

CLIMATE CHANGE

• A Primer • The Yukon • Home Energy Use • Transportation • Yukon Research •



TRANSPORTATION IN THE YUKON

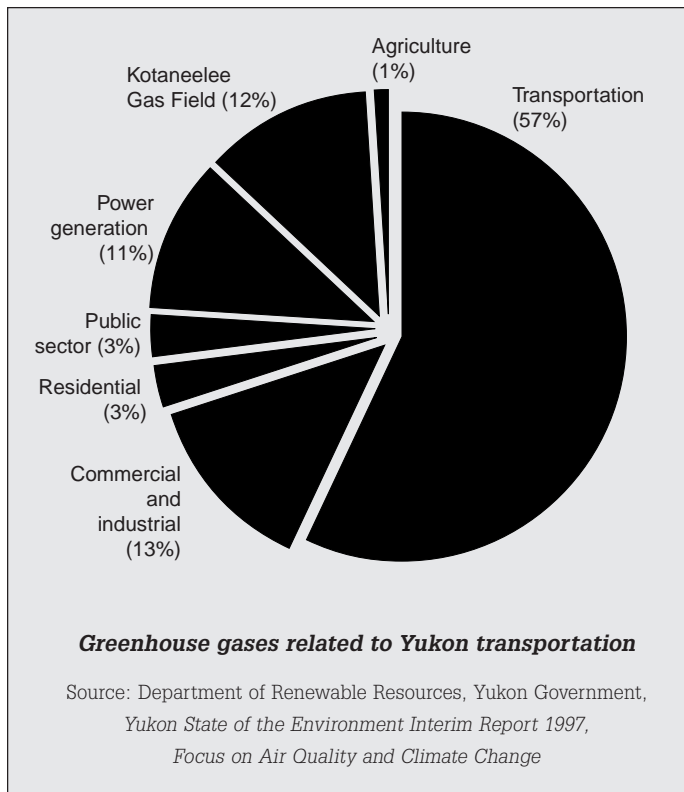
Transportation and greenhouse gases

The transportation sector is the largest source of the Yukon's carbon dioxide emissions. The pie chart below shows that over 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*

The costs of transportation

According to the Canadian Automobile Association, the average Canadian spends about \$7,000 per year maintaining and operating a two-year-old car, including gas, oil, tires, insurance, registration, depreciation, and financing, among other costs. That works out to about 30¢ per kilometre for a person who drives 24,000 kilometres per year, or \$300 per month based on a 50-kilometre round trip to work each day. Approximately three tonnes of CO₂ are produced by driving 24,000 kilometres.



Individual actions that save money and reduce greenhouse gases

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 do have choices. We can reduce our reliance on vehicles by using public transportation, carpooling, bicycling or walking. When we do drive, we can choose fuel-efficient cars and use driving methods that improve fuel efficiency. Not only will we be reducing our greenhouse gas emissions, but we will be saving money.

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

ENERGY EFFICIENCY SAVINGS WITH YOUR VEHICLE

Action	Explanation	Approximate money saved per year ¹	CO ₂ reduction per year (tonnes) ²
Next time, buy a more fuel-efficient car	Fuel efficient cars can consume 6 litres per 100 kilometres (47 miles per gallon), rather than the average 8.7 litres per 100 kilometres (32 miles per gallon).	\$675	2.25
Take one less automobile trip each week	Telecommute, walk, bicycle, take the bus or share a ride.	\$98	0.33
Properly inflate your car's tires	Fuel consumption increases by 1% for every 2 psi of underinflation.	\$50	0.17
Turn your car off instead of idling it	One minute of idling uses more fuel than restarting the engine.	\$66	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.	\$41	0.14
Have your car regularly tuned	A poorly tuned car can increase fuel consumption by 50% or more.	\$330	1.10
Avoid short trips in cold weather	Gasoline engines can use up to 50% more fuel in cold weather and engine wear increases significantly when the engine is cold.	\$7	0.02
Drive the speed limit and avoid sudden starts and stops	Every 10 kilometres per hour reduction in speed saves 10% on fuel costs.	\$165	0.55

Notes

1. Based on an average cost of gasoline in Whitehorse of \$0.660 per litre.
2. Based on 2.2 kg CO₂ emitted per litre of fuel burned.

Sources

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

“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*

Community actions

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.

They can develop unique, Yukon designs for reducing the need for vehicle use within their boundaries. For more information on community-based actions, refer to Environment Canada's Eco Action 2000 program, "Canada's Transportation Challenge."