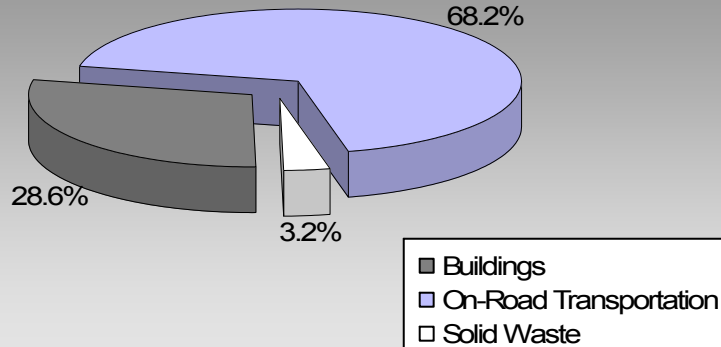


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

Where are the majority of our community's emissions coming from?

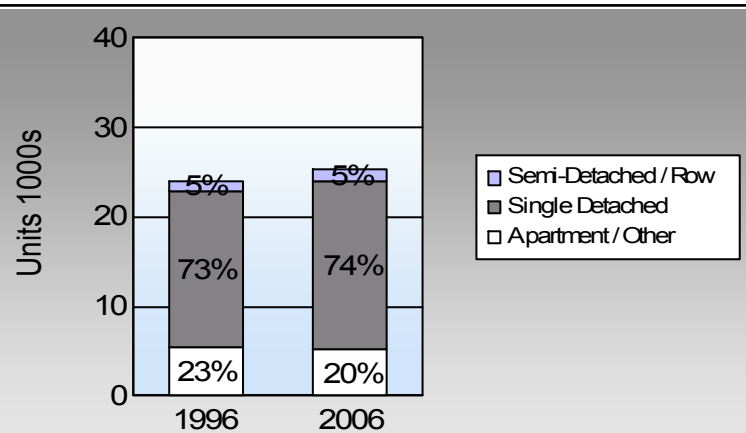
**Cariboo Regional District
2007 GHG Emissions Sources**



**Total for BC
Communities**








Are we living more compactly? Housing Type



In BC, single family detached housing made up 49% of housing in 2006.

Are we driving less? Commute To Work

	1996	2006
	81.3%	82.4%
	9.2%	9.5%
	0.6%	0.7%
	6.8%	5.0%
	0.8%	1.0%

In BC, 10% of people took transit, 7% walked, and 2% cycled to work in 2006.

Residential Density

This data is only available for municipalities.
BC municipal average: 7.4 people per net ha

Are we living closer to where we work? Commute Distance

This data is currently unavailable in the CEEI 2007 Reports

In BC, 41% of people lived within 5km of their work in 2006.

Sectors

On Road Transportation		<u>Vehicles</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Average-VKT(km)</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	9,581	14,576,370	Litres	14,412	510,173	34,837
	Diesel Fuel	338	374,542	Litres	14,883	14,345	1,023
	Other Fuel	< 10	2,606	Litres	10,212	100	4
Small Passenger Cars						524,618	35,864
Large Passenger Cars	Gasoline	5,669	13,635,538	Litres	18,437	477,244	32,456
	Diesel Fuel	144	383,481	Litres	19,024	14,687	1,047
	Other Fuel	17	45,234	Litres	15,506	1,732	69
Large Passenger Cars						493,663	33,572
Light Trucks, Vans, SUVs	Gasoline	21,280	68,286,634	Litres	19,761	2,390,032	163,738
	Diesel Fuel	4,325	11,119,143	Litres	20,081	425,863	30,377
	Other Fuel	257	716,863	Litres	13,327	27,456	1,098
Light Trucks, Vans, SUVs						2,843,351	195,213
Commercial Vehicles	Gasoline	212	952,795	Litres	13,430	33,348	2,225
	Diesel Fuel	683	3,279,918	Litres	20,847	125,621	8,826
	Other Fuel	30	121,351	Litres	12,228	4,648	186
Commercial Vehicles						163,617	11,237
Tractor Trailer Trucks	Gasoline	29	162,844	Litres	15,419	5,700	382
	Diesel Fuel	1,213	37,422,446	Litres	76,212	1,433,280	100,702
	Other Fuel	< 10	18,159	Litres	7,199	696	28
Tractor Trailer Trucks						1,439,676	101,112
Motorhomes	Gasoline	341	517,909	Litres	2,720	18,127	1,209
	Diesel Fuel	55	59,565	Litres	3,907	2,281	160
	Other Fuel	13	17,859	Litres	2,189	684	27
Motorhomes						21,092	1,396
Motorcycles, Mopeds	Gasoline	331	218,528	Litres	4,959	7,648	510
Motorcycles, Mopeds						7,648	510
Bus	Gasoline	29	372,992	Litres	24,366	13,055	877
	Diesel Fuel	129	1,324,660	Litres	21,600	50,734	3,565
	Other Fuel	< 10	27,220	Litres	15,619	1,043	42
Bus						64,832	4,484

Cariboo Regional District

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	3,455,327	236,234
	Diesel:	2,066,811	145,700
	Other Fuel:	36,359	1,454
On Road Transportation Totals	All Fuels:	5,558,497	383,388

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)	
Residential	Electricity	32,053	349,304,375	Kilowatt Hours	1,257,495	8,616	
	Natural Gas	16,974	1,410,729	GigaJoules	1,410,729	71,948	
	Heating Oil		145,033	GigaJoules	145,033	10,223	
	Propane		394,237	GigaJoules	394,237	24,052	
	Wood		848,942	GigaJoules	848,942	314	
Residential					4,056,436	115,153	
Commercial/Small-Medium Industrial	Electricity	5,268	258,332,385	Kilowatt Hours	929,996	6,372	
	Natural Gas	1,995	771,362	GigaJoules	771,362	39,339	
Commercial/Small-Medium Industrial					1,701,358	45,711	
					Electricity:	2,187,491	14,988
					Natural Gas:	2,182,091	111,287
					Propane:	394,237	24,052
					Wood:	848,942	314
					Heating Oil:	145,033	10,223
Buildings Totals	Buildings:				5,757,794	160,864	

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	34,556	18,221

Cariboo Regional District

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO ₂ e (t)
Diesel Fuel	53,963,755	L	2,066,811	145,700
Electricity	607,636,760	kWh	2,187,491	14,988
Gasoline	98,723,610	L	3,455,327	236,234
Heating Oil	145,033	GJ	145,033	10,223
Natural Gas	2,182,091	GJ	2,182,091	111,287
Other Fuel	949,292	L	36,359	1,454
Propane	394,237	GJ	394,237	24,052
Solid Waste	34,556	T	0	18,221
Wood	848,942	GJ	848,942	314
Total of Transportation / Buildings / Solid Waste:			11,316,291 GJ	562,473 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (t)
Large Industrial	Electricity	20	1,739,100,716	Kilowatt Hours	6,260,758	42,898
	Natural Gas	24	4,712,691	GigaJoules	4,712,691	240,348
Large Industrial					10,973,449	283,246

Agriculture	Number of Animals	Methane	CO ₂ e (t)
Enteric Fermentation	142,718	8,655	181,755

Land-Use Change	Area (ha)	CO ₂ e (t)
Deforestation from Settlement	165	79,410
Deforestation from Agriculture	34	15,734
Deforestation:	199	95,144

Supporting Indicators

Below you will find supporting indicators for which data is provided. These are the first five supporting indicators for which data is provided as a part of the updated 2007 CEEI. Columns with all zeros indicate data unavailable in these CEEI reports. Thirteen additional supporting indicators are under consideration for future reports (see next page). Local government feedback is requested on all supporting indicators. Please take the time to complete the short CEEI Survey at <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html> or contact us directly at CEEIRPT@gov.bc.ca

Housing Type - Private dwellings by structural type

Housing type is important for reducing building-related GHG emissions and energy consumption. A trend toward fewer single family dwellings indicates an increase in residential density, which is known to reduce transportation-related GHG emissions.

	1996		2001		2006	
	Units	%	Units	%	Units	%
Single Detached House	17,490	42	18,905	75	18,745	74
Semi-Detached House	455	1	545	2	645	3
Row House	635	2	720	3	705	3
Apartment, Duplex	490	1	625	2	675	3
Apartment, 5 storeys or higher	0	0	0	0	5	0
Apartment, under 5 storeys	1,875	5	1,760	7	1,800	7
Other Single Attached House	115	0	55	0	145	1
Movable Dwelling	2,970	7	2,695	11	2,490	10

Commute to Work - Employed labour force - by mode of commute

An increase in the number of people choosing to walk, cycle and use transit reduces GHG emissions. More compact, complete, connected communities should see an increase in the use of these transportation modes.

	1996		2001		2006	
	People	%	People	%	People	%
Car, Truck, Van as Driver	21,690	81	22,365	84	21,865	82
Car, Truck, Van as Passenger	2,450	9	1,810	7	2,515	9
Public Transit	150	1	140	1	185	1
Walked	1,815	7	1,825	7	1,315	5
Bicycle	215	1	245	1	275	1
Motorcycle	20	0	20	0	35	0
Taxicab	20	0	10	0	25	0
Other Method	320	1	265	1	335	1

Residential Density

* Net of Crown land, parks, Indian Reserves, water features, airports, ALR, waste disposal sites.

Increasing residential densities is known to reduce vehicle use resulting in fewer transportation-related GHG emissions. There are many additional benefits from more compact development.

2009

This data is currently unavailable in the CEEI 2007 Reports.

Commute Distance

Shorter commute distances generally reduce GHG emissions by increasing the likelihood of people walking, cycling or using transit. Commute distance is also indicative of the 'completeness' of a community from an employment perspective.

2006
People %

This data is currently unavailable in the CEEI 2007 Reports.

Parks and Protected Greenspace

* Total is net of Indian Reserves

** The quantity of parkland may be underestimated

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Area (ha)	%
National Parks	0.0	0.0
Provincial Parks / Protected Areas	1,052,510.6	12.7
Local Parks	128.9	0.0
Agricultural Land Reserve	936,157.4	11.3
Other land use	6,277,949.3	75.9
Total Land Area	8,266,746.2	100.0

Supporting Indicators Under Consideration

The following supporting indicators are under consideration for inclusion in future CEEI reports. The 2007 CEEI reports provide these 'placeholder' indicators to give indication of data that may be provided in the future by the Province on an ongoing basis to assist in monitoring actions to reduce GHG emissions and energy consumption. Please submit feedback to CEEIRPT@gov.bc.ca (see survey on CEEI website).

On-Road Transportation (and Land Use)

Proximity to Transit	Persons, dwelling units (du) and employment within 400m of a quality transit stop/line
Proximity to Services	Persons and dwelling units (du) within 400m of services (e.g. grocery store, school, other retail etc.)
Transit Ridership	Annual per capita transit ridership

Buildings

Residential; Public Building Energy Intensity	Average energy use per person per square metre of floor space
Floor Space	Average residential dwelling unit size

Solid Waste (and Water)

Waste Diversion	Tonnes of waste diverted
Avoided Waste Emissions	Tonnes of CO ₂ e of avoided future emissions due to reduced waste since 2007
Water Use	Per capita residential water use

Land-Use Change

Impervious Surface Cover	% change in impervious surface cover
Tree Canopy Cover	% change in tree canopy cover

Community and Renewable Energy Supply

District Energy	# and energy output (e.g. buildings connected, energy consumed in GJ or kWh) of district energy systems by energy type (e.g. renewable or non-renewable)
On-Site Renewable Energy	# and energy output (in GJ or kWh) from households producing and/or consuming on-site renewable heat (e.g. biomass, solar thermal, geo-exchange) and/or electrical (e.g. solar photovoltaic, small wind, small scale hydro) energy
Energy Recovery From Waste	Energy (GJ or kWh) recovered from waste (e.g. from landfill gas, sewage treatment, industrial operations, farm)

This is your local government's Updated 2007 Community Energy and Emissions Inventory (CEEI) Report

What is a CEEI Report?

CEEI Reports are a result of a multi-agency effort to provide a province-wide solution to assist local governments in BC to track and report on community-wide energy consumption and greenhouse gas (GHG) emissions every two years. CEEI Reports are one of the many resources available through the Climate Action Toolkit (<http://www.toolkit.bc.ca>), a web-based service provided through the ongoing collaboration between UBCM and the Province.

Why does my local government need a CEEI Report?

A community energy and GHG emissions inventory can be a valuable tool that helps local governments plan and implement GHG and energy management strategies, while at the same time strengthening broader sustainability planning at the local level. CEEI reports fulfill local governments' Climate Action Charter commitment to measure and report their community's GHG emissions profile, establish a base year inventory for local governments to consider as they develop targets, policies, and actions related to BC's *Local Government Act* requirements, and fulfill Milestone One requirements for those local government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program.

A first in North America!

CEEI is a first in North America and a first step for BC communities. The 2007 CEEI Reports are based on best available province-wide data. The accuracy and detail of CEEI reports will continue to improve to meet increasing local and provincial government information needs. Improvements have been made from the original draft 2007 CEEI Reports posted in Spring 2009. These include estimates for residential heating oil, propane and wood use, breaking out small and medium from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items', and the first of a suite of 'supporting indicators'. Following the 2010 CEEI Reports, inventories will be generated every two years, and will continue to improve as government information needs, international protocols and new data sources emerge.

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For More Information:

- The full list of all BC local government Updated 2007 CEEI Reports, CEEI Data Summary Report, Technical Methods and Guidance Document, and additional information on the Secondary Indicators are available at: <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html>.
- For guidance on target setting and community actions, go to <http://www.toolkit.bc.ca> and <http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm>.

We Need Your Feedback:

- To continue to guide us on CEEI, particularly now with the new Indicators. Please take the time to complete the short CEEI Survey at <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html> or contact us directly at CEEIRPT@gov.bc.ca

Notice to the Reader: This CEEI Report uses information from a variety of sources to estimate GHG emissions. While the methodologies, assumptions and data used are intended to provide reasonable estimates of greenhouse gas emissions, the information presented in this report may not be appropriate for all purposes. The Province of BC and the data providers do not provide any warranty to the user or guarantee the accuracy or reliability of the data contained in this report. The user accepts responsibility for the ultimate use of such data. We need your help to make these reports better, where you do note inaccuracies, please contact us.