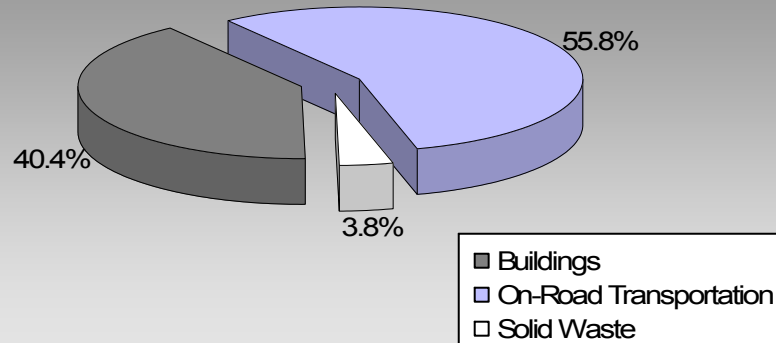


Updated 2007 Community Energy and Emissions Inventory

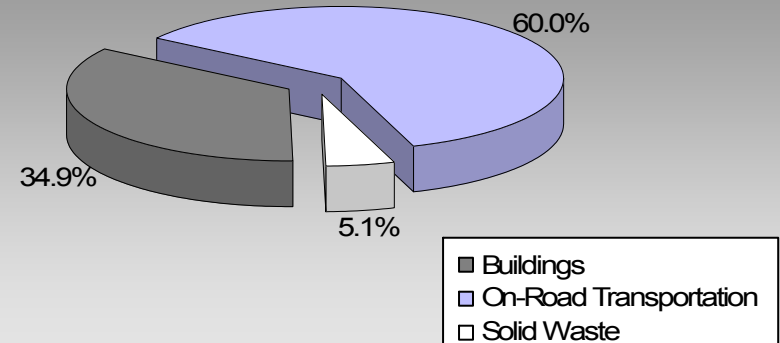
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

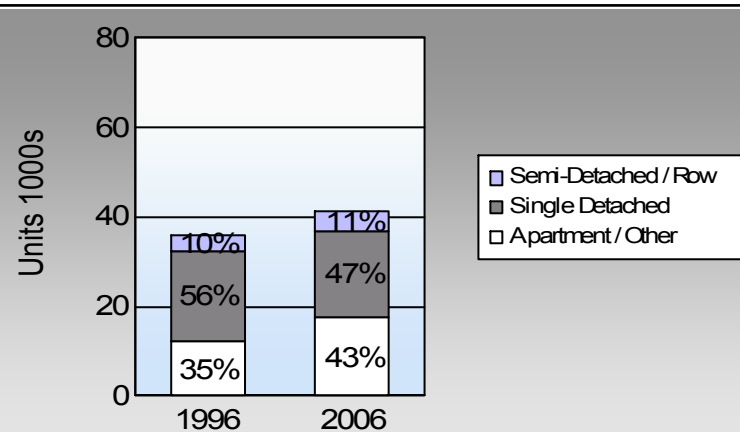
**Coquitlam City
2007 GHG Emissions Sources**



**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**

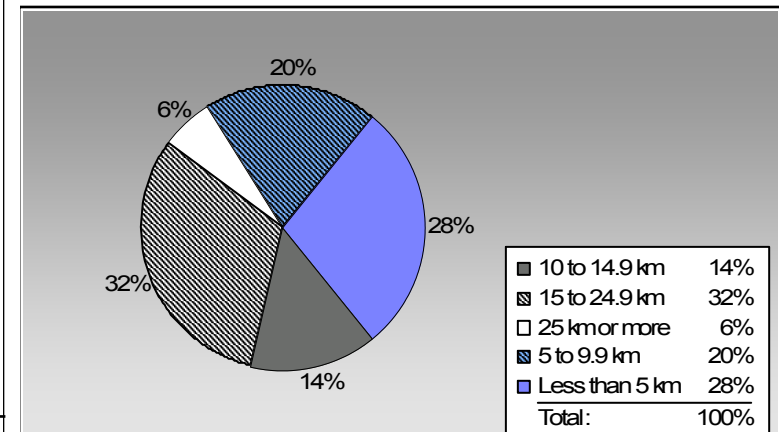
	1996	2006
	79.5%	73.8%
	6.6%	7.3%
	9.3%	13.9%
	3.1%	3.7%
	0.7%	0.6%

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

Residential Density

Coquitlam City: 18.1 people per net ha
BC municipal average: 7.4 people per net ha

**Are we living closer to where we work?
Commute Distance**



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	25,733	34,155,133	Litres	13,482	1,195,430	81,056
	Diesel Fuel	458	471,067	Litres	13,726	18,042	1,287
	Other Fuel	< 10	5,458	Litres	9,757	209	8
Small Passenger Cars						1,213,681	82,351
Large Passenger Cars	Gasoline	12,700	22,176,434	Litres	14,843	776,175	52,415
	Diesel Fuel	217	388,394	Litres	13,875	14,875	1,060
	Other Fuel	25	50,072	Litres	12,162	1,918	77
Large Passenger Cars						792,968	53,552
Light Trucks, Vans, SUVs	Gasoline	24,221	46,482,843	Litres	13,582	1,626,899	110,863
	Diesel Fuel	946	2,090,076	Litres	16,868	80,050	5,710
	Other Fuel	96	179,657	Litres	10,825	6,881	275
Light Trucks, Vans, SUVs						1,713,830	116,848
Commercial Vehicles	Gasoline	95	414,153	Litres	15,093	14,495	970
	Diesel Fuel	502	2,334,070	Litres	21,100	89,395	6,281
	Other Fuel	16	62,973	Litres	12,289	2,412	96
Commercial Vehicles						106,302	7,347
Tractor Trailer Trucks	Gasoline	13	97,832	Litres	21,976	3,424	230
	Diesel Fuel	952	29,029,216	Litres	83,505	1,111,819	78,117
Tractor Trailer Trucks						1,115,243	78,347
Motorhomes	Gasoline	331	461,394	Litres	3,617	16,149	1,081
	Diesel Fuel	37	43,418	Litres	4,573	1,663	117
	Other Fuel	< 10	5,815	Litres	2,189	223	9
Motorhomes						18,035	1,207
Motorcycles, Mopeds	Gasoline	754	348,069	Litres	5,632	12,182	812
	Motorcycles, Mopeds						12,182
Bus	Gasoline	43	382,593	Litres	23,960	13,391	899
	Diesel Fuel	34	867,302	Litres	46,879	33,218	2,334
	Other Fuel	< 10	14,630	Litres	15,902	560	22
Bus						47,169	3,255

Coquitlam City

Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	3,658,145	248,326
	Diesel:	1,349,062	94,906
	Other Fuel:	12,203	487
	All Fuels:	5,019,410	343,719

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	40,778	390,315,331	Kilowatt Hours	1,405,134	9,628
	Natural Gas	26,830	2,902,435	GigaJoules	2,902,435	148,024
	Heating Oil		61,487	GigaJoules	61,487	4,334
	Propane		91,052	GigaJoules	91,052	5,555
Residential					4,460,108	167,541
Commercial/Small-Medium Industrial	Electricity	3,635	408,184,578	Kilowatt Hours	1,469,463	10,069
	Natural Gas	2,002	1,389,906	GigaJoules	1,389,906	70,885
Commercial/Small-Medium Industrial					2,859,369	80,954
Buildings Totals	Electricity:				2,874,597	19,697
	Natural Gas:				4,292,341	218,909
	Propane:				91,052	5,555
	Wood:					
	Heating Oil:				61,487	4,334
Buildings:					7,319,477	248,495

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	64,077	23,316

Coquitlam City

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	35,223,543	L	1,349,062	94,906
Electricity	798,499,909	kWh	2,874,597	19,697
Gasoline	104,518,451	L	3,658,145	248,326
Heating Oil	61,487	GJ	61,487	4,334
Natural Gas	4,292,341	GJ	4,292,341	218,909
Other Fuel	318,605	L	12,203	487
Propane	91,052	GJ	91,052	5,555
Solid Waste	64,077	T	0	23,316
Total of Transportation / Buildings / Solid Waste:			12,338,887 GJ	615,530 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-
	Natural Gas	40	706,242	GigaJoules	706,242	36,018
Large Industrial					706,242	36,018

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	19,920	36	20,685	51	19,225	47
Semi-Detached House	975	2	1,310	3	1,205	3
Row House	2,500	4	3,065	8	3,155	8
Apartment, Duplex	2,280	4	3,540	9	5,295	13
Apartment, 5 storeys or higher	1,355	2	1,650	4	1,810	4
Apartment, under 5 storeys	8,255	15	9,540	24	10,150	25
Other Single Attached House	55	0	35	0	20	0
Movable Dwelling	390	1	395	1	380	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	37,985	80	41,120	80	40,275	74
Car, Truck, Van as Passenger	3,170	7	4,020	8	3,955	7
Public Transit	4,460	9	4,165	8	7,565	14
Walked	1,455	3	1,675	3	2,035	4
Bicycle	325	1	315	1	310	1
Motorcycle	60	0	55	0	145	0
Taxicab	20	0	50	0	35	0
Other Method	280	1	225	0	265	0

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	123,213.0
Net Land Area (ha) *	6,788.5
Residential Density (people per net ha)	18.1

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 %
Less than 5 km	13,620 28
5 to 9.9 km	9,380 20
10 to 14.9 km	6,855 14
15 to 24.9 km	15,130 32
25 km or more	2,870 6

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	3,118.8	24.0
Local Parks	1,693.1	13.0
Agricultural Land Reserve	823.5	6.3
Other land use	7,350.8	56.6
Total Land Area	12,986.2	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.