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Ontario

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Global Automakers of Canada

OVIN INSIGHTS Specialized Series

Executive Summary:

Ontario's Automotive Sector: Economic Contribution and Key Players

Quarterly Specialized Report

OCI Where Next Happens

A word from our contributors

“The Global Automakers of Canada is pleased to collaborate on this important publication by OVIN. With Honda and Volkswagen announcing Canada’s largest and second largest investments ever in Canadian automotive history, combined with Toyota’s vehicle production leadership in Canada, followed by Honda as the second largest producer in Canada, our members have staked out a key role in Ontario’s automotive industry of the present and the future.”

David Adams, President and CEO, Global Automakers Canada

“Building on our long-term collaboration with the Ontario Vehicle Innovation Network and shared vision to drive the growth of the automotive and mobility sector, the Automotive Parts Manufacturers' Association is proud to underscore the key role that the sector plays as an engine of Ontario's economic growth. Initiatives such as this report not only highlight Ontario's longstanding position as the only subnational jurisdiction home to several major OEMs, but more importantly reinforce the province's strong ability to foster collaboration across the public and private sectors to fuel recent investments that place Ontario at the forefront of the global electric vehicle transition.”

Flavio Volpe, President, Automotive Parts Manufacturers

Executive Summary

Ontario is the home of Canada's automotive sector. It is a hub of vehicle production, and the only province in Canada that assembles vehicles, with five original equipment manufacturers (OEMs) operating plants (Ford, General Motors [GM], Honda, Stellantis, and Toyota). Through this unique position, Ontario contributes significantly to Canada's economy, trade, and employment.

In 2020,[a] Ontario's automotive manufacturing sector contributed over $11B to the national GDP. In 2022, more than 104K people were employed in the automotive sector across the province, representing 80% of all Canada's automotive employees. Over 36.5K of these employees worked at one of the five OEMs, where they contributed to the production of over 1.5M Ontario-made vehicles in 2023.

Ontario far exceeds all other Canadian provinces in motor vehicle exports; it was responsible for $75B in exports in the motor vehicle manufacturing, body and trailer manufacturing, and parts manufacturing sectors in 2023. The province has also attracted $43B in new automotive investments since 2020, including investments in electric vehicle (EV) and EV battery production. A substantial amount of this investment originated from the five OEMs, with $25.4B of investment announced between them since 2018.

With demand for EVs expected to grow, Ontario is very well positioned to respond to the needs of the automotive industry in the electric transformation. Ontario's response to the ongoing transformation is driven by Driving Prosperity, the Government of Ontario's plan for the future of the province's automotive sector. This plan outlines a vision in which Ontario is "a North American hub for developing and building the car of the future through emerging technologies and advanced manufacturing processes". Through this plan, the provincial government has committed to partner with the auto industry to:

1. Reposition vehicle and parts production for the car of the future.
2. Establish and support a battery supply chain ecosystem.
3. Innovate in every stage of development.
4. Invest in Ontario's auto workers.

This report, which has been developed in collaboration with Global Automakers of Canada, presents an overview of Ontario's automotive sector, including its contributions to the economy, trade, and employment. It also provides a summary of the automotive ecosystem, outlining key locations, investments, and actors, including high level profiles of each of the OEMs operating in the province.

[a] While more recent GDP data is available in *chained dollars* from Statistics Canada, this report presents GDP in *current dollars* in order to facilitate a comparison between various industries. The most recent GDP data available in *current dollars* is from 2020.

Ontario's Automotive Sector at a Glance

GDP

$11B

Ontario's automotive industry contribution to national GDP in 2020

Investments

$43B

in new automotive investments announced in Ontario since 2020

Employment

>104K

people employed in automotive manufacturing in Ontario in 2022

80%

share of Canadian automotive manufacturing jobs in Ontario in 2022

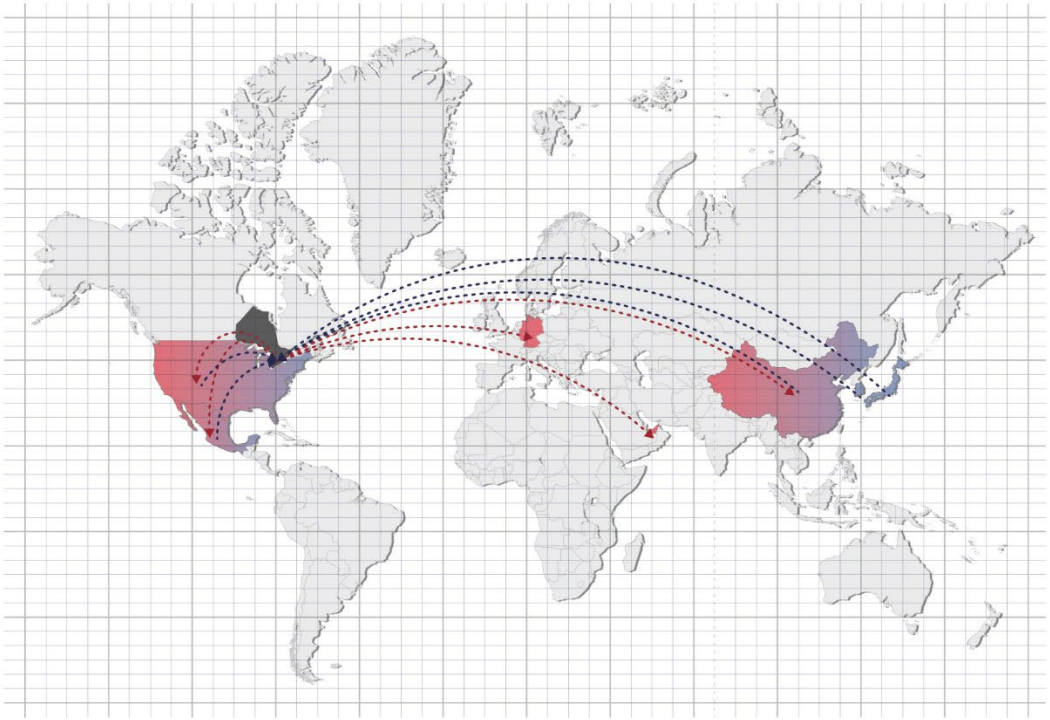
Trade

$109B

Ontario's total automotive manufacturing imports in 2023

$75B

Ontario's total automotive manufacturing exports in 2023



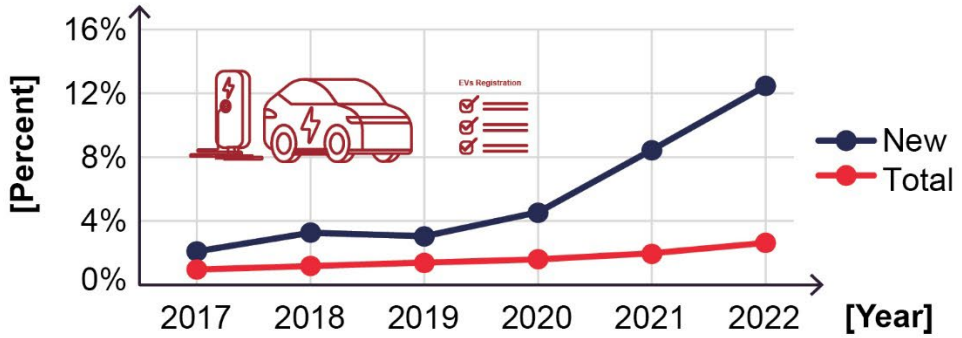
Ontario's automotive corridor

Sales

41%

Ontario's share of Canada's new motor vehicles sales in 2023

Percentage of total & new vehicle registrations that are EVs



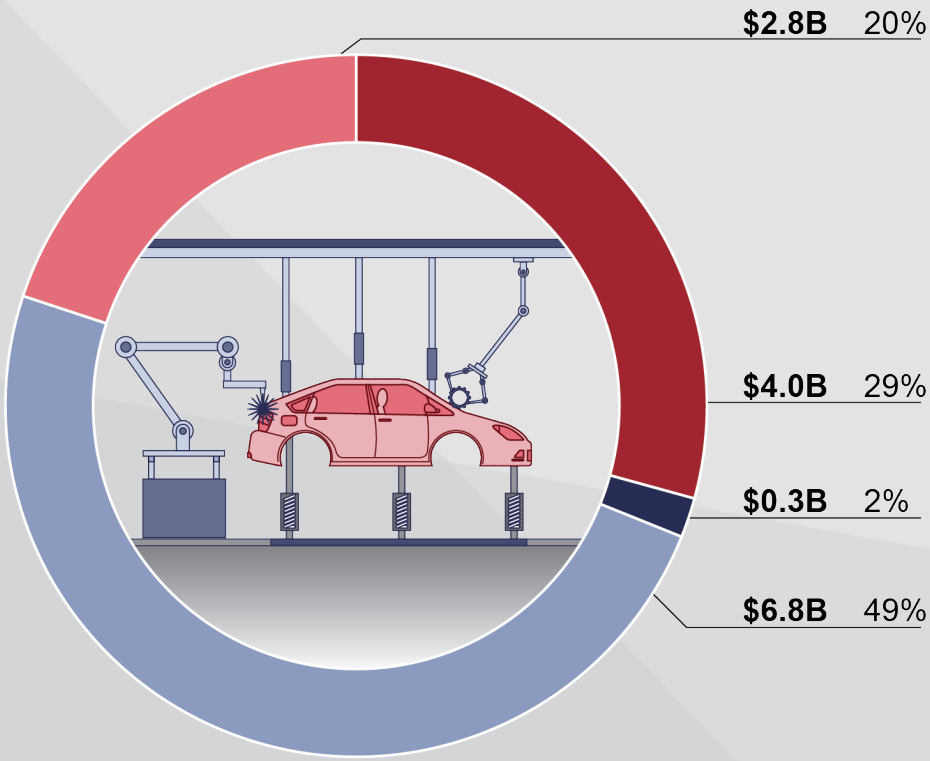
Ontario's Automotive Manufacturing Industry – Contributions to Economy, Trade & Employment

GDP

Manufacturing is a vital industry in Ontario, contributing $86B towards the province's GDP.

Within the manufacturing industry, Ontario's automotive manufacturing sector plays a significant role, contributing over $11B towards GDP in 2020.

Ontario GDP by transport equipment manufacturing industry 2020

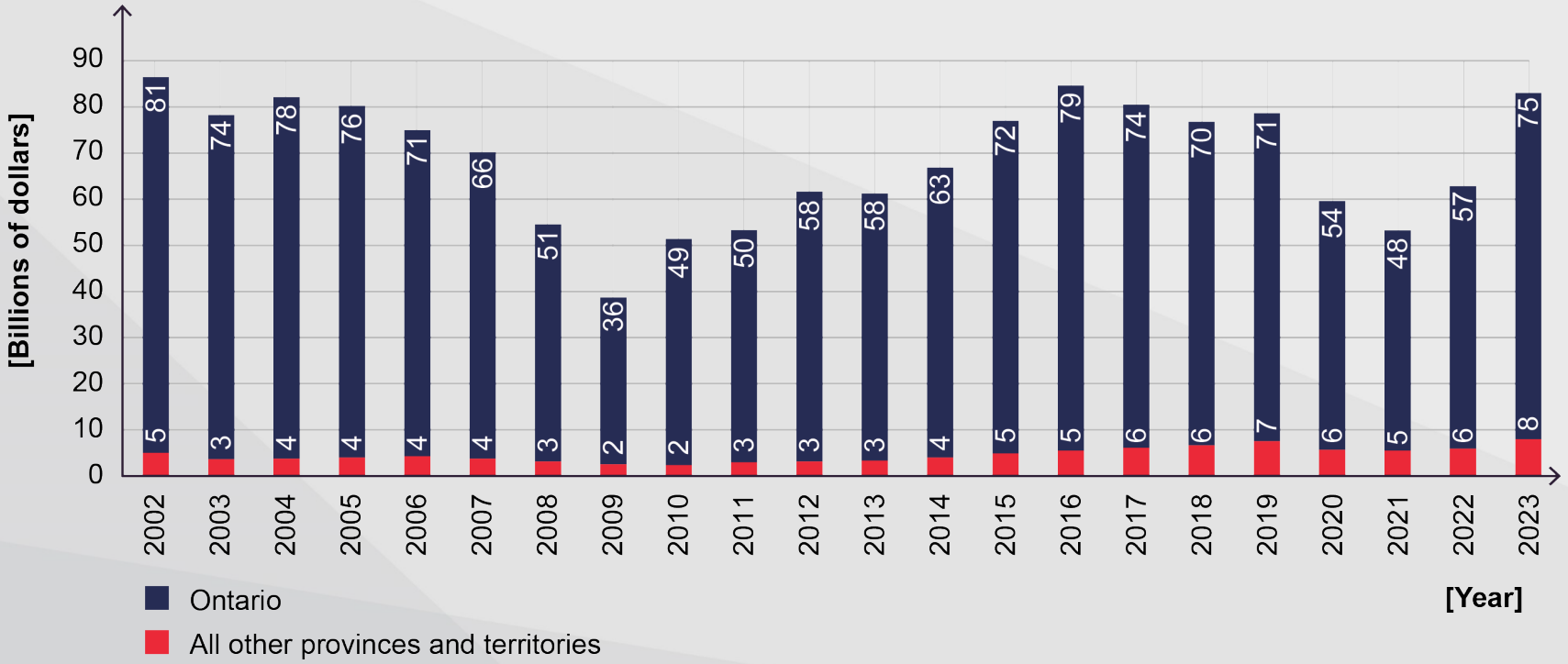


Trade

As shown in the graph below, Ontario far exceeds all other provinces in terms of global motor vehicle exports. In 2023, Ontario was responsible for $75B in exports of products in the motor vehicle manufacturing, body, and trailer manufacturing, and parts manufacturing sectors combined. In comparison, the second largest exporter – Quebec – was responsible for just $5B in exports.

In 2023, Ontario's motor vehicle manufacturing exports made up 73% of the automotive manufacturing export market, contributing $54.5B. Parts manufacturing exports were worth $19.7B, equivalent to 26% of total automotive manufacturing exports, with body and trailer manufacturing exports making up a significantly smaller 1% of total exports, at $0.7B. These contributions make up a significant share of the Canadian exports market, highlighting Ontario's role at the heart of the industry.

Motor vehicle exports by province 2002 – 2023[b]



[b] Graph shows the combined value of motor vehicle, body, and parts exports (NAICS 3361, 3362, and 3363).

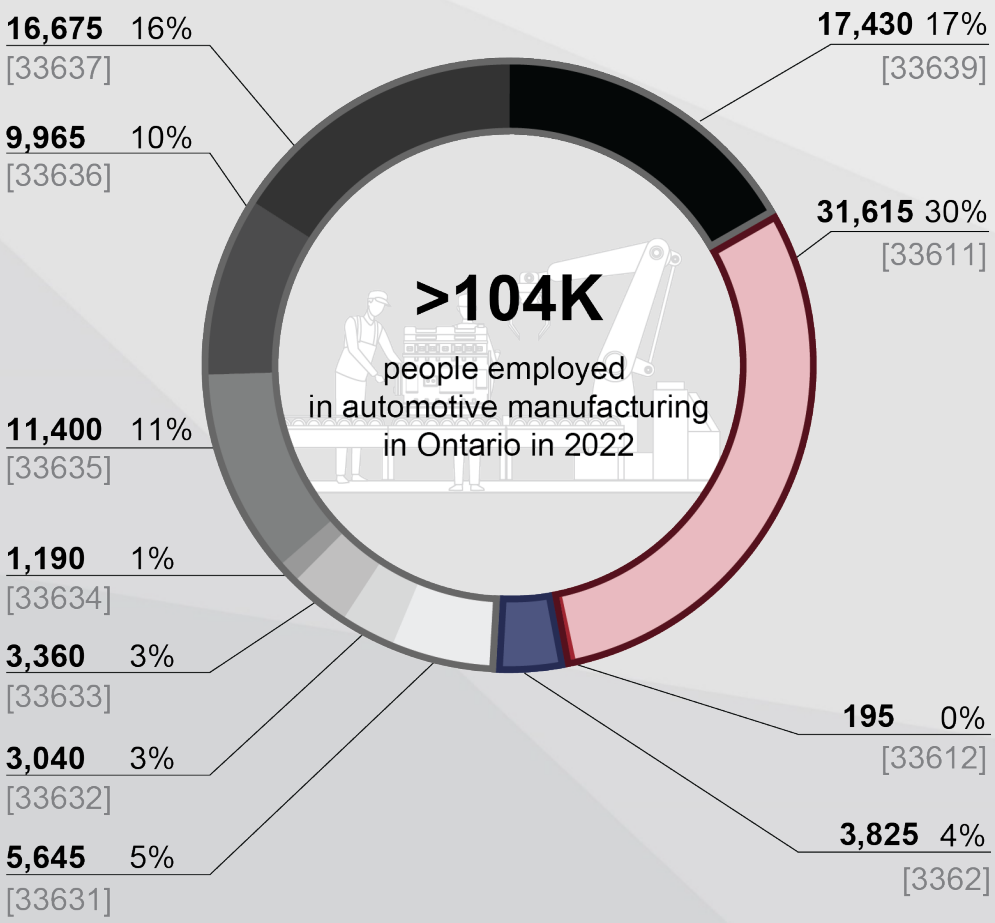
Sales

In 2023, nearly 720K new motor vehicles were sold in Ontario – 41% of all vehicles sold in Canada. The majority of these were light trucks, which includes minivans, sport-utility vehicles, light trucks, and vans – over 590K light trucks were sold in Ontario in 2023.

Employment

Ontario's automotive manufacturing industry employed over 104K people in 2022, with most specializing in motor vehicle parts manufacturing. Across Canada, nearly 130K people were employed in the industry in 2022, with Ontario accounting for a notable 80% of all automotive manufacturing jobs nationwide.

Automotive manufacturing employment in Ontario 2022



Motor vehicle manufacturing [3361]

- Automobile and light-duty motor vehicle manufacturing [33611]
- Heavy-duty truck manufacturing [33612]

Motor vehicle body and trailer manufacturing [3362]

Motor vehicle parts manufacturing [3363]

- Motor vehicle gasoline engine and engine parts manufacturing [33631]
- Motor vehicle electrical and electronic equipment manufacturing [33632]
- Motor vehicle steering and suspension components manufacturing [33633]
- Motor vehicle brake system manufacturing [33634]
- Motor vehicle transmission and power train parts manufacturing [33635]
- Motor vehicle seating and interior trim manufacturing [33636]
- Motor vehicle metal stamping [33637]
- Other motor vehicle parts manufacturing [33639]

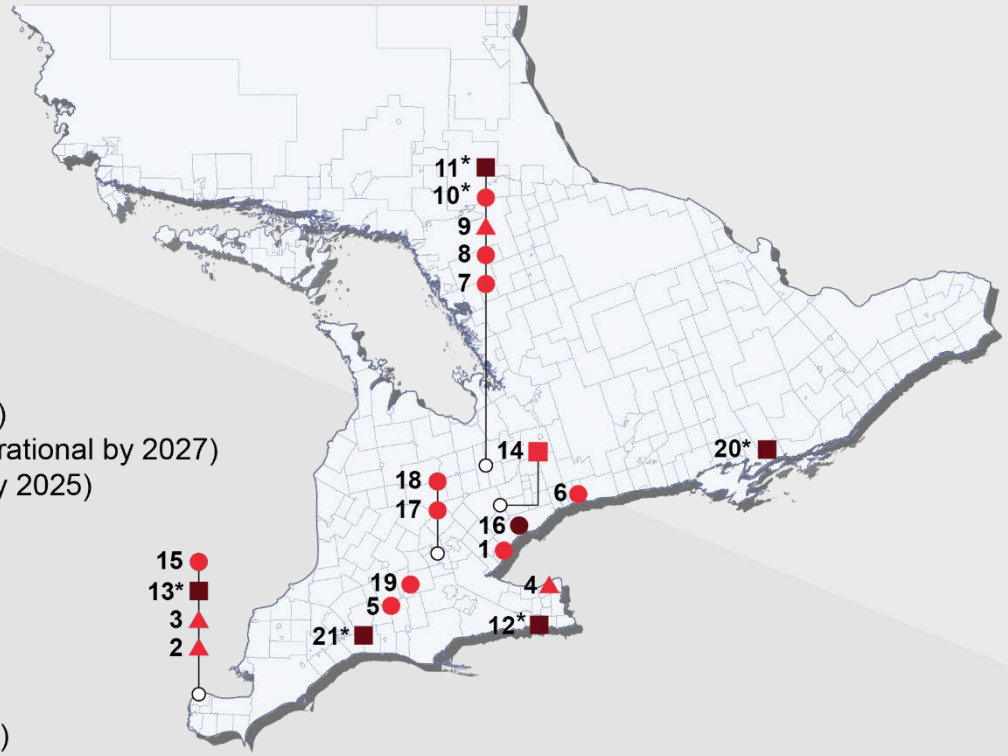
Ontario’s Automotive Manufacturing Ecosystem

Automotive Manufacturing Ecosystem

Ontario is at the centre of Canada's automotive industry, home to five OEMs. These are Ford, General Motors, Toyota, Stellantis, and Honda. There are also six major battery or battery materials plants currently planned or under construction, with three owned by Honda: a battery manufacturing plant, a battery separator factory in partnership with Asahi Kasei, and a Battery Active Materials (BAMs) factory in partnership with POSCO, the location of which is still to be announced. These are due to be operational by 2028, 2027, and 2028 respectively. Additional plants are owned by NextStar Energy, Umicore, and Volkswagen, which are due to be operational by 2025, 2026, and 2027 respectively.

List of Plants

1. Ford Motor Company Oakville Assembly Complex
2. Ford Motor Company Windsor Engine Plant
3. Ford Motor Company Essex Engine Plant
4. GM St. Catharines Propulsion Plant
5. GM CAMI Assembly Plant
6. GM Oshawa Assembly Plant
7. Honda Plant 1
8. Honda Plant 2
9. Honda Engine Plant
10. Honda EV Assembly Plant *(operational by 2028)
11. Honda Battery Manufacturing Plant *(operational by 2028)
12. Honda and Asahi Kasei EV Battery Separator Plant *(operational by 2027)
13. NextStar Energy Windsor EV Battery Hub *(operational by 2025)
14. Stellantis Brampton Assembly & Stamping Plant
15. Stellantis Windsor Assembly Plant
16. Stellantis Etobicoke Casting Plant
17. Toyota Motor Manufacturing Canada North Plant
18. Toyota Motor Manufacturing Canada South Plant
19. Toyota Motor Manufacturing Canada West Plant
20. Umicore EV Battery Materials Plant *(operational by 2026)
21. Volkswagen and PowerCo SE Battery Cell Gigafactory *(operational by 2027)



Legend

- ■ Vehicle assembly & auto parts manufacturing
- ▲ Engine assembly plant
- ● Vehicle assembly plant
- ● Auto parts manufacturing plant
- ■ Battery or battery parts manufacturing plant

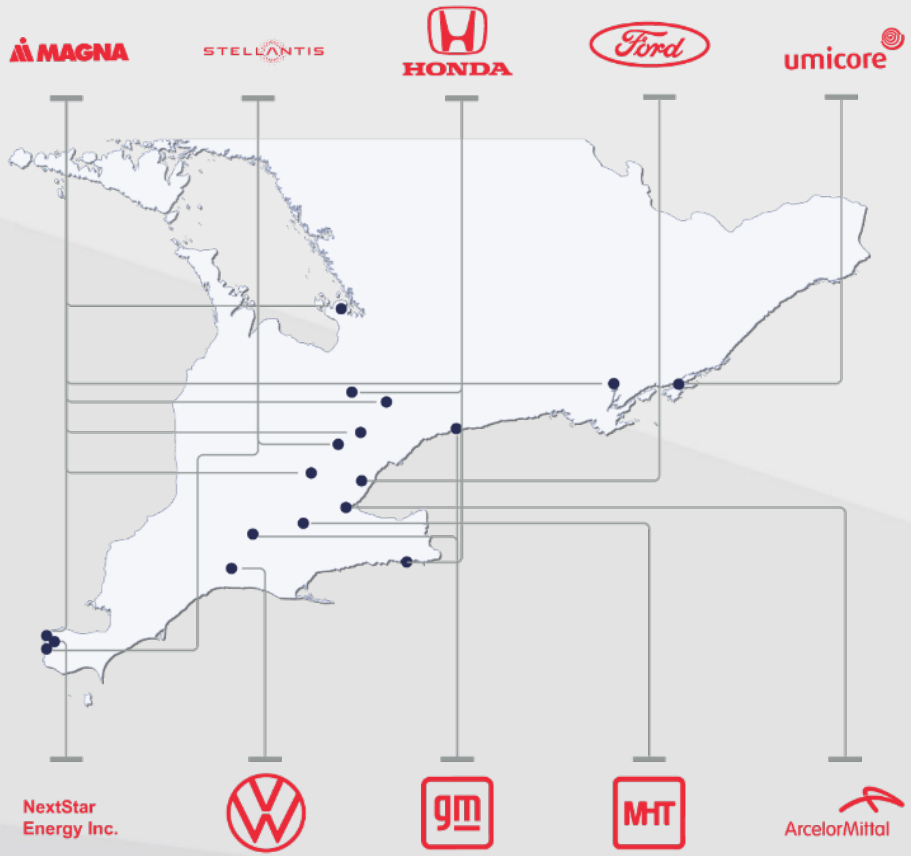
Recent Investments in Ontario

Automotive Investments 2020 - 2024

Global automakers, parts suppliers, and EV battery manufacturers have announced $43B worth of investments in Ontario since 2020.

Selection of Ontario's top investors

Company	Total Investment	Year Announced	Facility Type
HONDA	$15B	2024	Battery materials, battery manufacturing, and vehicle assembly plants
VW	$7B	2023	Battery manufacturing plant
NextStar Energy Inc.	$5B	2022	Battery manufacturing plant
STELLANTIS	$3.6B	2022	Vehicle assembly plant
gm	$2.2B	2022	Vehicle assembly plant
umicore	$2.1B	2023	Battery materials manufacturing plant
ArcelorMittal	$1.8B	2021	Steel manufacturing plant
Ford	$1.8B	2020	Vehicle assembly plant
HONDA	$1.4B	2022	Vehicle assembly plant
MAGNA	$470M	2023	Auto parts manufacturing plant
MHT	$102M	2023	Auto parts manufacturing plant



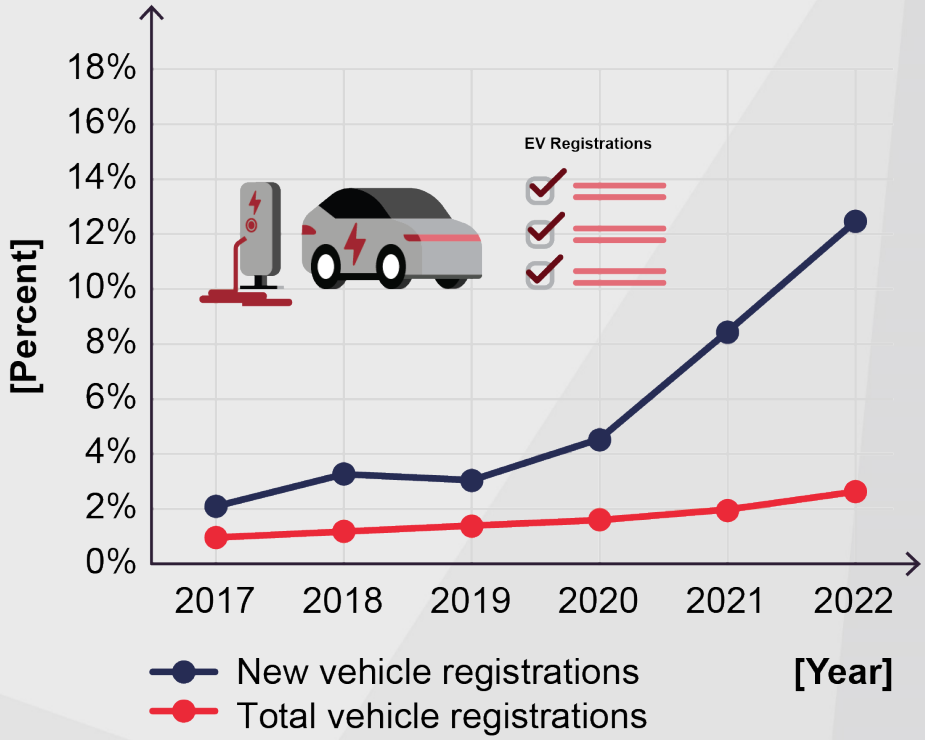
The Electric Transformation and Ontario's Unique Position

Demand for Electric Vehicles

Demand for EVs – across battery electric, hybrid electric and plug-in hybrid – is expected to grow over the coming years. In 2022, there were over 26M EVs on the road worldwide, with EV car sales exceeding 10M – an increase of 55% relative to 2021. The International Energy Agency has predicted that there could be up to 240M EVs on roads globally by 2030. In addition to this, Canada has set a mandatory target for 100% of new light-duty car and passenger truck sales to be zero-emission by 2035.

In Ontario, the percentage of total vehicle registrations that are battery electric, hybrid electric and plug-in hybrid EVs has grown from 1% in 2017 to 3% in 2022. For new vehicle registrations, the percentage of EVs grew from 2% in 2017 to 12% in 2022. Additional data shows that new vehicle registrations for battery electric, hybrid electric, and plug-in hybrid EVs reached approximately 17% in 2023.

Percentage of total and new vehicle[c] registrations in Ontario that are EVs[d] 2017-2022



[c] This graph combines registration data for passenger cars, pickup trucks, multi-purpose vehicles, and vans.

[d] For the purposes of this graph, EV includes battery electric, hybrid electric, and plug-in hybrid vehicles.

Ontario's Key Automakers

>1.5M

total number of vehicles produced by Ontario's key automakers in 2023

36.5K

total number of people employed by Ontario's key automakers

$25.4B

value of investment commitments made by Ontario's key automakers since 2018

Ford · gm · HONDA · STELLANTIS · TOYOTA

About OVIN

OVIN is a key component of Phase Two of Driving Prosperity, the Government of Ontario's ambitious plan that positions Ontario as a North American leader in developing and building the car of the future through emerging technologies and advanced manufacturing processes. The Government of Ontario has committed an additional $56.4 million, for a total investment of over $141 million to date, through OVIN's innovative programming to support research and development (R&D) funding, talent development, technology acceleration, business and technical supports, and testing and demonstration.

OVIN, led by Ontario Centre of Innovation (OCI), is supported by the Government of Ontario's Ministry of Economic Development, Job Creation and Trade (MEDJCT) and Ministry of Transportation (MTO).

The initiative comprises five distinct programs and a central hub. The OVIN programs are:

- Research and Development Partnership Fund
- Talent Development
- Regional Technology Development Sites
- Demonstration Zone
- Project Arrow

The OVIN Central Hub is the driving force behind the programming, province-wide coordination of activities and resources, and Ontario's push to lead in the future of the automotive and mobility sector globally. Led by a dedicated team, the Central Hub provides the following key functions:

- A focal point for all stakeholders across the province;
- A bridge for collaborative partnerships between industry, post-secondary institutions, broader public sector agencies, municipalities, and the government;
- A concierge for new entrants into Ontario's thriving ecosystem; and
- A hub that drives public education and thought leadership activities and raises awareness around the potential of automotive and mobility technologies and the opportunities for Ontario and for its partners.

To find out the latest news, visit www.ovinhub.ca or follow OVIN on social media @OVINhub

OVIN Objectives

	Foster the development and commercialization of Ontario-made advanced automotive technologies and smart mobility solutions.
	Showcase the Province of Ontario as the leader in the development, testing, piloting and adoption of the latest transportation and infrastructure technologies
	Drive innovation and collaboration among the growing network of stakeholders at the convergence of automotive and technology
	Leverage and retain Ontario’s highly skilled talent, and prepare Ontario’s workforce for jobs of the future in the automotive and mobility sector
	Harness Ontario’s regional strengths and capabilities, and support its clusters of automotive and technology

Meet the OVIN Team

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Disclaimers

This report was commissioned by the Ontario Centre of Innovation (OCI) through a Request for Proposals titled “Ontario Vehicle Innovation Network (OVIN) – Annual Comprehensive Sector Report & Quarterly Specialized Reports,” dated August 25, 2023, and has been prepared by Arup Canada Inc. It is one of five reports covering an analysis of Ontario’s automotive technology, electric vehicle and smart mobility landscape while incorporating implications for the sector’s skills and talent landscape.

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