COMMUNITY-BASED ELECTRIFICATION STRATEGY:

Yarmouth, Nova Scotia

Vision Statement

To advance a practical and inclusive transition toward transportation electrification in Yarmouth and surrounding rural municipalities by building local partnerships, improving charging accessibility, and ensuring that electrified mobility solutions are affordable, reliable, and sustainable. This transition aims to reduce emissions, enhance regional connectivity, and strengthen community resilience while aligning with Nova Scotia's 2050 net-zero goals.

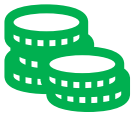
Benefits Identified for the Community

Environmental

- Reduces greenhouse gas and air pollutant emissions, contributing to cleaner air and lower regional carbon footprint.
- Decreases noise pollution from transportation, improving quality of life in residential and downtown areas.
- Supports the use of clean, renewable energy sources to power vehicles and charging infrastructure.

Economic

- Offers long-term cost savings for both residents and municipalities through reduced fuel and maintenance costs.
- Stabilizes operating budgets by lowering exposure to fluctuating fuel prices.
- Create opportunities for local trades, renewable energy suppliers, and clean-technology businesses.

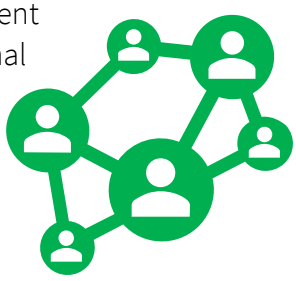


Social & Community

- Enhance accessibility through smaller electric mobility options (e-bikes, scooters, golf carts) that do not require driver's licenses.
- Demonstrates municipal leadership and commitment to sustainability, strengthening public trust and community pride.
- This makes rural communities more attractive to new residents and businesses, contributing to local economic revitalization.

Institutional & Regional

- Encourage collaboration among municipalities, provincial agencies, and utilities to share costs and technical expertise.
- Supports development of integrated, regional transit and charging networks across Southwest Nova Scotia.



Action Items

Short-Term Strategies (0-5 Years)

- Conduct EV Infrastructure Assessment: Identify priority charging locations (e.g., municipal buildings, ferry terminals, community hubs) and assess grid capacity in collaboration with Nova Scotia Power.
- Repurpose Existing Sites: Explore brownfield and municipal properties for conversion into charging and fleet facilities to minimize new land use and costs.
- Pilot Municipal Fleet Electrification: Begin gradual transition of light-duty municipal vehicles, supported by federal and provincial funding programs.
- Public–Private Partnerships: Collaborate with local businesses, developers, and utilities to co-fund and maintain charging infrastructure.
- Community Awareness and Engagement: Launch campaigns to share information on EV incentives, cost savings, and charging options, while addressing skepticism about electrification in rural contexts.
- Feasibility and Cost Studies: Evaluate total cost of ownership and payback for electrification projects to ensure financial viability.
- Establish the RESAlliance Working Group: Strengthen collaboration among municipalities to coordinate procurement, share best practices, and pursue joint funding opportunities.

Long-Term Strategies (5-15 Years)

- Expand Charging Network: Develop a network of chargers across key regional corridors and tourism destinations, including partnerships with adjacent municipalities.
- Electrify Transit Services: Work toward electrifying local and intermunicipal bus routes, beginning with pilot programs supported by the province.
- Create a Provincial Procurement and Standards Framework: Advocate for standardized EV and charger specifications to streamline procurement and vehicle sharing among rural municipalities.
- Integrate Renewable Energy Sources: Pair charging stations with solar or small-scale renewable power generation to reduce grid strain and enhance energy independence.
- Workforce Development: Provide training opportunities for local electricians, fleet managers, and maintenance staff in EV and charging technologies.
- Monitor and Report Progress: Establish measurable benchmarks (e.g., % of fleet electrified, number of chargers installed, GHG reductions) and regularly communicate outcomes to stakeholders.
- Incorporate Electrification in Municipal Planning: Embed EV infrastructure and fleet transition goals in municipal transportation and climate action plans.

About the Project

This strategy was developed as part of the Community-Based Planning and Design for the Electrification of Transport Systems in Rural Municipalities project, led by Dalhousie Transportation Collaboratory (DalTRAC) and funded by the Low Carbon Communities (LCC) program through the Nova Scotia Department of Natural Resources and Renewables. The project engaged rural communities across the province to co-design local electrification strategies.