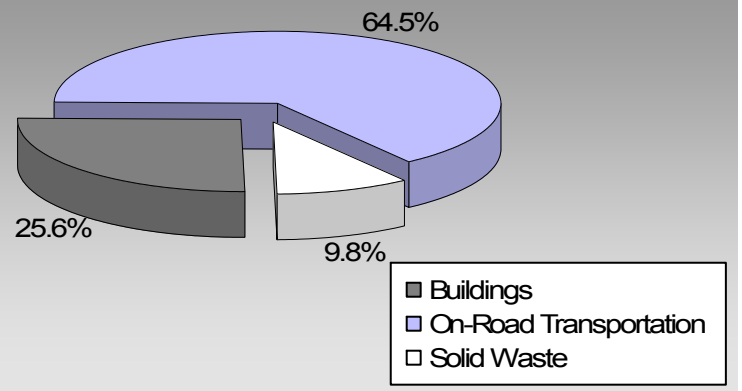
Strathcona Regional District Unincorporated Areas
Updated 2007 Community Energy and Emissions Inventory

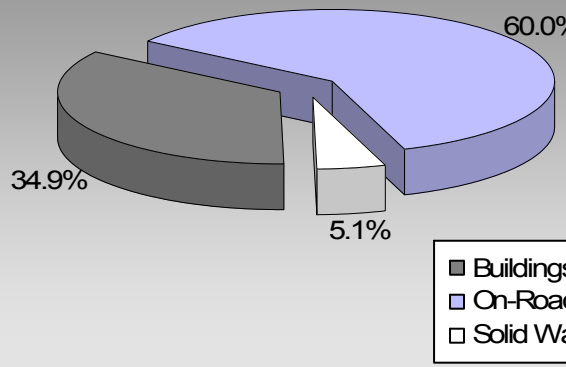
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

Strathcona Regional District Unincorporated Areas 2007 GHG Emissions Sources

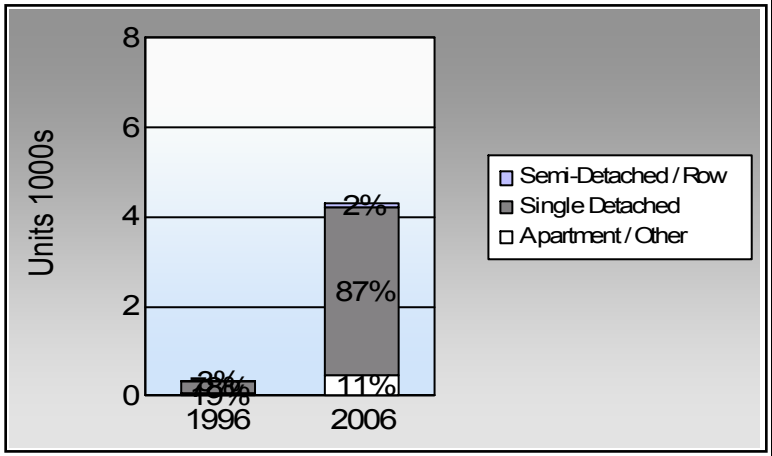


Total for BC Communities



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
	37.7%	76.2%
	14.5%	6.0%
	0.0%	2.3%
	26.1%	7.2%
	0.0%	2.9%

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.

For more information and to provide feedback on your Community Energy and Emissions Inventory (CEEI) Report see back page.

Sectors

On Road Transportation		Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	1,547	2,151,433	Litres	13,809	75,300	5,172
	Diesel Fuel	107	111,438	Litres	14,374	4,268	304
	Other Fuel	0	0	Litres	0	-	-
				Small Passenger Cars		**79,568**	**5,476**
Large Passenger Cars	Gasoline	767	1,773,550	Litres	18,443	62,074	4,240
	Diesel Fuel	32	68,283	Litres	18,480	2,615	186
	Other Fuel	< 10	7,504	Litres	14,169	287	11
				Large Passenger Cars		**64,976**	**4,437**
Light Trucks, Vans, SUVs	Gasoline	3,251	9,345,907	Litres	19,694	327,107	22,509
	Diesel Fuel	382	861,175	Litres	18,939	32,983	2,352
	Other Fuel	26	60,113	Litres	13,190	2,302	92
				Light Trucks, Vans, SUVs		**362,392**	**24,953**
Commercial Vehicles	Gasoline	42	172,769	Litres	16,588	6,047	404
	Diesel Fuel	65	255,127	Litres	20,936	9,771	687
	Other Fuel	< 10	14,365	Litres	12,117	550	22
				Commercial Vehicles		**16,368**	**1,113**
Tractor Trailer Trucks	Gasoline	< 10	4,761	Litres	7,085	167	11
	Diesel Fuel	65	1,481,463	Litres	71,560	56,740	3,987
	Other Fuel	0	0	Litres	0	-	-
				Tractor Trailer Trucks		**56,907**	**3,998**
Motorhomes	Gasoline	73	75,255	Litres	2,834	2,634	176
	Diesel Fuel	< 10	9,008	Litres	4,263	345	24
	Other Fuel	< 10	1,246	Litres	2,189	48	2
				Motorhomes		**3,027**	**202**
Motorcycles, Mopeds	Gasoline	143	53,937	Litres	4,892	1,888	126
				Motorcycles, Mopeds		**1,888**	**126**
Bus	Gasoline	< 10	56,055	Litres	19,420	1,962	131
	Diesel Fuel	< 10	69,899	Litres	22,345	2,677	188
	Other Fuel	< 10	5,852	Litres	15,902	224	9
				Bus		**4,863**	**328**

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	Gasoline:	477,179	32,769
	Diesel:	109,399	7,728
	Other Fuel:	3,411	136
On Road Transportation Totals	**All Fuels:**	**589,989**	**40,633**

Buildings

	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	5,353	80,728,110	Kilowatt Hours	290,621	1,992
	Natural Gas	671	34,852	GigaJoules	34,852	1,777
	Heating Oil		138,795	GigaJoules	138,795	9,784
	Propane		23,893	GigaJoules	23,893	1,458
	Wood		169,586	GigaJoules	169,586	63
			Residential		**657,747**	**15,074**
Commercial/Small-Medium Industrial	Electricity	526		Kilowatt Hours	-	-
	Natural Gas	32	21,190	GigaJoules	21,190	1,081
			Commercial/Small-Medium Industrial		**21,190**	**1,081**

	Electricity:	290,621	1,992
	Natural Gas:	56,042	2,858
	Propane:	23,893	1,458
	Wood:	169,586	63
	Heating Oil:	138,795	9,784
Buildings Totals	**Buildings:**	**678,937**	**16,155**

Solid Waste

		Mass (t)	CO2e (t)
	Community Solid Waste	5,684	6,201

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Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	2,856,393	L	109,399	7,728
Electricity	80,728,110	kWh	290,621	1,992
Gasoline	13,633,667	L	477,179	32,769
Heating Oil	138,795	GJ	138,795	9,784
Natural Gas	56,042	GJ	56,042	2,858
Other Fuel	89,080	L	3,411	136
Propane	23,893	GJ	23,893	1,458
Solid Waste	5,684	T	0	6,201
Wood	169,586	GJ	169,586	63
Total of Transportation / Buildings / Solid Waste:			**1,268,926** GJ	**62,989** tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-
	Natural Gas	0	0	GigaJoules	-	-
				Large Industrial	**-**	**-**

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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	265	78	3,585	87	3,760	87
Semi-Detached House	10	3	50	1	65	2
Row House	0	0	0	0	15	0
Apartment, Duplex	0	0	55	1	55	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	0	0	20	0	40	1
Other Single Attached House	10	3	10	0	10	0
Movable Dwelling	55	16	405	10	365	8

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 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	130	38	3,160	74	3,320	76
Car, Truck,Van as Passenge	50	14	340	8	260	6
Public Transit	0	0	80	2	100	2
Walked	90	26	280	7	315	7
Bicycle	0	0	110	3	125	3
Motorcycle	0	0	15	0	10	0
Taxicab	0	0	0	0	0	0
Other Method	75	22	295	7	225	5

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	237,127.7	13.0
Local Parks	318.7	0.0
Agricultural Land Reserve	13,982.2	0.8
Other land use	1,579,443.4	86.3
Total Land Area	1,830,872.0	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 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)

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.

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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