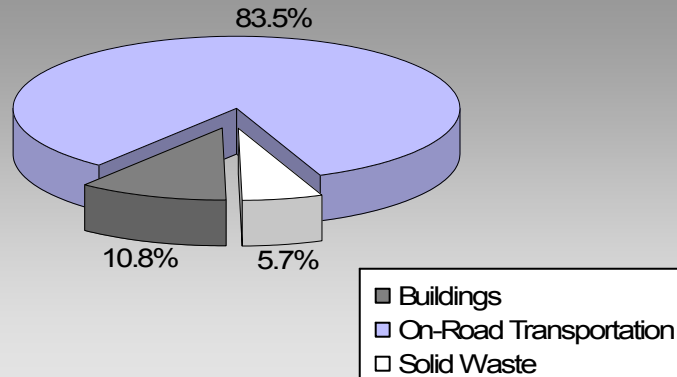


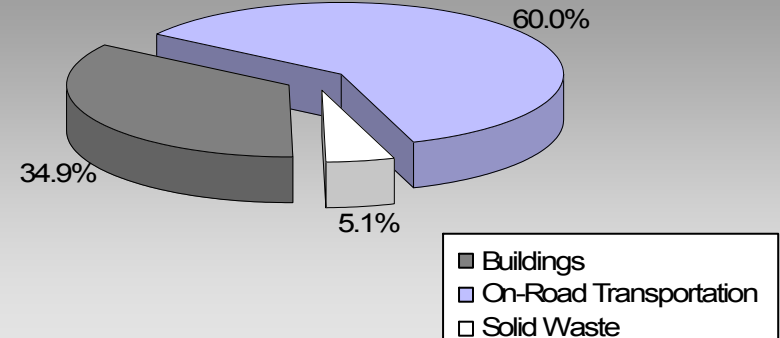
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

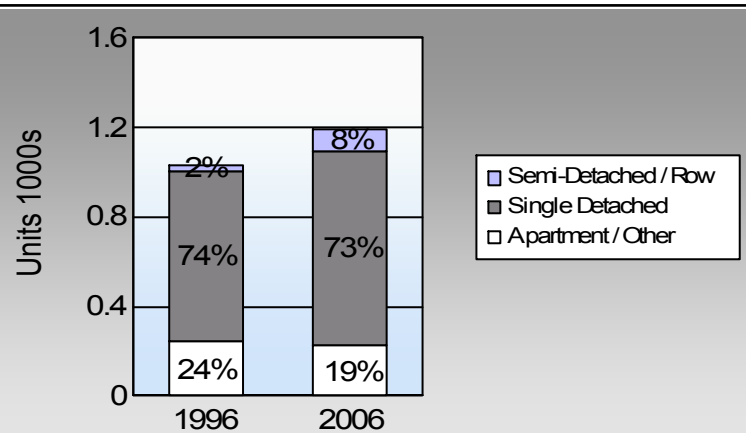
**Invermere District Municipality  
2007 GHG Emissions Sources**



**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
	71.4%	71.8%
	5.7%	7.6%
	0.0%	1.3%
	20.2%	16.3%
	2.7%	3.0%

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

#### Residential Density

Invermere District Municipality: 5.2 people per net ha  
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	523	772,447	Litres	13,924	27,036	1,839
	Diesel Fuel	39	41,139	Litres	14,476	1,576	112
<b>Small Passenger Cars</b>						<b>28,612</b>	<b>1,951</b>
Large Passenger Cars	Gasoline	468	1,006,609	Litres	17,302	35,231	2,381
	Diesel Fuel	10	22,363	Litres	17,858	857	61
	Other Fuel	< 10	2,956	Litres	13,670	113	5
<b>Large Passenger Cars</b>						<b>36,201</b>	<b>2,447</b>
Light Trucks, Vans, SUVs	Gasoline	1,602	5,060,082	Litres	20,414	177,103	12,084
	Diesel Fuel	160	440,613	Litres	22,128	16,875	1,204
	Other Fuel	20	46,178	Litres	13,290	1,769	71
<b>Light Trucks, Vans, SUVs</b>						<b>195,747</b>	<b>13,359</b>
Commercial Vehicles	Gasoline	20	90,005	Litres	15,269	3,150	211
	Diesel Fuel	65	293,576	Litres	21,216	11,244	790
	Other Fuel	< 10	10,038	Litres	12,279	384	15
<b>Commercial Vehicles</b>						<b>14,778</b>	<b>1,016</b>
Tractor Trailer Trucks	Gasoline	< 10	5,925	Litres	17,635	207	14
	Diesel Fuel	103	3,039,226	Litres	79,059	116,402	8,178
<b>Tractor Trailer Trucks</b>						<b>116,609</b>	<b>8,192</b>
Motorhomes	Gasoline	19	27,148	Litres	2,961	950	63
	Diesel Fuel	< 10	2,556	Litres	4,229	98	7
	Other Fuel	< 10	554	Litres		21	1
<b>Motorhomes</b>						<b>1,069</b>	<b>71</b>
Motorcycles, Mopeds	Gasoline	36	22,864	Litres	5,072	800	53
<b>Motorcycles, Mopeds</b>						<b>800</b>	<b>53</b>
Bus	Gasoline	< 10	113,032	Litres	34,502	3,956	266
	Diesel Fuel	27	226,160	Litres	19,278	8,662	609
	Other Fuel	< 10	17,556	Litres	15,902	672	27
<b>Bus</b>						<b>13,290</b>	<b>902</b>

# Invermere District Municipality

## Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	248,433	16,911
	Diesel:	155,714	10,961
	Other Fuel:	2,959	119
<b>On Road Transportation Totals</b>	<b>All Fuels:</b>	<b>407,106</b>	<b>27,991</b>

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	1,455	25,202,822	Kilowatt Hours	90,730	622	
	Heating Oil		15,029	GigaJoules	15,029	1,059	
	Propane		26,394	GigaJoules	26,394	1,610	
	Wood		31,587	GigaJoules	31,587	12	
<b>Residential</b>					<b>163,740</b>	<b>3,303</b>	
Commercial/Small-Medium Industrial	Electricity	208	13,123,291	Kilowatt Hours	47,244	324	
<b>Commercial/Small-Medium Industrial</b>					<b>47,244</b>	<b>324</b>	
					Electricity:	137,974	946
					Natural Gas:		
					Propane:	26,394	1,610
					Wood:	31,587	12
					Heating Oil:	15,029	1,059
<b>Buildings Totals</b>	<b>Buildings:</b>				<b>210,984</b>	<b>3,627</b>	

Solid Waste	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	3,698	1,924

# Invermere District Municipality Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	4,065,633	L	155,714	10,961
Electricity	38,326,113	kWh	137,974	946
Gasoline	7,098,112	L	248,433	16,911
Heating Oil	15,029	GJ	15,029	1,059
Other Fuel	77,282	L	2,959	119
Propane	26,394	GJ	26,394	1,610
Solid Waste	3,698	T	0	1,924
Wood	31,587	GJ	31,587	12
<b>Total of Transportation / Buildings / Solid Waste:</b>			<b>618,090 GJ</b>	<b>33,542 tonnes</b>

## Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
<b>Large Industrial</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	760	42	810	72	870	73
Semi-Detached House	15	1	55	5	75	6
Row House	10	1	55	5	20	2
Apartment, Duplex	95	5	90	8	100	8
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	140	8	100	9	115	10
Other Single Attached House	0	0	10	1	0	0
Movable Dwelling	10	1	5	0	10	1

### 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	935	71	1,010	69	1,080	72
Car, Truck, Van as Passenger	75	6	160	11	115	8
Public Transit	0	0	0	0	20	1
Walked	265	20	245	17	245	16
Bicycle	35	3	15	1	45	3
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	0	0	25	2	0	0

### 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
Population	3,668.0
Net Land Area (ha) *	712.3
Residential Density (people per net ha)	5.2

### 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	145.5	13.3
Local Parks	10.2	0.9
Agricultural Land Reserve	144.7	13.3
Other land use	791.9	72.5
<b>Total Land Area</b>	<b>1,092.3</b>	<b>100.0</b>

## 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.