

Collective Call for Action to Accelerate **School Bus Electrification** *to protect children's health and the environment*

In Canada, approximately 2.2 million children travel to and from school every day on over 50,000 school buses, making 792 million school bus trips each year.¹ The majority of school buses are still fueled by diesel. Diesel-powered school buses contribute to air pollution and climate impacts that are jeopardizing the health and future prospects of children in Canada.

Electric school buses are a viable solution that eliminates diesel bus emissions and exemplifies local action on climate change.

Children are at greater risk of the health effects associated with diesel exhaust

Compared to adults, children are more vulnerable to the health effects of air pollution, including diesel exhaust, because their bodies are growing, their lungs are developing and because they breathe in more air per kilogram of body weight.² While Canadian data are limited, research shows that children in Canada who experience poverty, racialization and other forms of marginalization are often at greater risk because of disproportionate exposure to traffic-related air pollution (TRAP).^{3,4,5}

Pollution, climate change, and noise from diesel engines are linked to multiple physical and mental health effects

Exposure to diesel exhaust can cause lung cancer and adverse respiratory and cardiovascular health outcomes including reduced lung function, increased risk of heart disease, chronic obstructive pulmonary disease (COPD), and increased risk of asthma development in children.⁶ TRAP, which includes diesel exhaust, can cause childhood leukemia, development and worsening of asthma symptoms in children, reduced lung function, and lung cancer in adults.^{5,7,8} It has also been linked to poor mental health in children and adolescents, including anxiety and depression.⁹ Anxiety and concern regarding

climate change is increasingly prevalent. Young people feel worried about climate change and these feelings negatively affect their daily lives.¹⁰ In addition, diesel buses and other vehicles powered by fossil fuel are significant sources of noise pollution, road traffic being the main source of noise within urban centres.¹¹ Children's physical health and mental well-being can be adversely affected by noise generated by diesel engines and other sources.¹²

Emerging evidence suggests that diesel exhaust can impede brain function and learning

A growing body of scientific evidence is raising concern about the effects diesel exhaust exposure may have on brain function.¹³ This includes impacts on children's neurodevelopment, spatial learning and memory.⁶ Prenatal and early childhood exposures to TRAP may contribute to neurodevelopmental disorders, such as autism spectrum disorder.¹⁴ Children can also experience barriers to learning as an indirect impact of diesel exhaust. Asthma is the leading cause of school absenteeism¹⁵ and diesel emissions contribute to thousands of asthma symptom days and child acute bronchitis episodes across Canada every year.⁶

Switching from diesel to electric school buses is a hopeful and tangible example of local climate action

Diesel-powered school buses emit harmful pollutants, including greenhouse gases – the root cause of climate change.¹⁶ Children are disproportionately at risk of climate-related health impacts. They are affected both directly and indirectly by climate change, with physical and mental health effects stemming from increasing air pollution, extreme heat and weather events, climate-related disasters, and climate anxiety.¹⁷ Making the shift to electric-powered school buses is a visible and demonstrable step in reducing pollution and addressing the climate emergency.¹⁸ All children will benefit from cleaner air, healthier communities and a more sustainable future.

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It's Time To Shift...

There is a growing momentum among government and non-government organizations, parents, youth, school boards, educators and communities to accelerate the shift from diesel to electric school buses. Investments and collaborative efforts are resulting in children in some communities benefitting from electric school buses, but

progress is uneven. Faced with the existential threat posed by climate change and mounting scientific evidence of the harm to children caused by traffic-related air pollution, including diesel exhaust, more comprehensive and urgent action is needed to bring electric school bus transportation to all communities across Canada.

The Canadian Partnership for Children's Health and Environment (CPCHE) with our partners, affiliates and collaborators, calls on all levels of government to take immediate and decisive action to:

- 1 Accelerate the shift to all electric school bus fleets across Canada, through policy and funding measures that support electric bus procurement, operation and infrastructure.
- 2 Prioritize electric school bus adoption in communities facing disproportionate exposure to TRAP, via targeted and streamlined funding.
- 3 Promote and celebrate the electric school bus as a way for children, families and communities to learn about and participate in climate action through the transition to zero-emission transportation in Canada.

All children deserve to learn, play and grow in environments that promote their health and well-being, now and into the future.



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Strong leadership, supported by the actions of multiple sectors, is essential to ensure that every child in Canada is protected from exposures to harmful diesel exhaust that jeopardizes health and exacerbates social inequities.

As we call upon our governments to act, we also urge parents, youth, school boards, educators, community organizations and other stakeholders to learn more about the issues and opportunities to take action at:

<https://healthyenvironmentforkids.ca/held/>

Signatories

In solidarity and with determination for the health and well-being of our nation's children and future generations, this Call for Action is advanced collectively by:

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| <p>Canadian Partnership for Children's Health and Environment
Pollution Probe
Green Teacher
Ontario Public Health Association
Canadian Electric School Bus Alliance
Canadian Association of Physician for the Environment
unicef Canada
Learning Disabilities Association of Canada
Canadian Environmental Law Association
Canadian Public Health Association</p> | <p>Raffi Foundation for Child Honouring
Équiterre
Green Communities Canada
Canadian Association of Nurses for the Environment
Canadian Lung Association
Climate Emergency Unit
For Our Kids
EcoSchools Canada
Green Learning
Canadian Child Care Federation
Prenatal Environmental Health Education Collaboration</p> | <p>Foundation for Resilient Health
Prevent Cancer Now
Women's Healthy Environments Network
Friends of the Earth
Little Things Matter
David Suzuki Foundation
Environmental Defence
New Brunswick Lung Association
Conservation Council of New Brunswick
Ecology Action Centre
Ecology Ottawa
Thunder Bay Public Health Unit</p> |
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