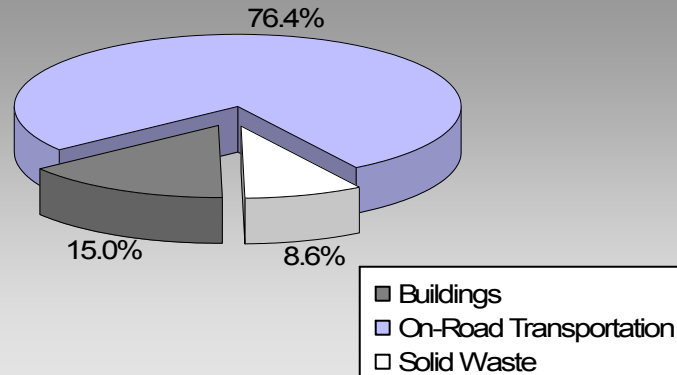


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

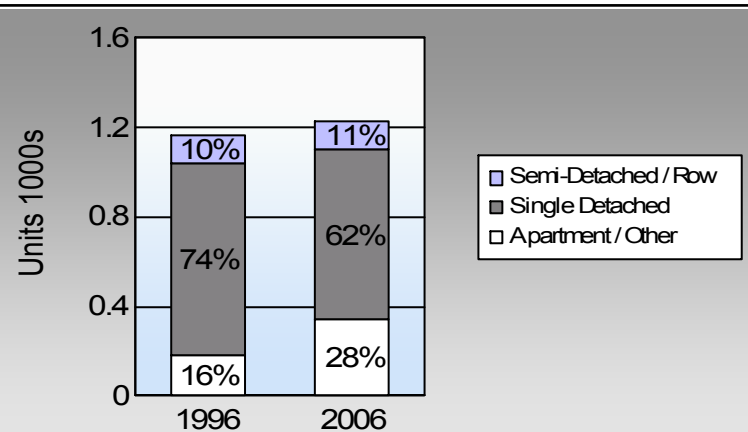
**Sicamous District Municipality  
2007 GHG Emissions Sources**



**Total for BC  
Communities**








## 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
	71.4%	78.1%
	8.6%	5.9%
	0.0%	1.0%
	17.7%	8.3%
	2.3%	4.9%

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

### Residential Density

Sicamous District Municipality: 3.6 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.

## Sectors

<b>On Road Transportation</b>		<u>Vehicles</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Average-VKT(km)</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	492	700,673	Litres	13,810	24,524	1,675
	Diesel Fuel	15	19,557	Litres	14,258	749	53
<b>Small Passenger Cars</b>						<b>25,273</b>	<b>1,728</b>
Large Passenger Cars	Gasoline	362	844,694	Litres	17,541	29,564	2,014
	Diesel Fuel	< 10	15,978	Litres	18,232	612	44
	Other Fuel	< 10	3,730	Litres	18,151	143	6
<b>Large Passenger Cars</b>						<b>30,319</b>	<b>2,064</b>
Light Trucks, Vans, SUVs	Gasoline	1,010	3,074,121	Litres	19,207	107,594	7,385
	Diesel Fuel	148	356,947	Litres	19,071	13,671	975
	Other Fuel	11	25,480	Litres	12,646	976	39
<b>Light Trucks, Vans, SUVs</b>						<b>122,241</b>	<b>8,399</b>
Commercial Vehicles	Gasoline	< 10	48,873	Litres	12,249	1,711	114
	Diesel Fuel	29	130,257	Litres	20,591	4,989	351
	Other Fuel	< 10	9,717	Litres	12,621	372	15
<b>Commercial Vehicles</b>						<b>7,072</b>	<b>480</b>
Tractor Trailer Trucks	Gasoline	< 10	2,380	Litres	7,085	83	6
	Diesel Fuel	37	1,096,398	Litres	72,935	41,992	2,950
<b>Tractor Trailer Trucks</b>						<b>42,075</b>	<b>2,956</b>
Motorhomes	Gasoline	33	42,839	Litres	3,133	1,499	100
	Diesel Fuel	< 10	3,140	Litres	2,888	120	8
	Other Fuel	< 10	415	Litres		16	1
<b>Motorhomes</b>						<b>1,635</b>	<b>109</b>
Motorcycles, Mopeds	Gasoline	40	18,386	Litres	5,505	644	43
<b>Motorcycles, Mopeds</b>						<b>644</b>	<b>43</b>
Bus	Gasoline	< 10	21,421	Litres	20,716	750	50
<b>Bus</b>						<b>750</b>	<b>50</b>

# Sicamous District Municipality Updated 2007 Community Energy and Emissions Inventory

<b>On Road Transportation Totals</b>	Gasoline:	166,369	11,387
	Diesel:	62,133	4,381
	Other Fuel:	1,507	61
	<b>All Fuels:</b>	<b>230,009</b>	<b>15,829</b>

<b>Buildings</b>	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	2,020	27,895,610	Kilowatt Hours	100,424	688
	Heating Oil		11,235	GigaJoules	11,235	792
	Propane		19,797	GigaJoules	19,797	1,208
	Wood		99,046	GigaJoules	99,046	37
<b>Residential</b>					<b>230,502</b>	<b>2,725</b>
Commercial/Small-Medium Industrial	Electricity	415	15,430,326	Kilowatt Hours	55,549	381
<b>Commercial/Small-Medium Industrial</b>					<b>55,549</b>	<b>381</b>
<b>Buildings Totals</b>	Electricity:				155,973	1,069
	Natural Gas:					
	Propane:				19,797	1,208
	Wood:				99,046	37
	Heating Oil:				11,235	792
<b>Buildings:</b>					<b>286,051</b>	<b>3,106</b>

<b>Solid Waste</b>	Mass (t)	CO2e (t)
Community Solid Waste	2,359	1,791

# Sicamous District Municipality

## Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	1,622,277	L	62,133	4,381
Electricity	43,325,936	kWh	155,973	1,069
Gasoline	4,753,387	L	166,369	11,387
Heating Oil	11,235	GJ	11,235	792
Other Fuel	39,342	L	1,507	61
Propane	19,797	GJ	19,797	1,208
Solid Waste	2,359	T	0	1,791
Wood	99,046	GJ	99,046	37
<b>Total of Transportation / Buildings / Solid Waste:</b>			<b>516,060 GJ</b>	<b>20,726 tonnes</b>

### Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
<b>Large Industrial</b>					-	-

## 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](mailto: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.

	1996		2001		2006	
	Units	%	Units	%	Units	%
Single Detached House	855	74	790	65	760	62
Semi-Detached House	20	2	45	4	45	4
Row House	100	9	90	7	85	7
Apartment, Duplex	0	0	5	0	15	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	50	4	70	6	105	9
Other Single Attached House	35	3	20	2	10	1
Movable Dwelling	100	9	190	16	210	17

### 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		2001		2006	
	People	%	People	%	People	%
Car, Truck, Van as Driver	625	71	650	73	800	78
Car, Truck, Van as Passenger	75	9	45	5	60	6
Public Transit	0	0	0	0	10	1
Walked	155	18	130	15	85	8
Bicycle	20	2	20	2	50	5
Motorcycle	0	0	0	0	10	1
Taxicab	0	0	0	0	0	0
Other Method	0	0	45	5	10	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	2,950.0
Net Land Area (ha) *	813.1
Residential Density (people per net ha)	3.6

### 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.

2006	
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.

	2009	
	Area (ha)	%
National Parks	0.0	0.0
Provincial Parks / Protected Areas	0.0	0.0
Local Parks	0.0	0.0
Agricultural Land Reserve	452.0	27.0
Other land use	1,222.3	73.0
Total Land Area	1,674.3	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](mailto: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	Average energy use per person per square metre of floor space
Floor Space	Average residential dwelling unit size

---

### Solid Waste (and Water)

Waste Diversion	Tonnes of waste diverted
Avoided Waste Emissions	Tonnes of CO <sub>2</sub> e 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 (<http://www.toolkit.bc.ca>), 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 <http://www.toolkit.bc.ca> and <http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm>.

## 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](mailto:CEEIRPT@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.