

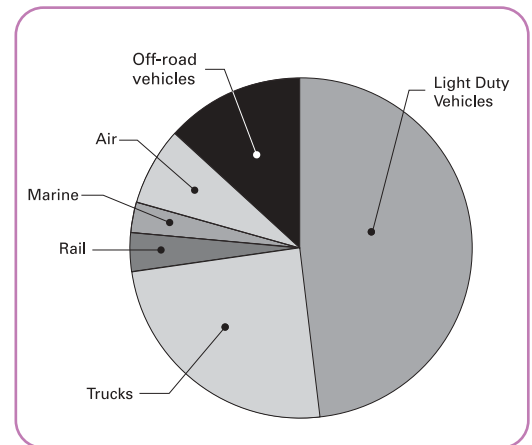
# Transportation in the Yukon

*Almost 50% of the greenhouse gases that Yukoners produce are directly related to transportation.*

## Transportation and greenhouse gases

The transportation sector is the largest generator of the Yukon's carbon dioxide (greenhouse gas) emissions. Almost 50% of the greenhouse gases that Yukoners produce are directly related to transportation. This differs from the rest of Canada, where transportation accounts for roughly 30% of the total greenhouse gas emissions.

Source: Pollution Data Branch, Air Pollution Prevention Directorate, Environment Canada, *Trends in Canada's Greenhouse Gas Emissions*



*Sources of transportation emissions in Canada*

Graph Source: Government of Canada *Climate Change Plan for Canada, 2002*

## The costs of transportation

According to the Canadian Automobile Association, the average Canadian spends about \$10,000 per year maintaining and operating a new compact car with a four-cylinder engine. Costs include gas, oil, tires, insurance, registration, depreciation, and financing, among other costs. That works out to 41.5 cents per kilometre for a person who drives 24,000 kilometres per year, or \$415 per month based on a 50-kilometre round-trip to work each day. As well, the average car produces three times its weight in carbon dioxide every year.

## Individual actions that save money and reduce greenhouse gases

*If every Canadian motorist avoided idling his or her vehicle for just five minutes a day, all year, more than 1.6 million tonnes of carbon dioxide, along with other toxic substances, would not enter the air.*

We do not necessarily have to hang up our car keys. In the Yukon, we need vehicles to cover the distances between and within our communities—but we also have choices. We can reduce our reliance on vehicles by using public transportation, car pooling, bicycling, or walking. When we do drive, we can choose fuel-efficient cars and use driving methods that improve fuel economy. In addition to reducing our greenhouse gas emissions, we will be saving money.

A typical late-model sport utility vehicle driven 20,000 km a year produces about

six tonnes of carbon dioxide, compared to four tonnes for a recent mid-sized sedan, and just two tonnes for a gasoline-electric hybrid vehicle.

The table on the back of this sheet shows how a few energy efficient actions can result in substantial money savings and carbon dioxide emission reductions.

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Yukon  
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# Energy-efficiency savings with your vehicle

Action	Explanation	Approximate money saved per year <sup>1</sup>	CO <sub>2</sub> reduction per year (tonnes) <sup>2</sup>
Next time, buy a more fuel-efficient car.	Fuel-efficient cars can consume 6 litres of gasoline per 100 kilometres (47 miles per gallon), rather than the average 8.7 litres per 100 kilometres (32 miles per gallon).	\$900	2.25
Take one less automobile trip per year.	Telecommute, walk, bicycle, take the bus or share a ride.	\$130	0.33
Properly inflate your car's tires.	Fuel consumption increases by 1% for every 2 psi of underinflation.	\$67	0.17
Turn your car off instead of idling it.	Ten seconds of idling uses more fuel than restarting the engine.	\$88	0.22
Remove your roof rack when it's not being used.	A loaded roof rack can increase fuel consumption by as much as 5% in highway driving.	\$57	0.14
Have your car regularly tuned.	A poorly-tuned car can increase fuel consumption by 50% or more.	\$440	1.10
Avoid short trips in cold weather.	Gasoline engines can use up to 50% more fuel in cold weather, and engine wear increase significantly when the engine is cold.	\$9	0.02
Drive the speed limit and avoid sudden starts and stops.	Every 10 kilometres per hour reduction of speed saves 10% on fuel costs.	\$220	0.55

1. Based on an average cost of gasoline of \$0.88 per litre
2. Based on 2.2 kg CO<sub>2</sub> emitted per litre of fuel burned

**Table Sources:** Canadian Energy Pipeline Association and the Canadian Gas Association, *Climate Change Chronicles Volume IV*; Government of Canada, *Global Climate Change, Climate Change and Canadians: Taking Action*; Yukon Government

## Community action

This fact sheet has focused on individual actions that people can take to travel more efficiently. Many more dollars and tonnes of air pollutants can be saved by community-based transportation efficiency. Municipalities can include greenhouse gas reducing transportation strategies in their municipal plans.

Yukon communities can develop unique, northern designs that reduce the need for vehicle use within their boundaries. For more information on community-based actions, refer to the Federation of Canadian Municipalities Partners for Climate Protection Program.

*“Saving fuel... avoids global warming, acid rain, and other pollution, not at a cost but at a profit.”*

Lovins and Lovins, *The Negawatt Revolution: Abating Global Warming for Fun and Profit*

## Further information

Office of Energy Efficiency: Autosmart  
<http://oee.nrcan.gc.ca/autosmart/home.cfm?PrintView=N&Text=N>

Natural Resources Canada: Idle Free Zone  
<http://oee.nrcan.gc.ca/idling/hom>

Canadian Automobile Association: Climate Change  
<http://www.caa.ca/e/news-issues/climate-change/index.shtml>