit from the higher efficiency associated with the existing standards over the life of their purchase. However, research from the International Council on

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<sup>1</sup> <https://www.canada.ca/en/environment-climate-change/news/2018/08/canada-begins-consultations-on-vehicle-emission-standards.html>

<sup>2</sup> As stated in the discussion paper on the mid-term evaluation:  
<https://www.canada.ca/content/dam/eccc/documents/pdf/cepa/DiscussionPaperAutomobilesLightTrucksGHG2018-eng.pdf>

<sup>3</sup> Ibid.

<sup>4</sup> <https://www.wheels.ca/news/most-canadians-keep-their-cars-for-nine-years-or-more-desrosiers/>

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Clean Transportation (ICCT) points to the suggested payback period as being overly pessimistic.<sup>5</sup> Actual payback time may be as short as one to two years, after which the savings from the increased efficiency accrue to the vehicle owner. Further, the ICCT research notes that if the standards are frozen to the current requirements for 2020 models, the payback period is actually longer than if the existing 2022-25 standards are followed. In other words, freezing the efficiency standards will increase costs for consumers, not lessen them.

As the discussion paper highlights, the gap between what Canadian drivers pay for fuel versus what US drivers pay is widening, with Canadians paying consistently higher rates than Americans. If this trend continues, the payback period for efficiency measures will further shorten.

A majority of Canadians purchase new vehicles through financing, and the average term length for these loans has stretched to over 72 months.<sup>6</sup> ICCT notes that consumers utilizing a 72 month loan at a rate of 4.25% would see an *immediate* off-the-lot savings for vehicles built to the existing efficiency standards, as the savings from lower fuel costs offset the loan payments.<sup>7</sup>

At the macro-level, the money saved by Canadians on fuel costs will largely be spent in other areas of the economy, leading to increased economic activity and growth, which would be a net benefit to Canada, and thus Canadian investors. At the company level, the increased savings to consumers implied by the existing standards may act as a hedge against a dramatic rise in fuel costs. Combined with the trend towards larger vehicles, a significant increase in fuel costs could severely impact light vehicle sales in Canada. The increased efficiency performance that will result from the implementation of the existing standards can partially shield the industry from the negative impact of fuel price swings. Further, research in the U.S. found that respondents under the age of 50 were willing to pay 60% more for fuel economy versus those 50 years of age or older (\$870 for one extra mile per gallon increase in efficiency versus \$540).<sup>8</sup> Future market share may be dictated, in part, by efficiency performance. Maintaining the existing standards appears to be a good hedge in this light.

*Is the projected greenhouse gas emission reduction contribution of the light-duty vehicle sector towards meeting the government's emission reduction goals reasonable?*

The Financial Stability Board, in creating the Task Force for Climate-Related Financial Disclosure (TCFD), cited the systemic risk to the financial system from climate change as its motivation for convening the TCFD.<sup>9</sup> This

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<sup>5</sup> The International Council on Clean Transportation, *Assessing Canada's 2025 passenger vehicle greenhouse gas standards: Benefits Analysis*. 2018.

[https://www.theicct.org/sites/default/files/publications/Canada\\_CAFE\\_4\\_Benefits\\_20180912.pdf](https://www.theicct.org/sites/default/files/publications/Canada_CAFE_4_Benefits_20180912.pdf)

<sup>6</sup> Financial Consumer Agency of Canada, *Auto Finance: Market Trends*. 2016.

<https://www.canada.ca/content/dam/canada/financial-consumer-agency/migration/eng/resources/researchsurveys/documents/auto-finance-market-trends.pdf>

<sup>7</sup> [https://www.theicct.org/sites/default/files/publications/Canada\\_CAFE\\_4\\_Benefits\\_20180912.pdf](https://www.theicct.org/sites/default/files/publications/Canada_CAFE_4_Benefits_20180912.pdf)

<sup>8</sup> Kormos & Sussman, *Auto buyers' Valuation of Fuel Economy: A Randomized Stated Choice Experiment*. 2018.

<http://www.consumersunion.org/MPGreport>

<sup>9</sup> <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf>

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definition as a systemic risk makes climate change unique among ESG risks faced by companies and their investors. The risks associated with climate change require investors to think beyond the exposure of individual equities and to consider a broader assessment of risk across their portfolio. Unmitigated climate change will have a negative impact across all sectors and asset classes, and investor returns will suffer regardless of which equities they are exposed to. As such, it is in the interests of all investors that Canada meet its obligations under the Paris Agreement and do so in an equitable way across sectors.

In respect to the light-duty vehicle sector, the sector currently represents roughly 11% of Canada's GHG emissions.<sup>10</sup> The market shift towards light trucks means that if emissions standards don't increase in stringency, we will likely experience an emission trajectory from the sector that is incompatible with our Paris targets. Delaying action in the light-duty vehicle sector would either require steeper cuts in other sectors in the nearterm, or much stricter (and costly) regulations on the vehicle sector in the future in order to meet our targets. Neither of these scenarios has a compelling economic rationale.

Canada's unique geography and demographics limits the ability to maximize transportation solutions that can be used in denser, smaller jurisdictions (e.g. mass transit, ride-sharing, etc.). As such, passenger vehicle travel is likely to remain a major part of our transportation picture. The ongoing role that personal vehicles will likely play in our transportation network underlines the importance of increasingly stringent vehicle standards if we are committed to meeting our Paris targets.

More importantly, some sectors face significant technological challenges in regard to reducing emissions, and will require a step-change in innovation that has not yet surfaced or is currently cost-prohibitive (e.g. emissions associated with the cement industry or carbon capture and storage technologies). In respect of the light-duty vehicle market, there appear to be multiple options and avenues the sector can pursue to meet these reductions and no shortage of ideas. As noted above, the relative costs associated with these solutions appear to be modest and can be passed on to the consumer with little or no impact to the consumer herself.

Major car manufacturers have indicated they plan to be compliant with a low-carbon future regardless of regulatory requirements, indicating that the industry itself is optimistic about the potential to achieve reductions in line with a low-carbon future *and* still remain profitable.<sup>11</sup>

As such the expected reductions from the sector seem eminently reasonable when compared to the systemic risks of unmitigated climate change.

*Would compliance with the existing standards for the 2022 to 2025 model years be achievable while maintaining the competitiveness of the Canadian auto industry considering the integrated nature of vehicle manufacturing and trade in the North American market?*

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<sup>10</sup> As stated in the discussion paper:

<https://www.canada.ca/content/dam/eccc/documents/pdf/cepa/DiscussionPaperAutomobilesLightTrucksGHG2018-eng.pdf>

<sup>11</sup> <https://medium.com/cityoftomorrow/a-measure-of-progress-bc34ad2b0ed>

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Having one common compliance expectation across the North American market would clearly be the most efficient approach with the least impact on vehicle manufacturers and parts makers. However, if the current rollbacks proposed by the National Highway Traffic and Safety Administration (NHTSA) and the U.S. Environmental Protection Agency (EPA) are pursued it is looking highly unlikely that even U.S. manufacturers will be facing a single compliance standard. The state of California has been emphatic in its opposition to the rollbacks and has given notice that it will only deem vehicles built to the previous federal standards (what we are referring to here as the existing standards) to be compliant with California's standards.<sup>12</sup>

In addition, 20 State Attorney Generals have stated their intention to file a lawsuit against the proposed rollbacks, guaranteeing further uncertainty in respect of the final federal standard and a potential bifurcation of the U.S. market for an indefinite period. The 13 states that currently follow the California standards represent roughly 1/3 of auto sales in the U.S. The ongoing uncertainty in the U.S. over the fate of vehicle emission standards makes it difficult to choose which, if any, side will prevail. As such, it is important to consider competitiveness issues in a global context as well.

To ensure the long-term health of the sector, Canada must consider the competitiveness of our auto manufacturing industry in the context of the global marketplace. Taken together, the U.S. and Canadian markets represent 14% of the global production of light-duty vehicles and 20% of global sales.<sup>13</sup> Put another way, 80% of the global market for light-duty vehicle sales and 86% of global production occurs outside of North America. There is a growing international consensus on the imperative of higher efficiency standards for vehicles, and access to these markets will require Canadian companies to continue to innovate and develop new technologies compliant with these higher standards. The Chinese market alone is over 30% larger than the North American market, and has announced higher vehicle efficiency standards than even the existing standards for 2022-2025.<sup>14,15</sup> Allowing the standards in Canada to drop may lower the incentive for companies to innovate and inadvertently shut Canadian companies out of the global marketplace.

The imperative to innovate, and the opportunity that innovation brings, is particularly relevant to the automotive parts manufacturing industry. Roughly 70% of the people employed by the automotive manufacturing industry are employed in the manufacture of automotive parts.<sup>16</sup> According to a report by Ceres, the automotive parts industry would benefit the most from maintaining the existing standards. Looking at the U.S. industry, they estimate that 80% of the additional costs associated with meeting the higher

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<sup>12</sup> State of California Air Resources Board, *Public Hearing to Consider Proposed Amendments to the Low-Emission Vehicle III Greenhouse Gas Emission Regulation – Staff Report: Initial Statement of Reasons*. August 7, 2018.

<https://www.arb.ca.gov/regact/2018/leviii2018/leviiiisor.pdf>

<sup>13</sup> International Organization of Motor Vehicle Manufacturers: <http://www.oica.net/wp-content/uploads/Sales-all-vehicles-2017.pdf>

<sup>14</sup> Ibid.

<sup>15</sup> Chinese regulations require automobile manufacturers to meet a Corporate Average Fuel Economy of 54.5 miles per gallon by 2025, which is stricter than the *previous* 2025 target in the US of 46.8 miles per gallon.

<https://www.forbes.com/sites/jackperkowski/2017/10/10/china-raises-the-bar-with-new-electric-vehicle-rules/#2ffbfbdb377ac>

<sup>16</sup> Sweeney, Brendan. *A Profile of the Automotive Manufacturing Industry in Canada, 2012-2016*. 2017.

<https://aprc.mcmaster.ca/sites/default/files/pubs/automotive-manufacturing-canada-2012-2016.pdf>

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standards out to 2025 are accounted for through increased sales to suppliers.<sup>17</sup> In the U.S. market alone this represents \$20 billion in revenues in the 2022-2025 window. Extrapolated globally, the potential for automotive parts makers to materially benefit from the shift to low-emission vehicles is immense. From the investor perspective, this represents a significant investment opportunity and one that Canadian companies should be encouraged to pursue.

Further, we strongly encourage the government of Canada to engage with the state of California to ensure that Canada's regulations are deemed compliant with California's standards and to ensure future regulatory developments are coordinated to the greatest degree possible. If Canada decides to maintain the existing standards, and the U.S. federal proposal stands, it is imperative that Canada align itself with the states following the California standards in order to optimize the opportunities for Canadian businesses.

*Would the existing standards for the 2022 to 2025 model years provide benefits to consumers and to the public?*

As noted earlier, the payback period for the existing standards would appear to be better than if standards are held flat in accordance with the current proposal by NHTSA and the EPA. Combined with financing, the increased fuel efficiency of the existing standards, versus a freezing at 2022 levels, appears to provide to consumers a reduction in costs that outweighs the expected increase in the purchase price of vehicles. These savings will accrue directly to consumers and flow into the general economy.

The reduction in GHG emissions associated with the existing standards will have global benefits, and Canadians will enjoy these benefits to the degree the standards help mitigate the impacts of climate change. However, there will be very specific regional benefits associated with increased efficiency. Namely, reducing the negative impacts of localized air pollution.

The State of California Air Resources Board estimates that if the efficiency standards are frozen at 2021 levels, California will incur an additional \$1 billion in economic costs between 2021 and 2030 due to premature deaths and health-related damages that result from the expected increase in air pollution.<sup>18</sup> It can be presumed that the existing standards would likewise bring health benefits to Canadians, particularly those living in urban areas experiencing traffic congestion issues.

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<sup>17</sup> Baum & Luria, *Ceres Analyst Brief: Economic Effects on U.S. Automakers and Suppliers of Retaining or Weakening 2025 National Program Fuel Economy Standards*, 2018. [https://www.ceres.org/sites/default/files/reports/2018-06/Ceres%20analyst%20brief%20spring%202018%206\\_1.pdf](https://www.ceres.org/sites/default/files/reports/2018-06/Ceres%20analyst%20brief%20spring%202018%206_1.pdf)

<sup>18</sup> State of California Air Resources Board, *Proposed Amendments to the Low-Emission Vehicle III Greenhouse Gas Emission Regulation: Standardized Regulatory Impact Assessment (SRIA) Equivalent Document*. 2018. [http://www.dof.ca.gov/Forecasting/Economics/Major\\_Regulations/Major\\_Regulations\\_Table/documents/LEV\\_III\\_GHG\\_Regulation\\_Amendments.pdf](http://www.dof.ca.gov/Forecasting/Economics/Major_Regulations/Major_Regulations_Table/documents/LEV_III_GHG_Regulation_Amendments.pdf)

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*Are there changes to existing flexibilities or other new flexibilities that should be considered to facilitate compliance with existing standards while minimizing impacts on expected greenhouse gas emission reductions?*

Despite the public support that major car manufacturers such as Ford have shown for maintaining ambitious efficiency standards, the enduring ask from leading US-based manufacturers is that they would like greater flexibilities regarding the creation and accounting of low to zero emission cars.<sup>19</sup> As such, serious consideration should be given to this concern, though we do not presuppose what that should look like.

## Conclusion

We appreciate the opportunity to offer our perspective on the mid-term review of the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations. We urge the government of Canada to consider maintaining the existing standards in light of the environmental and economic benefits the existing standards will bring to the light-vehicle industry, to consumers and the general public, and ultimately to investors. Please do not hesitate to contact me if you have any questions in relation to this submission.

Sincerely,

## NEI Investments

A handwritten signature in black ink, appearing to read "Jamie Bonham", written over a light blue horizontal line.

Jamie Bonham  
Manager, Corporate Engagement

cc:

Board of Directors, NEI Investments

Responsible Investment Executive Committee, NEI Investments

Ms. Michelle de Cordova, Director, Corporate Engagement and Public Policy, NEI Investments

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<sup>19</sup> <https://medium.com/cityoftomorrow/a-measure-of-progress-bc34ad2b0ed>

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