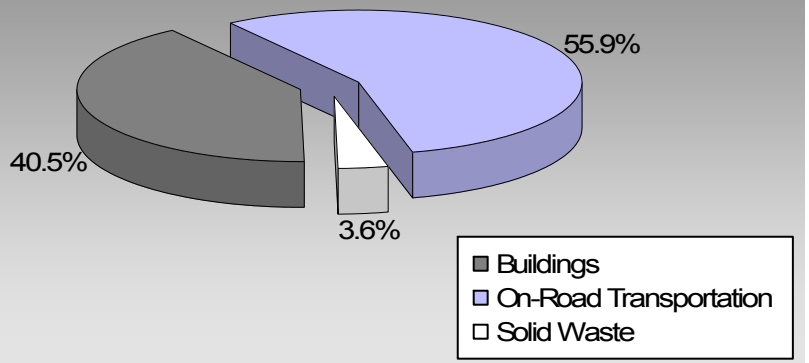
Port Coquitlam City
Updated 2007 Community Energy and Emissions Inventory

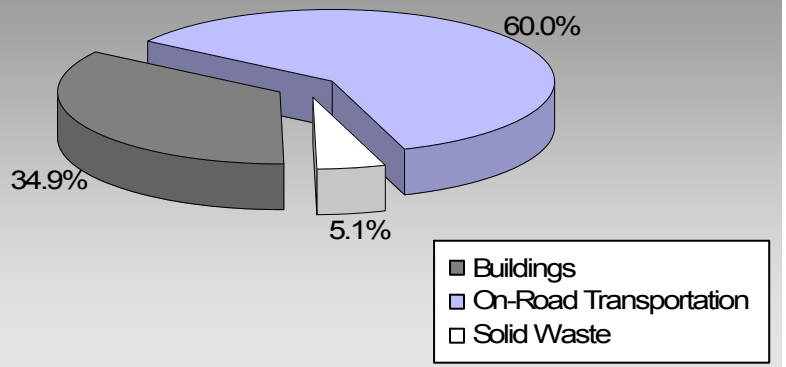
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

Port Coquitlam City
2007 GHG Emissions Sources

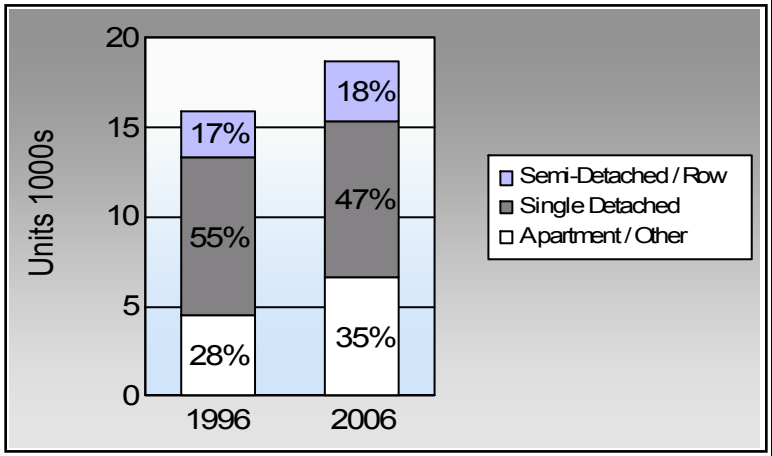


Total for BC Communities



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
	81.1%	76.5%
	6.1%	7.8%
	8.0%	10.7%
	3.2%	2.7%
	0.8%	1.0%

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

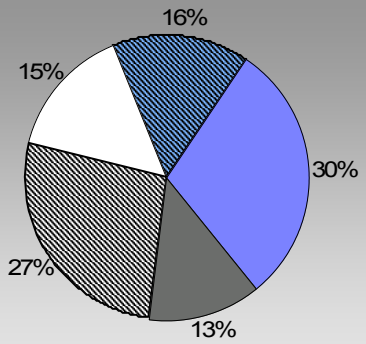
Residential Density

Port Coquitlam City: 27.8 people per net ha

BC municipal average: 7.4 people per net ha

Are we living closer to where we work?

Commute Distance



10 to 14.9 km	13%
15 to 24.9 km	27%
25 km or more	15%
5 to 9.9 km	16%
Less than 5 km	30%
Total:	100%

In BC, 41% of people lived within 5km of their work in 2006.

For more information and to provide feedback on your Community Energy and Emissions Inventory (CEEI) Report see back page.

Sectors

On Road Transportation		Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	12,171	16,258,794	Litres	13,535	569,058	38,612
	Diesel Fuel	210	219,644	Litres	13,740	8,412	600
	Other Fuel	< 10	3,699	Litres	10,388	142	6
				Small Passenger Cars		**577,612**	**39,218**
Large Passenger Cars	Gasoline	5,471	9,600,911	Litres	14,782	336,032	22,719
	Diesel Fuel	101	179,000	Litres	13,691	6,856	488
	Other Fuel	< 10	20,157	Litres	12,451	772	31
				Large Passenger Cars		**343,660**	**23,238**
Light Trucks, Vans, SUVs	Gasoline	12,057	23,370,205	Litres	13,511	817,957	55,787
	Diesel Fuel	545	1,207,483	Litres	16,385	46,247	3,299
	Other Fuel	54	104,936	Litres	10,595	4,019	161
				Light Trucks, Vans, SUVs		**868,223**	**59,247**
Commercial Vehicles	Gasoline	44	221,901	Litres	17,048	7,767	520
	Diesel Fuel	259	1,191,697	Litres	21,245	45,642	3,207
	Other Fuel	< 10	36,014	Litres	12,745	1,379	55
				Commercial Vehicles		**54,788**	**3,782**
Tractor Trailer Trucks	Diesel Fuel	372	13,190,413	Litres	92,417	505,193	35,495
				Tractor Trailer Trucks		**505,193**	**35,495**
Motorhomes	Gasoline	154	170,148	Litres	3,095	5,955	398
	Diesel Fuel	16	18,132	Litres	5,103	694	49
	Other Fuel	< 10	1,246	Litres	2,189	48	2
				Motorhomes		**6,697**	**449**
Motorcycles, Mopeds	Gasoline	508	216,140	Litres	5,586	7,565	505
				Motorcycles, Mopeds		**7,565**	**505**
Bus	Gasoline	17	154,859	Litres	23,294	5,420	364
	Diesel Fuel	10	179,596	Litres	31,146	6,879	483
				Bus		**12,299**	**847**

	Gasoline:	1,749,754	118,905
	Diesel:	619,923	43,621
	Other Fuel:	6,360	255
On Road Transportation Totals	**All Fuels:**	**2,376,037**	**162,781**

Buildings

	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	18,387	183,400,034	Kilowatt Hours	660,240	4,524
	Natural Gas	13,356	1,256,415	GigaJoules	1,256,415	64,077
	Heating Oil		53,789	GigaJoules	53,789	3,792
	Propane		79,610	GigaJoules	79,610	4,857
			Residential		**2,050,054**	**77,250**
Commercial/Small-Medium Industrial	Electricity	2,441	190,696,728	Kilowatt Hours	686,508	4,704
	Natural Gas	1,532	707,889	GigaJoules	707,889	36,102
			Commercial/Small-Medium Industrial		**1,394,397**	**40,806**

	Electricity:	1,346,748	9,228
	Natural Gas:	1,964,304	100,179
	Propane:	79,610	4,857
	Wood:		
	Heating Oil:	53,789	3,792
Buildings Totals	**Buildings:**	**3,444,451**	**118,056**

Solid Waste

	Mass (t)	CO2e (t)
Community Solid Waste	28,597	10,406

Grand Total		CONSUMPTION		ENERGY (GJ)	CO2e (t)
	Diesel Fuel	16,185,965	L	619,923	43,621
	Electricity	374,096,762	kWh	1,346,748	9,228
	Gasoline	49,992,958	L	1,749,754	118,905
	Heating Oil	53,789	GJ	53,789	3,792
	Natural Gas	1,964,304	GJ	1,964,304	100,179
	Other Fuel	166,052	L	6,360	255
	Propane	79,610	GJ	79,610	4,857
	Solid Waste	28,597	T	0	10,406
Total of Transportation / Buildings / Solid Waste:				**5,820,488** GJ	**291,243** tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	2	withheld	Kilowatt Hours	-	-
	Natural Gas	13	494,337	GigaJoules	494,337	25,211
				Large Industrial	**494,337**	**25,211**

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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	8,805	36	9,270	52	8,725	47
Semi-Detached House	495	2	670	4	605	3
Row House	2,135	9	2,450	14	2,755	15
Apartment, Duplex	1,600	6	1,935	11	2,765	15
Apartment, 5 storeys or higher	10	0	0	0	0	0
Apartment, under 5 storeys	2,825	11	3,365	19	3,800	20
Other Single Attached House	10	0	15	0	15	0
Movable Dwelling	55	0	45	0	45	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	56,446.0
Net Land Area (ha) *	2,033.4
Residential Density (people per net ha)	27.8

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	18,250	81	20,255	81	20,650	76
Car, Truck,Van as Passenge	1,380	6	1,720	7	2,110	8
Public Transit	1,795	8	1,900	8	2,890	11
Walked	725	3	840	3	735	3
Bicycle	180	1	185	1	275	1
Motorcycle	40	0	30	0	100	0
Taxicab	20	0	10	0	35	0
Other Method	110	0	125	1	210	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	6,865	30
5 to 9.9 km	3,575	16
10 to 14.9 km	2,925	13
15 to 24.9 km	6,195	27
25 km or more	3,460	15

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	11.5	0.3
Local Parks	476.4	14.1
Agricultural Land Reserve	599.7	17.8
Other land use	2,288.2	67.8
Total Land Area	3,375.8	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 CO2e 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