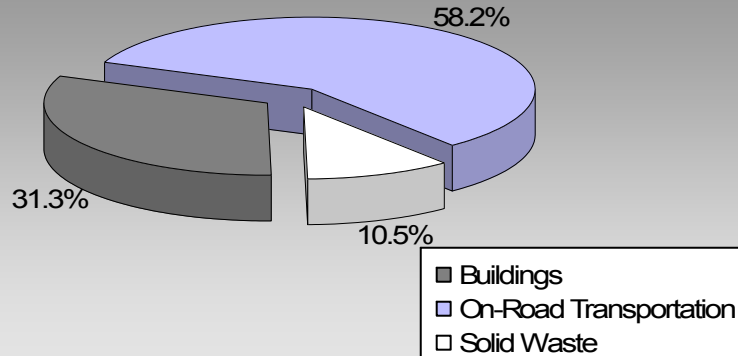


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

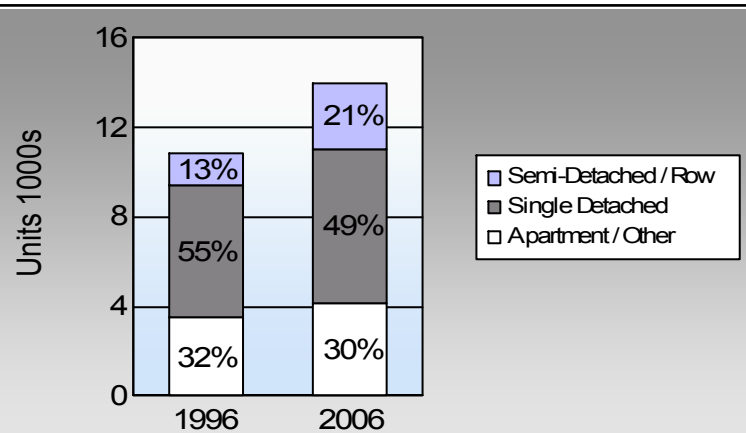
**Squamish-Lillooet Regional District
2007 GHG Emissions Sources**



**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
	69.2%	68.2%
	10.3%	10.9%
	4.5%	6.8%
	10.2%	9.0%
	3.0%	3.2%

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	6,549	9,701,359	Litres	14,055	339,548	23,124
	Diesel Fuel	370	407,984	Litres	14,900	15,626	1,114
Small Passenger Cars						355,174	24,238
Large Passenger Cars	Gasoline	2,950	6,845,436	Litres	17,917	239,590	16,277
	Diesel Fuel	97	226,440	Litres	17,546	8,673	618
	Other Fuel	< 10	25,754	Litres	13,735	986	39
Large Passenger Cars						249,249	16,934
Light Trucks, Vans, SUVs	Gasoline	11,564	35,907,420	Litres	20,293	1,256,760	85,898
	Diesel Fuel	1,055	2,821,961	Litres	20,216	108,081	7,709
	Other Fuel	70	192,142	Litres	13,301	7,359	294
Light Trucks, Vans, SUVs						1,372,200	93,901
Commercial Vehicles	Gasoline	93	411,837	Litres	15,539	14,414	965
	Diesel Fuel	317	1,509,127	Litres	21,894	57,800	4,061
	Other Fuel	< 10	38,050	Litres	11,575	1,457	58
Commercial Vehicles						73,671	5,084
Tractor Trailer Trucks	Gasoline	< 10	35,238	Litres	11,653	1,233	83
	Diesel Fuel	267	7,127,408	Litres	66,854	272,980	19,179
	Other Fuel	< 10	1,785	Litres		68	3
Tractor Trailer Trucks						274,281	19,265
Motorhomes	Gasoline	195	193,025	Litres	2,778	6,756	451
	Diesel Fuel	17	18,068	Litres	3,525	692	49
	Other Fuel	10	5,399	Litres	2,189	207	8
Motorhomes						7,655	508
Motorcycles, Mopeds	Gasoline	420	193,395	Litres	5,168	6,769	452
Motorcycles, Mopeds						6,769	452
Bus	Gasoline	48	484,428	Litres	24,124	16,955	1,138
	Diesel Fuel	82	1,401,262	Litres	32,519	53,668	3,771
	Other Fuel	< 10	32,186	Litres	15,902	1,233	49
Bus						71,856	4,958

Squamish-Lillooet Regional District

Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	1,882,025	128,388
	Diesel:	517,520	36,501
	Other Fuel:	11,310	451
	All Fuels:	2,410,855	165,340

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	22,627	371,776,227	Kilowatt Hours	1,338,393	9,171
	Natural Gas	2,961	189,537	GigaJoules	189,537	9,666
	Heating Oil		36,256	GigaJoules	36,256	2,556
	Propane		263,698	GigaJoules	263,698	16,088
	Wood		429,614	GigaJoules	429,614	159
Residential					2,257,498	37,640
Commercial/Small-Medium Industrial	Electricity	3,425	316,154,202	Kilowatt Hours	1,138,154	7,799
	Natural Gas	405	204,719	GigaJoules	204,719	10,441
	Propane	313	542,468	GigaJoules	542,468	33,096
Commercial/Small-Medium Industrial					1,885,341	51,336
Buildings Totals	Electricity:				2,476,547	16,970
	Natural Gas:				394,256	20,107
	Propane:				806,166	49,184
	Wood:				429,614	159
	Heating Oil:				36,256	2,556
Buildings:					4,142,839	88,976

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	37,975	29,744

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	13,512,250	L	517,520	36,501
Electricity	687,930,429	kWh	2,476,547	16,970
Gasoline	53,772,138	L	1,882,025	128,388
Heating Oil	36,256	GJ	36,256	2,556
Natural Gas	394,256	GJ	394,256	20,107
Other Fuel	295,316	L	11,310	451
Propane	806,166	GJ	806,166	49,184
Solid Waste	37,975	T	0	29,744
Wood	429,614	GJ	429,614	159
Total of Transportation / Buildings / Solid Waste:			6,553,694 GJ	284,060 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	2	withheld	Kilowatt Hours	-	-
Large Industrial					-	-

Agriculture		Number of Animals	Methane	CO2e (t)
	Enteric Fermentation	6,076	370	7,770

Land-Use Change		Area (ha)	CO2e (t)
	Deforestation from Agriculture	-	-
	Deforestation from Settlement	57	27,569
Deforestation:		57	27,569

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	5,945	35	6,860	55	6,910	49
Semi-Detached House	425	3	610	5	975	7
Row House	1,025	6	1,760	14	1,955	14
Apartment, Duplex	1,405	8	1,100	9	1,490	11
Apartment, 5 storeys or higher	15	0	55	0	20	0
Apartment, under 5 storeys	1,290	8	1,400	11	1,925	14
Other Single Attached House	105	1	85	1	75	1
Movable Dwelling	665	4	695	6	635	5

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	10,415	69	12,135	70	12,750	68
Car, Truck, Van as Passenger	1,550	10	1,770	10	2,045	11
Public Transit	670	4	1,085	6	1,280	7
Walked	1,535	10	1,520	9	1,685	9
Bicycle	450	3	415	2	595	3
Motorcycle	50	0	20	0	100	1
Taxicab	95	1	45	0	10	0
Other Method	285	2	255	1	235	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	284,633.6	17.3
Local Parks	425.8	0.0
Agricultural Land Reserve	25,341.3	1.5
Other land use	1,335,325.7	81.1
Total Land Area	1,645,726.4	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.