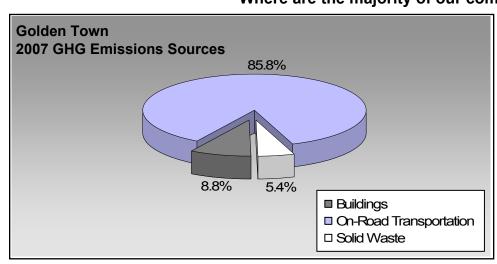
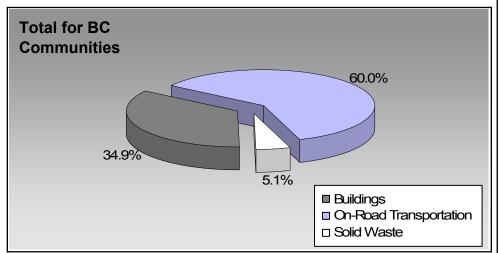


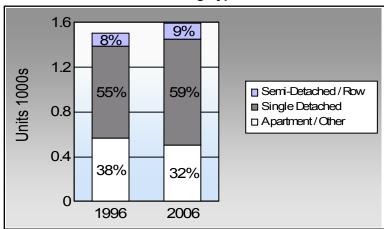
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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





### 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
	66.4%	68.7%
	10.1%	9.7%
	0.6%	0.8%
<b>ķ</b>	16.8%	14.5%
<b>S</b> O	4.5%	4.1%

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

#### **Residential Density**

Golden Town: 4.4 people per net ha

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.

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



### Sectors

On Road Transport	ation	Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	708	1,035,994	Litres	14,059	36,260	2,470
	Diesel Fuel	56	56,860	Litres	14,051	2,178	155
				Small Pa	assenger Cars	38,438	2,625
Large Passenger Cars	Gasoline	402	950,408	Litres	18,733	33,264	2,252
	Diesel Fuel	12	39,988	Litres	19,468	1,532	109
	Other Fuel	< 10	551	Litres		21	1
				Large Pa	assenger Cars	34,817	2,362
Light Trucks, Vans, SUVs	Gasoline	1,825	5,666,562	Litres	19,994	198,330	13,553
	Diesel Fuel	195	517,909	Litres	20,773	19,836	1,415
	Other Fuel	15	40,759	Litres	12,823	1,561	62
				Light Tr	ucks, Vans, SUVs	219,727	15,030
Commercial Vehicles	Gasoline	28	124,248	Litres	15,600	4,349	291
	Diesel Fuel	55	313,373	Litres	23,011	12,002	843
	Other Fuel	< 10	4,310	Litres	11,356	165	7
				Comme	rcial Vehicles	16,516	1,141
Tractor Trailer Trucks	Diesel Fuel	80	2,914,290	Litres	95,400	111,617	7,842
				Tractor	Trailer Trucks	111,617	7,842
Motorhomes	Gasoline	22	32,761	Litres	2,811	1,147	76
	Diesel Fuel	< 10	4,585	Litres	4,349	176	12
	Other Fuel	< 10	1,800	Litres		69	3
				Motorho	omes	1,392	91
Motorcycles, Mopeds	Gasoline	29	19,259	Litres	4,962	674	45
				Motorcy	cles, Mopeds	674	45
Bus	Gasoline	< 10	34,778	Litres	17,389	1,217	81
	Diesel Fuel	< 10	74,009	Litres	31,699	2,835	199
	Other Fuel	< 10	4,389	Litres		168	7
				Bus		4,220	287



	Gasoline:	275,241	18,768
	Diesel:	150,176	10,575
	Other Fuel:	1,984	80
On Road Transportation Totals	All Fuels:	427,401	29,423

Buildings	<u>Type</u>	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Residential	Electricity	1,828	25,535,250	Kilowatt Hours	91,927	630
	Heating Oil		8,518	GigaJoules	8,518	600
	Propane		15,013	GigaJoules	15,013	916
	Wood		75,052	GigaJoules	75,052	28
			Residential		190,510	2,174
Commercial/Small-Medium Industrial	Electricity	501	34,017,758	Kilowatt Hours	122,464	839
			Commercial/Sma	II-Medium Industrial	122,464	839
			Electri	city:	214,391	1,469
			Natura	al Gas:		
			Propa	ne:	15,013	916
		Wood:		75,052	28	
			Heatir	ıg Oil:	8,518	600
Buildings Totals		Buildings:			312,974	3,013

Solid Waste		Mass (t)	CO2e (t)
	Community Solid Waste	3,307	1,846



Grand Total		CONSUMPTION		ENERGY (GJ)	<u>CO2e (t)</u>
	Diesel Fuel	3,921,014	L	150,176	10,575
	Electricity	59,553,008	kWh	214,391	1,469
	Gasoline	7,864,010	L	275,241	18,768
	Heating Oil	8,518	GJ	8,518	600
	Other Fuel	51,809	L	1,984	80
	Propane	15,013	GJ	15,013	916
	Solid Waste	3,307	Т	0	1,846
	Wood	75,052	GJ	75,052	28
Total of Transportation / Bu	ildings / Solid Waste:			<b>740,375</b> GJ	<b>34,282</b> tonnes

### **Memo Items**

Buildings	<u>Type</u>	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-
			Lar	ge Industrial	-	-
	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 <a href="http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html">http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html</a> or contact us directly at <a href="https://ceei/index.html">CEEIRPT@gov.bc.ca</a>

#### 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	6	2001	1	2006	6	
	Units	%	Units	%	Units	%	
Single Detached House	820	35	1,180	76	940	59	
Semi-Detached House	40	2	25	2	40	3	
Row House	75	3	110	7	105	7	
Apartment, Duplex	65	3	55	4	85	5	
Apartment, 5 storeys or higher	0	0	0	0	5	0	
Apartment, under 5 storeys	225	10	185	12	195	12	
Other Single Attached House	10	0	5	0	5	0	
Movable Dwelling	265	11	0	0	215	14	

#### 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	96	20	01	200	)6	
	People	%	People	%	People	%	
Car, Truck, Van as Driver	1,185	66	1,390	74	1,350	69	
Car, Truck, Van as Passenge	180	10	110	6	190	10	
Public Transit	10	1	0	0	15	1	
Walked	300	17	255	14	285	15	
Bicycle	80	4	115	6	80	4	
Motorcycle	10	1	0	0	10	1	
Taxicab	0	0	0	0	0	0	
Other Method	20	1	0	0	35	2	

#### **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	3,959.0
Net Land Area (ha) *	904.8
Residential Density (people pe	r net ha) 4.4

#### 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	6
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.

	200	9	
	Area (ha)	%	
National Parks	0.0	0.0	
Provincial Parks / Protected Areas	118.2	10.0	
Local Parks	63.0	5.3	
Agricultural Land Reserve	10.8	0.9	
Other land use	989.6	83.8	
Total Land Area	1,181.6	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** 

Floor Space

Average energy use per person per square metre of 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)



Page 8 of 8 June 30, 2010

# 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 (<a href="http://www.toolkit.bc.ca">http://www.toolkit.bc.ca</a>), 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: <a href="http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html">http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html</a>.
- For guidance on target setting and community actions, go to <a href="http://www.toolkit.bc.ca">http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm</a>.

#### 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 <a href="http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html">http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html</a> or contact us directly at <a href="mailto:CEEIRPT@gov.bc.ca">CEEIRPT@gov.bc.ca</a>

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.