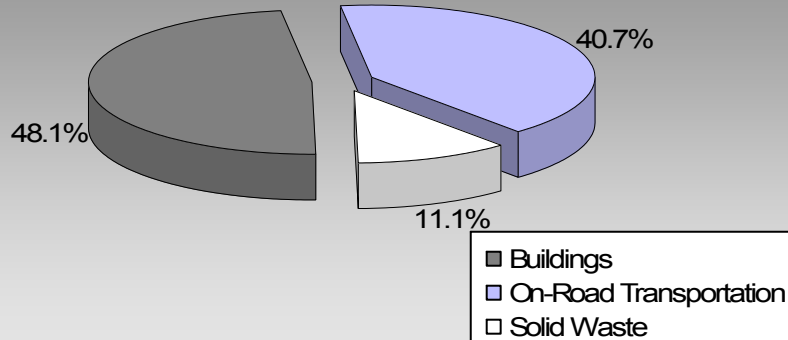


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

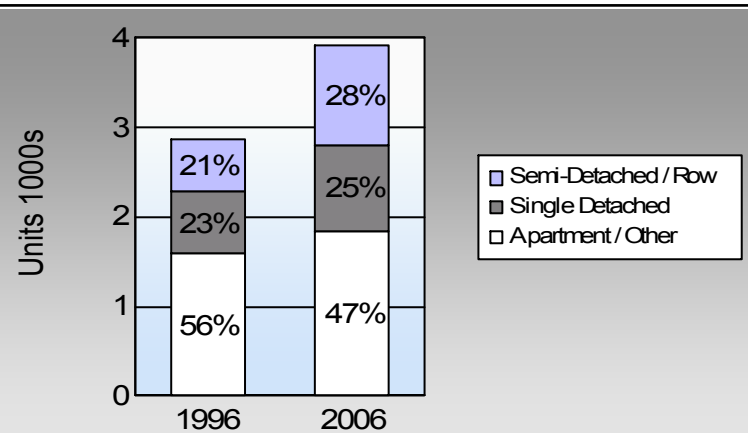
**Whistler District Municipality  
2007 GHG Emissions Sources**



**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
	58.7%	54.5%
	5.9%	7.6%
	10.9%	16.1%
	15.4%	14.4%
	4.6%	6.1%

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

#### Residential Density

Whistler District Municipality: 1.6 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	1,787	2,699,795	Litres	14,183	94,493	6,424
	Diesel Fuel	109	119,978	Litres	14,917	4,595	328
<b>Small Passenger Cars</b>						<b>99,088</b>	<b>6,752</b>
Large Passenger Cars	Gasoline	729	1,715,232	Litres	18,246	60,033	4,073
	Diesel Fuel	28	61,029	Litres	18,109	2,337	167
	Other Fuel	< 10	13,086	Litres	13,862	501	20
<b>Large Passenger Cars</b>						<b>62,871</b>	<b>4,260</b>
Light Trucks, Vans, SUVs	Gasoline	3,582	11,153,489	Litres	20,514	390,372	26,664
	Diesel Fuel	163	461,011	Litres	20,999	17,657	1,260
	Other Fuel	12	34,695	Litres	13,789	1,329	53
<b>Light Trucks, Vans, SUVs</b>						<b>409,358</b>	<b>27,977</b>
Commercial Vehicles	Gasoline	< 10	47,738	Litres	16,404	1,671	112
	Diesel Fuel	53	276,619	Litres	22,602	10,595	744
	Other Fuel	< 10	12,929	Litres	11,356	495	20
<b>Commercial Vehicles</b>						<b>12,761</b>	<b>876</b>
Tractor Trailer Trucks	Diesel Fuel	38	1,064,963	Litres	70,865	40,788	2,866
<b>Tractor Trailer Trucks</b>						<b>40,788</b>	<b>2,866</b>
Motorhomes	Gasoline	65	66,627	Litres	2,965	2,332	156
	Diesel Fuel	< 10	3,094	Litres	3,112	119	8
	Other Fuel	< 10	1,246	Litres	2,189	48	2
<b>Motorhomes</b>						<b>2,499</b>	<b>166</b>
Motorcycles, Mopeds	Gasoline	129	61,784	Litres	5,532	2,162	144
<b>Motorcycles, Mopeds</b>						<b>2,162</b>	<b>144</b>
Bus	Gasoline	22	246,091	Litres	25,906	8,613	578
	Diesel Fuel	40	1,012,541	Litres	44,604	38,780	2,725
	Other Fuel	< 10	14,630	Litres	15,902	560	22
<b>Bus</b>						<b>47,953</b>	<b>3,325</b>

# Whistler District Municipality

## Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	559,676	38,151
	Diesel:	114,871	8,098
	Other Fuel:	2,933	117
<b>On Road Transportation Totals</b>	<b>All Fuels:</b>	<b>677,480</b>	<b>46,366</b>

<b>Buildings</b>	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	10,380	182,141,095	Kilowatt Hours	655,707	4,493	
	Propane		199,768	GigaJoules	199,768	12,188	
<b>Residential</b>					<b>855,475</b>	<b>16,681</b>	
Commercial/Small-Medium Industrial	Electricity	1,131	202,565,305	Kilowatt Hours	729,235	4,997	
	Propane	313	542,468	GigaJoules	542,468	33,096	
<b>Commercial/Small-Medium Industrial</b>					<b>1,271,703</b>	<b>38,093</b>	
					Electricity:	1,384,942	9,490
					Natural Gas:		
					Propane:	742,236	45,284
					Wood:		
					Heating Oil:		
<b>Buildings Totals</b>	<b>Buildings:</b>				<b>2,127,178</b>	<b>54,774</b>	

<b>Solid Waste</b>	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	15,811	12,677

# Whistler District Municipality

## Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION	ENERGY (GJ)	CO2e (t)
Diesel Fuel	2,999,235 L	114,871	8,098
Electricity	384,706,400 kWh	1,384,942	9,490
Gasoline	15,990,756 L	559,676	38,151
Other Fuel	76,586 L	2,933	117
Propane	742,236 GJ	742,236	45,284
Solid Waste	15,811 T	0	12,677
<b>Total of Transportation / Buildings / Solid Waste:</b>		<b>2,804,658 GJ</b>	<b>113,817 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	675	19	1,005	28	960	25
Semi-Detached House	195	5	320	9	295	8
Row House	405	11	750	21	805	21
Apartment, Duplex	985	28	780	22	970	25
Apartment, 5 storeys or higher	0	0	35	1	10	0
Apartment, under 5 storeys	600	17	690	19	830	21
Other Single Attached House	15	0	10	0	35	1
Movable Dwelling	0	0	5	0	0	0

### 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	2,875	59	3,625	61	3,165	54
Car, Truck, Van as Passenger	290	6	305	5	440	8
Public Transit	535	11	840	14	935	16
Walked	755	15	765	13	835	14
Bicycle	225	5	240	4	355	6
Motorcycle	20	0	0	0	10	0
Taxicab	70	1	25	0	0	0
Other Method	130	3	105	2	70	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	
Population	10,228.0
Net Land Area (ha) *	6,443.5
Residential Density (people per net ha)	1.6

### 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	3,297.5	13.5
Local Parks	342.1	1.4
Agricultural Land Reserve	0.0	0.0
Other land use	20,719.9	85.1
<b>Total Land Area</b>	<b>24,359.6</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.