

Background

In the [Environmental Goals and Climate Change Reduction Act](#), the Government of Nova Scotia has set climate and electrification objectives for 2030: reducing greenhouse gas (GHG) emissions by at least 53% and implementing a standard that ensures that 30% of new light-duty vehicles sold are zero emission. While electric school bus (ESB) procurement could support the former, the province currently has no ESBs on its roads and doesn't have any clear strategy to make the transition from diesel school buses, despite the fact that federal funding programs for ESB purchases are available.

Why do we need to act now?

Electrification of the school bus fleet could be an opportunity to achieve meaningful progress on the province's climate targets and transport electrification goals while generating complementary health and economic benefits.

It is estimated that electrifying Nova Scotia's 1,298 diesel school buses could help avoid the 23,000 tons of CO₂ emitted each year.¹ School bus electrification also holds significant potential to reduce air pollution produced by diesel tailpipe emissions, which contributes to hundreds of premature deaths every year in the province². The impacts of diesel-related air pollution primarily affect the health of bus drivers, the 72,000 children who ride the bus to school every day³, as well as the disadvantaged communities who are more likely to live near major roadways and thus daily school routes. Reducing diesel emissions could amount to substantial savings in health care costs for the province. The transition to ESBs could also benefit service providers by lowering the total cost of operations (TCO) for student transportation, with significant savings resulting from lower costs associated with fuel and repair. School bus fleet operators in PEI have demonstrated a 75% reduction in operations and maintenance costs of ESBs when compared to diesel buses.⁴

What are the main barriers?

- Acquiring an electric school bus remains **up to three times the cost of a diesel equivalent**, while also requiring significant investments in charging infrastructure and potential electrical upgrades;
- The **lack of charging infrastructure** in place;
- The **lack of information, resources and logistical support** for fleet managers on the operation and transition to ESBs;

¹ Ecology Action Centre. (2022). [BRIEFING NOTE: Electric School Bus Procurement](#).

² Health Canada. (2021). [Health Impacts of Air Pollution in Canada - Estimates of premature deaths and nonfatal outcomes](#).

³ MQO Research. (2019). [Perceptions on School Bus Transportation among Nova Scotians](#).

⁴ Saltwire. (2023). [P.E.I. electric school buses showing promise in reducing carbon emissions, fuel prices](#).

- The **lack of training for drivers and mechanics.**

Recommendations

In order to maximize the various benefits of electrifying school transportation and to help Nova Scotia meet its climate target, it is key that the province **commits to a 100% ESB fleet by 2035**, as recommended by Ecology Action Centre, and in alignment with its neighbours in Prince Edward Island. To achieve this, we recommend that the government:

1. Makes school buses part of its strategy for transportation electrification alongside transit buses, as well as identify and implement incentives, regulations, policies, and programs that are best suited to achieve its target for electric school bus adoption, taking inspiration from other jurisdictions, including Québec, BC and PEI;
2. Takes advantage of the federal funding for ESB purchase through the Zero Emission Transit Fund and the Canada Infrastructure Bank loan program, that could help reduce the purchase cost of ESBs by up to 50%;
3. Conducts outreach and education efforts on the available funding for electric school buses with the Halifax Regional Centre for Education and other key stakeholders in the province;
4. Provides financial support to assist fleet managers in operating and transitioning their bus fleets, particularly in planning their charging infrastructure needs;
5. Invests in the development of ongoing training programs for the workforce in medium- and heavy-duty electric transportation.

We are available to provide more detail on these recommendations and to contribute to discussions on these issues.

Contact

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About CESBA

Led by Équiterre in partnership with Green Communities Canada, the **Canadian Electric School Bus Alliance (CESBA)** is an initiative that brings together provincial and federal school transportation stakeholders – from school boards passing through environmental organizations to national health associations, to advocate for measurable policies that will accelerate the transition to a 100% zero-emission school bus fleet by 2040, in alignment with Canada's climate targets. [Website](#)

