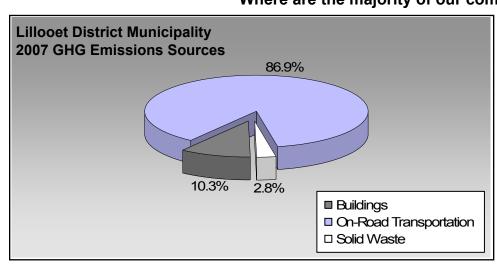
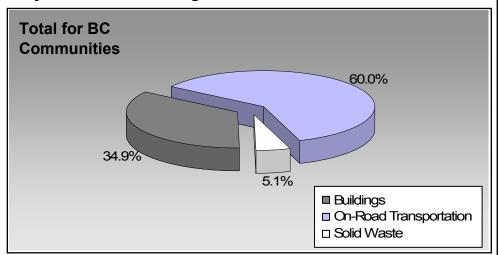


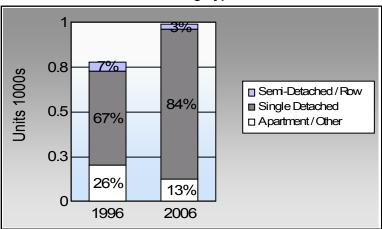
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

### 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
	64.3%	75.6%
	9.4%	12.2%
	1.2%	1.5%
<b>ķ</b>	22.2%	8.8%
<b>%</b>	2.9%	0.0%

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

#### **Residential Density**

Lillooet District Municipality: 1.1 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	<u>Vehicles</u>	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	398	593,323	Litres	13,767	20,766	1,417
	Diesel Fuel	21	23,142	Litres	15,005	886	63
				Small Pa	assenger Cars	21,652	1,480
Large Passenger Cars	Gasoline	259	588,889	Litres	17,420	20,611	1,399
	Diesel Fuel	10	23,175	Litres	16,604	888	63
	Other Fuel	< 10	2,284	Litres	13,377	87	3
				Large P	assenger Cars	21,586	1,465
Light Trucks, Vans, SUVs	Gasoline	883	2,663,591	Litres	19,601	93,226	6,375
	Diesel Fuel	148	410,077	Litres	21,770	15,706	1,120
	Other Fuel	10	29,181	Litres	13,164	1,118	45
				Light Tr	ucks, Vans, SUVs	110,050	7,540
Commercial Vehicles	Gasoline	15	51,463	Litres	12,318	1,801	120
	Diesel Fuel	22	106,470	Litres	21,304	4,078	287
	Other Fuel	< 10	7,183	Litres	11,356	275	11
				Comme	rcial Vehicles	6,154	418
Tractor Trailer Trucks	Gasoline	< 10	7,074	Litres	12,380	248	17
	Diesel Fuel	40	1,081,725	Litres	70,660	41,430	2,911
				Tractor	Trailer Trucks	41,678	2,928
Motorhomes	Gasoline	< 10	15,552	Litres	3,331	544	36
	Diesel Fuel	< 10	2,283	Litres	3,021	87	6
	Other Fuel	< 10	692	Litres	2,189	27	1
				Motorho	omes	658	43
Motorcycles, Mopeds	Gasoline	37	16,757	Litres	5,593	586	39
				Motorcy	cles, Mopeds	586	39
Bus	Gasoline	< 10	28,249	Litres	17,761	989	66
	Diesel Fuel	< 10	50,090	Litres	37,055	1,918	135
				Bus		2,907	201



	Gasoline: Diesel:	138,771 64,993	9,469 4,585
	Other Fuel:	1,507	60
On Road Transportation Totals	All Fuels:	205,271	14,114

Buildings	<u>Type</u>	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Residential	Electricity	930	13,961,360	Kilowatt Hours	50,261	344
	Heating Oil		5,811	GigaJoules	5,811	410
	Propane		10,241	GigaJoules	10,241	625
	Wood		68,911	GigaJoules	68,911	25
			Residential		135,224	1,404
Commercial/Small-Medium Industrial	Electricity	201	10,701,965	Kilowatt Hours	38,527	264
			Commercial/Sma	II-Medium Industrial	38,527	264
			Electri	city:	88,788	608
			Natura	al Gas:		
			Propa	ne:	10,241	625
		Wood:		68,911	25	
		Heating Oil:			5,811	410
Buildings Totals			Buildi	ngs:	173,751	1,668

Solid Waste		Mass (t)	<u>CO2e (t)</u>
	Community Solid Waste	1,162	455



	Wood	68,911	GJ	68,911	25
	Solid Waste	1,162	T	0	455
	Propane	10,241	GJ	10,241	625
	Other Fuel	39,340	L	1,507	60
	Heating Oil	5,811	GJ	5,811	410
	Gasoline	3,964,898	L	138,771	9,469
	Electricity	24,663,325	kWh	88,788	608
	Diesel Fuel	1,696,962	L	64,993	4,585
Grand Total		CONSUMPTION		ENERGY (GJ)	CO2e (t)

## **Memo Items**

Buildings	<u>Type</u>	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
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	·	200	-	2006	.,
	Units	%	Units	%	Units 9	%
Single Detached House	520	40	735	65	835 8	84
Semi-Detached House	20	2	30	3	15	2
Row House	35	3	35	3	15	2
Apartment, Duplex	40	3	40	4	15	2
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	75	6	35	3	70	7
Other Single Attached House	0	0	35	3	15	2
Movable Dwelling	90	7	225	20	25	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.

	1996		20	01	2006		
	People	%	People	%	People	%	
Car, Truck, Van as Driver	550	64	930	72	775	76	
Car, Truck, Van as Passenge	80	9	160	12	125	12	
Public Transit	10	1	10	1	15	1	
Walked	190	22	150	12	90	9	
Bicycle	25	3	0	0	0	0	
Motorcycle	0	0	10	1	20	2	
Taxicab	0	0	0	0	0	0	
Other Method	0	0	35	3	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	2,367.0
Net Land Area (ha) *	2,233.9
Residential Density (people per net ha	1.1

#### 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	2006 People %		
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	09	
National Parks	Area (ha)	%	
National Parks	0.0	0.0	
Provincial Parks / Protected Areas	0.0	0.0	
Local Parks	33.4	1.1	
Agricultural Land Reserve Other land use	372.1	12.7	
Other land use	2,534.7	86.2	
Total Land Area	2,940.1	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.