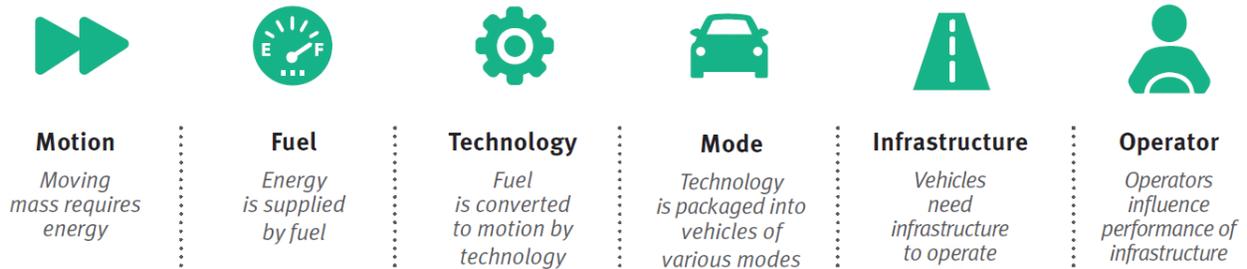


Decarbonizing Transportation in Canada: Building a Foundation for Success

Backgrounder

The report *Decarbonizing Transportation in Canada: Building a Foundation for Success* is the culmination of an in-depth study that supports the Government of Canada and Provincial and Territorial Governments in their efforts to implement the Pan-Canadian Framework on Clean Growth and Climate Change and associated efforts to reduce transportation emissions and energy demand. This initiative was made possible through an ongoing partnership between Pollution Probe and Toyota Canada.

The report articulates the key underlying factors that influence energy demand in Canada’s transportation sector, and highlights how these factors interact at a system-wide level (see below). A change within any one of these elements will contribute to a degree of overall system change in transportation energy use and in GHG emissions.



The report proposes a framework approach for developing comprehensive strategies to reduce greenhouse gas (GHG) emissions from transportation energy use in Canada. The proposed framework contains a number of policy options which are not exhaustive, but illustrate how the framework can be used as a tool of strategy development. The intended outcome is a set of policies and measures that can be further explored to help advance the de-carbonization of transportation in jurisdictions across Canada. The report findings demonstrate that there are many areas in which Canada can maintain or establish global leadership positions in low-carbon transportation options, leading to clean economic growth and a cleaner environment. Our key policy options include:

- Canada should develop a comprehensive transportation decarbonization strategy. Such a strategy should include options to address emissions from passenger cars and trucks, as well as off-road vehicles, marine, rail and aviation. These options should involve investigating alternative fuels such as electrification, natural gas, hydrogen and biofuels.



- Pollution Probe encourages the Government of Canada to continue to maintain and increase the stringency of transportation emissions standards. Automakers and truck manufacturers have made tremendous progress in this area in recent years, and continued progress should be enabled by regulation.
- The federal government should support the installation of more public charging/refuelling stations to encourage consumer adoption of low emission vehicles.
- There are many question marks around the environmental impacts of various biofuels. The Government of Canada needs a comprehensive research program to identify which fuels have clear environmental benefits, so Canada can become a global leader in sustainable biofuel production and use.
- Pollution Probe encourages the Government of Canada to work with provinces to develop national size and weight standards for freight trucks to facilitate improvements in freight efficiency.
- Freight trucks are the fastest growing vehicle segment in terms of GHG emissions. The Government of Canada should support R&D efforts for heavy-duty zero-emission applications including trucks and buses.
- The Government of Canada should work with each province to identify and deliver infrastructure investments that have the potential to significantly change the way Canadians travel and ship goods. This could mean more bike lanes in one region, additional rail lines in another, or extended public transit service hours.
- The federal government should consider mandating the use of speed limiters in all on-road freight trucks in Canada. This measure would reduce fuel consumption and GHG emissions, and would make our roads safer.
- Governments should develop programs incentivizing the retirement of older, heavily polluting vehicles.
- Working with industry, governments should assess the technical potential for renewable diesel locomotive engine systems.
- In order to displace one of the dirtiest fossil fuels still in use – heavy fuel oil – governments should explore lower carbon alternative fuels and technologies for marine applications, such as natural gas and hybridization.

Download the full report at <http://www.pollutionprobe.org/publications/decarbonizing-transportation-in-canada>