

# Niagara ZEV Blueprint Niagara Economic Development

Presented by Daniel Turner

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# Niagara ZEV Blueprint

## Zero Emissions Vehicle

## Introduction

- An analysis of activities related to the Niagara ZEV Transition Blueprint.
- The Niagara ZEV Transition Blueprint aims to guide the region through the transition from internal combustion engine (ICE) supply chain production and to zero emission vehicle production (ZEV) supply chain development.
- The blueprint covers critical areas including supply chain development, workforce and skills development, infrastructure investment, indigenous inclusion, and community coordination.

# Background:

- **March 2023:** Minister responsible for the Federal Economic Development Agency for Southern Ontario, Filomena Tassi hosts EV Roundtable with Niagara Region.
- **Discussion:** Industry and Business representatives were asked how they were preparing for the ZEV transition
- **Support:** There was a need for support from various levels of government in learning about the opportunities in the ZEV transition.



# FedDev Funding:

- **August 2023:** Government of Canada supports electric vehicle (EV) sector in Niagara Region
- **Announcement:** “Regional Municipality of Niagara to receive a \$300,000-Government of Canada investment to support growth of Niagara’s EV sector”
- “The Regional Municipality of Niagara is bringing together the right people and organizations to strengthen and grow the EV sector in Niagara” - Minister Tassi



# Electric Mobility Sector Specialist

- Felix is a business professional with a keen interest in advancing the electric mobility ecosystem and promoting the use of renewable energy to decarbonize the global economy.
- Felix is dedicated to fostering economic growth and development in the region's Electric Vehicle (EV) and energy storage sector.
- With over 15 years of industry experience, Felix has worked with businesses across North America, South America, and the Middle East, primarily in manufacturing, aviation, and metals and minerals industries.



# Creating the ZEV Blueprint

## March 2024:

With the recent hiring of Niagara's EV Specialist, FedDev requested the creation of a Niagara Region ZEV Transition Blueprint

## Comprehensive Analysis:

The Niagara ZEV Transition Blueprint provides a strategic framework to leverage Niagara's strategic location, existing automotive ecosystem, and investment potential to become a key player in the global ZEV market.

## ZEV Blueprint Creation:

In May 2024, the ZEV Blueprint was created and presented to FedDev Ontario's Policy team. This document will be updated periodically as the industry continues to evolve.

# 1. Supply Chain Development Analysis

- Niagara is well-positioned to integrate into the global ZEV supply chain, leveraging its proximity to 11 vehicle assembly plants, 4 engine plants, and 5 upcoming battery cell/pack manufacturers in Ontario.
- Retooling of existing manufacturing processes is essential to meet the specific needs of the EV demand. Support in parts design and retooling capabilities is necessary. Small businesses in Niagara need to scale their operations to meet the increasing demand from large manufacturing complexes.
- Investment attraction efforts focus on developing the EV battery pack supply chain, which represents ~40% of EV value. Recent successful investments highlight the potential for future growth. The growing EV market in North America presents significant opportunities for Niagara, supported by governmental policies and investments in EV infrastructure.

Niagara EV Supply Chain	Operating Companies		Future Development		Total	
	No. Companies	No. Jobs	No. Projects	No. Jobs	No. Companies	No. Jobs
Body Structure	25	616	1	200	26	816
Chassis Components	26	1055	0	0	26	1055
Engine System	1	1216	0	0	1	1216
E-drive and Electronic Components	1	7	1	500	2	507
Battery Pack	0	0	3	1200	3	1200

# 2. Workforce Analysis

- An estimated 1,500 people are needed to directly support ZEV investments, plus an additional 2,160 to support the resulting supply chain.
- Niagara's current labor force of 232,000 will require extensive training and educational opportunities to upskill for EV manufacturing.
- The EV transition poses risks to the automotive labor market, with an estimated 700 jobs potentially affected by the long-term shift from ICE to electric drive units.





# 3. Skills Development Analysis

- The EV and battery manufacturing sector requires various technical and engineering positions. Training programs and collaborations with educational institutions are crucial.
- Further analysis will provide estimates on the number of workers required under each identified skill set. Upskilling and reskilling workers will address the lack of trained skilled workers in the EV sector.
- Support from Niagara College and Brock University will be sought to develop training programs for the ZEV supply chain. Immigration will play a role in attracting skilled workers, with mentorship and support services critical for their integration into the ZEV labor force.



# 4. Support Analysis

- Key infrastructure needs include serviceable land for production and R&D facilities, housing for workers, and transportation infrastructure.
- Funding support from provincial and federal levels is essential.
- The Signature Sites Tool identifies industrial and commercial properties available for development. Collaboration among local municipalities, the Niagara Region, and private realtors enhances the region's investment potential.



# 5. Indigenous Inclusion Analysis

- Engagement with the Six Nations of the Grand River and Mississaugas of the Credit First Nation highlighted opportunities for collaboration in ZEV infrastructure development and job creation.
- Integrating Indigenous suppliers into the ZEV supply chain and developing transportation infrastructure to connect Indigenous communities with job opportunities are crucial steps.



# 6. Community Coordination Analysis

- Effective leadership and cross-collaboration among key stakeholders, including Niagara Economic Development, local municipalities, Invest Ontario, Invest Canada, NPCA, land and real estate developers, builders, academic institutions, and Indigenous communities, are essential for the successful development of the ZEV supply chain ecosystem in Niagara.
- The Niagara Workforce Coalition has been launched to leverage existing business and employment service connections in Niagara, identify gaps, and enhance the local labor market.
- Addressing challenges such as high unemployment, newcomers' employment inequities, and low education levels, the coalition aims to re-engage workers, improve educational resources, and support employers in adapting to modern hiring and employee relations practices.



# Prosperous Region

- The blueprint's focus on supply chain development and investment attraction aligns with the Prosperous Region priority by promoting economic growth and job creation.
- Workforce and skills development initiatives ensure that the local labor force is prepared for new opportunities in the EV sector, driving regional prosperity.
- Collaborative efforts with educational institutions and support for small businesses underscore the blueprint's commitment to building a robust, prosperous regional economy.



# Effective Region

- The Niagara ZEV Transition Blueprint emphasizes the retooling of manufacturing processes and infrastructure investment, fostering an Effective Region through enhanced production capabilities.
- The strategic engagement with Indigenous communities and stakeholders enhances regional inclusivity and effectiveness in economic development.
- Coordinated efforts among various entities, including local municipalities and economic development agencies, ensure that Niagara operates as an Effective Region, efficiently leveraging resources for maximum impact.



# QUESTIONS & CONTACT

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