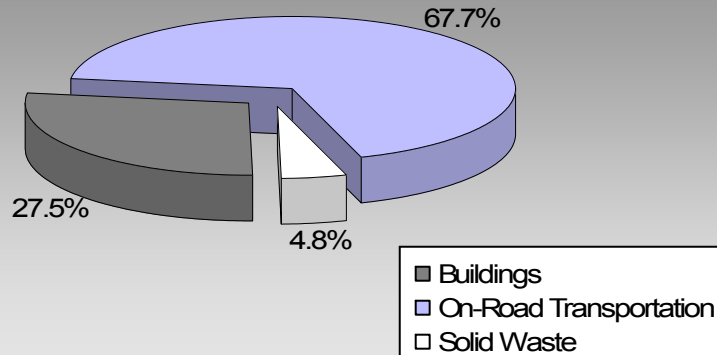


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

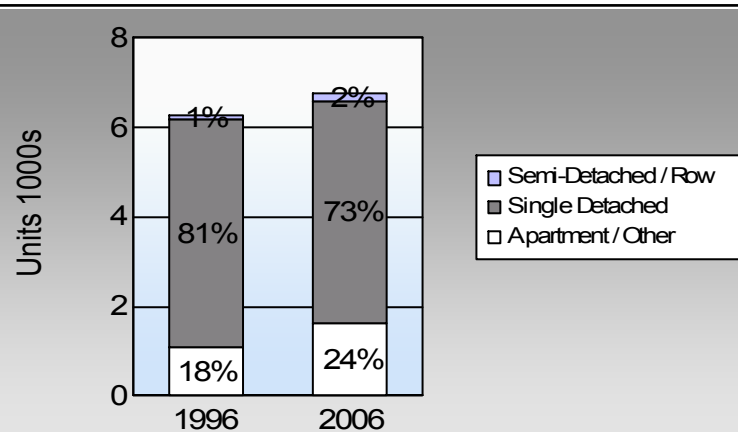
**East Kootenay Regional District Unincorporated Areas
2007 GHG Emissions Sources**



**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
	82.1%	85.3%
	9.4%	7.6%
	0.3%	1.0%
	4.5%	2.9%
	0.9%	0.8%

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	2,068	3,083,073	Litres	13,899	107,908	7,352
	Diesel Fuel	189	196,227	Litres	14,694	7,516	536
Small Passenger Cars						115,424	7,888
Large Passenger Cars	Gasoline	1,519	3,261,062	Litres	16,496	114,137	7,757
	Diesel Fuel	34	74,648	Litres	17,279	2,859	204
	Other Fuel	< 10	17,971	Litres	13,798	688	28
Large Passenger Cars						117,684	7,989
Light Trucks, Vans, SUVs	Gasoline	5,693	18,050,469	Litres	19,885	631,766	43,227
	Diesel Fuel	911	2,293,871	Litres	19,725	87,855	6,267
	Other Fuel	60	152,482	Litres	13,192	5,840	234
Light Trucks, Vans, SUVs						725,461	49,728
Commercial Vehicles	Gasoline	53	213,529	Litres	14,484	7,474	498
	Diesel Fuel	176	838,681	Litres	21,843	32,121	2,257
	Other Fuel	< 10	22,114	Litres	12,174	847	34
Commercial Vehicles						40,442	2,789
Tractor Trailer Trucks	Gasoline	< 10	11,246	Litres	12,548	394	26
	Diesel Fuel	174	4,975,821	Litres	80,945	190,574	13,390
	Other Fuel	< 10	7,102	Litres	8,417	272	11
Tractor Trailer Trucks						191,240	13,427
Motorhomes	Gasoline	83	107,575	Litres	2,821	3,765	251
	Diesel Fuel	< 10	11,773	Litres	4,847	451	32
	Other Fuel	< 10	1,108	Litres	2,189	42	2
Motorhomes						4,258	285
Motorcycles, Mopeds	Gasoline	114	72,441	Litres	5,145	2,535	169
Motorcycles, Mopeds						2,535	169
Bus	Gasoline	< 10	80,656	Litres	24,639	2,823	189
	Diesel Fuel	< 10	97,242	Litres	22,702	3,724	262
	Other Fuel	0	0	Litres	0	-	-
Bus						6,547	451

East Kootenay Regional District Unincorporated Areas Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	870,802	59,469
	Diesel:	325,100	22,948
	Other Fuel:	7,689	309
	All Fuels:	1,203,591	82,726

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	14,495	179,739,326	Kilowatt Hours	647,061	4,433
	Natural Gas	3,260	273,270	GigaJoules	273,270	13,936
	Heating Oil		72,766	GigaJoules	72,766	5,129
	Propane		127,786	GigaJoules	127,786	7,796
	Wood		152,935	GigaJoules	152,935	57
Residential					1,273,818	31,351
Commercial/Small-Medium Industrial	Electricity	2,100	91,738,601	Kilowatt Hours	330,259	2,262
	Natural Gas	141		GigaJoules	-	-
Commercial/Small-Medium Industrial					330,259	2,262
Buildings Totals	Electricity:				977,320	6,695
	Natural Gas:				273,270	13,936
	Propane:				127,786	7,796
	Wood:				152,935	57
	Heating Oil:				72,766	5,129
Buildings:					1,604,077	33,613

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	19,151	5,907

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	8,488,263	L	325,100	22,948
Electricity	271,477,927	kWh	977,320	6,695
Gasoline	24,880,051	L	870,802	59,469
Heating Oil	72,766	GJ	72,766	5,129
Natural Gas	273,270	GJ	273,270	13,936
Other Fuel	200,777	L	7,689	309
Propane	127,786	GJ	127,786	7,796
Solid Waste	19,151	T	0	5,907
Wood	152,935	GJ	152,935	57
Total of Transportation / Buildings / Solid Waste:			2,807,668 GJ	122,246 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	5	withheld	Kilowatt Hours	-	-
	Natural Gas	1	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	5,085	23	5,475	82	4,940	73
Semi-Detached House	30	0	80	1	105	2
Row House	40	0	35	1	50	1
Apartment, Duplex	65	0	80	1	80	1
Apartment, 5 storeys or higher	0	0	0	0	10	0
Apartment, under 5 storeys	80	0	75	1	80	1
Other Single Attached House	10	0	25	0	25	0
Movable Dwelling	940	4	930	14	1,450	22

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	5,700	82	6,380	85	6,780	85
Car, Truck, Van as Passenger	650	9	590	8	605	8
Public Transit	20	0	25	0	80	1
Walked	315	5	330	4	230	3
Bicycle	60	1	115	2	60	1
Motorcycle	10	0	10	0	25	0
Taxicab	0	0	0	0	10	0
Other Method	195	3	90	1	160	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

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	133,890.8	5.0
Provincial Parks / Protected Areas	273,584.8	10.2
Local Parks	272.6	0.0
Agricultural Land Reserve	263,461.0	9.9
Other land use	2,002,673.9	74.9
Total Land Area	2,673,883.0	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 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.