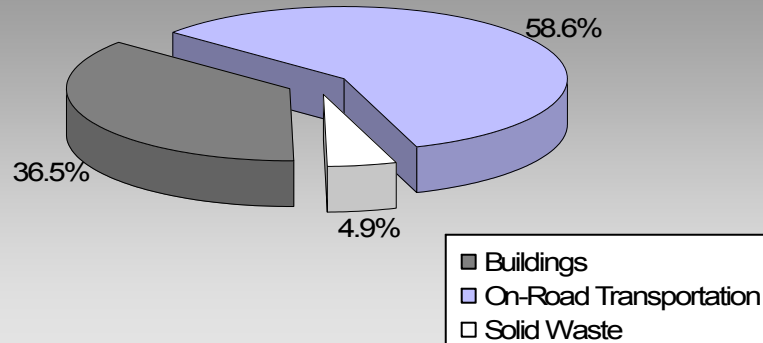


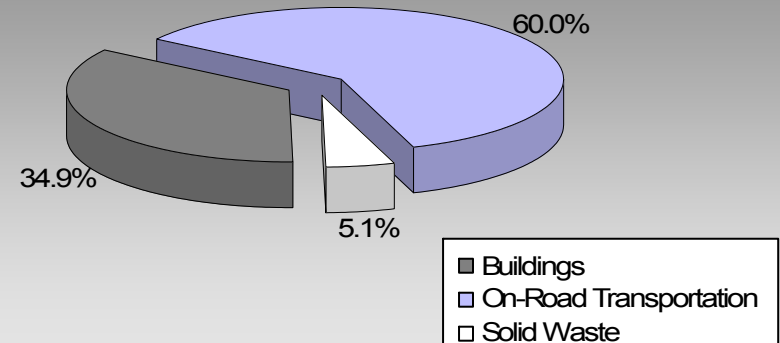
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

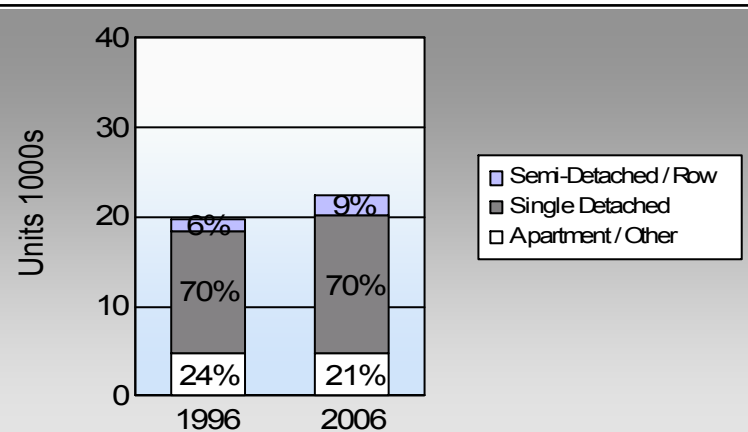
Peace River Regional District  
2007 GHG Emissions Sources



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
	77.0%	78.9%
	12.0%	10.4%
	0.7%	0.6%
	7.8%	7.4%
	0.8%	0.8%

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

<b>On Road Transportation</b>		<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	6,216	9,682,918	Litres	14,672	338,902	23,001
	Diesel Fuel	248	282,608	Litres	15,657	10,824	772
	Other Fuel	< 10	2,433	Litres	11,624	93	4
<b>Small Passenger Cars</b>						<b>349,819</b>	<b>23,777</b>
Large Passenger Cars	Gasoline	4,510	11,678,882	Litres	19,971	408,761	27,709
	Diesel Fuel	191	562,231	Litres	20,868	21,533	1,535
	Other Fuel	18	47,923	Litres	16,516	1,835	73
<b>Large Passenger Cars</b>						<b>432,129</b>	<b>29,317</b>
Light Trucks, Vans, SUVs	Gasoline	20,992	71,487,520	Litres	20,913	2,502,063	170,543
	Diesel Fuel	4,906	14,544,035	Litres	23,241	557,037	39,740
	Other Fuel	211	604,647	Litres	14,006	23,158	926
<b>Light Trucks, Vans, SUVs</b>						<b>3,082,258</b>	<b>211,209</b>
Commercial Vehicles	Gasoline	366	1,693,677	Litres	15,357	59,279	3,964
	Diesel Fuel	1,706	9,181,456	Litres	23,784	351,650	24,707
	Other Fuel	49	189,164	Litres	11,734	7,245	290
<b>Commercial Vehicles</b>						<b>418,174</b>	<b>28,961</b>
Tractor Trailer Trucks	Gasoline	44	183,860	Litres	10,426	6,435	430
	Diesel Fuel	2,310	71,760,354	Litres	78,723	2,748,422	193,104
	Other Fuel	< 10	21,432	Litres	8,853	821	33
<b>Tractor Trailer Trucks</b>						<b>2,755,678</b>	<b>193,567</b>
Motorhomes	Gasoline	306	487,917	Litres	2,958	17,077	1,140
	Diesel Fuel	70	102,547	Litres	5,315	3,928	276
	Other Fuel	14	19,520	Litres	2,189	748	30
<b>Motorhomes</b>						<b>21,753</b>	<b>1,446</b>
Motorcycles, Mopeds	Gasoline	266	207,419	Litres	5,494	7,260	484
<b>Motorcycles, Mopeds</b>						<b>7,260</b>	<b>484</b>
Bus	Gasoline	39	320,148	Litres	18,796	11,205	753
	Diesel Fuel	96	1,072,630	Litres	23,504	41,082	2,886
	Other Fuel	43	277,974	Litres	15,902	10,646	426
<b>Bus</b>						<b>62,933</b>	<b>4,065</b>

# Peace River Regional District Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	3,350,982	228,024
	Diesel:	3,734,476	263,020
	Other Fuel:	44,546	1,782
<b>On Road Transportation Totals</b>	<b>All Fuels:</b>	<b>7,130,004</b>	<b>492,826</b>

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	25,238	273,339,978	Kilowatt Hours	984,023	6,742
	Natural Gas	16,697	1,910,798	GigaJoules	1,910,798	97,450
	Heating Oil		71,283	GigaJoules	71,283	5,025
	Propane		193,322	GigaJoules	193,322	11,795
	Wood		529,661	GigaJoules	529,661	196
<b>Residential</b>					<b>3,689,087</b>	<b>121,208</b>
Commercial/Small-Medium Industrial	Electricity	4,584	357,009,544	Kilowatt Hours	1,285,233	8,806
	Natural Gas	2,582	3,470,755	GigaJoules	3,470,755	177,009
<b>Commercial/Small-Medium Industrial</b>					<b>4,755,988</b>	<b>185,815</b>
					Electricity:	15,548
					Natural Gas:	274,459
					Propane:	11,795
					Wood:	196
					Heating Oil:	5,025
<b>Buildings Totals</b>	<b>Buildings:</b>				<b>8,445,075</b>	<b>307,023</b>

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	71,225	41,497

# Peace River Regional District

## Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO <sub>2</sub> e (t)
Diesel Fuel	97,505,861	L	3,734,476	263,020
Electricity	630,349,522	kWh	2,269,256	15,548
Gasoline	95,742,341	L	3,350,982	228,024
Heating Oil	71,283	GJ	71,283	5,025
Natural Gas	5,381,553	GJ	5,381,553	274,459
Other Fuel	1,163,093	L	44,546	1,782
Propane	193,322	GJ	193,322	11,795
Solid Waste	71,225	T	0	41,497
Wood	529,661	GJ	529,661	196
<b>Total of Transportation / Buildings / Solid Waste:</b>			<b>15,575,079 GJ</b>	<b>841,346 tonnes</b>

### Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO <sub>2</sub> e (t)
Large Industrial	Electricity	16	1,521,888,498	Kilowatt Hours	5,478,794	37,540
	Natural Gas	37	2,203,466	GigaJoules	2,203,466	112,377
<b>Large Industrial</b>					<b>7,682,260</b>	<b>149,917</b>

Agriculture	Number of Animals	Methane	CO <sub>2</sub> e (t)
Enteric Fermentation	172,250	10,413	218,673

Land-Use Change	Area (ha)	CO <sub>2</sub> e (t)
Deforestation from Agriculture	935	323,488
Deforestation from Settlement	1,567	735,471
<b>Deforestation:</b>	<b>2,502</b>	<b>1,058,959</b>

## 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](mailto: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	13,755	41	14,095	69	15,605	70
Semi-Detached House	400	1	595	3	790	4
Row House	825	2	980	5	1,285	6
Apartment, Duplex	210	1	70	0	125	1
Apartment, 5 storeys or higher	100	0	100	0	90	0
Apartment, under 5 storeys	2,460	7	2,455	12	2,595	12
Other Single Attached House	35	0	60	0	30	0
Movable Dwelling	1,915	6	2,050	10	1,825	8

### 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	18,680	77	19,150	79	22,835	79
Car, Truck, Van as Passenger	2,920	12	2,335	10	2,995	10
Public Transit	160	1	195	1	185	1
Walked	1,895	8	2,055	8	2,140	7
Bicycle	185	1	190	1	235	1
Motorcycle	10	0	0	0	90	0
Taxicab	45	0	50	0	55	0
Other Method	365	2	255	1	400	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	1,113,783.4	9.3
Local Parks	631.6	0.0
Agricultural Land Reserve	1,289,444.4	10.8
Other land use	9,568,648.6	79.9
Total Land Area	11,972,508.0	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](mailto:CEEIRPT@gov.bc.ca) (see survey on CEEI website).

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### 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

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### Buildings

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

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### Solid Waste (and Water)

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

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### Land-Use Change

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

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### 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)

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# 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](mailto: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.