

Electric School Buses

A sustainable transportation option



Many school jurisdictions in Canada are currently in the process of phasing out diesel-powered school buses in favour of electrified alternatives. Although electric school buses require a higher initial investment, they offer substantial long-term savings while prioritizing the welfare of our children and safeguarding the environment.

Initial costs and long-term savings

Although the initial price of an electric bus is two to three times higher than a diesel school bus, energy and maintenance costs are significantly reduced, making their [long-term costs comparable to a diesel bus](#).

Additionally, more financial incentives and grants available to encourage the adoption of cleaner, more sustainable transportation options.

The affordability and appeal of electric school buses are steadily increasing, thanks to battery advancements, competitive innovation, increased funding and manufacturing efficiencies. Industry experts predict that the lifetime cost of electric buses will soon be on par with diesel buses, possibly by the end of this decade.

The World Resources Institute reported that electric buses offer annual cost savings in fuel and maintenance, ranging from US\$4,000 to US\$11,000 per bus. According to U.S.-based environmental policy firm Energy Innovation: Policy and Technology, electric school buses cost only 14 cents US per mile to operate compared with 49 US cents per mile for diesel buses, highlighting the significant economic benefits of transitioning to electric fleets.





Comparing costs: Electric school bus vs diesel school bus

	Diesel School Bus	Electric School Bus
Purchase price of bus	\$130,000	\$310,000
Cost of charging infrastructure (installation and terminal)	-	\$13,200
Energy Consumption	0.33 L/km (fuel)	0.87 kWh/km (electricity)
Energy Costs	\$2.20/L (current average)	\$0.16/kWh
Total energy consumption (for 20,000 km)	\$14,520	\$2,784
Cost of maintenance	\$0.19/km	\$0.11/km
Total cost of maintenance (for 20,000 km)	\$3,800	\$2,200
Annual cost of operation (excluding purchase and infrastructure)	\$18,320	\$4,984
Annual cost of operation after 12 years	219,840	59,808

Federal funding and financing opportunities



Zero emissions transit fund

In 2021, the Canadian government introduced the Zero Emission Transit Fund. With an investment of \$2.75 billion over five years, this fund aims to support public transit and school bus operators to transition to zero-emission vehicles, including planning projects, purchasing vehicles and building infrastructure. The funding can cover half the cost for capital projects and 80 per cent for planning projects.

Investing in Canada: Green Infrastructure Stream

Electric school bus purchases are eligible for funding under the federal government's Investing in Canada Infrastructure Program – Green Infrastructure Stream. For provincial electric school bus projects, the stream will cover up to half of the costs. P.E.I. has received over \$14 million through the fund to buy 82 electric school buses.

Canada Infrastructure Bank

The Canada Infrastructure Bank's \$1.5 billion zero-emission bus initiative assists transit agencies and school bus operators to transition their fleets to modern, environmentally friendly vehicles. The CIB seeks to invest up to \$5 billion into public transit projects that are in the public interest and support Canadian sustainable economic growth.

Established in 1969, the Conservation Council of New Brunswick is the province's leading public advocate for environmental protection.

A member of the United Nations' Global 500 Roll of Honour, we work to find practical solutions to help families and citizens, educators, governments and businesses protect the air we breathe, the water we drink, the precious marine ecosystem and the land, including the forests, that support us.



Conservation Council of New Brunswick

180 St. John Street
Fredericton New Brunswick
Canada E3B 4A9

T. (506) 458-8747

E.info@conservationcouncil.ca

www.conservationcouncil.ca

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