# Incentives for Medium- and Heavy-Duty Zero Emission Vehicles Program (iMHZEV) Questionnaire

May 13, 2022

Electric Mobility Canada (EMC) welcomes the opportunity to respond to Transport Canada's (TC) request for comment on its forthcoming *Incentives for Medium- and Heavy-Duty Zero Emissions Vehicles Program* (iMHZEV). This is an important new program that will provide crucial support for the Government of Canada's goal of ensuring that 35% of new medium- and heavy-duty vehicles (MHDV) sales are zero-emission vehicles (ZEVs) by 2030. The achievement of that sub-sectoral sales target would reduce transportation emissions and boost progress toward Canada's economy-wide climate targets in one of the country's most difficult-to-decarbonize sectors.

As a part of the government's strategy for reducing transportation emissions, iMHZEV will promote positive outcomes both for the climate and the clean economy. The program will boost the domestic market for zero-emissions technology in a significant industrial area where Canada, building on its existing manufacturing base and other strategic advantages, is poised to enhance its position of global leadership.

## General comments

EMC commends Transport Canada for its swift action to develop and launch the iMHZEV program. The department has proposed a program that evidently incorporates many of the best practices established in other jurisdictions with similar incentives already in place. We strongly support the department's intention to launch the program quickly, so as to avoid the risk of dampening existing sales activity while prospective EV buyers wait for clarity around program eligibility and impact (i.e., the potential scale of cost-reductions to the up-front purchase price of MHD ZEVs).

EMC views the purchase incentive as a key policy action laying the groundwork for the burgeoning federal intention to regulate MHDV sales, such that a growing subset of class 2b–8 on-road commercial vehicles are ZEVs. This regulatory strategy to guarantee MHD ZEV supply will—together with other policy supports, such as the iMHZEV purchase incentive and investments in necessary charging infrastructure—form the backbone of public efforts to decarbonize commercial/freight transportation. We regard the successful implementation and timely disbursement of funds via iMHZEV as a foundational action supporting the feasibility of the government's ZEV deployment targets, which are ultimately tied to Canada's emission-reduction goals.

We concur with the comments submitted by Clean Energy Canada, which argue that the program design and implementation should be structured to minimize administrative burden, ensure widespread and accelerated deployment of zero-emission MHDVs, and enable learning across government and industry. We support the proposed guiding principles of **transparency**, **simplicity**, **accessibility**, and **adaptability**. In particular,

- iMHZEV administrators should clearly and proactively communicate timelines, processes, requirements, ongoing funding availability, and any program changes;
- iMHZEV should be easy to navigate for manufacturers, vendors, fleets, and other members of the public;
- iMHZEV should be designed to maximize access by the greatest number of fleet types and zero-emission vehicles possible; and
- iMHZEV should be launched quickly, with initial funds becoming available soon after the post-consultation program design is confirmed, but administrators should also allow for periodic program refinement and re-calibration as incentive uptake is evaluated and the MHDV market evolves.

## 1. Program Approach, Parameters, Delivery

a. *Do you have concerns with the program approach or any program parameter as described in the webinar? If so, what is the issue and how could things be adjusted to work better?*

Timing and funding streams

- EMC supports the proposed timing of program delivery, with predictable and growing multi-year funding allocated over four years beginning in fiscal year 2022-23. We recognize and deeply appreciate Transport Canada's diligent work to open the program and make it operational as quickly as possible. We urge the department to continue bearing in mind the need to avoid, as much as possible, a situation whereby iMHZEV has the perverse effect of delaying vehicle purchases and capital expenditures while fleets and other prospective participants wait for program details to come into fuller resolution. EMC members greatly appreciate the department's attentiveness to this concern, and acknowledge that such a situation would, in any case, be unlikely to persist.
- Once the iMHZEV program is launched, the business calculations of some EMC members will hinge in part on the availability program funds and on an awareness of program timelines. We encourage TC to clearly and proactively communicate the availability of funding and the timelines for review, approval, and disbursement (following the submission of mandatory documentation by the vendor). The issuance of re-payment within 20 business days of an application's being filed is an appropriate standard to uphold. Transport Canada should also attempt to transparently communicate the placement of an application within the current review queue, and to indicate well in advance when program funding is close to depletion.

- <u>Dedicated and enhanced funding for small fleets and independent owner-operators</u>
  EMC joins others in the call for the creation of a dedicated funding stream with higher incentives for small fleets and independent owner-operators. This funding stream could be modelled on California's Innovative Small e-Fleets pilot project and would be distinct from the proposed annual 10-vehicle cap on receipts of the iMHZEV incentive. While still worthwhile, the cap alone is insufficient to ensure funding for smaller fleets. Incorporating a small-fleet element into program design would enhance equity, which is an important consideration given that the purchase price barrier for MHD ZEVs is likely to be more acute for smaller fleet/truck operators, who may lack the means of financing new vehicles in the primary market. While larger fleets may have the wherewithal and human resources capacity to quickly overcome the financial and administrative costs of fully participating in iMHZEV, smaller operators may be unable to surmount the transaction and opportunity costs of program participation absent additional inducement to do so.
- In line with the potential equity benefits of deploying more MHD ZEVs, EMC would also support efforts by Transport Canada to pilot voucher enhancements/modifiers/multipliers that would extend or improve the size of the incentive for fleets and owner-operators operating from disadvantaged or minority communities.

Payment model and sequencing

- EMC strongly supports a first-come, first-served incentive approach that reduces medium- and heavy-duty ZEV capital costs immediately at point-of-sale, with authorized vendors (dealers/manufacturers) implementing the up-front cost reduction for listed vehicles and seeking reimbursement from Transport Canada following the vehicle sale (or delivery, in case of a lease).

- Voucher-based incentive:
  However, we also align with Clean Energy Canada in suggesting that Transport Canada could meaningfully improve the iMHZEV program by structuring it as a voucher-based incentive rather than as a grant. Such an approach would improve certainty for vendors by providing the assurance that program funds are allocated immediately upon receipt of the voucher by administrators (or, equivalently, the submission of the voucher by vendors). Given the additional cost and complexity associated with the purchase of vehicles for MHD fleets (as compared with personal light-duty vehicles), the program should go as far as it can to provide procedural assurance that the submission of a claim (via voucher or supporting documentation [Bill of Sale/Lease Agreement; Consent Form; Incentive Received Form]) leads to the automatic allocation of the funds necessary for reimbursement. The release of these funds would still be subject to a process of review and confirmation, but vendors and fleet buyers could move forward with confidence that, as soon as the paperwork associated with a MHD ZEV purchase has been submitted, the funding necessary to deliver the rebate has been automatically set aside and committed. This additional certainty would enhance the capacity of all parties to move forward with transactions.

Eligibility requirements

- Broad accessibility across vehicle categories, weight classes, and fleet types:
  EMC supports the proposal to make iMHZEV eligible to all on-road class 2b–8 vehicles, except for transit and school buses, which are supported via other federal programs (e.g., Infrastructure Canada's Zero Emissions Transit Fund and the Canadian Infrastructure Bank's Zero Emission Buses initiative).
- We also support the proposed program parameters that would make the incentive broadly accessible to private (for-profit and not-for-profit) and public (provincial, territorial, municipal) fleets. Participation in the program by multiple kinds of fleet operators will help to build awareness, limit the possibility that funds go unallocated through fiscal year 2025-26, and ensure that Transport Canada is able to support accelerated MHD ZEV deployment to the greatest extent possible.
- Date of eligibility:
  We agree that eligibility for the incentive should not be retroactive, and that the incentive should become available with the announcement of an official program launch date.
- Retain proposed definition of ZEV:
  EMC strongly supports the proposal to restrict vehicle eligibility to battery electric vehicles (BEVs), plug-in hybrid electric vehicles (PHEVs), and fuel cell electric vehicles (FCEVs).
- We urge Transport Canada *not* to revise its definition of "Zero-Emission Vehicle" (for the purpose of program eligibility) to include hydrogen-diesel dual-fuel vehicles or (renewable) natural gas vehicles. FCEVs, PHEVs, and BEVs are the proper set of eligible vehicle types, because it is only through the widespread deployment of these technologies that Canada can maximize long-term emissions reductions in the medium- and heavy-duty segment of transportation.
- Hybrids:
  To align with California's approach in HVIP, which currently discounts the incentive for hybrids in each weight class by 50% relative to the incentive available for full ZEVs in that category, Transport Canada may also wish to consider downgrading the incentive for hybrid vehicles, in recognition of their diminished emissions-reduction potential (since they can still produce GHGs). Given slow turnover rates and long lifetimes of MHDVs, EMC contends that iMHZEV should prioritize support for the deployment of vehicles that cannot produce any greenhouse gases whatsoever; this will help the program to maximize its environmental benefits—by avoiding the long-term lock-in of emissions from commercial transport and specialty vehicle applications where diesel consumption would otherwise occur—and focus public support on the market for vehicles that have zero air emissions at the tailpipe.

Data collection and reporting

- Transparency and tracking of listed (eligible vehicles):
  We support the proposed maintenance by TC of a public list of eligible vehicles (LoEV) and corresponding incentive levels. We recommend that the list not only be updated continuously on the basis of new applications for inclusion by manufacturers, but also that TC capture annual snapshots of the list to facilitate tracking of the vehicle market and enable responsive, evidence-based program recalibration. A maturing vehicle market may justify an eventual phase-down of incentives, but changes in technology and costs, along with evidence of lagging adoption rates for some vehicle classes, might also justify program extension or recapitalization beyond fiscal year 2025-26, and/or targeted carve-outs to address ongoing deployment challenges in some vehicle classes or weight categories.

- Support learning and best practices through additional reporting requirements:
  While all effort should be made to minimize administrative burden on successful applicants, EMC is open to the possibility that recipients of an iMHZEV incentive should be required to submit information that could help support the extension, growth, and/or reform of the program. For instance, following the example of California's HVIP or the New York Truck Voucher Incentive Program, Clean Energy Canada has suggested a requirement be laid on iMHZEV beneficiaries to report one to three years of vehicle utilization data, along with an opportunity to collect qualitative feedback from fleet operators and vendors. The regular compilation of this type of data could help Transport Canada evaluate the benefits (and any drawbacks) of the iMHZEV program and of ZEV adoption by fleets, helping to administer and refine the program over time. We encourage the department to review the reporting requirements of the above-mentioned programs and to consider what quantitative and qualitative information would empower government to understand whether and how iMHZEV is meeting its objectives, and what type/level of additional funding might need to be delivered through future federal budgets if the program were to be extended beyond the 2025-26 fiscal year.

b. Certain project parameters (e.g., the formula to calculate the incentive for leased vehicles, and the >50km range for plug-in hybrid electric vehicles (PHEVs) to receive the full incentive) were adopted from the federal iZEV program. Do you have any concerns with the use of the parameters? Do you have information to support the use of alternative parameters in the context of medium- and heavy-duty vehicles?

   See above.

c. *Do you foresee any complications with program delivery or interactions with other programs? If so, what could be modified to alleviate these issues?*

Program interaction and coordination

EMC supports the proposed approach in which incentives are delivered through a streamlined program, like iMHZEV, that is distinct from programs offering support for the fueling infrastructure necessary to deploy ZEVs. We also support the stackability of the iMHZEV incentive with other provincial and municipal incentives, such as the rebate programs in Quebec and British Columbia, as well as appropriate safeguards to ensure the combined value of incentives does not exceed the full value of the vehicle purchased (manufacturer's suggested retail price).

However, we recommend further coordination between Transport Canada and federal partners in Natural Resources Canada (NRCan) and the Canadian Infrastructure Bank (CIB), given these institutions' responsibility for programming related to low-carbon fueling infrastructure, and the often-significant infrastructure upgrades needed to deploy commercial ZEVs in specific contexts and at scale. As both the absence and the expense of fueling infrastructure (including fast chargers, associated make-ready electrical upgrades, and hydrogen-dispensing stations) are together a primary obstacle to increased zero-emission MHDV adoption, the department should give thought to potential linkages and synergies that may be possible by deepening coordination between, for example, iMHZEV and NRCan's $680m Zero Emission Vehicle Infrastructure Program (ZEVIP) or CIB's $500m ZEV Infrastructure initiative.

For instance, under California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), applicants to the program are automatically prompted to consider seeking supplementary funding through the California Energy Commission's EnergIIZE program, which funds fueling infrastructure (equipment and upgrades) for commercial MHD zero-emission vehicles. An approach that secures funding for ZEVs and associated infrastructure in tandem is more likely to result in successful ZEV deployments, given that fueling infrastructure must typically *already* be in place for a commercial ZEV's operation and duty cycle to be feasible. In turn, maximizing the number and possibility of successful MHD ZEV deployments will lay the groundwork for the Government of Canada's medium-term MHD ZEV adoption target, namely that 35% of MHDV sales be zero-emissions advanced technology vehicles by 2030.

## 2. Incentive levels and caps

At this time, we do not have specific vehicle pricing information to share, but If EMC can assist in further canvassing industry for such data after this initial intake round, please feel free to solicit our help.

Otherwise, we support the general approach outlining incentive levels roughly on par with those of existing programs, like the California's HVIP. We agree that incentives should scale with Gross Vehicle Weight Rating (GVWR), which follows from the fact that battery size is the determining factor in the cost of battery electric vehicles. By definition, higher vehicle classes are heavier, and so on average require more power and larger batteries—meaning a larger incentive is justified to bridge the ZEV cost gap equitably across vehicle classes.

For each qualifying vehicle, we believe incentives should be assessed on a principle of eliminating 60-100% of the cost differential relative to the equivalent internal combustion engine (ICE) vehicle. The high up-front capital costs of ZEV purchases, especially for medium- and heavy-duty fleets, is a major deterrent to fuel-switching away from diesel models; iMHZEV should therefore be designed to address the barrier in part or in whole, and, if the former, then at or beyond a minimum threshold of 60%, as indicated above. We suggest this minimum corresponds to a threshold of significance, from the point of view of vehicle purchasers, who may be willing to absorb a minority share of the cost premium on MHD ZEVs (in view of their environmental, operational, and other benefits), but who also face a magnified cost differential relative to the substitution of gasoline or diesel vehicle equivalents by ZEVs in the passenger segment.

In short, for EMC, the main purpose of the iMHZEV is to support faster deployment of zero-emission MHDVs by covering a major share, if not all, of the incremental cost of these vehicles, relative to their diesel comparators. The point of the program is to make ZEV sales happen across the diverse medium- and heavy-duty vehicle segment. This means that we support an approach to the administration of iMHZEV whereby incentives are set *individually* and *adaptively* for each GVWR category. Incentive levels may vary over time as technologies, costs, and government priorities change. Transport Canada should also consider adjusting incentive levels to respond to deployment

challenges in certain weight classes or vehicle types. While the incentive program should remain accessible continuously throughout its life, iMHZEV funds could also be disbursed in periodic waves that allow the department to grow an understanding of how the program has been accessed to date, to observe market developments, and then perhaps to respond to this knowledge base by communicating funding levels and prioritizing the coming-to-market of zero-emission technologies in certain vehicle categories.

EMC supports the proposal to cap incentives at an annual maximum of 10 per fleet, a level that strikes the right balance between rewarding ambition and enhancing participation. This approach will reward early adopters with support for multiple vehicle purchases, while protecting the capacity of the program to deliver funds to as wide an array of fleets and operators as possible over the life of the program. In future, Transport Canada may wish to adjust the cap upward or downward in view of program performance and other emerging government priorities; such changes, particularly if tightening the cap, should be clearly communicated ahead of implementation.

## 3. Points of contact

We ask that you include both of the following email addresses in Transport Canada's distribution list for the iMHZEV program:

Bora Plumptre, Research Director – bora.plumptre@emc-mec.ca (primary contact)
Daniel Breton, President & CEO – daniel.breton@emc-mec.ca

## Concluding remarks

EMC is committed to supporting Transport Canada as it endeavours to make the iMHZEV program a success. We appreciate the opportunity to participate in this consultation and look forward to continuing to work with the department as it begins its administration of the new incentive. Please do not hesitate to contact EMC staff with any questions or concerns.

### About Electric Mobility Canada

EMC is a national membership-based not-for-profit organization dedicated exclusively to the advancement of electric mobility as an exciting and promising opportunity to fight climate change and air pollution while stimulating the Canadian economy. EMC's mission is to strategically accelerate the transition to electric mobility across Canada. Established in 2006, EMC is one of the first electric mobility associations in the world. Members include vehicle manufacturers, utilities, charging infrastructure manufacturers, charging suppliers and networks, technology companies, mining companies, fleet managers, unions, cities, universities, dealers associations, NGOs and EV owners associations.