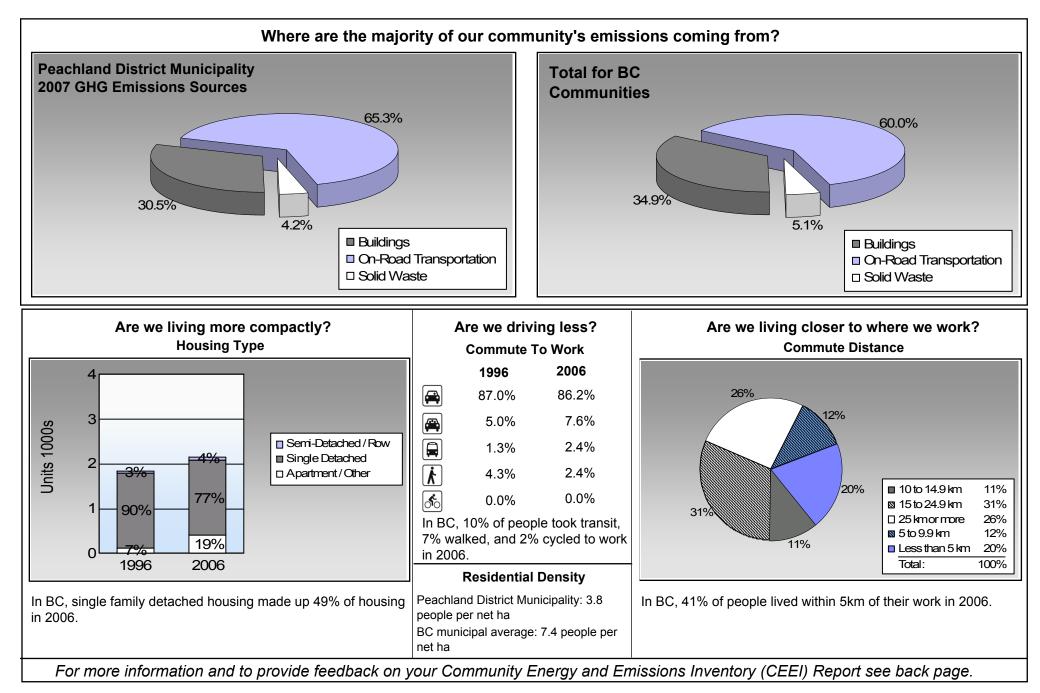


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities





Page 2 of 8 June 30, 2010

Sectors

On Road Transport	ation	<u>Vehicles</u>	Consumption	<u>Measurement</u>	Average-VKT(km)	Energy (GJ)	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	980	1,329,428	Litres	12,876	46,530	3,165
	Diesel Fuel	79	75,445	Litres	13,257	2,890	206
	Other Fuel	< 10	555	Litres		21	1
				Small Pa	assenger Cars	49,441	3,372
Large Passenger Cars	Gasoline	673	1,374,982	Litres	16,387	48,124	3,270
	Diesel Fuel	12	28,761	Litres	16,868	1,102	78
	Other Fuel	< 10	6,538	Litres	13,883	250	10
				Large Pa	assenger Cars	49,476	3,358
Light Trucks, Vans, SUVs	Gasoline	1,563	4,623,442	Litres	19,667	161,820	11,063
	Diesel Fuel	167	419,652	Litres	19,528	16,073	1,146
	Other Fuel	13	32,503	Litres	13,794	1,245	50
				Light Tr	179,138	12,259	
Commercial Vehicles	Gasoline	10	34,220	Litres	11,726	1,198	80
	Diesel Fuel	30	145,590	Litres	23,011	5,576	392
				Comme	rcial Vehicles	6,774	472
Tractor Trailer Trucks	Gasoline	< 10	2,380	Litres	7,085	83	6
	Diesel Fuel	28	763,748	Litres	75,172	29,252	2,055
				Tractor	Trailer Trucks	29,335	2,061
Motorhomes	Gasoline	44	62,541	Litres	3,243	2,189	146
	Diesel Fuel	< 10	7,806	Litres	4,939	299	21
	Other Fuel	< 10	1,800	Litres	2,189	69	3
				Motorho	omes	2,557	170
Motorcycles, Mopeds	Gasoline	57	27,913	Litres	5,128	977	65
				Motorcy	cles, Mopeds	977	65
Bus	Gasoline	< 10	3,725	Litres		130	9
				Bus		130	9



Page 3 of 8 June 30, 2010

			Gasol	ine:	261,051	17,804
			Diese	:	55,192	3,898
			Other	Fuel:	1,585	64
On Road Transportation Totals			All Fu	iels:	317,828	21,766
Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Residential	Electricity	2,493	27,415,850	Kilowatt Hours	98,697	676
	Natural Gas	2,142	160,278	GigaJoules	160,278	8,173
			Residential		258,975	8,849
Commercial/Small-Medium Industrial	Electricity	197	7,151,001	Kilowatt Hours	25,744	176
	Natural Gas	81	22,652	GigaJoules	22,652	1,155
			Commercial/Sma	II-Medium Industrial	48,396	1,331
			Electri	city:	124,441	852
				al Gas:	182,930	9,328
			Propa	ne:		
			Wood			
			Heatir	ig Oil:		
Buildings Totals			Buildi		307,371	10,180
Solid Waste					<u>Mass (t)</u>	<u>CO2e (t)</u>
			Comm	unity Solid Waste	3,170	1,406



Grand Total		CONSUMPTION		ENERGY (GJ)	<u>CO2e (t)</u>
Dies	sel Fuel	1,441,002	L	55,192	3,898
Elec	ctricity	34,566,851	kWh	124,441	852
Gas	oline	7,458,631	L	261,051	17,804
Nat	ural Gas	182,930	GJ	182,930	9,328
Oth	er Fuel	41,396	L	1,585	64
Soli	d Waste	3,170	Т	0	1,406
Total of Transportation / Buildings / S	olid Waste:			625,199 G	J 33,352 tonnes

Memo Items

Buildings	Туре	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
			Lar	ge 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/cas/mitigation/ceei/index.html or

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.

	199 Units	6 %	200 Units	1 %	2006 Units	S %	
Single Detached House	1,655	47	1,615	81	1,660	77	
Semi-Detached House	10	0	40	2	40	2	
Row House	40	1	20	1	45	2	
Apartment, Duplex	20	1	50	3	110	5	
Apartment, 5 storeys or higher	0	0	0	0	0	0	
Apartment, under 5 storeys	90	3	160	8	230	11	
Other Single Attached House	20	1	5	0	5	0	
Movable Dwelling	0	0	105	5	70	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.

	199	6	20	2001		2006	
	People	%	People	%	People	%	
Car, Truck, Van as Driver	1,310	87	1,255	81	1,590	86	
Car, Truck,Van as Passenge	75	5	90	6	140	8	
Public Transit	20	1	35	2	45	2	
Walked	65	4	55	4	45	2	
Bicycle	0	0	20	1	0	0	
Motorcycle	0	0	10	1	0	0	
Taxicab	0	0	0	0	0	0	
Other Method	35	2	75	5	25	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	
Population	5,244.0	
Net Land Area (ha) *	1,390.1	
Residential Density (people pe	er net ha) 3.8	

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.

	200		
	People	%	
Less than 5 km	305	20	
5 to 9.9 km	175	12	
10 to 14.9 km	170	11	
15 to 24.9 km	470	31	
25 km or more	395	26	



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	0.0	0.0			
Local Parks	64.3	3.6			
Agricultural Land Reserve	126.7	7.2			
Other land use	1,576.4	89.2			
Total Land Area	1,767.4	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 <u>CEEIRPT@gov.bc.ca</u> (see survey on CEEI website).

On-Road Transportation (and Land Use) Proximity to Transit Persons, dwelling units (du) and employment within 400m of a guality transit stop/line Persons and dwelling units (du) within 400m of services (e.g. grocery store, school, other retail etc.) Proximity to Services Transit Ridership Annual per capita transit ridership **Buildings** Residential; Public Building Average energy use per person per square metre of floor space Energy Intensity Average residential dwelling unit size Floor Space 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 (<<u>http://www.toolkit.bc.ca></u>), 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.

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 <<u>http://www.toolkit.bc.ca></u> and <<u>http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm></u>.

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/cas/mitigation/ceei/index.html or contact us directly at http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html or contact us directly at http://www.env.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.