Subject: Niagara Electric Vehicle Blueprint – EV Sector Development

Report to: Planning and Economic Development Committee

Report date: Wednesday, September 11, 2024

Recommendations

1. That Report ED 11-2024 **BE RECEIVED** for information.

Key Facts

- This report provides an update on key activities related to the Niagara Zero Emission Vehicle (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 supply chain development.
- The blueprint covers critical areas including supply chain development, workforce and skills development, infrastructure investment, indigenous inclusion, and community coordination.

Financial Considerations

The activities described in this report are primarily funded by the Federal Economic Development Agency of Southern Ontario (FedDev Ontario) through the Electric Mobility Sector Development Grant.

This funding supports various initiatives to enhance Niagara's capacity to transition to zero emission vehicles, including supply chain enhancements, workforce training, and infrastructure development. A significant portion of this funding is allocated to hiring our Electric Mobility Sector Specialist. The specialist serves as a liaison between FedDev Ontario and the Niagara manufacturing sector, including automotive supply chain companies. This role involves researching funding opportunities for companies wishing to transition to the EV sector and attending EV-related conferences to enhance investment attraction efforts in the EV sector.

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.

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, four (4) engine plants, and five (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.

Work is in progress with the Federal Economic Development Agency for Southern Ontario to connect small and mid-size businesses with business opportunities in the EV supply chain (e.g., Honda opportunity) and inform about funding options to revamp their platform to better participate in the growing EV sector.

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.

To further enhance Niagara Region as the next business address for EV related investments we have been participating in key trade shows and invertors roundtables in North America and Europe where we have identified a growing interest of companies to expand operations into the North American market. Also, these EV events allowed us to connect local business with multinational companies to forge potential business partnerships in the future.

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 interested parties, 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.

Alternatives Reviewed

The strategies and actions outlined in the Niagara ZEV Transition Blueprint are consistent with accepted economic development practices.

Relationship to Council Strategic Priorities

Economic development activities described in this report directly support two of Council's Growing Better Together 2023-2026 Strategic Priorities:

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 community partners 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.

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

Other Pertinent Reports

Economic Development Strategy 2023-2033

(https://niagaracanada.com/about-us/economic-development-strategy/)

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Appendices

N/A