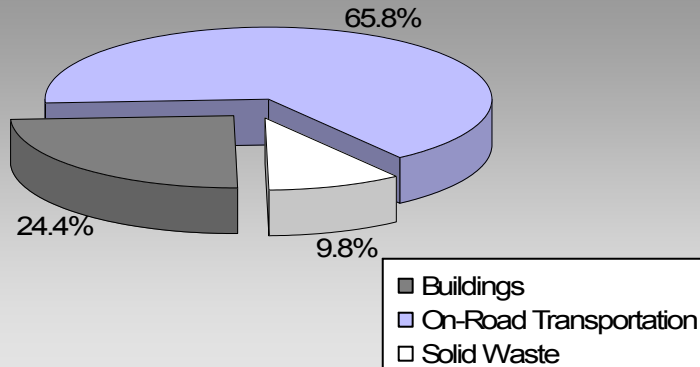


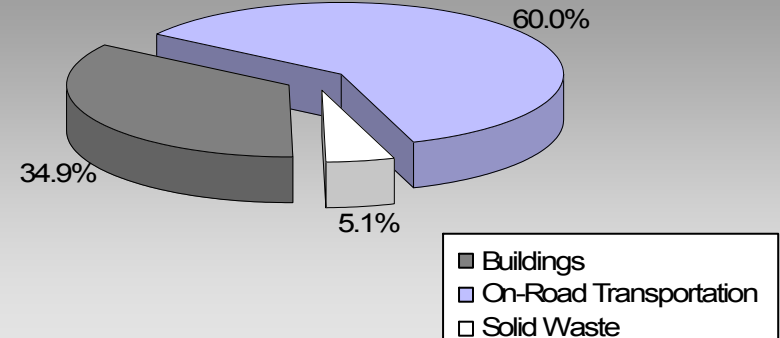
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

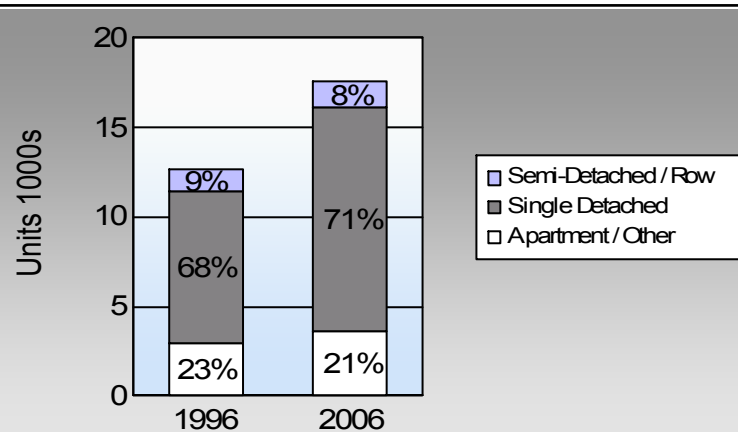
**Strathcona Regional District
2007 GHG Emissions Sources**



**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
	72.6%	75.9%
	10.6%	8.7%
	2.8%	2.4%
	8.1%	6.9%
	1.2%	1.8%

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

Residential Density

This data is only available for municipalities.
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

On Road Transportation		<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	7,368	10,235,547	Litres	13,809	358,244	24,473
	Diesel Fuel	373	390,184	Litres	14,374	14,944	1,066
	Other Fuel	< 10	191	Litres		7	-
Small Passenger Cars						373,195	25,539
Large Passenger Cars	Gasoline	3,927	8,916,846	Litres	18,443	312,090	21,248
	Diesel Fuel	104	247,526	Litres	18,480	9,480	676
	Other Fuel	< 10	17,481	Litres	14,169	670	27
Large Passenger Cars						322,240	21,951
Light Trucks, Vans, SUVs	Gasoline	13,578	39,785,119	Litres	19,694	1,392,479	95,472
	Diesel Fuel	1,658	3,952,319	Litres	18,939	151,374	10,797
	Other Fuel	110	258,993	Litres	13,190	9,919	397
Light Trucks, Vans, SUVs						1,553,772	106,666
Commercial Vehicles	Gasoline	144	695,563	Litres	16,588	24,345	1,631
	Diesel Fuel	276	1,266,783	Litres	20,936	48,518	3,409
	Other Fuel	14	48,256	Litres	12,117	1,848	74
Commercial Vehicles						74,711	5,114
Tractor Trailer Trucks	Gasoline	< 10	11,902	Litres	7,085	417	28
	Diesel Fuel	312	8,498,173	Litres	71,560	325,480	22,868
	Other Fuel	< 10	4,166	Litres	7,085	160	6
Tractor Trailer Trucks						326,057	22,902
Motorhomes	Gasoline	308	330,292	Litres	2,834	11,560	772
	Diesel Fuel	31	40,096	Litres	4,263	1,536	108
	Other Fuel	< 10	5,538	Litres	2,189	212	8
Motorhomes						13,308	888
Motorcycles, Mopeds	Gasoline	568	227,506	Litres	4,892	7,963	531
Motorcycles, Mopeds						7,963	531
Bus	Gasoline	21	185,827	Litres	19,420	6,504	436
	Diesel Fuel	36	411,565	Litres	22,345	15,763	1,108
	Other Fuel	< 10	16,093	Litres	15,902	616	25
Bus						22,883	1,569

Strathcona Regional District

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	2,113,602	144,591
	Diesel:	567,095	40,032
	Other Fuel:	13,432	537
On Road Transportation Totals	All Fuels:	2,694,129	185,160

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)	
Residential	Electricity	20,340	292,883,891	Kilowatt Hours	1,054,381	7,225	
	Natural Gas	5,646	318,233	GigaJoules	318,233	16,229	
	Heating Oil		303,721	GigaJoules	303,721	21,409	
	Propane		52,310	GigaJoules	52,310	3,191	
	Wood		370,880	GigaJoules	370,880	137	
Residential					2,099,525	48,191	
Commercial/Small-Medium Industrial	Electricity	2,782	191,075,002	Kilowatt Hours	687,869	4,713	
	Natural Gas	681	311,804	GigaJoules	311,804	15,902	
Commercial/Small-Medium Industrial					999,673	20,615	
					Electricity:	1,742,250	11,938
					Natural Gas:	630,037	32,131
					Propane:	52,310	3,191
					Wood:	370,880	137
					Heating Oil:	303,721	21,409
Buildings Totals	Buildings:				3,099,198	68,806	

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	27,544	27,462

Strathcona Regional District

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO ₂ e (t)
Diesel Fuel	14,806,646	L	567,095	40,032
Electricity	483,958,893	kWh	1,742,250	11,938
Gasoline	60,388,602	L	2,113,602	144,591
Heating Oil	303,721	GJ	303,721	21,409
Natural Gas	630,037	GJ	630,037	32,131
Other Fuel	350,718	L	13,432	537
Propane	52,310	GJ	52,310	3,191
Solid Waste	27,544	T	0	27,462
Wood	370,880	GJ	370,880	137
Total of Transportation / Buildings / Solid Waste:			5,793,327 GJ	281,428 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (t)
Large Industrial	Electricity	2	withheld	Kilowatt Hours	-	-
	Natural Gas	2	withheld	GigaJoules	-	-
Large Industrial					-	-

Agriculture		Number of Animals	Methane	CO ₂ e (t)
	Enteric Fermentation	862	28	588

Land-Use Change		Area (ha)	CO ₂ e (t)
	Deforestation from Agriculture	-	-
	Deforestation from Settlement	28	24,420
Deforestation:		28	24,420

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.

	1996		2001		2006	
	Units	%	Units	%	Units	%
Single Detached House	8,565	68	12,185	74	12,455	71
Semi-Detached House	315	3	440	3	535	3
Row House	820	7	825	5	950	5
Apartment, Duplex	375	3	200	1	465	3
Apartment, 5 storeys or higher	45	0	20	0	60	0
Apartment, under 5 storeys	1,815	14	1,810	11	2,135	12
Other Single Attached House	10	0	35	0	20	0
Movable Dwelling	655	5	990	6	930	5

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	11,140	73	13,115	76	14,285	76
Car, Truck, Van as Passenger	1,620	11	1,495	9	1,635	9
Public Transit	425	3	470	3	460	2
Walked	1,240	8	1,030	6	1,290	7
Bicycle	185	1	315	2	335	2
Motorcycle	25	0	35	0	60	0
Taxicab	10	0	30	0	10	0
Other Method	710	5	875	5	755	4

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

This data is currently unavailable in the CEEI 2007 Reports.

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	238,212.9	12.9
Local Parks	391.8	0.0
Agricultural Land Reserve	19,031.9	1.0
Other land use	1,590,510.7	86.1
Total Land Area	1,848,147.2	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	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 ₂ 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

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.