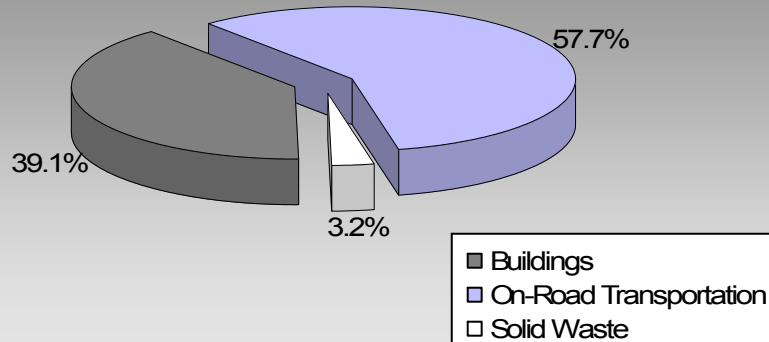


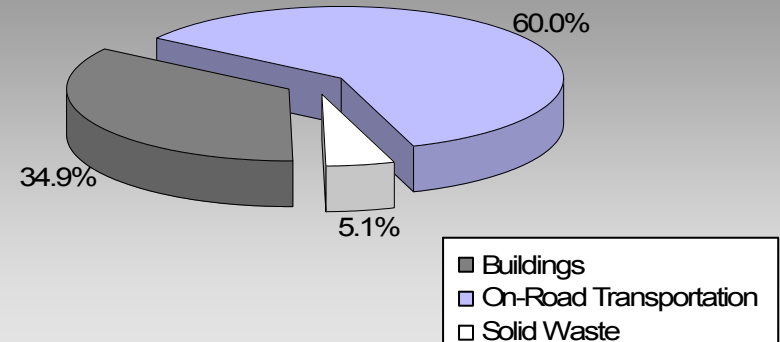
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

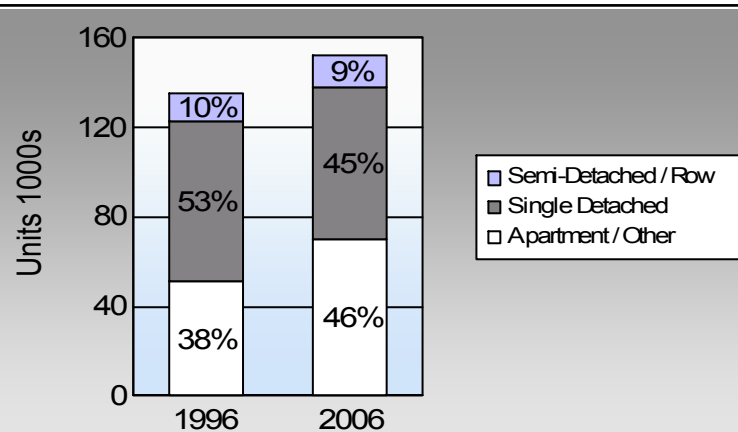
**Capital Regional District
2007 GHG Emissions Sources**



**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
	67.4%	65.2%
	6.9%	6.9%
	9.7%	10.0%
	9.7%	10.3%
	4.8%	5.5%

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	82,475	87,372,384	Litres	10,673	3,058,033	208,998
	Diesel Fuel	2,394	1,947,370	Litres	11,294	74,584	5,317
	Other Fuel	33	25,297	Litres	8,200	969	39
Small Passenger Cars						3,133,586	214,354
Large Passenger Cars	Gasoline	37,952	54,940,684	Litres	12,095	1,922,924	130,905
	Diesel Fuel	801	1,254,882	Litres	12,610	48,062	3,422
	Other Fuel	132	268,548	Litres	13,112	10,285	411
Large Passenger Cars						1,981,271	134,738
Light Trucks, Vans, SUVs	Gasoline	74,131	128,796,621	Litres	12,154	4,507,882	308,345
	Diesel Fuel	3,606	6,253,582	Litres	13,690	239,512	17,083
	Other Fuel	525	909,232	Litres	10,024	34,824	1,393
Light Trucks, Vans, SUVs						4,782,218	326,821
Commercial Vehicles	Gasoline	471	1,433,049	Litres	10,766	50,157	3,351
	Diesel Fuel	1,334	4,398,289	Litres	15,152	168,454	11,836
	Other Fuel	80	244,807	Litres	10,725	9,376	375
Commercial Vehicles						227,987	15,562
Tractor Trailer Trucks	Gasoline	23	83,444	Litres	9,048	2,921	195
	Diesel Fuel	1,360	36,251,483	Litres	69,927	1,388,432	97,551
	Other Fuel	< 10	24,333	Litres	10,404	932	37
Tractor Trailer Trucks						1,392,285	97,783
Motorhomes	Gasoline	2,235	2,074,732	Litres	2,787	72,616	4,845
	Diesel Fuel	226	224,472	Litres	4,292	8,597	604
	Other Fuel	37	31,842	Litres	2,189	1,220	49
Motorhomes						82,433	5,498
Motorcycles, Mopeds	Gasoline	5,823	2,049,403	Litres	5,421	71,729	4,785
Motorcycles, Mopeds						71,729	4,785
Bus	Gasoline	141	1,196,377	Litres	20,796	41,873	2,807
	Diesel Fuel	445	10,700,403	Litres	43,055	409,825	28,795
	Other Fuel	19	127,283	Litres	15,902	4,875	195
Bus						456,573	31,797

Capital Regional District Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	9,728,135	664,231
	Diesel:	2,337,466	164,608
	Other Fuel:	62,481	2,499
On Road Transportation Totals	All Fuels:	12,128,082	831,338

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)	
Residential	Electricity	158,156	2,109,422,564	Kilowatt Hours	7,593,915	52,033	
	Natural Gas	31,246	1,769,437	GigaJoules	1,769,437	90,242	
	Heating Oil		2,368,936	GigaJoules	2,368,936	166,986	
	Propane		410,180	GigaJoules	410,180	25,025	
	Wood		862,929	GigaJoules	862,929	319	
Residential					13,005,397	334,605	
Commercial/Small-Medium Industrial	Electricity	16,503	1,359,296,043	Kilowatt Hours	4,893,462	33,529	
	Natural Gas	4,470	3,835,912	GigaJoules	3,835,912	195,632	
Commercial/Small-Medium Industrial					8,729,374	229,161	
					Electricity:	12,487,377	85,562
					Natural Gas:	5,605,349	285,874
					Propane:	410,180	25,025
					Wood:	862,929	319
					Heating Oil:	2,368,936	166,986
Buildings Totals	Buildings:				21,734,771	563,766	

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	174,537	45,885

Capital Regional District Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO ₂ e (t)
Diesel Fuel	61,030,481	L	2,337,466	164,608
Electricity	3,468,718,607	kWh	12,487,377	85,562
Gasoline	277,946,694	L	9,728,135	664,231
Heating Oil	2,368,936	GJ	2,368,936	166,986
Natural Gas	5,605,349	GJ	5,605,349	285,874
Other Fuel	1,631,342	L	62,481	2,499
Propane	410,180	GJ	410,180	25,025
Solid Waste	174,537	T	0	45,885
Wood	862,929	GJ	862,929	319
Total of Transportation / Buildings / Solid Waste:			33,862,853 GJ	1,440,989 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (t)
Large Industrial	Electricity	2	withheld	Kilowatt Hours	-	-
Large Industrial					-	-

Agriculture		Number of Animals	Methane	CO ₂ e (t)
	Enteric Fermentation	13,364	334	7,014

Land-Use Change		Area (ha)	CO ₂ e (t)
	Deforestation from Settlement	17	15,542
	Deforestation from Agriculture	-	-
Deforestation:		17	15,542

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	71,340	34	74,715	53	68,055	45
Semi-Detached House	5,045	2	5,510	4	5,600	4
Row House	7,870	4	8,475	6	8,810	6
Apartment, Duplex	8,430	4	9,660	7	20,405	13
Apartment, 5 storeys or higher	6,640	3	6,820	5	7,645	5
Apartment, under 5 storeys	33,655	16	34,785	24	39,755	26
Other Single Attached House	305	0	325	0	315	0
Movable Dwelling	2,215	1	1,860	1	1,900	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	94,250	67	98,380	68	106,960	65
Car, Truck, Van as Passenger	9,635	7	8,690	6	11,285	7
Public Transit	13,545	10	13,795	10	16,325	10
Walked	13,540	10	14,970	10	16,960	10
Bicycle	6,745	5	6,810	5	9,055	6
Motorcycle	585	0	840	1	1,260	1
Taxicab	160	0	210	0	240	0
Other Method	1,470	1	1,305	1	1,880	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	3,909.7	1.7
Provincial Parks / Protected Areas	6,467.4	2.8
Local Parks	12,454.9	5.3
Agricultural Land Reserve	16,405.1	7.0
Other land use	193,945.4	83.2
Total Land Area	233,182.4	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.