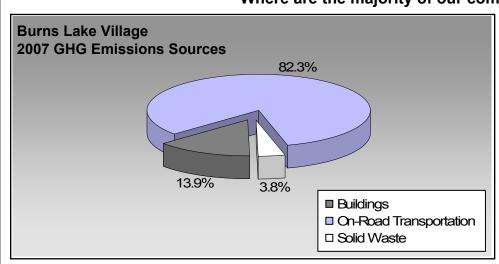
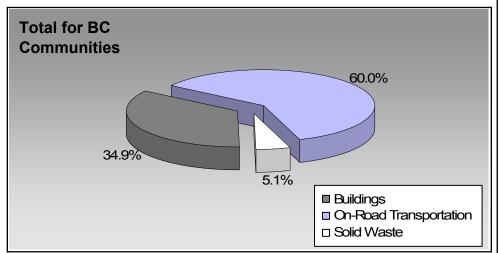


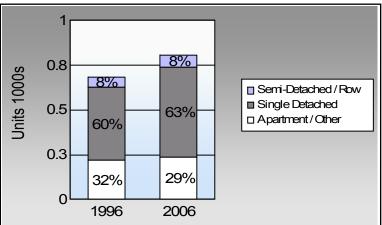
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

#### 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
	75.3%	69.3%
	9.0%	10.8%
	0.0%	0.0%
<b>ķ</b>	15.7%	19.9%
<b>\$</b> 0	0.0%	0.0%

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

#### **Residential Density**

Burns Lake Village: 3.1 people per net ha

BC municipal average: 7.4 people per net ha

#### 0.076

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

This data is currently unavailable in

the CEEI 2007 Reports

Are we living closer to where we work?

**Commute Distance** 

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)	CO2e (t)
Small Passenger Cars	Gasoline	514	752,963	Litres	13,388	26,354	1,800
	Diesel Fuel	35	40,038	Litres	14,499	1,533	109
				Small Pa	assenger Cars	27,887	1,909
Large Passenger Cars	Gasoline	406	1,022,455	Litres	19,827	35,786	2,427
	Diesel Fuel	11	30,337	Litres	20,538	1,162	83
	Other Fuel	< 10	1,887	Litres	14,858	72	3
				Large Pa	assenger Cars	37,020	2,513
Light Trucks, Vans, SUVs	Gasoline	1,493	4,882,996	Litres	19,908	170,905	11,700
	Diesel Fuel	364	994,852	Litres	21,176	38,103	2,718
	Other Fuel	21	53,296	Litres	14,144	2,041	82
				Light Tr	ucks, Vans, SUVs	211,049	14,500
Commercial Vehicles	Gasoline	17	69,434	Litres	12,341	2,430	162
	Diesel Fuel	97	418,617	Litres	20,018	16,033	1,126
	Other Fuel	< 10	11,475	Litres	12,210	439	18
				Comme	rcial Vehicles	18,902	1,306
Tractor Trailer Trucks	Gasoline	< 10	23,203	Litres	16,586	812	54
	Diesel Fuel	196	6,028,814	Litres	73,630	230,904	16,223
				Tractor '	Trailer Trucks	231,716	16,277
Motorhomes	Gasoline	16	30,504	Litres	2,712	1,068	71
	Diesel Fuel	< 10	2,845	Litres		109	8
	Other Fuel	< 10	277	Litres		11	-
				Motorho	omes	1,188	79
Motorcycles, Mopeds	Gasoline	13	9,323	Litres	4,885	326	22
				Motorcycles, Mopeds		326	22
Bus	Gasoline	< 10	17,556	Litres	15,902	614	41
	Other Fuel	< 10	9,218	Litres	16,106	353	14
				Bus		967	55



	Gasoline:	238,295	16,277
	Diesel: Other Fuel:	287,844 2,916	20,267 117
On Road Transportation Totals	All Fuels:	529,055	36,661

Buildings	<u>Type</u>	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	1,022	10,327,012	Kilowatt Hours	37,177	255
	Natural Gas	674	59,412	GigaJoules	59,412	3,030
			Residential		96,589	3,285
Commercial/Small-Medium Industrial	Electricity	260	17,363,193	Kilowatt Hours	62,507	428
	Natural Gas	173	48,841	GigaJoules	48,841	2,491
			Commercial/Small-Medium Industrial		111,348	2,919
			Electri	city:	99,684	683
			Natura	al Gas:	108,253	5,521
			Propa	ne:		
			Wood			
			Heating Oil:			
Buildings Totals			Buildi	ngs:	207,937	6,204

Solid Waste		Mass (t)	CO2e (t)
	Community Solid Waste	3,190	1,688



Grand Total		CONSUMPTION		ENERGY (GJ)	CO2e (t)
	Diesel Fuel	7,515,503	L	287,844	20,267
	Electricity	27,690,205	kWh	99,684	683
	Gasoline	6,808,434	L	238,295	16,277
	Natural Gas	108,253	GJ	108,253	5,521
	Other Fuel	76,153	L	2,916	117
	Solid Waste	3,190	T	0	1,688
Total of Transportation / B	uildings / Solid Waste:			<b>736,992</b> GJ	<b>44,553</b> tonnes

### **Memo Items**

Buildings	Туре	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
	Natural Gas	2	withheld	GigaJoules	-	-
			-	-		



## **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.

	199 Units	6 %	200 <sup>-</sup> Units	1 %	2006 Units	8	
Single Detached House	405	37	495	66	505	63	
Semi-Detached House	10	1	15	2	15	2	
Row House	45	4	50	7	50	6	
Apartment, Duplex	25	2	35	5	50	6	
Apartment, 5 storeys or higher	0	0	0	0	0	0	
Apartment, under 5 storeys	165	15	105	14	130	16	
Other Single Attached House	0	0	0	0	0	0	
Movable Dwelling	30	3	55	7	55	7	

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.

Commute to Work - Employed labour force - by mode of commute

	199	1996		2001		2006	
	People	%	People	%	People	%	
Car, Truck, Van as Driver	625	75	555	68	575	69	
Car, Truck,Van as Passenge	75	9	75	9	90	11	
Public Transit	0	0	0	0	0	0	
Walked	130	16	190	23	165	20	
Bicycle	0	0	0	0	0	0	
Motorcycle	0	0	0	0	0	0	
Taxicab	0	0	0	0	0	0	
Other Method	0	0	0	0	0	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 2	,114.0
Net Land Area (ha) *	678.9
Residential Density (people per net ha)	3.1

#### 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.

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	0.0	0.0	
Local Parks	3.3	0.4	
Agricultural Land Reserve Other land use	0.0	0.0	
Other land use	751.9	99.6	
Total Land Area	755.2	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** 

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.