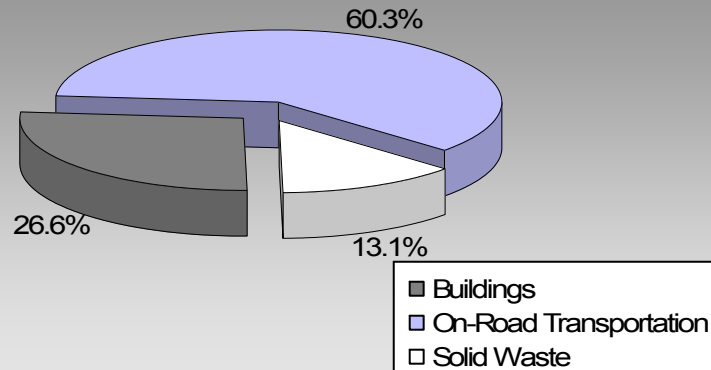


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

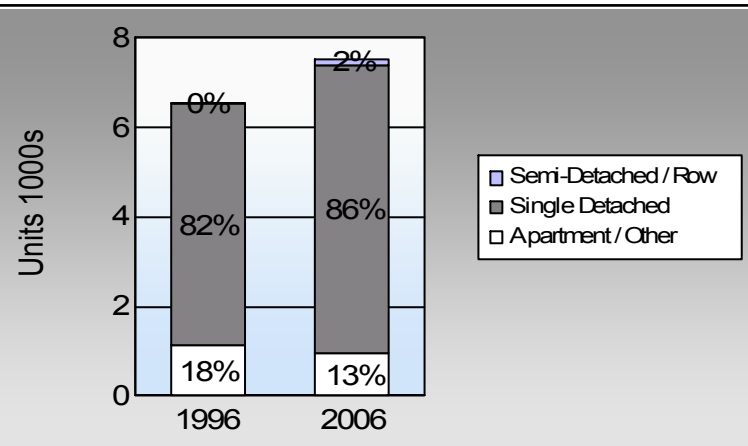
**Peace River Regional District Unincorporated Areas
2007 GHG Emissions Sources**



**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
	81.9%	83.6%
	9.9%	9.6%
	0.3%	0.5%
	5.7%	4.0%
	0.3%	0.3%

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	1,414	2,271,766	Litres	14,672	79,512	5,419
	Diesel Fuel	105	117,838	Litres	15,657	4,513	322
	Other Fuel	0	0	Litres	0	-	-
Small Passenger Cars						84,025	5,741
Large Passenger Cars	Gasoline	1,110	2,888,021	Litres	19,971	101,081	6,876
	Diesel Fuel	66	188,385	Litres	20,868	7,215	514
	Other Fuel	< 10	13,013	Litres	16,516	498	20
Large Passenger Cars						108,794	7,410
Light Trucks, Vans, SUVs	Gasoline	5,843	19,767,039	Litres	20,913	691,846	47,287
	Diesel Fuel	1,909	5,513,043	Litres	23,241	211,150	15,063
	Other Fuel	75	218,296	Litres	14,006	8,361	334
Light Trucks, Vans, SUVs						911,357	62,684
Commercial Vehicles	Gasoline	167	711,122	Litres	15,357	24,889	1,663
	Diesel Fuel	624	3,229,210	Litres	23,784	123,679	8,690
	Other Fuel	25	87,622	Litres	11,734	3,356	134
Commercial Vehicles						151,924	10,487
Tractor Trailer Trucks	Gasoline	22	75,917	Litres	10,426	2,657	177
	Diesel Fuel	886	24,752,390	Litres	78,723	948,017	66,607
	Other Fuel	< 10	5,356	Litres	8,853	205	8
Tractor Trailer Trucks						950,879	66,792
Motorhomes	Gasoline	77	142,095	Litres	2,958	4,973	332
	Diesel Fuel	25	36,291	Litres	5,315	1,390	98
	Other Fuel	< 10	6,507	Litres	2,189	249	10
Motorhomes						6,612	440
Motorcycles, Mopeds	Gasoline	68	49,405	Litres	5,494	1,729	115
Motorcycles, Mopeds						1,729	115
Bus	Gasoline	12	96,942	Litres	18,796	3,393	228
	Diesel Fuel	14	169,775	Litres	23,504	6,502	457
	Other Fuel	< 10	40,965	Litres	15,902	1,569	63
Bus						11,464	748

Peace River Regional District Unincorporated Areas Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	910,080	62,097
	Diesel:	1,302,466	91,751
	Other Fuel:	14,238	569
	All Fuels:	2,226,784	154,417

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	8,600	124,835,047	Kilowatt Hours	449,406	3,079
	Natural Gas	4,307	501,921	GigaJoules	501,921	25,598
	Heating Oil		36,583	GigaJoules	36,583	2,579
	Propane		99,175	GigaJoules	99,175	6,051
	Wood		271,948	GigaJoules	271,948	101
Residential					1,359,033	37,408
Commercial/Small-Medium Industrial	Electricity	1,757	132,839,670	Kilowatt Hours	478,222	3,277
	Natural Gas	661	535,617	GigaJoules	535,617	27,317
Commercial/Small-Medium Industrial					1,013,839	30,594
Buildings Totals	Electricity:				927,628	6,356
	Natural Gas:				1,037,538	52,915
	Propane:				99,175	6,051
	Wood:				271,948	101
	Heating Oil:				36,583	2,579
	Buildings:				2,372,872	68,002

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	54,805	33,535

Peace River Regional District Unincorporated Areas Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	34,006,932	L	1,302,466	91,751
Electricity	257,674,717	kWh	927,628	6,356
Gasoline	26,002,307	L	910,080	62,097
Heating Oil	36,583	GJ	36,583	2,579
Natural Gas	1,037,538	GJ	1,037,538	52,915
Other Fuel	371,759	L	14,238	569
Propane	99,175	GJ	99,175	6,051
Solid Waste	54,805	T	0	33,535
Wood	271,948	GJ	271,948	101
Total of Transportation / Buildings / Solid Waste:			4,599,656 GJ	255,954 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	6	withheld	Kilowatt Hours	-	-
	Natural Gas	32	withheld	GigaJoules	-	-
Large Industrial					-	-

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	5,370	26	5,630	80	6,450	86
Semi-Detached House	15	0	35	1	95	1
Row House	5	0	5	0	25	0
Apartment, Duplex	30	0	5	0	20	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	45	0	20	0	45	1
Other Single Attached House	5	0	30	0	5	0
Movable Dwelling	1,065	5	1,270	18	880	12

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	6,160	82	6,895	86	7,920	84
Car, Truck, Van as Passenger	745	10	680	8	910	10
Public Transit	20	0	0	0	45	0
Walked	430	6	360	4	375	4
Bicycle	25	0	5	0	30	0
Motorcycle	10	0	0	0	45	0
Taxicab	0	0	0	0	5	0
Other Method	140	2	120	1	145	2

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	1,113,673.1	9.5
Local Parks	70.2	0.0
Agricultural Land Reserve	1,249,948.6	10.7
Other land use	9,344,658.5	79.8
Total Land Area	11,708,350.3	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.