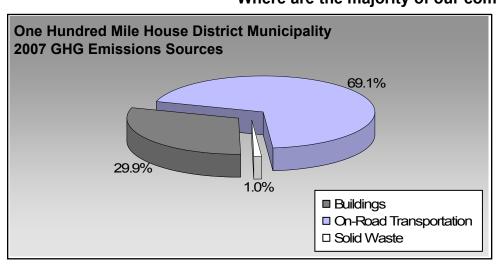
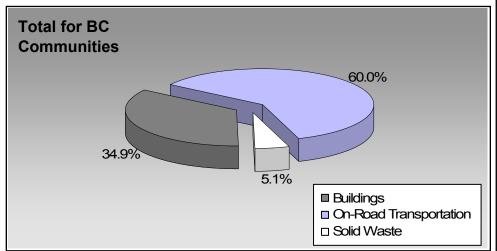


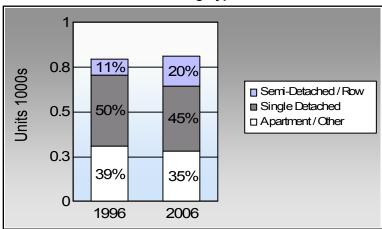
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

### 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
	71.5%	66.2%
	8.0%	19.2%
	0.0%	0.0%
<b>†</b>	20.5%	13.3%
<b>%</b>	0.0%	1.3%

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

#### **Residential Density**

One Hundred Mile House District Municipality: 1.8 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	tation	Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	484	752,684	Litres	14,534	26,344	1,796
	Diesel Fuel	18	21,509	Litres	14,877	824	59
	Other Fuel	< 10	232	Litres		9	-
				Small Pa	assenger Cars	27,177	1,855
Large Passenger Cars	Gasoline	293	717,497	Litres	18,329	25,112	1,704
	Diesel Fuel	< 10	22,634	Litres	19,266	867	62
	Other Fuel	< 10	1,032	Litres		40	2
				Large Pa	assenger Cars	26,019	1,768
Light Trucks, Vans, SUVs	Gasoline	1,229	3,917,931	Litres	20,330	137,128	9,360
	Diesel Fuel	212	515,558	Litres	19,446	19,746	1,408
	Other Fuel	< 10	23,751	Litres	13,694	910	36
				Light Tr	ucks, Vans, SUVs	157,784	10,804
Commercial Vehicles	Gasoline	< 10	35,807	Litres	12,526	1,253	83
	Diesel Fuel	31	160,604	Litres	21,584	6,151	432
	Other Fuel	< 10	2,330	Litres		89	4
				Comme	rcial Vehicles	7,493	519
Tractor Trailer Trucks	Gasoline	< 10	1,190	Litres		42	3
	Diesel Fuel	57	2,094,929	Litres	91,250	80,236	5,637
	Other Fuel	< 10	2,380	Litres	7,085	91	4
				Tractor	Trailer Trucks	80,369	5,644
Motorhomes	Gasoline	15	23,991	Litres	2,784	840	56
	Diesel Fuel	< 10	2,597	Litres	3,332	99	7
	Other Fuel	< 10	1,108	Litres	2,189	42	2
				Motorho	omes	981	65
Motorcycles, Mopeds	Gasoline	10	8,274	Litres	4,681	290	19
				Motorcy	cles, Mopeds	290	19
Bus	Gasoline	< 10	22,880	Litres	21,504	801	54
	Diesel Fuel	< 10	26,701	Litres	48,992	1,023	72
				Bus		1,824	126



	Gasoline:	191,810	13,075
	Diesel:	108,946	7,677
	Other Fuel:	1,181	48
On Road Transportation Totals	All Fuels:	301,937	20,800

Buildings	<u>Type</u>	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Residential	Electricity	888	7,573,870	Kilowatt Hours	27,266	187
	Natural Gas	671	54,153	GigaJoules	54,153	2,762
	Heating Oil		672	GigaJoules	672	47
	Propane		1,829	GigaJoules	1,829	112
			Residential		83,920	3,108
Commercial/Small-Medium Industrial	Electricity	451	23,774,683	Kilowatt Hours	85,589	586
	Natural Gas	331	104,097	GigaJoules	104,097	5,309
			Commercial/Sma	ıll-Medium Industrial	189,686	5,895
			Electr	icity:	112,855	773
			Natura	al Gas:	158,250	8,071
			Propa	ne:	1,829	112
			Wood	:		
			Heatir	ng Oil:	672	47
Buildings Totals			Build	ings:	273,606	9,003

Solid Waste		Mass (t)	CO2e (t)
	Community Solid Waste	1,039	316



Grand Total		CONSUMPTION		ENERGY (GJ)	<u>CO2e (t)</u>
Grana rotai				• •	
	Diesel Fuel	2,844,532	L	108,946	7,677
	Electricity	31,348,553	kWh	112,855	773
	Gasoline	5,480,254	L	191,810	13,075
	Heating Oil	672	GJ	672	47
	Natural Gas	158,250	GJ	158,250	8,071
	Other Fuel	30,833	L	1,181	48
	Propane	1,829	GJ	1,829	112
	Solid Waste	1,039	Т	0	316
Total of Transportation / B	uildings / Solid Waste:			<b>575,543</b> GJ	<b>30,119</b> tonnes

### **Memo Items**

Buildings	Туре	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>	
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-	
	Natural Gas	1	withheld	GigaJoules	-	-	
		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	200	1	2006	i	
	Units	%	Units	%	Units	%	
Single Detached House	395	33	375	48	365	45	
Semi-Detached House	40	3	60	8	60	7	
Row House	50	4	90	12	105	13	
Apartment, Duplex	10	1	5	1	20	2	
Apartment, 5 storeys or higher	0	0	0	0	0	0	
Apartment, under 5 storeys	180	15	140	18	165	20	
Other Single Attached House	15	1	5	1	0	0	
Movable Dwelling	105	9	105	13	95	12	

### 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	2001		2006	
	People	%	People	%	People	%	
Car, Truck, Van as Driver	540	72	445	67	500	66	
Car, Truck, Van as Passenge	60	8	50	8	145	19	
Public Transit	0	0	15	2	0	0	
Walked	155	21	150	23	100	13	
Bicycle	0	0	0	0	10	1	
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
	1,941.0
Net Land Area (ha) *	1,086.3
Residential Density (people per net ha)	1.8

#### 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	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	8.9	0.2	
Agricultural Land Reserve	3,266.9	61.6	
Other land use	2,030.2	38.3	
Total Land Area	5,306.0	100.0	



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### **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)



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# 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.