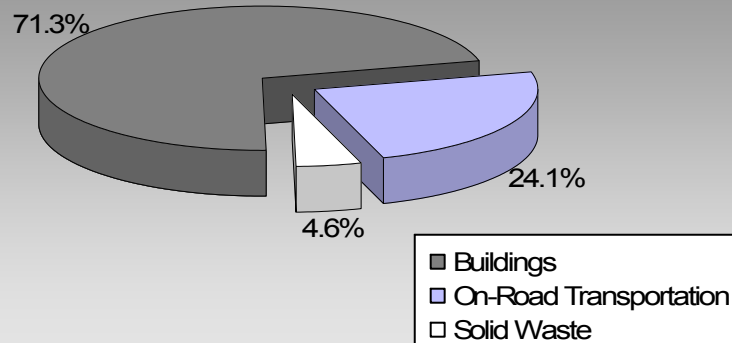


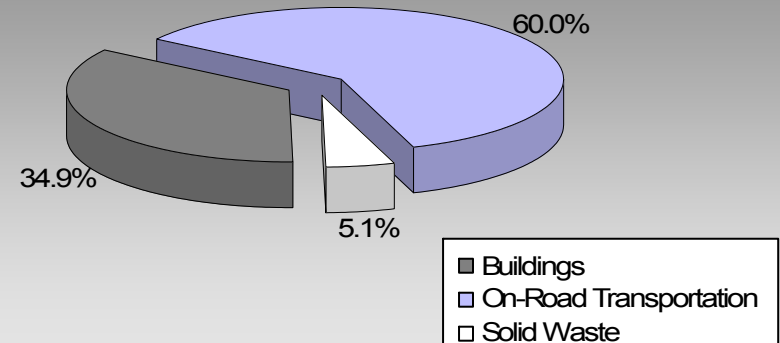
*BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities*

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

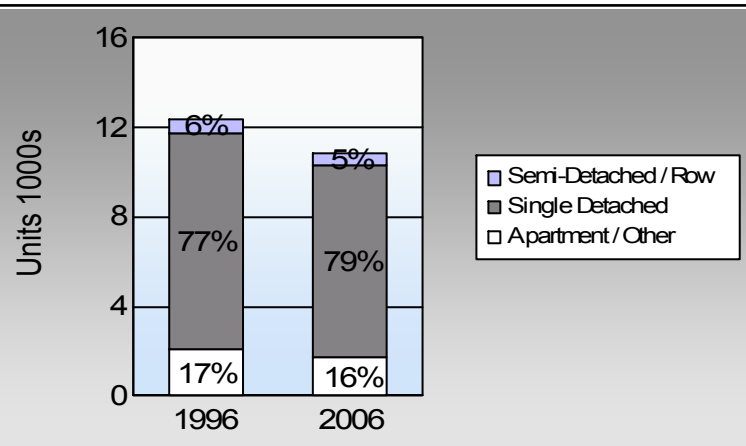
**Capital Regional District Unincorporated Areas  
2007 GHG Emissions Sources**



**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
	75.8%	74.7%
	8.3%	10.0%
	5.7%	4.1%
	5.5%	6.7%
	1.7%	1.8%

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	1,199	1,322,153	Litres	10,673	46,275	3,170
	Diesel Fuel	31	25,150	Litres	11,294	963	69
	Other Fuel	10	32,084	Litres	8,200	1,229	49
<b>Small Passenger Cars</b>						<b>48,467</b>	<b>3,288</b>
Large Passenger Cars	Gasoline	637	942,575	Litres	12,095	32,990	2,250
	Diesel Fuel	< 10	13,537	Litres	12,610	518	37
	Other Fuel	< 10	5,297	Litres	13,112	203	8
<b>Large Passenger Cars</b>						<b>33,711</b>	<b>2,295</b>
Light Trucks, Vans, SUVs	Gasoline	1,341	2,307,869	Litres	12,154	80,775	5,545
	Diesel Fuel	70	120,675	Litres	13,690	4,622	330
	Other Fuel	15	26,149	Litres	10,024	1,002	40
<b>Light Trucks, Vans, SUVs</b>						<b>86,399</b>	<b>5,915</b>
Commercial Vehicles	Gasoline	< 10	21,776	Litres	10,766	762	51
	Diesel Fuel	< 10	26,558	Litres	15,152	1,017	71
	Other Fuel	22	75,917	Litres	10,725	2,657	177
<b>Commercial Vehicles</b>						<b>4,436</b>	<b>299</b>
Tractor Trailer Trucks	Gasoline	0	0	Litres	0	-	-
	Diesel Fuel	18	186,302	Litres	69,927	7,135	501
	Other Fuel	0	0	Litres	0	-	-
<b>Tractor Trailer Trucks</b>						<b>7,135</b>	<b>501</b>
Motorhomes	Gasoline	42	43,040	Litres	2,787	1,506	101
	Diesel Fuel	< 10	4,520	Litres	4,292	173	12
	Other Fuel	< 10	831	Litres	2,189	32	1
<b>Motorhomes</b>						<b>1,711</b>	<b>114</b>
Motorcycles, Mopeds	Gasoline	89	30,055	Litres	5,421	1,052	70
<b>Motorcycles, Mopeds</b>						<b>1,052</b>	<b>70</b>
Bus	Gasoline	< 10	20,934	Litres	20,796	733	49
	Diesel Fuel	160	64,343	Litres	43,055	2,252	150
	Other Fuel	< 10	4,389	Litres	15,902	168	7
<b>Bus</b>						<b>3,153</b>	<b>206</b>

# Capital Regional District Unincorporated Areas Updated 2007 Community Energy and Emissions Inventory

<b>On Road Transportation Totals</b>	Gasoline:	164,093	11,236
	Diesel:	16,680	1,170
	Other Fuel:	5,291	282
	<b>All Fuels:</b>	<b>186,064</b>	<b>12,688</b>

<b>Buildings</b>	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	14,001	213,536,652	Kilowatt Hours	768,731	5,268
	Natural Gas	0	0	GigaJoules	-	-
	Heating Oil		381,750	GigaJoules	381,750	26,910
	Propane		65,886	GigaJoules	65,886	4,020
	Wood		139,590	GigaJoules	139,590	52
<b>Residential</b>					<b>1,355,957</b>	<b>36,250</b>
Commercial/Small-Medium Industrial	Electricity	1,555	51,653,539	Kilowatt Hours	185,953	1,274
	Natural Gas	0	0	GigaJoules	-	-
<b>Commercial/Small-Medium Industrial</b>					<b>185,953</b>	<b>1,274</b>
<b>Buildings Totals</b>	Electricity:				954,684	6,542
	Natural Gas:				-	-
	Propane:				65,886	4,020
	Wood:				139,590	52
	Heating Oil:				381,750	26,910
	<b>Buildings:</b>				<b>1,541,910</b>	<b>37,524</b>

<b>Solid Waste</b>	Mass (t)	CO2e (t)
Community Solid Waste	9,214	2,422

# Capital Regional District Unincorporated Areas Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	441,085	L	16,680	1,170
Electricity	265,190,191	kWh	954,684	6,542
Gasoline	4,688,402	L	164,093	11,236
Heating Oil	381,750	GJ	381,750	26,910
Natural Gas	0	GJ	0	0
Other Fuel	144,667	L	5,291	282
Propane	65,886	GJ	65,886	4,020
Solid Waste	9,214	T	0	2,422
Wood	139,590	GJ	139,590	52
<b>Total of Transportation / Buildings / Solid Waste:</b>			<b>1,727,974 GJ</b>	<b>52,634 tonnes</b>

## Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
	Natural Gas	0	0	GigaJoules	-	-
<b>Large Industrial</b>					<b>-</b>	<b>-</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	9,600	11	8,505	85	8,520	79
Semi-Detached House	350	0	195	2	240	2
Row House	350	0	245	2	315	3
Apartment, Duplex	285	0	195	2	275	3
Apartment, 5 storeys or higher	90	0	0	0	65	1
Apartment, under 5 storeys	265	0	180	2	65	1
Other Single Attached House	20	0	30	0	30	0
Movable Dwelling	1,430	2	650	7	1,320	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	8,310	76	5,975	78	6,825	75
Car, Truck, Van as Passenger	910	8	550	7	915	10
Public Transit	620	6	295	4	370	4
Walked	600	5	535	7	610	7
Bicycle	185	2	100	1	165	2
Motorcycle	40	0	60	1	75	1
Taxicab	15	0	10	0	20	0
Other Method	290	3	100	1	155	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	3,896.9	2.1
Provincial Parks / Protected Areas	5,081.1	2.7
Local Parks	6,999.2	3.7
Agricultural Land Reserve	8,223.5	4.4
Other land use	163,705.8	87.1
Total Land Area	187,906.5	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.