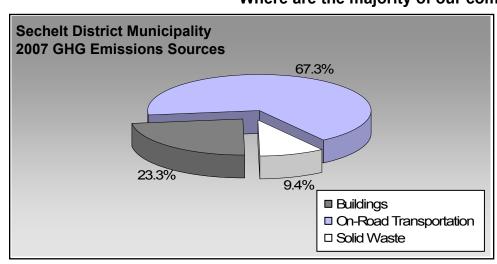
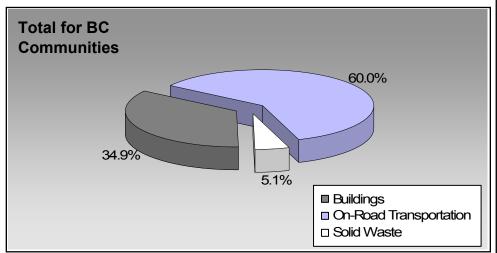


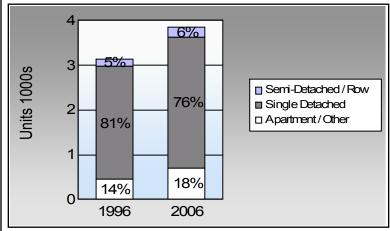
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

### 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
	74.1%	79.4%
	11.2%	6.8%
	4.2%	3.5%
<b>ķ</b>	6.0%	7.9%
<b>S</b> O	1.6%	0.5%

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

#### **Residential Density**

Sechelt District Municipality: 3.4 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	tation	<u>Vehicles</u>	Consumption	<u>Measurement</u>	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	2,005	2,535,216	Litres	12,667	88,733	6,063
_	Diesel Fuel	54	51,375	Litres	13,116	1,968	140
	Other Fuel	< 10	1,118	Litres		43	2
				Small Pa	assenger Cars	90,744	6,205
Large Passenger Cars	Gasoline	1,039	2,169,089	Litres	16,701	75,918	5,174
	Diesel Fuel	27	61,429	Litres	17,534	2,353	168
	Other Fuel	< 10	11,383	Litres	13,442	436	17
				Large Pa	assenger Cars	78,707	5,359
Light Trucks, Vans, SUVs	Gasoline	3,025	8,771,499	Litres	19,740	307,002	21,030
	Diesel Fuel	225	559,196	Litres	19,470	21,417	1,528
	Other Fuel	23	47,063	Litres	12,713	1,803	72
				Light Tr	ucks, Vans, SUVs	330,222	22,630
Commercial Vehicles	Gasoline	29	109,403	Litres	13,416	3,829	255
	Diesel Fuel	51	226,441	Litres	20,361	8,673	609
	Other Fuel	< 10	16,110	Litres	12,134	617	25
				Commercial Vehicles		13,119	889
Tractor Trailer Trucks	Diesel Fuel	78	1,699,355	Litres	58,250	65,085	4,573
				Tractor '	Trailer Trucks	65,085	4,573
Motorhomes	Gasoline	81	78,004	Litres	2,812	2,730	182
	Diesel Fuel	10	9,723	Litres	4,122	372	26
	Other Fuel	< 10	2,215	Litres	2,189	85	3
				Motorho	omes	3,187	211
Motorcycles, Mopeds	Gasoline	121	43,809	Litres	4,915	1,533	102
				Motorcy	cles, Mopeds	1,533	102
Bus	Gasoline	10	71,670	Litres	18,247	2,508	168
	Diesel Fuel	11	280,418	Litres	46,558	10,740	755
	Other Fuel	< 10	23,408	Litres	15,902	897	36
				Bus		14,145	959



On Road Transportation Totals	All Fuels:	596,742	40,928
	Other Fuel:	3,881	155
	Diesel:	110,608	7,799
	Gasoline:	482,253	32,974

Buildings	<u>Type</u>	Connections	Consumption	<u>Measurement</u>	Energy (GJ)	<u>CO2e (t)</u>
Residential	Electricity	4,832	66,689,124	Kilowatt Hours	240,081	1,645
	Natural Gas	2,258	128,666	GigaJoules	128,666	6,561
	Heating Oil		4,558	GigaJoules	4,558	321
	Propane		9,618	GigaJoules	9,618	587
			Residential		382,923	9,114
Commercial/Small-Medium Industrial	Electricity	661	35,352,350	Kilowatt Hours	127,268	872
	Natural Gas	255	81,670	GigaJoules	81,670	4,165
			Commercial/Sma	III-Medium Industrial	208,938	5,037
			Electr	city:	367,349	2,517
			Natura	al Gas:	210,336	10,726
			Propa	ne:	9,618	587
			Wood			
			Heatir	ng Oil:	4,558	321
Buildings Totals			Buildi	ngs:	591,861	14,151

Solid Waste		Mass (t)	CO2e (t)
	Community Solid Waste	4,514	5,746



Grand Total		CONSUMPTION		ENERGY (GJ)	<u>CO2e (t)</u>
	Diesel Fuel	2,887,937	L	110,608	7,799
	Electricity	102,041,474	kWh	367,349	2,517
	Gasoline	13,778,690	L	482,253	32,974
	Heating Oil	4,558	GJ	4,558	321
	Natural Gas	210,336	GJ	210,336	10,726
	Other Fuel	101,297	L	3,881	155
	Propane	9,618	GJ	9,618	587
	Solid Waste	4,514	Т	0	5,746
Total of Transportation / Buildings	s / Solid Waste:			1,188,603	GJ <b>60,825</b> tonnes

### **Memo Items**

ilowatt Hours -	-
ndustrial -	-



### **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	
	Units	%	Units	%	Units	%
Single Detached House	2,525	45	2,685	78	2,915	76
Semi-Detached House	25	0	35	1	35	1
Row House	135	2	190	6	195	5
Apartment, Duplex	145	3	100	3	125	3
Apartment, 5 storeys or higher	0	0	0	0	5	0
Apartment, under 5 storeys	210	4	245	7	335	9
Other Single Attached House	10	0	10	0	5	0
Movable Dwelling	85	2	180	5	240	6

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	6	200	01	200	6	
	People	%	People	%	People	%	
Car, Truck, Van as Driver	2,115	74	2,170	76	2,620	79	
Car, Truck, Van as Passenge	320	11	190	7	225	7	
Public Transit	120	4	105	4	115	3	
Walked	170	6	310	11	260	8	
Bicycle	45	2	20	1	15	0	
Motorcycle	0	0	15	1	0	0	
Taxicab	0	0	0	0	0	0	
Other Method	85	3	30	1	65	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
	9,164.0
Net Land Area (ha) *	2,733.0
Residential Density (people per net ha)	3.4

#### 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	06
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	59.0	1.5	
Local Parks	223.4	5.5	
Agricultural Land Reserve	984.6	24.1	
Other land use	2,812.8	68.9	
Total Land Area	4,079.8	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.