Minister of Innovation, Science and Industry
Ministre de l'Innovation, des Sciences et de l'Industrie
Ottawa, Canada K1A 0H5

The Honourable Joël Lightbound, M.P.
Chair
Standing Committee on Industry and Technology
House of Commons
Ottawa, Ontario K1A 0A6

Dear Colleague:

Pursuant to House of Commons Standing Order 109, I am pleased to submit on behalf of the Government of Canada (the Government) the response to the eighth report by the Standing Committee on Industry and Technology (the Committee) entitled: *Post-COVID-19 Economic Recovery: How Can We Rebuild Better?* (the Report), which was presented to the House of Commons on November 30, 2022.

The Government extends its gratitude to the members of the Committee for their work in developing the Report and preparing the recommendations, and to the witnesses who appeared before the Committee to provide evidence and share their advice. The Government supports the efforts of the Committee to examine the challenges and opportunities for a low-carbon economy and inclusive growth.

The post-COVID-19 economic recovery has been marked by significant investments in low-carbon technologies and training programs both in Canada and abroad. Given the urgency of global efforts to limit warming to below 2˚C and mitigate the impacts of climate change, the Government has set the ambitious target of achieving net-zero emissions by 2050, as well as reducing GHG emissions by 40–45 percent below 2005 levels by 2030. The Government has invested over $100 billion toward climate action and clean growth since 2015. These investments will accelerate Canada's transition to a low-carbon economy while taking advantage of the country's abundant natural resources, strong environmental standards and regulations, and highly skilled workforce. This includes programs that support an inclusive workforce, which have been critical to ensure all Canadians are able to benefit from the low-carbon transition and participate fully in Canada's economy.

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The Government is also keenly aware of the international context in which these investments are being made. Accelerated efforts by Canada's primary trading partner, the United States, to decarbonize its economy through an unprecedented level of funding implores Canada to keep pace. The European Union is taking similar steps. Trading patterns are also evolving, and Canada has an opportunity to work closely with allies to reduce reliance on geopolitical rivals for critical inputs.

With these considerations in mind, please find below the Government's response to the Committee's recommendations. The response is a collaborative effort of all implicated departments including Innovation, Science and Economic Development Canada, Environment and Climate Change Canada, Employment and Social Development Canada, Natural Resources Canada, Transport Canada, the Treasury Board Secretariat, and Public Services and Procurement Canada.

RECOMMENDATION 1: *That, when implementing post-COVID-19 economic recovery initiatives while seeking to reduce Canada's greenhouse gas emissions, the Government of Canada ensure that the initiatives support innovation at Canadian companies, especially small and medium-sized enterprises.*

The Government agrees with this recommendation. Supporting Canadian research and development (R&D) and innovation and technology adoption are of fundamental importance to our post-pandemic success, and to realizing Canada's climate objectives. This includes supporting technology development and adoption among small and medium-sized enterprises (SMEs), which make up 99.8 percent of the Canadian economy, and which face major costs in decarbonizing their operations.

The Government is taking significant steps to help Canadian businesses invest in R&D through a suite of business innovation supports that help firms at all stages of growth—including the Canada Innovation Corporation, regional development agencies, and the Strategic Innovation Fund—and, specifically in the clean technology sector, those such as Sustainable Development Technology Canada. What's more, the Government is helping Canadian businesses understand the importance of intangible assets (e.g., patents and data) and to protect IP through the Intellectual Property Strategy and initiatives like ElevateIP and the Patent Collective. The new Canada Innovation Corporation and Canada Growth Fund are thus supporting the retention of IP in Canada. In addition, the $4-billion Canada Digital Adoption Program (CDAP) is working with Canadian businesses to encourage the adoption of new technologies, which are essential to the growth and sustainability of Canada's economy.

Additional investment flows from the Government to Canadian SMEs with respect to clean technologies transpire via the Business Development Bank of Canada as well as Export Development Canada.

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RECOMMENDATION 2: *That, when implementing post-COVID-19 economic recovery initiatives while seeking to reduce Canada's greenhouse gas emissions, the Government of Canada considers the impact of the initiatives on vulnerable populations, including, but not limited to, Indigenous Canadians, racialized Canadians, people with disabilities, low-income families, rural and remote communities and farmers, who may be particularly hard hit by energy prices. In addition, that, when developing and implementing these initiatives, the Government of Canada ensure that these vulnerable populations are consulted and fully included in the economic recovery.*

The Government agrees with this recommendation. All Canadians will benefit from reduced GHG emissions and the other environmental benefits that will accrue from transitioning to an environmentally friendly and sustainable economy, including clean water, clean soil, clean air, and the creation of new sustainable jobs. The Government agrees that post-COVID-19 economic recovery initiatives must give special consideration to making public policy measures inclusive by design. Marginalized, underrepresented and equity-seeking groups are disproportionately impacted by the negative effects of climate change, and public policy responses must pay special consideration to their unique needs and perspectives.

Inclusion is a critical priority of the Government and has been for many years. The Government has actively implemented practices and policies that aim to ensure the development of an inclusive economy. For example, Gender-Based Analysis Plus (GBA Plus), which is required for all policy and funding proposals, is a well established and core analytical tool in the government's public policy decision-making process. Further, the Government has invested in targeted programs to encourage economic inclusion for underrepresented groups. This includes nearly $7 billion in investments for the Women Entrepreneurship Strategy, an investment of $135 million from the Government over four years (starting in 2020–2021) and $130 million from the Business Development Bank for the Black Entrepreneurship Program, and $50 million for the Inclusive Growth Stream within the renewed $450 million Venture Capital Catalyst Initiative. As Canada builds its post-COVID economy, these programs will support the participation of traditionally underrepresented groups in a more inclusive and resilient economy.

Announced as part of the interim Sustainable Jobs Plan in February 2023, the Government plans to bring forward proposed legislation on sustainable jobs to lay the foundation for ongoing federal action to ensure all Canadians benefit from the opportunities of a low-carbon future. This legislation lays out a framework for governance, accountability, and engagement that will ensure workers, communities, businesses and investors, including Indigenous entrepreneurs, among others, are empowered to participate in and build economic opportunities related to the shift to a low-carbon future.

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The proposed legislation would also establish a permanent Sustainable Jobs Partnership Council to provide ongoing advice to Government on its approach to sustainable jobs. Further details on this organization will be provided in 2023.

RECOMMENDATION 3: *That, in consultation with affected groups, the Government of Canada takes steps to increase the participation and general role of Indigenous peoples in the various industries connected with the energy transition, including oil and gas, mining, hydrogen and forestry. For example, that it take concrete steps to meet the 5 percent Indigenous procurement target as quickly as possible.*

The Government agrees with this recommendation. The Government is focused on action and investments to ensure Indigenous communities are partners in the net-zero transition. For example, NRCan is working with Indigenous peoples, communities, and businesses to develop and implement a number of measures to support participation in the natural resource sectors, including initiatives critical to the net-zero transition. These initiatives include funding programs that directly support community readiness and economic participation in the natural resource sectors, including the expansion of NRCan's Indigenous Partnerships Office and its Indigenous Natural Resource Partnerships Program, the Indigenous Forestry Initiative, the Clean Energy for Rural and Remote Communities Program, and the Indigenous Off-Diesel Initiative. Further, the Government has created an interdepartmental hub in partnership with a number of federal departments to deliver a single-window approach to better coordinate federal funding for clean energy projects that advance the transition of diesel-reliant rural and remote communities onto clean energy. The Hub includes an external Indigenous Council that provides advice and guidance on how the Government can best achieve these goals, both now and in the future.

To enhance these programs and to support Indigenous participation in natural resource sectors, NRCan is also leading the development of a Natural Benefits-Sharing Framework. This Framework will help ensure that Indigenous communities benefit more consistently and equitably from major natural resources projects in their territories. Similarly, the Canadian Minerals and Metals Plan has set a strategic direction of Advancing the Participation of Indigenous Peoples in the minerals and metals sector, which includes supporting the participation of Indigenous partners in critical minerals mining.

In August 2021, the Government announced a whole-of-government initiative, which requires all federal departments and agencies to implement a mandatory minimum target of at least 5 percent of their total value of federal contracts (regardless of value) to be awarded to businesses owned and led by Indigenous Peoples. Implementation and reporting on this initiative are built on existing programs and policies and is being phased in over three years beginning in

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2022–2023. Currently, 32 federal departments are either achieving the minimum mandatory target or are on track to meeting it and it is expected that all federal departments and agencies will meet or exceed the mandatory minimum target of 5 percent by 2024–2025. To support the government-wide initiative, $35.2 million is being invested over five years to modernize Indigenous procurement and to continue meaningful engagements with Indigenous partners to discuss further refinements and more transformative changes. This will help build a more inclusive economy and boost the competitiveness of these businesses to be better positioned to take advantage of opportunities associated with the net-zero transition.

RECOMMENDATION 4: *That the Government of Canada ensure that Canadian workers have access to retraining programs so they have the ability to work in sectors going through radical transformation. Where applicable, that it ensures that companies have the resources to create their own retraining programs and to encourage their employees to enroll.*

The Government agrees with this recommendation. The Government recognizes that the broad economic transformation currently underway, and the rapid pace of technological evolution, are affecting labour and skills needs across sectors. These structural trends put a premium on reskilling and upskilling initiatives. The Government is committed to ensuring that the right programs are in place to support workers in acquiring the skills they need to participate in emerging areas of the economy, and to support companies in accessing the talent they need to innovate and grow. The Government is taking concrete action to encourage sustainable job creation throughout the transition to a net-zero economy so that Canada creates new economic growth opportunities and Canadian workers have the supports, skills, and training to meet these opportunities and thrive in a net-zero economy.

The Government is beginning this process with a Sustainable Jobs Plan to take deliberate action and report on its progress in supporting all workers, communities and regions across Canada in the transition to a net-zero emissions and climate resilient economy. As part of this, the Government is prepared to introduce legislation on sustainable jobs in 2023 to establish a framework that will facilitate continued action over time. ESDC delivers skills and training programs in partnership with provinces and territories through bilateral labour market transfer agreements ($3 billion per year) and other programs with stakeholders. For example, the Sectoral Workforce Solutions Program, which supports industry-led solutions to address workforce needs, and the Indigenous Skills and Employment Training Program, which provides funding to First Nations, Métis, Inuit and urban/non-affiliated agreement holders to provide skills training and employment supports.

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The 2022 Fall Economic Statement proposed providing $250 million over five years to ESDC to help ensure Canadian workers can thrive in a changing global economy. This funding will be directed toward a Sustainable Jobs Secretariat, a new sustainable jobs stream under the Union Training and Innovation Program (UTIP), as well as a Sustainable Jobs Training Centre. The Secretariat will offer a one-stop shop for workers and employers and provide the most up-to-date information on federal programs, funding, and services across Government departments. The new sustainable jobs stream under UTIP would support unions in leading the development of low-carbon skills training for workers in the trades. The Training Centre will aim to bring together workers, unions, employers, and training institutions across the country to examine the skills of the labour force and to help 15,000 workers upgrade or gain new skills for jobs in a low-carbon economy.

In addition, ISED is making strategic investments in industry-facing skills programming. Budget 2021 announced $250 million over three years for the Upskilling for Industry Initiative to scale-up industry-led, third-party delivered, approaches to upskill and redeploy workers to meet the needs of high-growth sectors. These sectors include digital technology, cyber security, agriculture technology, advanced manufacturing, clean technology, and biomanufacturing.

RECOMMENDATION 5: *That, in collaboration with the provinces and territories, the Government of Canada implement a comprehensive strategy for assessing the production cycle of various products, in order to determine their actual environmental cost so the government can make more informed decisions. This includes, but is not limited to, mineral extraction and production, the place and manner in which goods are produced and assembled and management of the resulting waste, while ensuring timely approval of projects in order to remain globally competitive and advance projects that are critical to building the low-carbon economy.*

The Government is in alignment with this recommendation. The recommendation aligns well with the Government's efforts regarding the circular economy. However, under the response, the Government is not committing to new programs or policies that would include additional collaboration with the provinces and territories. The Government is taking into consideration the potential environmental costs of the production decisions necessary to building the low-carbon economy of the future. As part of the Government's work to assess production cycles to determine environmental costs, it is examining the potential implementation of a border carbon adjustment (BCA) regime. Implementing a BCA system would reduce the risk of carbon leakage with a more levelled playing field between imported and domestic goods, which would help maintain domestic competitiveness and support greater domestic climate ambition. Should the Government implement a BCA system, data collected may provide greater insight to inform environmental costs over the life cycle of goods and products.

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Further, the Government is working to ensure that development for future economic needs aligns with decarbonization efforts. As the global economy moves toward net-zero, advanced manufacturers are seeking to ensure their supply chains are carbon competitive, environmentally sustainable and respectful of human rights. As a trusted and reliable supplier of manufacturing inputs, Canada is well positioned to be a leader in responsible, inclusive, sustainable and resilient value chains. Canada has a role to play in powering the low-carbon and digital economy, both at home and around the world, in a manner that avoids a race to the bottom for the lowest-cost output. The Government and industry both recognize that Canada's industrial base needs to shift quickly toward net-zero models in order to remain successful and competitive in a net-zero global economy.

The Strategic Innovation Fund's Net-Zero Accelerator (NZA) initiative supports Canada's net-zero goals to help transform the economy for clean and long-term growth. Three NZA investment pillars are helping to maximize the impact of program investments:

1) decarbonization of large emitters, which focuses on near-term emissions reductions;

2) industrial transformation, which is helping Canada's established industries transition to the net-zero economy and includes funding to help sectors research, develop and adopt new processes and products with low carbon intensity, for Canadian and international markets; and

3) clean technology and better ecosystem development, which is capitalizing on net-zero opportunities by fostering emerging sectors. Investments made through the NZA are guided by core investment principles. This includes support for investments that align with provincial and territorial decarbonization priorities and investments that consider regional environmental, industrial and economic needs.

RECOMMENDATION 6: *That, in collaboration with the provinces and territories, the Government of Canada implement a comprehensive strategy for a circular economy for recycling, similar to other provinces.*

The Government agrees with this recommendation. One element of the Government's clean growth agenda is a renewed focus on resource efficiency—and taking a holistic approach to it through support for a transition to a circular economy. The Government is undertaking research and analysis, in collaboration with key stakeholders, to identify opportunities to further increase circularity across the Canadian economy. In Canada, responsibility for waste management—which includes recycling—is shared among federal, provincial, territorial and municipal governments. Provincial and territorial governments are

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responsible for approval, licensing, and monitoring of waste management operations, such as incinerators and landfills, as well as establishing programs, such as recycling, to divert waste from disposal. Given the shared responsibility, the Government is working with provinces and territories through the Canadian Council of Ministers of the Environment (CCME) to implement the Canada-wide Strategy for Zero Plastic Waste and a two-part Action Plan to drive concrete actions across the country. The CCME Action Plans focus efforts across a broad range of activities including identifying specific solutions for improving plastic product design, increasing responsible use and recycling of single-use products, establishing consistent extended producer responsibility programs, providing support for infrastructure to recover and recycle plastics, and developing standards for recycled content in plastic products.

In addition to collaboration with provinces and territories, the Government has adopted a comprehensive approach to reach the collective goal of zero plastic waste by 2030. The zero plastic waste agenda uses the full range of tools available to the federal government: gathering and disseminating scientific knowledge, supporting innovation and working with high plastic waste-generating sectors, developing regulations, and collaborating with key stakeholders along the entire plastics value chain. The federal tools are being applied according to the Waste Management Hierarchy, where the greatest benefits come from reduction, and then from reuse, repair, refurbishment, remanufacturing, and finally recycling. The Government is also responsible for administering regulations on the transboundary and interprovincial movements of both hazardous waste and hazardous recyclable materials.

As well, NRCan continues to work with the provinces and territories through the Canadian Minerals and Metals Plan to advance a circular economy through mining. This includes delivering a Mining Value from Waste Pilot project to mitigate environmental and economic liability from mining and building networks within the recycling community.

RECOMMENDATION 7: *That the Government of Canada draws on examples of regulations to prohibit the practice of planned obsolescence and all associated techniques that deliberately aim to reduce product life spans in favour of high replacement rates, and encourage environmental durability solutions among manufacturers.*

The Government is in alignment with this recommendation. The Government is committed to ensuring that right to repair policies could address certain practices leading to the obsolescence of products and incentivize manufacturers to enhance the durability of their products. These policies seek to give consumers greater information over the products they buy—either through changes to certain laws or regulations, or by influencing businesses to change their practices.

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The mandate letters for the Minister of ISI and Minister of ECC include commitments to a right to repair, in specific regard to home appliances and electronics.

The Committee studied two private Member's bills (C-244 and C-294) seeking to remove certain copyright barriers to repair that are consistent with the spirit of the mandate commitment. Those bills received unanimous support at second reading in the House of Commons. The Government will undertake a gap analysis once their outcomes are known.

The objective of the right to repair mandate commitment is to provide Canadians the flexibility to choose the best options for maintaining and repairing the devices and electronics that they own, and to support a clean environment and competitiveness in the marketplace. Initiatives implementing this commitment should facilitate their right to repair, promote the extension of the life span of appliances and electronics, and consequently reduce planned obsolescence. The Government will continue to engage with stakeholders on product obsolescence and the implementation of the right to repair mandate.

RECOMMENDATION 8: *That the Government of Canada strengthen its approach in specific key sectors to fight climate change, including with strategies in the following sectors:*

- *Strategic and critical minerals, to streamline rules to bring critical minerals to market;*
- *Digital transformation;*
- *Aeronautics, automobile and space industries;*
- *Innovation research and investment.*

The Government agrees with this recommendation. The Government is proactively working with Canada's traditionally strong sectors to support the transition to a low-carbon economy while leveraging opportunities for Canadian businesses to grow. Sector-specific strategies and investments are being implemented.

The Government launched its Critical Minerals Strategy in December 2022, which will aim to increase the supply of responsibly sourced critical minerals and support the development of domestic and global value chains for the low-carbon and digital economy. The response recognizes that additional mechanisms must be in place to expedite and facilitate strategic critical mineral projects from investment and funding opportunities, through regulatory approvals and development, to production. The Government recognizes that, although

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responsible regulations are vital, complex regulatory and permitting processes can hinder the economic competitiveness of the sector and increase investment risk for proponents. As such, the Government remains committed to sustainable economic development and environmental protection, which go hand-in-hand, in collaborating with Indigenous peoples, as well as the provinces and territories. The Government is committed to collaboration on impact assessments, informed participation and decision-making and high environmental standards for critical mineral projects.

The Government has introduced a number of initiatives to help spur the momentum of digital transformation across its industrial sectors. These programs and initiatives include the Canada Digital Adoption Program (CDAP), Innovative Solutions Canada, Regional Economic Growth through Innovation (REGI) program, Strategic Innovation Fund (SIF) and the Global Innovation Clusters. Furthermore, the Government is leveraging Canada's existing strengths in emerging digital technologies, such as AI, quantum, blockchain and cybersecurity, to grow Canada's digital technology capacity and underpin digital industrial transformation throughout the Canadian economy. The Government acknowledges that, despite the promise of digital technologies and Canada's early R&D lead in advanced technologies such as AI and quantum, Canadian industries have been traditionally slow to adopt large-scale technological change. The Government is actively working via existing programming to support economy-wide digital transformation, maintaining momentum gained over the course of the COVID-19 pandemic and ensuring that Canadian industry leverages digital technologies to prepare for the low-carbon economy of the future. Given the differing adoption and transformation levels of each sector of the economy, and the different needs of various industries, further sectoral approaches may be required to support more industries in their transformation, all in a sustainable way.

From the beginning of the pandemic, the Government has made significant and sustained efforts to strengthen its approach to lower-carbon, more sustainable aeronautics, automobile, and space industries to ensure that Canada remains a global leader in these sectors today and decades into the future. Over the past three years, strategic investments have been made in these sectors to ensure that they remain resilient and are prepared for the low-carbon economy of the future. This includes investments via the Strategic Innovation Fund, the National Research Council of Canada, and the regional development agencies. Direct support for low-carbon transition includes the National Research Council of Canada's Hybrid Electric Aircraft Facility and the Strategic Innovation Fund's Net Zero Accelerator. Further investments that indirectly support the transition of these sectors include NRCan's contributions to zero-emission vehicle infrastructure development and the implementation clean technology considerations under Canada's Industrial and Technological Benefits Policy, which is applicable to the aerospace sector.

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The Government has launched a number of initiatives to support and enable the transition to net zero, notably the Strategic Innovation Fund's Net Zero Accelerator, Sustainable Development Technology Canada and clean technology financing from the Business Development Bank of Canada and Export Development Canada, as well as the Low Carbon Economy Fund. Additional innovation research investments are expected to be implemented via the Global Innovation Clusters, the new Canadian Innovation and Investment Agency, and the new Canada Growth Fund.

RECOMMENDATION 9: *That the Government of Canada immediately table a bill to strengthen the Canadian Environmental Protection Act.*

The Government has already fulfilled Recommendation 9. On February 9, 2022, it introduced Bill S-5, Strengthening Environmental Protection for a Healthier Canada Act, in the Senate. Bill S-5 proposes to strengthen the *Canadian Environmental Protection Act, 1999* (CEPA) in two key areas: recognizing a right to a healthy environment as provided under CEPA and strengthening the management of substances. While strengthening CEPA via Bill S-5 marks an important step, it will not be the last one. Sustained efforts to further modernize the Act will be ongoing.

RECOMMENDATION 10: *That the Government of Canada develop programs to support and develop the network of electric and intelligent transportation, that it increases the amounts devoted to transportation research and innovation in Canada, and that it immediately invests in organizations that are transition ready.*

The Government agrees with this recommendation. As mentioned above, the COVID-19 pandemic significantly impacted Canada's automotive industry, a sector which is critical to ongoing and future initiatives to address climate change. As such, the Government has adapted existing federal programming to address this evolving reality. Most recently, the Minister of Transport announced the release of Canada's Action Plan for Clean On-Road Transportation, which is the Government's comprehensive strategy to help Canadians and Canadian businesses make the switch to zero-emission vehicles and reduce pollution from on-road transportation.

The Government's actions toward zero-emission and intelligent vehicles will continue evolving over time, following future assessments and feedback from Canadians. Continued commitment and actions toward clean on-road transportation will be demonstrated through progress reports as required under the *Canadian Net-Zero Emissions Accountability Act*. The first report is planned for this year.

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Examples of ongoing relevant initiatives are outlined below.

Electrification of Transportation Network

As part of its 2030 *Emissions Reduction Plan* setting out actions that will reduce GHG emissions by 40–45 percent to 2005 levels by 2030, the Government is establishing zero-emission vehicles sales regulations with an outcome of 100 percent of light-duty cars and passenger truck sales in 2035 being zero-emission vehicles. Proposed regulations were publicly announced in December 2022. In addition, the Government will develop a medium—and heavy-duty vehicle (MHDV) regulation to require that 100 percent of MHDV sales be zero-emission vehicles by 2040 for a subset of vehicle types, based on feasibility. The transition to zero-emission vehicles will be enabled through a series of incentives from and investments by the Government, as well as continued support for advanced transportation R&D and testing, a field in which Canada is a world leader.

ISED, TC, and NRCan have already made significant contributions to the development of an electrified transportation network through efforts that include:

Natural Resources Canada (NRCan)

- Zero Emission Vehicle Infrastructure Program (ZEVIP)—a $680-million initiative aimed to address the lack of charging and hydrogen refuelling stations in workplaces, multi-unit residential buildings, public places, on-street and on-road fleet infrastructure, addressing a key barrier to zero-emission vehicles adoption. Complemented by a $500-million program at Canada’s Infrastructure Bank.

- Zero Emission Vehicle Awareness Initiative (ZEVAI)—a program supporting projects that aim to increase awareness, knowledge and public confidence in zero-emission vehicles and public charging and refuelling infrastructure.

- Green Freight Program—a newly recapitalized $200 million program to help industry reduce emission from the movement of goods and decarbonize the existing fleet of MHD vehicles on the road today.

Transport Canada (TC)

- Incentives for Zero-Emission Vehicles (iZEV)—provides point-of sale purchase incentives of up to $5,000 toward the purchase of eligible new light-duty zero-emission vehicles made by Canadians and Canadian businesses. The iZEV program was launched in May 2019, renewed in Budget 2022, and has received over $2.3 billion in funding to date to

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continue providing incentives until March 31, 2025. As of December 31, 2022, over 185,000 zero-emission vehicles have been incentivized through the program, showing a zero-emission vehicles market share increase developing in Canada.

- Incentives for Medium- and Heavy-Duty Zero-Emission Vehicles (iMHZEV) Program—provides point-of-sale purchase incentives of up to $200,000 (depending on vehicle class) toward the purchase of eligible new medium- and heavy-duty zero-emission vehicles made by Canadian businesses. The program was launched in July 2022, receiving over $540 million in funding over four years. The program's eligibility list currently includes over 60 vehicles from over 20 different automakers and TC is continuing to accept new models on an ongoing basis.

- Zero-Emission Trucking Program (ZETP)—provided $75.8 million in Budget 2022 to contribute to accelerating the safe deployment of medium- and heavy-duty zero-emission vehicles on Canadian roads through research, support to provinces and territories, and investments at the Motor Vehicle Test Centre to conduct cutting edge research on MHZEVs.

- ecoTECHNOLOGY for Vehicles (eTV) Program conducts safety and environmental performance testing on new and emerging innovations that reduce emissions and pollution from Canada's on-road transportation sector. Results are used to inform safety, efficiency and environmental programs, policies and regulations, and help ensure that Canada can adopt clean technologies for cars, trucks and motorcycles in a safe and timely manner.

- Multimodal Clean Technology Research & Development Programs—Transport Canada's Clean Transportation RD&D Program is investing in the development of zero emission and low carbon technologies for Canada's rail, marine and aviation sectors, including supporting the development of Canada's first zero-emission hydrogen train, battery electric marine vessels, and hybrid-electric aircraft.

Innovation, Science and Economic Development Canada (ISED)

- Strategic Investment Fund (SIF) / Net Zero Accelerator Initiative (NZAI)—numerous investments to date in electrification and zero-emission vehicles production. For example:

    - General Motors CAMI (Ingersoll) Facility—the first full-scale electric vehicle facility for production of light-duty commercial vehicles in Canada;

    - Honda Alliston Facility—a manufacturing overhaul to produce next-generation hybrid-electric vehicles;

- Ford Oakville Assembly Complex—the conversion of a major automotive assembly plant for battery-electric vehicle production;
- Stellantis Windsor/Brampton EV facilities—the modernization of multiple assembly plants for electric vehicle production;
- LG Energy Solution and Stellantis Windsor battery manufacturing facility—a battery facility to supply North American Stellantis electric vehicles;
- Nova Bus Transformation Project—the development of domestic electric public transit bus production; and
- Lion Electric Battery-Pack Assembly Plant—the establishment of battery-pack assembly plant for electric buses and trucks.

Intelligent Transportation Network

The Government has made significant recent investments into standards development, talent attraction and retention, R&D, and investment attraction in the transportation network of the future, while leading significant stakeholder policy discussions, regulatory development, and inter-jurisdictional harmonization efforts on the vehicle of the future. Existing government programming includes the National Research Council Industrial Research Assistance Program (NRC IRAP), the Pan-Canadian Artificial Intelligence Strategy, ISED's Strategic Innovation Fund (SIF) and Global Innovation Clusters, regional development agency programming, Infrastructure Canada's Smart City Challenge, TC's Advancing Industry-Driven Digitalization of Canada's Supply Chains initiative, and TC's Program to Advance Connectivity and Automation in the Transportation System (ACATS).

RECOMMENDATION 11: *That the Government of Canada leads the way in the energy transition, incorporating this transition into all its practices, particularly with regards to federal properties and vehicle fleets:*

- *That it expedites the energy efficient transformation of federal properties, and that the subsidies received by companies are dependent upon the energy efficiency of their buildings;*
- *That it finances a program of electric charging stations at Canada Post offices and for those municipalities that request them, and that it offers incentives for those purchasing hybrid or zero-emission vehicles to accelerate this transition.*

The Government agrees with this recommendation. Its commitments to making its operations more sustainable are contained in the "*Greening Government Strategy: A Government of Canada Directive."* All federal operations including government-owned and leased real property, fleets, procurement of goods and services and national safety and security operations are expected to be net zero by 2050.

The Government is also working closely with Canada Post to explore opportunities to install charging stations at post offices. Canada Post has earmarked $1 billion on its net-zero strategy that includes fleets, buildings and renewable energy. Canada Post plans to transform its fleet to zero-emission vehicles, prioritizing electric vehicles in the near future, with commitments to reach a 50 percent electric fleet by 2030 and 100 percent by 2040. The Government is working closely with Canada Post to examine opportunities that could finance the acceleration of the electrification of the postal fleet and the expanded installation of electric charging stations at Canada Post corporately owned or leased post offices, where it is feasible and appropriate to do so.

Municipal governments, including their departments, agencies or utilities, are eligible to participate in the Zero Emission Vehicle Infrastructure Program (ZEVIP; a $680-million initiative ending in 2027) as direct recipients, or as indirect recipients of funding through a number of delivery organizations authorized by NRCan to distribute and administer funding. The program's objective is to address the lack of charging and refuelling stations in Canada—one of the barriers to zero-emission vehicle adoption—by increasing the availability of localized charging and hydrogen refuelling opportunities. Many municipalities have already been successful in their applications. This includes Montréal, Saguenay, St-Jean-sur-Richelieu, Pemberton, Peel, York, North Vancouver, Langley, Oakville, Windsor, Kingston, Guelph, and more.

In addition to ZEVIP's efforts, there is also federal funding of $500 million under the Canada Infrastructure Bank's Charging and Hydrogen Refuelling Infrastructure Initiative (CHRI). The two programs will be accessed through a single federal applicant window. Together, the programs will jointly aim for a target of 84,500 chargers approved by 2027. To date, projects proposing to install a total of over 33,400 chargers have been successful in gaining approval.

Regarding incentives for hybrid or zero-emission vehicles, as outlined in Recommendation 10, Transport Canada delivers multiple programs aimed at supporting the development of electrified transportation in Canada, including the Incentives for Zero-Emission Vehicles (iZEV) Program; the Incentives for Medium- and Heavy-Duty Zero-Emission Vehicles (iMHZEV) Program; the Zero-Emission Trucking Program (ZETP); the ecoTECHNOLOGY (eTV) Program; and the Multimodal Clean Technology Research & Development

Programs.

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In conclusion, on behalf of the Government, I would like to express my appreciation for the efforts of the Members of the Committee and its staff in preparing the Report, which, I believe will provide guidance as we continue to work to ensure our post-COVID-19 economic recovery incorporates low-carbon and inclusive growth.

Sincerely,

The Honourable François-Philippe Champagne, P.C., M.P