

POSITION PAPER

THE FUTURE OF CANADIAN CLEAN TRANSPORTATION

Founded in 1995 in Toronto with the purpose of strengthening economic ties between Canada and Europe, the European Union Chamber of Commerce to Canada (“EUCCAN”) advocates on behalf of EU companies, identifying challenges and opportunities of doing business in Canada, addressing common affairs, and voicing business interests and recommendations.

Following the private roundtable on the challenges and future of the Canadian Transport Industry organized on January 12th 2022 by The International Economic Forum of the Americas, EUCCAN carried out an extensive consultation with its members and stakeholders to gather their views on the future of Canadian Clean Transportation.

Resulting from this consultation, the present Position Paper presents to the federal government a short series of **six actionable initiatives**, that we believe could be useful to bridge Canada to the future of clean transportation systems while kickstarting Canadian jobs and economic growth. The following recommendations notably draw inspiration from the policy and regulatory playbook developed in Europe and experimented by our stakeholders, translated into the Canadian policy context:

#1 Further support Canada’s production and adoption of ZEVs and FCEVs

- 1.1: Maintain an incentive-based fiscal & regulatory framework
- 1.2: Support the development of EV-charging at home
- 1.3: Support the creation of a hydrogen FCEV hub in eastern Canada

#2 Invest in carbon neutral transportation infrastructures

- 2.1: Prioritize low emission solutions in the upcoming major transportation tenders
- 2.2: De-risk investment and expand public-private financing for the R&D of clean transportation systems
- 2.3: Develop a certification expertise for high- and very high-speed rail technologies

The purpose of this Paper is to serve as a constructive engagement tool with the Canadian government; and EUCCAN, together with its partners, would welcome the opportunity to further discuss and/or develop the ideas presented hereinafter.

#1 Further support Canada's production and adoption of ZEVs and FCEVs

Background: The auto industry is one of the most disrupted by the transition to a cleaner global economy. Currently, the internal combustion engine is one of the world's biggest sources of climate pollution. In Canada, Transportation accounts for about 25% of Canada's total greenhouse gas (GHG) emissions – more than 80% of which are produced by road transportation. Meanwhile, zero-emission vehicle (ZEV) technologies are quickly establishing market dominance.

Last June, the Government of Canada set a mandatory target for all new light-duty cars and passenger trucks sales to be zero-emission by 2035, accelerating Canada's previous goal of 100 percent sales by 2040. This announcement came on top of existing measures to support increased zero-emission vehicle adoption – from incentives that help with the upfront costs of zero-emission vehicles, to investments in zero-emission charging infrastructure, or partnerships with auto manufacturers.

In line with these initiatives and to allow Canada to reap the full economic rewards and climate benefits of manufacturing cleaner vehicles, the federal government should ensure its fiscal and regulatory framework does not prevent the industry from developing and bringing to market zero-emission light-, medium- and heavy-duty vehicles.

Recommendation 1.1

Maintain an incentive-based fiscal & regulatory framework

State of Play: The availability of ZEVs is critical to meeting Canada's ambitious climate goals, requiring 100% of car and passenger truck sales be zero-emission by 2035. Nearly all EU member states now offer some form of fiscal support to stimulate the market uptake of electric vehicles. Similarly, in the U.S., the Biden Infrastructure Bill foresees an EV tax credit of up to USD 12,500. Meanwhile Canada's iZEV Program provides for point-of-sale incentives of up to CAD 5000 or CAD 2500. Both the "iZEV" and "tax write-offs for business" programs are capped to under CAD 45000 – 55000 vehicles. And the Government of Canada introduced a new Tax on Select Luxury Goods, as part of Budget 2021 (yet to be passed into law), from which ZEVs are not exempt. Currently, emerging ZEVs like the zero-emission light-duty trucks, which many middle-class Canadians require for their line of work, are priced above the \$100,000 threshold of the luxury tax and are not eligible for federal or most provincial incentives.

Proposed action(s): To ensure the availability and market adoption of ZEVs in Canada, we recommend that the Federal Government maintain fiscal incentives on par with its international peers and exempt ZEVs (including BEVs, PHEVs and FCEVs) from its luxury tax. Maintaining this tax on electrified vehicles will reduce consumer demand and limit imports of certain vehicle models, ultimately reducing the number of ZEVs on the road in the years to come, hindering Canada's efforts to transition to net zero.

Recommendation 1.2

Support the development of EV-charging at home

State of Play: Research finding shows that a shortage of charging infrastructure remains one of the barriers to the adoption of ZEVs in Canada and most developed countries. To remedy Canada's lack of infrastructure (i.e., an est. 15,000 public or semi-private chargers available and another 2,000 are in various stages of construction), the federal government has already pledged close to \$880 million over the next four years to build about 65,000 new charging stations. Industry estimates however ranges between 4-6 million the need for charging stations in Canada by 2050. To make up for this gap and complement public and semi-private infrastructures, developing the fleet of private EV-charging stations is paramount. At present, the installation of these stations can be costly -- ranging from CAD300 to CAD2,500 for a level 1 charger, from CAD6,000 to CAD20,000 for a more-effective level 2 charger including the cost of the charger and the cost of the installation. And some older homes do not have the proper capacity at the electric panel to properly support an EV charger.

Proposed action(s): We recommend that the Federal Government adopt incentives to accelerate the installation of private EV-charging infrastructure -- under the form of a new tax credit covering up to 30% of the cost of purchase and installation of new EV-charging equipment, and/or by extending the scope of the Canada Greener Homes Grant Initiative to the installation of home EV-charging stations (and the associated electrical system upgrade).

Recommendation 1.3

Support the creation of a hydrogen FCEV hub in eastern Canada

State of Play: In December 2020, the Federal Government presented a Hydrogen Strategy for Canada that laid out an ambitious framework to cement hydrogen as a tool to achieve Canada's goal of net-zero emissions by 2050 and position Canada as a global, industrial leader of clean renewable fuels. In the short term, the Strategy notably foresees a federal support to the development of pre-commercial applications (e.g., heavy-duty trucks, seaport goods movement equipment, power generation, heat for industry and the built environment), to be introduced as pilot projects in regional HUBs. One year into the implementation of the strategy, the number of pilots in the transportation sector is scarce – limited so far to the Alberta Zero Emissions Truck Electrification Collaboration (AZETEC).

Proposed action(s): We recommend that the Federal Government support the creation of a pilot project for a regional hydrogen mobility HUB in Eastern Canada, covering part of the Windsor-Quebec City corridor. The HUB could focus on heavy-duty transportation and be structured around an already existing innovative ecosystem (Movin'On) and local industrial partnerships (with Symbio - who has already developed a similar pilot in the Europe and in the U.S.)[1].

#2 Invest in carbon neutral transportation infrastructures

Background: An important limitation for scaling up climate change mitigation is that climate action mostly focuses on incremental change in the systems that underpin our modern economies. Climate action too often aims at optimizing individual components within these systems rather than transforming the systems themselves. Action to reduce CO2 emissions in the transport sector is not an exception to this. For decades, mitigation action in the sector has focused on optimizing vehicle's emission performance (a component) in car-dependent urban and transport systems – an important but insufficient measure.

Rail is currently one of Canada's greenest transportation modes. Each year, Canada's railways move over 100 million passengers and 70% of all intercity freight, while producing just 3.5% of Canada's transportation greenhouse gas (GHG) emissions. Freight and passenger railways can play a vital role in helping Canada to meet its international environmental commitments.

Shifting freight and passenger traffic away from carbon-intensive transportation systems will however require a mix of political and financial activism from the Federal government in the coming years to foster the adoption of rail transportation solutions and position Canada as a leader of low- to zero-emission propulsion technologies.

Recommendation 2.1

Prioritize low emission solutions in the upcoming major transportation tenders

State of Play: The latest federal and local public tenders have not necessarily opted for the most environmental and carbon-friendly solutions on the market – contrasting with the political ambition exhibited by different levels of government in Canada. Nevertheless, several major urban and intercity projects are still in the pipeline and could see the deployment of commercially-ready low-carbon solutions in Canada in the next decade.

Proposed action(s): The Federal Government, in its own capacity and through its network of Crown Corporations (notably the Canada Infrastructure Bank) has already taken or will likely take a financial stake in the upcoming railway infrastructure projects – e.g., Via Rail's Fleet Replacement Program or the overhaul of Toronto's Metro. We recommend that the federal government lead by example and leverage its position to ensure the associated public tender processes favor the adoption and deployment of low- to zero- emission rail solutions to reduce Canada's transport-related GhG emissions, all the while supporting domestic industry and jobs. This should be achieved by including lifetime emissions as a specific selection criterion for projects.

Recommendation 2.2

De-risk investment and expand public-private financing for the R&D of clean transportation systems

State of Play: While the short- to mid-term development of a clean Canadian Transportation systems should be dominated by the deployment of already mature solutions, the long-term outlook of the sector will be shaped by an ever-increasing demand for faster and cleaner means of transportation. Some of these solutions, like the Hyperloop technology, are currently being developed or co-developed in Canada but require massive up-front investments. In this context governments at all levels in Canada, as well as private sector stakeholders, have an important role to play in co-funding and de-risking these investments. Some of Canada's closest partners have already taken steps in that direction – the EU through the combined action of the European Commission's Green Deal Investment Plan (EGDIP), the European Innovation Council Accelerator and the European Committee for Standardization (ECS).

Proposed action(s): Funding models should evolve over time. In a market still at its early stages, we recommend that the Federal Government establishes multi-year programming and funding programs (together with the Federal Crown Corporations) to support the R&D and pilot-deployment of pre-commercial zero-emission transportation solutions. Access to these long-term R&D funding should not be revenue-dependent, these technologies being partly developed by start-ups and research-focused companies. Among others, dedicated programs under Stream 1 and/or 4 of the Strategic Innovation Fund could focus on investments in the development and technology demonstration of these solutions; while the Canada Infrastructure Bank could support the pilot deployment of these solutions.

Recommendation 2.3

Develop a certification expertise for high- and very high-speed rail technologies [regulatory]

State of Play: High-speed and very high-speed rail is a comfortable, safe, flexible and environmentally sustainable mode of transport. In Europe, the development of high-speed rail has impacted passenger transportation patterns and greatly fostered the adoption of rail services. Yet, Canada is currently the only G7 country that does not have high-speed rail, despite presenting a few routes (Edmonton to Calgary, Quebec City to Toronto, Montreal to New York, Vancouver to Portland) suitable to high-speed corridors. Aside from financial considerations, the development of high- and very-high speed rail projects in Canada is hindered by a lack of expertise related to the certification of these solutions.

Proposed action(s):

1/ We recommend that Transport Canada in partnership with the Standards Council of Canada structure and fund the activities of a multi-level, intergovernmental working group and/or technical committee to define, establish, and standardize the methodology and framework to regulate high- and very-high speed travel systems and ensure interoperability and high safety standards throughout Canada.

2/ We also recommend that Transport Canada leverage international collaborations and pursue synergistic international initiatives to fasten the development of a Canadian certification expertise. The European Union via the ECS, and several of Canada's European partners (Austria, Belgium, Denmark, France, Germany, Italy, Norway, Portugal, Spain, The Netherlands), have already been developing this certification expertise and in some instances applied it to currently operating routes. We therefore recommend that Transport Canada, in collaboration with Global Affairs Canada and the Treasury Board, initiates discussion with the EU (DG GROW and TRADE) within the framework of the CETA Regulatory Cooperation Forum to explore cooperation opportunities on this topic.

Contact us

Adrian THOMAS
President
adrian.thomas@euccan.com

Thomas GILBERT
Policy Officer
advocacy@euccan.com

Delphine ADENOT-OWUSU
Executive Director
delphine.adenot-owusu@euccan.com