

Table 3: Transportation options – Energy consumption and CO2 emissions

http://www.hydroquebec.com/sustainable-development/documentation/pdf/transport_en_2006.pdf

Mode	Number of passengers, or load factor	Consumption (kJ per passenger-km)	Energy source	Direct** CO2 emissions (g per passenger-km)
Intercity passenger transportation				
SUV 12 litres/100 km	one	4,200	gasoline	286
Mid-size car: 8 litres/100 km	one	2,800	gasoline	190
Compact car: 6 litres/100 km	one	2,100	gasoline	143
	three	800		54
Diesel bus	average*	567	diesel	40
Train: Diesel (LRC)	50%	800	diesel	56
	Electric	300	diesel	0
Airplane: Flight of more than 1,000 km	average	1,500-2,500	kerosene	102-170
		3,000-5,000	kerosene	204-340
Snowmobile on trail	one	4,000-9,200	gasoline	272-626
Urban passenger transportation				
SUV: 17 litres/100 km	one	5,950	gasoline	405
Mid-size car: 12 litres/100 km	one	4,200	gasoline	286
Compact car: 9 litres/100 km	one	3,150	gasoline	214
	three	1,100		75
Diesel bus	50%	800	diesel	56
	100%	450	diesel	32
Electric tram	100%	300	hydro	0
School bus	average	432	gasoline	29
Subway (electric)	40%	280	hydro	0
	100%	130		
Pedestrian		150	cereals	wheat = 2
Cyclist		60	cereals	wheat = 1
Freight transportation				
Diesel truck: all heavy	average	1583	diesel	111
	average	600-1 000	diesel	42-71
Train	100%	280-400	diesel	20-28
Ship	average	less than 200	oil	less than 14
Pipeline	average	170		
Cargo plane	average	7,000-15,000	kerosene	476-1,020

* Average = load factor based from actual data

** Estimates of CO2 emissions do not include emissions related to fuel refining, vehicle manufacture or infrastructure construction