Idle-Free Facts

Average Canadian Statistics[1]

By reducing their idling by five minutes a day the average Canadian has a:

- Annual Fuel Savings: 41.98 L/yr
- Annual GHG Emission Reduction: 0.10 tonnes/yr (or 100 kg/yr)
- Annual Reduction in Fuel Cost[2]: $34.14 per year

This is equal to not driving their vehicle for over 11 days.

Canada-wide Statistics

On an *annual* basis if every Canadian reduced their idling by five minutes a day it would have a:

- Annual Fuel Savings: over 680 million litres per year[3]
- Annual GHG Emission Reduction: over 1.6 Mt/yr (or 1.6 million tonnes/yr)[4]
- Annual Reduction in Fuel Costs: over $550 million dollars per year[5]

This is equal to taking over 490,000 cars off the road.[6]

On a *daily* basis if every Canadian reduced their idling by five minutes a day it would have a:

- Daily Fuel Savings: 1.8 million L/day
- Daily GHG Emission Reduction: 4,492 tonnes/day
- Daily Reduction in Fuel Costs: $1.5 million per day

[1] This is based on the average daily idle time for Canadians (5 minutes/day).
[2] This is based on the average fuel price from MJ Erving in 2004 ($0.81/L).
[3] Actual fuel savings estimated to be 683,200,150 L/yr.
[4] Actual GHG emission reduction estimated to be 1,639,680 tonnes/yr.
[5] Actual fuel cost savings estimated to be $555,555,589 per year.
[6] Actual cars off the road are 494,573.

Provincial Statistics

On a provincial or regional basis the reduction of 5 minutes of idling by residents would have a:

Province/Region	Annual Reduction in[7]			
	Fuel Use (L/yr)	GHG Emission (tonnes/yr)	Fuel Costs ($/yr)	Vehicles off Road
Atlantic	53,819,749	$43,764,426	129,167	38,960
Quebec	170,863,009	$138,940,104	410,071	123,689
Ontario	254,825,176	$207,215,339	611,580	184,470
Manitoba	25,398,555	$20,653,259	60,957	18,386
Saskatchewan	25,734,404	$20,926,360	61,763	18,629
Alberta	69,646,617	$56,634,308	167,152	50,418
BC and Territories	82,912,640	$67,421,795	198,990	60,021

Idle-Free Calculations

The following calculations were used to estimate all information on the impact of reducing idling by 5 minutes:

Per Person (Vehicle) Calculation:[8]

Idle Fuel Consumption Rate = 0.350 x (engine size) + 0.330
= 0.350 x (3L[9]) + 0.330
= 1.380 L/hr

Fuel Loss from Idling =(Idle Fuel Consumption Rate) x (Idling Hours per Day) x (Days per Year)
= (1.380 L/hr) x (0.083 hr/day[10]) x (365 days/yr)
= 41.98 L/yr

CO_2 Emission from Idling = (Fuel Loss from Idling) x (CO_2 Emission Factor)
= (41.98 L/yr) x (2.4 kg/yr CO_2E)
= 100.75 kg/yr
= 0.10 tonnes/yr[11]

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[7] Source of information is number and usage of vehicles by vehicle type for LDV published by DPAD for 2003.
[8] These calculations are for light-duty gasoline vehicles. Less than 5% of the LDV market is diesel.
[9] This is the average engine size of LDVs in Canada based on registration and purchasing data.
[10] The average idle time for Canadians is 5 minutes/day based on national surveys.
[11] 1 tonne = 1,000 kg

Community/Provincial/National Level Calculations:

Total CO_2 Emission from Idling	= (CO_2 Emission per Vehicle) x (Number of Vehicles in Community) = (100.75 kg/yr) x (16.2 million LDV in Canada) = 1,639,680,000 kg/yr = 1,639,680 tonnes/yr[12]

To conduct your own estimates of idling impacts please see Appendix A (associated excel spreadsheet).

[12] 1 tonne = 1,000 kg