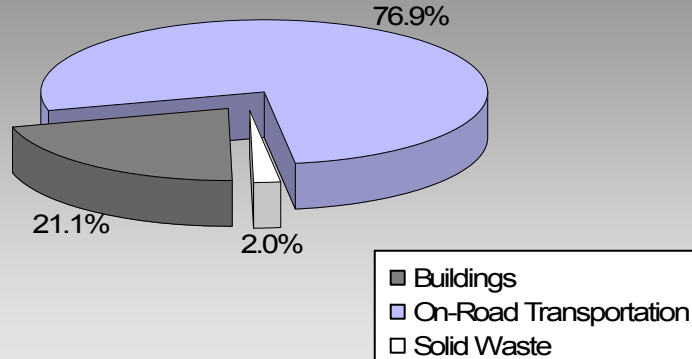


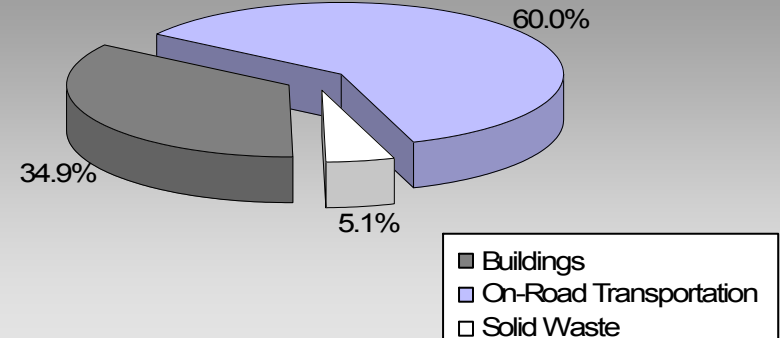
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

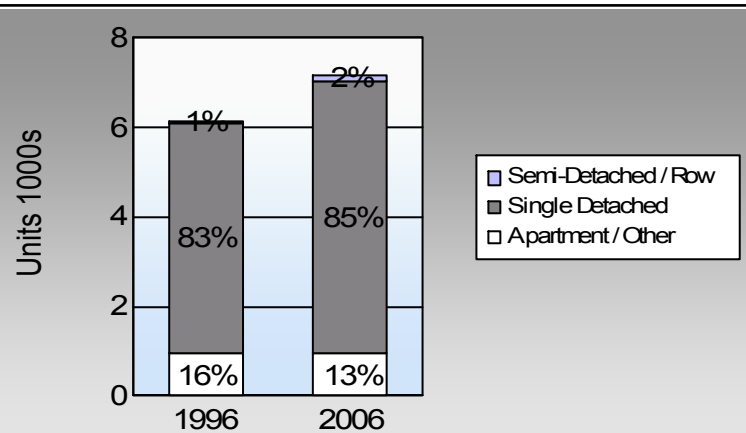
**North Okanagan Regional District Unincorporated Areas
2007 GHG Emissions Sources**



**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
	84.4%	85.1%
	8.2%	8.1%
	0.2%	0.7%
	4.0%	3.9%
	0.9%	0.9%

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.

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	2,928	4,186,939	Litres	13,377	146,543	10,014
	Diesel Fuel	150	168,131	Litres	13,778	6,439	459
	Other Fuel	< 10	1,081	Litres	10,634	41	2
Small Passenger Cars						153,023	10,475
Large Passenger Cars	Gasoline	1,883	4,363,807	Litres	17,953	152,733	10,397
	Diesel Fuel	38	96,158	Litres	18,116	3,683	262
	Other Fuel	< 10	8,621	Litres	14,873	330	13
Large Passenger Cars						156,746	10,672
Light Trucks, Vans, SUVs	Gasoline	5,388	16,545,550	Litres	19,766	579,094	39,700
	Diesel Fuel	912	2,298,632	Litres	19,909	88,038	6,280
	Other Fuel	69	181,511	Litres	13,025	6,952	278
Light Trucks, Vans, SUVs						674,084	46,258
Commercial Vehicles	Gasoline	53	227,496	Litres	14,292	7,962	531
	Diesel Fuel	149	728,355	Litres	20,947	27,896	1,960
	Other Fuel	< 10	35,177	Litres	12,243	1,347	54
Commercial Vehicles						37,205	2,545
Tractor Trailer Trucks	Gasoline	< 10	11,307	Litres	15,959	396	26
	Diesel Fuel	195	5,564,828	Litres	85,642	213,133	14,975
	Other Fuel	0	0	Litres	0	-	-
Tractor Trailer Trucks						213,529	15,001
Motorhomes	Gasoline	137	201,144	Litres	2,961	7,040	470
	Diesel Fuel	34	34,461	Litres	4,564	1,320	93
	Other Fuel	< 10	3,599	Litres	2,189	138	6
Motorhomes						8,498	569
Motorcycles, Mopeds	Gasoline	179	89,846	Litres	5,184	3,145	210
Motorcycles, Mopeds						3,145	210
Bus	Gasoline	< 10	42,871	Litres	21,616	1,500	101
	Diesel Fuel	< 10	56,373	Litres	29,603	2,159	152
	Other Fuel	< 10	11,704	Litres	15,902	448	18
Bus						4,107	271

North Okanagan Regional District Unincorporated Areas Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	898,413	61,449
	Diesel:	342,668	24,181
	Other Fuel:	9,256	371
	All Fuels:	1,250,337	86,001

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	8,180	107,796,951	Kilowatt Hours	388,069	2,660
	Natural Gas	3,490	275,095	GigaJoules	275,095	14,029
	Heating Oil		32,633	GigaJoules	32,633	2,300
	Propane		57,430	GigaJoules	57,430	3,504
	Wood		288,080	GigaJoules	288,080	107
Residential					1,041,307	22,600
Commercial/Small-Medium Industrial	Electricity	807	39,113,900	Kilowatt Hours	140,810	965
	Natural Gas	175		GigaJoules	-	-
Commercial/Small-Medium Industrial					140,810	965
Buildings Totals	Electricity:				528,879	3,625
	Natural Gas:				275,095	14,029
	Propane:				57,430	3,504
	Wood:				288,080	107
	Heating Oil:				32,633	2,300
Buildings:					1,182,117	23,565

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	2,797	2,264

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	8,946,938	L	342,668	24,181
Electricity	146,910,851	kWh	528,879	3,625
Gasoline	25,668,960	L	898,413	61,449
Heating Oil	32,633	GJ	32,633	2,300
Natural Gas	275,095	GJ	275,095	14,029
Other Fuel	241,693	L	9,256	371
Propane	57,430	GJ	57,430	3,504
Solid Waste	2,797	T	0	2,264
Wood	288,080	GJ	288,080	107
Total of Transportation / Buildings / Solid Waste:			2,432,454 GJ	111,830 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	2	withheld	Kilowatt Hours	-	-
	Natural Gas	5	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 <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	5,115	20	5,580	86	6,105	85
Semi-Detached House	50	0	80	1	90	1
Row House	20	0	30	0	35	0
Apartment, Duplex	100	0	130	2	210	3
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	45	0	50	1	90	1
Other Single Attached House	20	0	20	0	20	0
Movable Dwelling	800	3	615	9	615	9

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	5,300	84	5,405	87	6,510	85
Car, Truck, Van as Passenger	515	8	355	6	620	8
Public Transit	15	0	20	0	50	1
Walked	250	4	285	5	300	4
Bicycle	55	1	35	1	70	1
Motorcycle	5	0	15	0	20	0
Taxicab	0	0	0	0	5	0
Other Method	140	2	75	1	75	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

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	59,647.5	8.3
Local Parks	19.5	0.0
Agricultural Land Reserve	49,417.9	6.9
Other land use	605,734.8	84.7
Total Land Area	714,819.6	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.

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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

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.