

Nathalie Morin  
Acting Director General  
Energy & Transportation Directorate  
Environment and Climate Change Canada  
[Nathalie.morin4@canada.ca](mailto:Nathalie.morin4@canada.ca) / Tel: 613-301-5925

April 23, 2021.

Dear Ms. Morin,

Thank you for inviting us to participate in the stakeholder consultations on Zero Emissions Vehicle Supply Policy in Canada. As shown in the latest National Inventory Report,<sup>1</sup> carbon emissions from transportation in Canada continue to rise and are now 14% above 2005 levels. Furthermore, Health Canada has estimated that pollution from Internal Combustion Engine (ICE) vehicles accounts for approximately 1650 premature mortalities and over \$12.8B in economic damages annually. Zero Emissions Vehicles (ZEVs) are key to addressing this growing problem. In that context, it is distressing to note that independent analysis suggests Canada is not on track to achieve its ZEV sales targets with existing measures.

We support Canada's goal for ZEVs to supply 10% of Light Duty Vehicles (LDV) sales by 2025, 30% of new vehicle sales by 2030, and 100% by 2040. However, we urge the government to strengthen these goals, especially in the context of Canada's new increased 2030 climate target. This progressive timeline approach to setting incremental goals is important, and we strongly urge the government to integrate Canada's current and future sales targets into regulations going forward. Incremental approaches help to ensure transparency and accountability when setting goals and achieving them.

### **The Importance of Confidence and Predictability in ZEV Supply Policy**

It is increasingly clear that getting on track to achieve Canada's ZEV sales targets and climate commitments requires the development of a supply-side policy framework. The key to a successful ZEV supply policy framework is a high degree of confidence and predictability in the pace of the ZEV transition, and the ultimate goal of 100% ZEV market share by or before 2040. Confidence and predictability are key to unlocking the massive investments needed to enable the ZEV transition, without which we cannot reach our climate targets.

Investor and stakeholder confidence in the pace and predictability of the ZEV transition is critical from two perspectives. First, from an economic development perspective, it is important to attract investment in the growth of domestic supply chains for ZEVs and related components, including batteries and

---

<sup>1</sup> <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2021.html>

---

minerals. Second, from a utility and regulator perspective, predictability is needed so electricity planning decisions and investments can be made today to shape the future of Canadian electricity infrastructure for decades to come. Investments in Canada's electricity system are needed to enable transportation electrification. Currently, Canada's ZEV sales targets are too often ignored in infrastructure decision-making. For example, ZEV charging requirements were recently removed altogether from Ontario's Building Code due to lack of clear direction on the ZEV transition. This directly impacts confidence of investors and stakeholders in Canada as there is a lack of clear direction and supports for ZEVs.

Below we comment on each of the ZEV supply policy framework options outlined by ECCC, from the perspective of confidence and predictability.

### Voluntary Sales Targets

Canada has a long history of relying on voluntary programs to achieve our climate targets – a history of failure. In fact, over reliance on voluntary approaches is one of the major reasons that Canada has failed to achieve any meaningful progress against its current or past climate targets. The pattern is clear -certain segments of industry argue for a voluntary framework and once implemented minimal results are achieved. After low compliance with voluntary standards, the conversation shifts to a mandatory framework at the end of a multi-year process that has little to show for it. Canada cannot afford to squander any more time repeating past mistakes. **TAF recommends a mandatory incremental approach to any ZEV supply policy that is implemented.** The incremental nature of a program allows it to be nimble and respond to challenges as needed, but it must be mandatory to meet climate commitments by 2025 with ZEVs and ramping up significantly in the decades following.

A voluntary target framework carries most of the administrative burden of a regulatory framework but will do nothing to create confidence and predictability in the ZEV transition. In fact, a voluntary framework would only serve to reinforce the perception that Canada is not serious about achieving its ZEV targets. Linking voluntary targets to Canada's Light-Duty Vehicle Greenhouse Gas (LDV GHG) standards by incentivizing companies that exceed their ZEV target would be redundant, as Canada's LDV GHG standards already include ZEV multipliers. Such an approach would also weaken the net impact of Canada's LDV GHG standards.

### More Stringent Light-Duty Vehicle GHG Standards

More stringent LDV GHG performance standards would contribute towards meeting the federal ZEV sales targets. However, GHG performance standards alone are unlikely to be sufficient to ensure compliance with the 2025 and 2030 ZEV sales targets. Driving compliance with ZEV sales targets through LDV GHG standards alone would require a greater degree of stringency than is currently being used or contemplated anywhere in North America. Given that automakers would have the option to achieve compliance via conventional fuel efficiency or increasing ZEV sales, it would do little to increase confidence and predictability in the pace of the ZEV transition. This in turn would continue to undermine investment in ZEV supply chains, charging infrastructure, and electricity infrastructure.

---

**TAF strongly supports the use of more stringent LDV GHG performance standards, in concert with a national ZEV mandate.** These two policy approaches are complementary. GHG performance standards ensure continuous improvement in the fuel efficiency of internal combustion engine (ICE) vehicles, while a ZEV mandate creates confidence and predictability in the pace of the ZEV transition and the achievement of national ZEV sales targets. The two policy tools can be embedded in separate regulations or integrated in a single regulatory framework (as in California's Advanced Clean Cars Program). It should be noted that the implementation of a national ZEV mandate would trigger a need to eliminate or redesign the use of ZEV multipliers in future LDV GHG performance standards (e.g. only applying the multiplier to ZEVs which exceed a manufacturer's ZEV mandate target for the year).

**TAF recommends incremental fuel efficiency standards in an LDV GHG, eventually resulting in a de facto ICE phaseout.** The strength of stronger LDV GHG standards compared to a simple ICE ban is the ability to monitor progress, see where issues are occurring, and respond to them in between benchmarks. A ban such as the one in the United Kingdom that does not have fuel efficiency targets (which effectively phases out the worst of the ICE engines over the period) is that progress can be lost if time periods are pushed back. With incremental check-in periods, we will know how to respond to emerging issues, but won't halt progress if time periods are extended. We know that transport is a main source of emissions and air pollution in urban regions such as the Greater Toronto and Hamilton Area<sup>2</sup> and stringent LDV GHG standards will improve the health of people near major transportation routes, as well as help lower emissions in our major metropolitan centres.

## **ZEV Standard and Mandate**

**TAF strongly supports the development of a national ZEV mandate aligned with Canada's ZEV sales targets.** The incremental nature of a ZEV mandate allows it to be nimble and respond to challenges as needed, while its mandatory nature is clearly necessary in the context of Canada's newly strengthened 2030 climate target. We note that Canada has committed to aligning its LDV regulations with the leading national or subnational jurisdictions in North America. ZEV mandates have emerged as a key part of LDV regulatory frameworks in the leading subnational jurisdictions in North America, including California and nine other U.S (United States). states, as well as British Columbia and Quebec.

**A national ZEV sales mandate would maximize confidence and predictability in the pace the ZEV transition and in the achievement of Canada's ZEV sales targets.** This in turn would facilitate investment in ZEV supply chains, ensuring Canada is well placed to benefit from the enormous economic opportunities associated with the global ZEV transition. It would mobilize greater investment in charging infrastructure and facilitate the introduction of EV charging requirements into building codes across Canada, combating charging anxiety. Finally, it would ensure investors, utilities and utilities

---

<sup>2</sup> <https://taf.ca/publications/reality-check-carbon-emissions-inventory-for-the-gtha/>

---

regulators take Canada's ZEV sales targets into account when planning and investing in the future of Canada's electricity generation, transmission, and distribution infrastructure.

**A ZEV mandate is also the only tool that will ensure Canadians from coast to coast-to-coast benefit from the full range of ZEV models available across North America.** Absent a national ZEV mandate, ZEV supplies will continue to be preferentially diverted to the 11 states and provinces with ZEV mandates. This would create growing inequity in access to ZEVs and the public health benefits associated with them. A national ZEV mandate would also prevent the proliferation of provincial mandates and the consequent development of an increasingly complex and fractured regulatory landscape for manufacturers. A national ZEV mandate could exempt provinces with an equivalent or stronger ZEV mandate, avoiding overlapping regulations, similar to Canada's approach carbon pricing.

**A ZEV mandate would complement Canada's LDV GHG Standards.** LDV GHG standards would ensure continued improvement in ICE vehicle efficiency, while the ZEV mandate would ensure a rapid and predictable transition to ZEVs over time. As noted above, the enactment of a ZEV mandate would necessitate rethinking the use of multipliers for ZEVs under the LDV GHG standards. Options would include eliminating ZEV multipliers or only applying them to vehicles which exceed a manufacturer's compliance obligation under the ZEV mandate. Either way, Canada's LDV GHG standards and ZEV mandate need to be closely coordinated and designed as part of a holistic LDV regulatory framework.

## **Ban on Internal Combustion Engine Vehicles**

**The weakness of a ban on ICE vehicles is that it does little to create confidence or predictability in the pace of the ZEV transition up until the ban date.** This approach would also undermine confidence and predictability by creating speculation (and a real risk) that the ICE ban date would be pushed back if there is insufficient progress in increasing ZEV market share ahead of the ban. As a stand-alone tool, a ban is an all or nothing approach with a real risk of failure if the ban is pushed back or rescinded by future governments.

The strength of more stringent LDV GHG standards combined with a ZEV mandate compared to a simple ICE ban is that it would ensure continuous improvement in vehicle performance and ZEV market share in the short, medium, and long-term. Even if a future government were to rescind or weaken the ZEV mandate, it would at least have an impact in the short-term. Relying on an ICE ban, by contrast, is a high-risk strategy which may not end up achieving any market impact (if it is rescinded). **TAF recommends the use of more stringent LDV GHG standards, combined with a national ZEV mandate, to ensure a de-facto ICE ban by-or-before 2040.**

---

## Conclusion

We know that Transportation is a main source of carbon emissions across Canada and especially in major urban centres such as the GTHA. **Air pollution from ICE vehicles kills over a thousand Canadians every year and creates billions in economic damages.** The burden of illness from ICE air pollution is disproportionately borne by lower-income Canadians and racialized minorities, who are more likely to live near major roadways with elevated concentrations of air pollutants.<sup>3</sup> **The implementation of a national ZEV mandate combined with more stringent LDV GHG standards will improve the health of all Canadians, while disproportionately benefitting low-income and marginalized populations.**

Finally, we'd like to emphasize that Canada's ZEV supply policy should be developed and integrated in the context of a broader ZEV strategy. This broader strategy must include other policy and program tools as well as addressing ZEV supply for medium and heavy-duty vehicles. This includes the continuation and enhancement of funding and rebate programs for the full range of ZEV vehicle classes as well as charging infrastructure. TAF would like to echo the recommendation from the Standing Committee on Environment and Climate Change's report from April 13th, 2021, and **recommend the Government of Canada review, and build on existing programs to facilitate and support continued development for domestic supply chains for the full lifecycle of ZEV components, including batteries.**

TAF supports Electric Mobility Canada's testimony that EVs represent the future of the auto manufacturing sector and Canada is well positioned to play a key role in this transition.<sup>4</sup> From an urban and suburban climate perspective we would like to reiterate the importance of ZEVs in cities and note the important work being done by the City of Toronto, the Region of Peel, and its municipalities, on electrification. We cannot stress enough the importance of having a federal partner support the work of implementing charging stations to address charge anxiety, integrating charging requirements into building codes, and supports for retrofitting existing buildings to charge vehicles.

In closing, TAF thanks the Government of Canada for opening these consultations and is looking forward to further progress on this file. The ZEV transition is vital to achieving our carbon reduction targets. When it comes to the supply chain, it is important to remember that a mandatory target ensures reductions, while also sending clear signals to other parts of the economy to prepare for this transition. A phased in approach with strong fuel efficiency and GHG targets helps to ensure transparency and compliance and prevents unnecessary delays.

Sincerely,

Bryan Purcell  
VP, Policy & Programs, The Atmospheric Fund

---

<sup>3</sup> <https://www.toronto.ca/legdocs/mmis/2017/pe/bgrd/backgroundfile-108665.pdf>

<sup>4</sup> <https://www.ourcommons.ca/DocumentViewer/en/43-2/ENVI/report-3/page-30>

---

## About the Atmospheric Fund

*The Atmospheric Fund (TAF) is a regional climate agency that invests in low-carbon solutions for the Greater Toronto and Hamilton Area (GTHA) and helps scale them up for broad implementation. Please note that the views expressed in this submission do not necessarily represent those of the City of Toronto or other GTHA stakeholders. We are experienced leaders and collaborate with stakeholders in the private, public and non-profit sectors who have ideas and opportunities for reducing carbon emissions. Supported by endowment funds, we advance the most promising concepts by investing, providing grants, influencing policies and running programs. We're particularly interested in ideas that offer benefits in addition to carbon reduction such as improving people's health, creating local jobs, boosting urban resiliency, and contributing to a fair society.*