BACKGROUNDER

Provincial and Territorial Zero-Emission Vehicle Scorecard

Tracking Canadian Sub-national Leadership in ZEV Strategies, Policies & Investments

2021-22

DOWNLOAD THE FULL REPORT HERE

DOWNLOAD THE METHODOLOGY HERE



What is the Provincial & Territorial ZEV Scorecard?

This report contains:

- A **tracker** showing the state of action on zero-emission vehicles (ZEVs) in all Canadian provinces and territories in the 2021-22 fiscal year
- A library of actions that provinces and territories can take to increase adoption of ZEVs
- Case studies of ambitious and creative efforts already in place

The Scorecard includes actions taken by **provinces**, **territories**, **and utilities** (these actions can include strategies, policies, regulations and investments). It covers light, medium, and heavy-duty ZEVs, which includes battery electric vehicles (BEV), plug-in hybrid electric vehicles (PHEV), and fuel cell electric vehicles (FCEV).

Why did we make this Scorecard?

Canadians are increasingly eager to use electric mobility. ZEVs will be an important part of Canada's lowcarbon transportation system of the future, alongside electrified public transit, active transport, compact land use planning and complete communities. While a fast-growing number of Canadians are adopting ZEVs, sales in Canada have not yet reached the levels seen in the leading jurisdictions.

Provinces, territories and utilities have a key role to play to make electric mobility an option for everyone. This Scorecard focuses on actions that must be taken specifically by provinces, territories and utilities, while recognizing that these actions require coordinated action with the federal and municipal governments, and other actors, for success. Provinces and territories also have a key role to play in working with Indigenous nations and communities to expand access to electric mobility.

This tool will help create a common baseline for ZEV action in Canada, highlight opportunities and gaps for provinces and territories at all stages of adoption, and help these jurisdictions learn from each other and from global leaders.

Quick facts

- Sales of EVs have been accelerating in Canada. Canadian sales of electric cars grew in the first quarter of 2022 to 8.3%. With the supports in place and the market trends, zero-emission vehicles are the clear choice for consumers and businesses in many parts of the country.
- Canada is not a global leader in adoption, however. In 2021, 6.6% of cars sold in Canada were electric vehicles², compared to 86% in Norway, 16% in China and 12% in California.³
- Purchase incentives, charging infrastructure investment, requiring a minimum share of sales to be ZEVs, and public education are some of the most important initial actions for provinces and territories to take to support ZEV adoption.
- The ZEV Scorecard shows that exciting action is already underway, from charging infrastructure investment in Newfoundland and Labrador, to support for businesses in BC, to purchase incentives for e-snowmobiles in the Yukon.
- At the same time, provinces and territories still have a lot of work to do. Only one Canadian jurisdiction (BC) has landed in the Global Leader scorecard category, with Quebec ranking highly as a Canadian Leader.
- Transportation emits a quarter of Canada's GHG emissions so mitigating the worst of the climate crisis cannot happen without shifting to electrified transportation at a much faster rate. Further, as the global economy shifts to electrified transport, provinces and territories have an opportunity to harness the economic development opportunities for their workers and businesses.

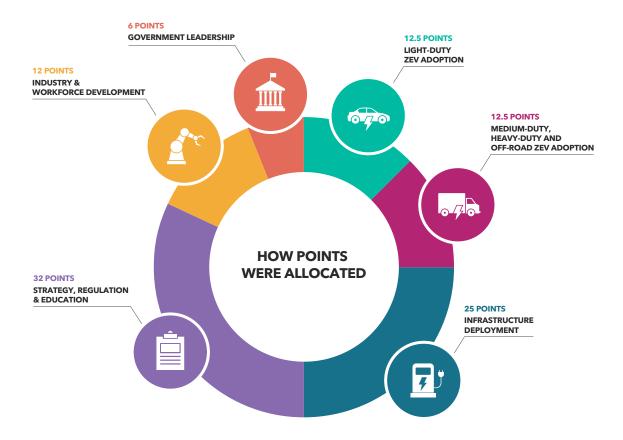
https://electricautonomy.ca/2022/05/27/q1-2022-ihs-how-many-zev-registrations-canada/

² EVs includes battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs)

https://www.iea.org/reports/global-ev-outlook-2022/trends-in-electric-light-duty-vehicles

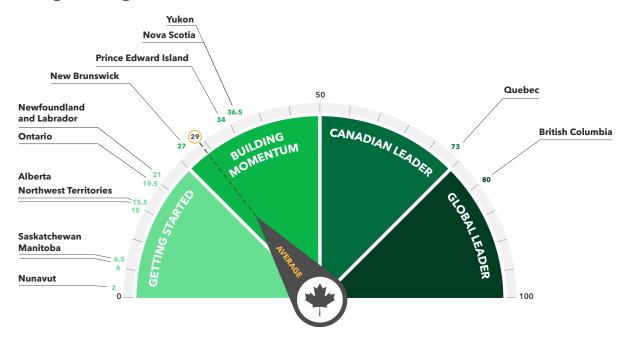
How were Points Allocated?

Points in the Scorecard are allocated under six action areas. The relative weighting of action areas reflects the priority actions at this stage of ZEV adoption in Canada. The points system sets the bar at the highest level of action seen across the globe and requires provinces and territories to design their policies and programs to meet the needs of equity-deserving groups and work with Indigenous communities to earn full points. Provinces, territories or utilities must support (financially or otherwise) the initiative for it to be counted.



Each jurisdiction has different geographies, economies, and communities. The Scorecard includes actions that can generally be adopted by every Province and Territory to achieve the transition to ZEVs in a way that responds to local realities.

Findings at a glance



- One province, BC, emerged as a Global Leader in the Scorecard. BC has taken the most comprehensive approach to enabling ZEV adoption. It has taken the core steps of adopting purchase incentives, investing in infrastructure and enacting a strong mandate for minimum ZEV sales. In addition, it has taken meaningful steps to train its workforce and orient its economy to respond to the transition.
- Quebec emerged as a Canadian Leader and is fast approaching the Global Leader category. Like BC, Quebec has adopted a ZEV mandate, offers comprehensive funding to individuals and businesses to adopt ZEVs, and is taking action to grow the ZEV workforce and economy. A clear mandate to the utility (Hydro Quebec) has helped the province develop a widespread charging network. Notably, Quebec's anticipated move to strengthen its mandate for minimum ZEV sales will help to drive supply and uptake.
- Nova Scotia, the Yukon, PEI, and New Brunswick fall firmly in the Building Momentum category. These jurisdictions have recently brought in purchase incentives to bolster ZEV adoption while also investing in the public charging network.
- The Provinces and territories in the Getting Started category (Newfoundland and Labrador, Ontario, Alberta, the Northwest Territories, Saskatchewan, Manitoba and Nunavut) have different strengths, ranging from new purchase incentives, to economic development, to municipal support, to green grids.

For detailed results by province and territory, download the full report here.

The Work Ahead

There's more to be done everywhere. Regardless of their scores for 2021-22, each jurisdiction can advance to higher categories in the coming years. The following are key actions that are absent in most jurisdictions and represent important areas to focus future efforts at the provincial and territorial level:

- Embed equity in every incentive, investment, and regulation.
- Penalize the purchase of fossil fuel-powered vehicles to pay for continued ZEV incentives (sometimes referred to as a "feebate" system).
- Advance zero-emissions MHDVs.
- Make 100% EV-ready buildings a reality by adopting 100% EV-ready requirements for new residential buildings in provincial building codes or regulations and investing significantly in retrofits of existing multiunit residential buildings.
- Make sure workers are ready to participate in the transition.
- Work with utilities and regulators to prepare the electricity regime to harness the benefits of vehicle electrification.

Table 1. Key actions by each jurisdiction

Province/ Territory	Action highlights	Opportunity areas	Points
Global Leaders			
British Columbia	 ZEV mandate in place for several years Comprehensive ZEV incentives including LDVs, MHDVs, airport and specialty vehicles, electric school buses, cargo e-bikes, and off-road vehicles Support for 100% EV-ready retrofits of multiunit residential buildings Clarity from the regulator on the ability of utilities to invest in the charging network Targeted support for research and development of BC-based product services or technology in the ZEV sector Training program to help prepare BCès workforce 	 Income-tested purchase incentives (forthcoming) ZEV mandate for MHDV (forthcoming) Creating a separate stream of LDV purchase incentives for shared fleets Implementing disincentives for the purchase and use of ICE vehicles Supporting recycling of ZEVs and their batteries 	80
Canadian Leade	rs		
Quebec	 ZEV mandate in place for several years Highest LDV & MHDV purchase incentives Strong mandate for infrastructure investment and favourable rate structures to improve the economics Workforce training and business education and investment in an industry cluster for Electric and Smart Transportation 	 Incorporating equity considerations into its incentives and investments ZEV mandate for MHDV (forthcoming) Implementing disincentives for the purchase and use of ICE vehicles Requiring smart charging through home charging incentives Strengthening support for 100% EV-ready retrofits of multi-unit residential buildings Supporting recycling of ZEVs and their batteries 	73

Province/ Territory	Action highlights	Opportunity areas	Points			
Building Momentum						
Yukon	 LDV and off-road purchase incentives (including e-snowmobiles) Formal ZEV infrastructure target and significant progress EV-ready requirements in Whitehorse developments (provincial policy) 	 Expand pilot MHDV rebate Invest in technician training and workforce development 	36.5			
Nova Scotia Prince Edward Island	 Recent LDV purchase incentive program Funding for transit electrification Utility-led smart home charging trials Commitments to greener grid Comprehensive public education programs with technical advisory services for businesses to transition fleets Recent LDV purchase incentives Investment in 35 electric school buses Strong investment in ZEV charging infrastructure. Transportation sector emissions reduction target EV test drives for parliamentarians and government staff 	 ZEV mandate (forthcoming) Equity-oriented education program (forthcoming) Funding for 100% EV-ready retrofits of multi-unit residential buildings (forthcoming) Support for MHDV electrification Setting targets for ZEV infrastructure Work with municipalities to adopt 100% EV-ready building code E-bike and bicycle purchase incentive program (forthcoming) Develop ZEV infrastructure targets Provide longer-term clarity on the role of utilities in infrastructure investment from electricity regulator 	36.5			
New Brunswick	Recent LDV purchase incentives Home charging incentives require smart charging capabilities Program specifically to support business investment in charging infrastructure	 Update infrastructure targets Fund electrification of school and transit buses Explore options to require 100% EV-ready new construction 	27			
Getting Started						
Newfoundland and Labrador	 Recent LDV purchase incentives Recent investments in EV charging infrastructure along key highways 	 Transit bus electrification (forthcoming) Shifting incentive program to be point-of-sale Infrastructure target setting and planning Explore options to require 100% EV-ready new construction 	21			

Province/ Territory	Action highlights	Opportunity areas	Points
Ontario	 Several recent announcements of financial support for new automobile and battery manufacturing plants Workforce development (general automotive sector) 	 Favourable overnight electricity rates (forthcoming) ZEV mandate to ensure supply ZEV purchase incentives MHDV electrification support Provincial infrastructure investment & favourable charging rates Ensure workforce development efforts include carve-outs focused on ZEV Public education program Government fleet procurement targets 	19.5
Alberta	 Financial support to municipalities for ZEV and infrastructure Investments in BEV and FCEV transit buses Demonstration hydrogen refuelling projects for trucks Utility-led infrastructure investment and pilot projects 	 ZEV mandate to ensure supply ZEV purchase incentives Infrastructure target setting and planning, and coordinating actors ZEV-related workforce development and training Government fleet procurement targets Investment in EV charging infrastructure along 	15.5
Northwest Territories	 Recent LDV purchase incentives Grants for businesses and non-profits to electrify operations 	key highway (forthcoming) • Off-road and used electric vehicle incentives • Infrastructure target setting and planning	15
Saskatchewan	 Utility-led funding for fast charging based on a priority map Pilot program to collect data on EV driving and charging Coal phase-out commitment 	 ZEV purchase incentives, including for off-road vehicles Infrastructure target setting and planning, and coordinating actors Expanding public education to in-person outreach and test drive opportunities Financial support to municipalities Government fleet procurement targets 	6.5
Manitoba	 Funding for municipalities and Northern Affairs/Indigenous communities that covers EV projects Green electricity supply 	 Transit bus electrification (forthcoming) ZEV sales targets Charging network investment ZEV purchase incentives Government fleet procurement targets 	6
Nunavut	 Net metring Investment in a solar hybrid energy plant 	 Continued investment in renewable energy Leveraging advances in ZEV off-road vehicles, including snowmobiles Leveraging advances in ZEV aviation, over time 	2



Electric Mobility Canada is a national membership-based not-for-profit organization dedicated exclusively to the advancement of e-mobility as an exciting and promising opportunity to fight climate change and stimulate and support the Canadian economy. Its mission is to strategically accelerate the transition to electric mobility across Canada.

ACKNOWLEDGEMENTS:

We would like to thank staff at provincial and territorial governments, utilities, and non-profits for their contributions to the Scorecard, particularly in reviewing data inputs.

We would like to thank Efficiency Canada for their collaboration in the data collection Phase.

SCORECARD RESEARCH AND DEVELOPMENT LED BY:



Founded in 2004, Dunsky Energy + Climate Advisors supports leading governments, utilities, firms and non-profits in their efforts to accelerate the clean energy transition.

THIS PROJECT WAS FUNDED BY:

WITH SUPPORT FROM:





