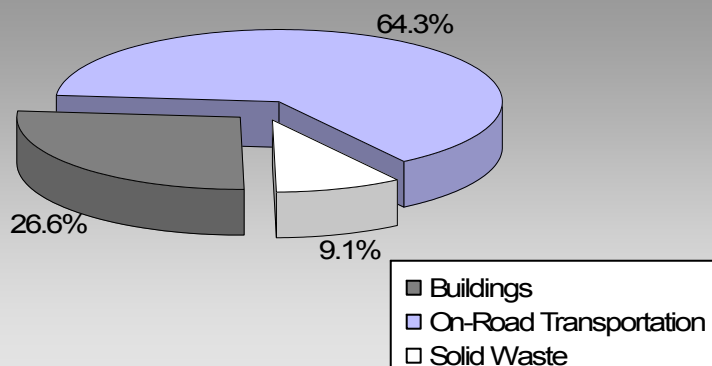


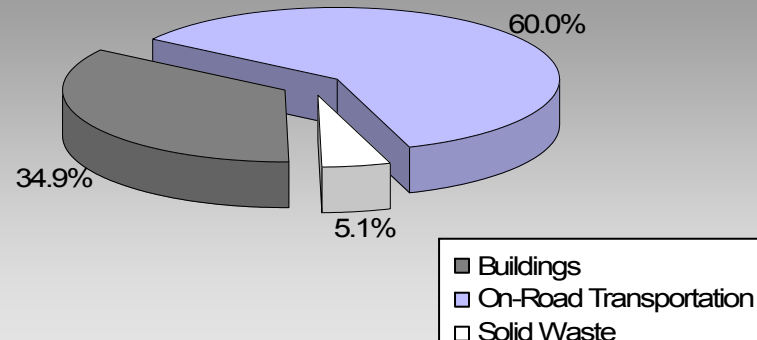
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

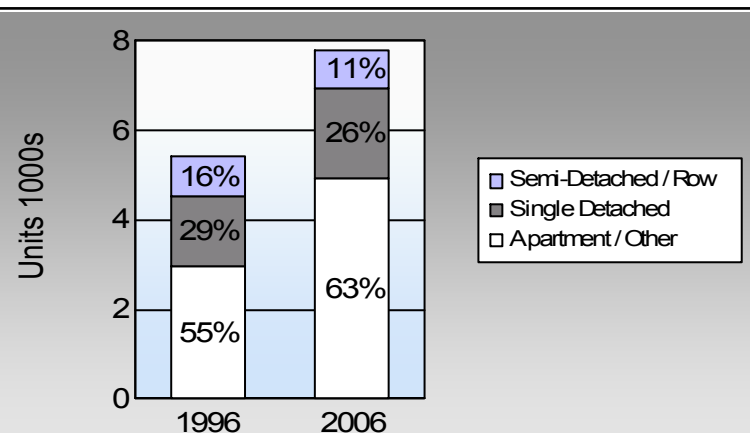
**Metro-Vancouver Regional District Unincorporated Areas
2007 GHG Emissions Sources**



**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
	56.4%	48.1%
	4.0%	6.1%
	12.1%	15.1%
	18.5%	23.5%
	7.1%	6.1%

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	3,254	4,259,082	Litres	13,375	149,068	10,081
	Diesel Fuel	62	61,204	Litres	13,549	2,344	167
	Other Fuel	0	0	Litres	0	-	-
Small Passenger Cars						151,412	10,248
Large Passenger Cars	Gasoline	1,824	3,165,178	Litres	14,748	110,781	7,473
	Diesel Fuel	29	45,870	Litres	13,837	1,757	125
	Other Fuel	< 10	1,531	Litres	11,817	59	2
Large Passenger Cars						112,597	7,600
Light Trucks, Vans, SUVs	Gasoline	2,818	5,530,361	Litres	13,527	193,563	13,178
	Diesel Fuel	87	179,291	Litres	17,008	6,867	490
	Other Fuel	< 10	16,808	Litres	10,850	644	26
Light Trucks, Vans, SUVs						201,074	13,694
Commercial Vehicles	Gasoline	28	130,785	Litres	16,051	4,577	307
	Diesel Fuel	27	123,630	Litres	21,310	4,735	333
	Other Fuel	< 10	6,464	Litres	12,417	248	10
Commercial Vehicles						9,560	650
Tractor Trailer Trucks	Gasoline	< 10	26,497	Litres	17,945	927	62
	Diesel Fuel	48	1,452,858	Litres	87,463	55,644	3,910
	Other Fuel	0	0	Litres	0	-	-
Tractor Trailer Trucks						56,571	3,972
Motorhomes	Gasoline	60	57,427	Litres	3,326	2,010	134
	Diesel Fuel	< 10	3,719	Litres	5,126	142	10
	Other Fuel	< 10	1,523	Litres	2,210	58	2
Motorhomes						2,210	146
Motorcycles, Mopeds	Gasoline	101	39,212	Litres	5,544	1,372	92
Motorcycles, Mopeds						1,372	92
Bus	Gasoline	< 10	57,843	Litres	24,966	2,025	136
	Diesel Fuel	< 10	67,273	Litres	46,471	2,577	181
	Other Fuel	< 10	5,852	Litres	30,393	224	9
Bus						4,826	326

On Road Transportation Totals	Gasoline:	464,323	31,463
	Diesel:	74,066	5,216
	Other Fuel:	1,233	49
	All Fuels:	539,622	36,728

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	4,850	42,657,629	Kilowatt Hours	153,567	1,050
	Natural Gas	1,632		GigaJoules	-	-
	Heating Oil		de minimis	GigaJoules	-	-
	Propane		de minimis	GigaJoules	-	-
	Wood		de minimis	GigaJoules	-	-
Residential					153,567	1,050
Commercial/Small-Medium Industrial	Electricity	693	355,567,532	Kilowatt Hours	1,280,042	8,770
	Natural Gas	71	104,922	GigaJoules	104,922	5,351
Commercial/Small-Medium Industrial					1,384,964	14,121
Buildings Totals					1,538,531	15,171

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	14,310	5,206

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	1,933,845	L	74,066	5,216
Electricity	398,225,161	kWh	1,433,609	9,820
Gasoline	13,266,385	L	464,323	31,463
Heating Oil	0	GJ	0	0
Natural Gas	104,922	GJ	104,922	5,351
Other Fuel	32,178	L	1,233	49
Propane	0	GJ	0	0
Solid Waste	14,310	T	0	5,206
Wood	0	GJ	0	0
Total of Transportation / Buildings / Solid Waste:			2,078,153 GJ	57,105 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
	Natural Gas	8	withheld	GigaJoules	-	-
Large Industrial					-	-

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	1,585	0	1,485	26	2,025	26
Semi-Detached House	35	0	25	0	105	1
Row House	845	0	860	15	735	9
Apartment, Duplex	40	0	25	0	100	1
Apartment, 5 storeys or higher	1,320	0	1,925	34	2,080	27
Apartment, under 5 storeys	1,245	0	900	16	2,390	31
Other Single Attached House	0	0	0	0	15	0
Movable Dwelling	355	0	400	7	345	4

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	2,935	56	3,035	54	3,575	48
Car, Truck, Van as Passenger	210	4	280	5	455	6
Public Transit	630	12	595	11	1,120	15
Walked	960	18	1,150	21	1,745	23
Bicycle	370	7	435	8	455	6
Motorcycle	30	1	20	0	20	0
Taxicab	15	0	0	0	0	0
Other Method	50	1	55	1	80	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	26,989.0	31.3
Local Parks	3,256.8	3.8
Agricultural Land Reserve	782.1	0.9
Other land use	55,160.0	64.0
Total Land Area	86,187.9	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.