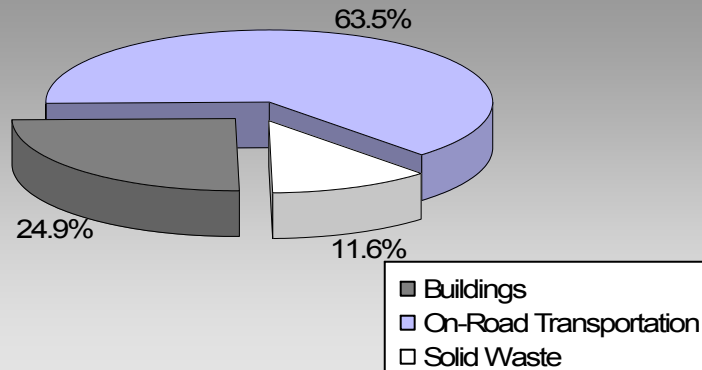


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

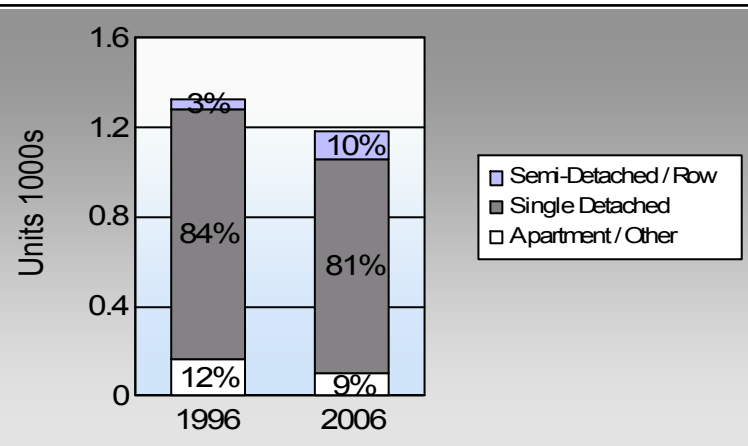
**Central Coast Regional District
2007 GHG Emissions Sources**



**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
	51.3%	55.8%
	10.0%	8.2%
	1.3%	1.0%
	24.8%	26.0%
	2.3%	1.0%

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	272	386,846	Litres	13,448	13,540	924
	Diesel Fuel	< 10	5,919	Litres	13,737	227	16
Small Passenger Cars						13,767	940
Large Passenger Cars	Gasoline	136	332,661	Litres	18,487	11,643	794
	Diesel Fuel	< 10	17,301	Litres	16,637	663	47
	Other Fuel	< 10	993	Litres		38	2
Large Passenger Cars						12,344	843
Light Trucks, Vans, SUVs	Gasoline	722	2,269,906	Litres	19,900	79,447	5,436
	Diesel Fuel	88	215,477	Litres	18,399	8,253	589
	Other Fuel	< 10	21,219	Litres	13,068	813	33
Light Trucks, Vans, SUVs						88,513	6,058
Commercial Vehicles	Gasoline	12	43,303	Litres	12,926	1,516	101
	Diesel Fuel	22	97,289	Litres	20,284	3,726	262
	Other Fuel	< 10	5,028	Litres	11,356	193	8
Commercial Vehicles						5,435	371
Tractor Trailer Trucks	Diesel Fuel	16	286,207	Litres	44,616	10,962	770
Tractor Trailer Trucks						10,962	770
Motorhomes	Gasoline	< 10	8,205	Litres	2,926	287	19
	Diesel Fuel	< 10	1,050	Litres		40	3
	Other Fuel	< 10	138	Litres		5	-
Motorhomes						332	22
Motorcycles, Mopeds	Gasoline	12	4,109	Litres	4,881	144	10
Motorcycles, Mopeds						144	10
Bus	Gasoline	< 10	28,639	Litres	15,138	1,002	67
	Diesel Fuel	< 10	74,790	Litres	23,633	2,864	201
Bus						3,866	268

Central Coast Regional District Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	107,579	7,351
	Diesel:	26,735	1,888
	Other Fuel:	1,049	43
On Road Transportation Totals	All Fuels:	135,363	9,282

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	1,362	16,410,690	Kilowatt Hours	59,078	405	
	Heating Oil		12,306	GigaJoules	12,306	867	
	Propane		33,653	GigaJoules	33,653	2,053	
	Wood		71,517	GigaJoules	71,517	26	
Residential					176,554	3,351	
Commercial/Small-Medium Industrial	Electricity	294	11,835,601	Kilowatt Hours	42,608	292	
Commercial/Small-Medium Industrial					42,608	292	
					Electricity:	101,686	697
					Natural Gas:		
					Propane:	33,653	2,053
					Wood:	71,517	26
					Heating Oil:	12,306	867
Buildings Totals	Buildings:				219,162	3,643	

Solid Waste	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	1,500	1,702

Central Coast Regional District Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO ₂ e (t)
Diesel Fuel	698,033	L	26,735	1,888
Electricity	28,246,291	kWh	101,686	697
Gasoline	3,073,669	L	107,579	7,351
Heating Oil	12,306	GJ	12,306	867
Other Fuel	27,378	L	1,049	43
Propane	33,653	GJ	33,653	2,053
Solid Waste	1,500	T	0	1,702
Wood	71,517	GJ	71,517	26
Total of Transportation / Buildings / Solid Waste:			354,525 GJ	14,627 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
Large Industrial					-	-

Agriculture		Number of Animals	Methane	CO ₂ e (t)
	Enteric Fermentation	584	35	735

Land-Use Change		Area (ha)	CO ₂ e (t)
	Deforestation from Agriculture	-	-
	Deforestation from Settlement	6	5,529
Deforestation:		6	5,529

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	1,115	46	1,060	78	955	81
Semi-Detached House	10	0	25	2	90	8
Row House	35	1	35	3	30	3
Apartment, Duplex	10	0	30	2	40	3
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	60	2	60	4	25	2
Other Single Attached House	0	0	10	1	5	0
Movable Dwelling	95	4	135	10	35	3

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	795	51	735	52	580	56
Car, Truck, Van as Passenger	155	10	130	9	85	8
Public Transit	20	1	10	1	10	1
Walked	385	25	375	27	270	26
Bicycle	35	2	20	1	10	1
Motorcycle	0	0	10	1	0	0
Taxicab	20	1	10	1	0	0
Other Method	140	9	125	9	85	8

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	771,074.0	30.9
Local Parks	0.0	0.0
Agricultural Land Reserve	4,659.1	0.2
Other land use	1,719,804.3	68.9
Total Land Area	2,495,537.4	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.