

Following is a review of a selection of activities in Canada that improve fleet performance or encourage the development and use of alternative fuels or intelligent transportation systems.

Promoting Rail and Road Efficiency

In the spring of 2000, Canada's federal minister of transportation announced a new five-year funding package to revitalize VIA Rail Canada. The investment is targeted for spending on system fleet renewal, modernized signaling on VIA-owned track, strategic infrastructure improvements, station refurbishment, and environmental waste-management improvements. Providing VIA with important new capital funds will ensure that VIA can operate safely and efficiently in the years to come, giving Canadians more frequent service, more modern VIA trains, and a more reliable system. This will provide a stable, safe, and environmentally friendly transportation option to Canadians and reduce congestion and greenhouse gas emissions. By 2004, it is expected that capacity will be increased by 19 percent and the number of passengers by 25 percent.

The federal Auto\$mart Program provides Canadian motorists with helpful tips on buying, driving, and maintaining their vehicles to reduce fuel consumption and greenhouse gas emissions. The program promotes energy-efficient practices through publications, events, and joint projects, as well as a kit for student drivers available to driving instructors across Canada.

Canada's federal department of the environment initiated a vehicle emissions inspection program in 1986. Since then, it has organized voluntary vehicle emissions clinics in conjunction with various regional organizations in both the public and private sectors. In 1999, emissions clinics were conducted in sixteen different locations throughout Canada. A total of 3 298 vehicles were tested for hydrocarbon and carbon monoxide emissions, providing a substantial base for comparison with future emissions data.

Many of the provinces operate clean driving programs, such as British Columbia's AirCare and Ontario's Drive Clean. Under Ontario's Drive Clean program, emissions testing and repair have become mandatory requirements for vehicle registration and transfer of ownership. In its first year, the program achieved fuel savings equal to more than 120 000 fill-ups for a midsize car, resulting in an estimated 6.7 percent reduction in the emission of smog-causing pollutants.

Dynamometer

The Ottawa–Carleton Regional Transit Commission (OC Transpo) now has an innovative Multi-Dynamometer Simulator built by Environment Canada. Buses are driven onto the dynamometer at OC Transpo's maintenance facility and a series of tests are performed to quickly analyze the performance of the engine, power train, brake systems, and exhaust emissions. Once the dynamometer's computer performs its analysis, mechanics fine-tune the bus based on the data provided. The result is safer and cleaner buses.

It is expected that carbon dioxide and other pollutants will be reduced by five tonnes per year for each of the eight hundred buses in the fleet, and fuel consumption will decrease 3 to 5 percent a year. This saving alone should allow the equipment to pay for itself within two years. In addition, electrical energy produced when the dynamometer simulates road speeds is used throughout the maintenance facility.

Learn more at <http://www.ec.gc.ca/pp/en/storyOutput.cfm?storyID=51>