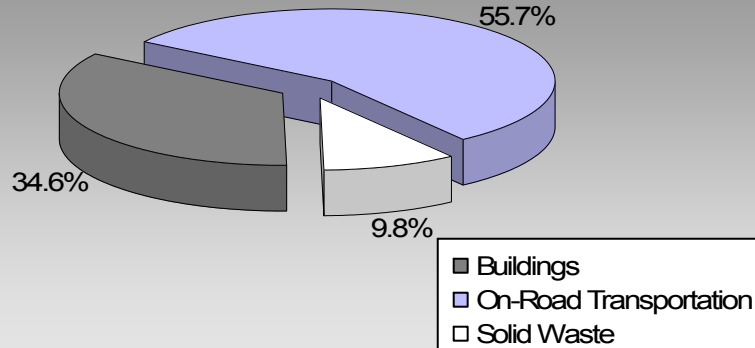


Updated 2007 Community Energy and Emissions Inventory

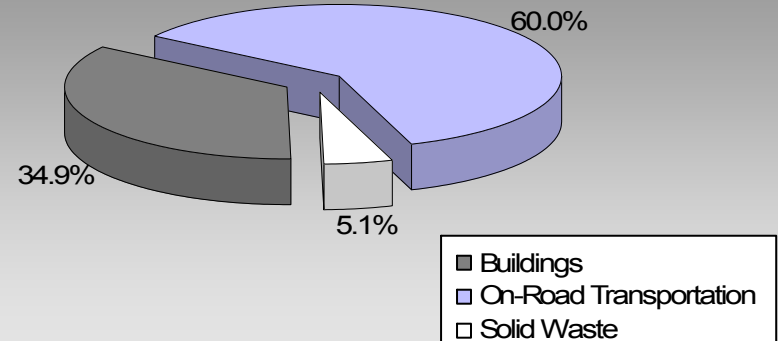
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

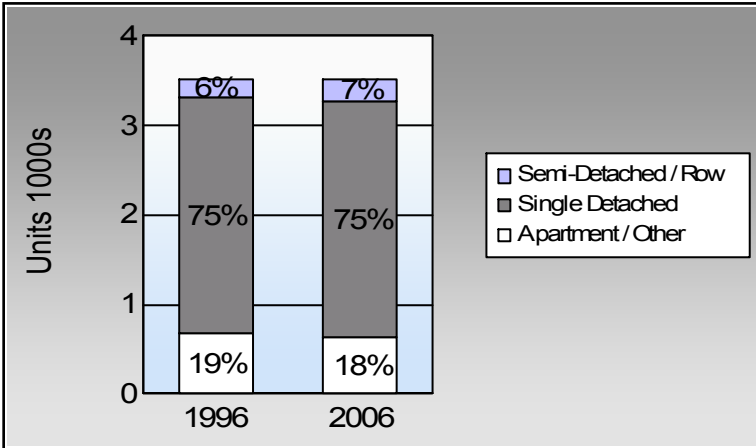
**Trail City
2007 GHG Emissions Sources**



**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
	71.6%	74.5%
	7.5%	8.1%
	1.9%	2.2%
	16.8%	12.4%
	1.5%	1.9%

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

Residential Density

Trail City: 3.8 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.

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	1,628	2,262,774	Litres	13,804	79,197	5,396
	Diesel Fuel	16	16,688	Litres	14,131	639	46
	Other Fuel	< 10	1,077	Litres	11,835	41	2
Small Passenger Cars						79,877	5,444
Large Passenger Cars	Gasoline	1,038	1,974,817	Litres	15,953	69,119	4,685
	Diesel Fuel	11	27,434	Litres	17,769	1,051	75
	Other Fuel	< 10	2,030	Litres		78	3
Large Passenger Cars						70,248	4,763
Light Trucks, Vans, SUVs	Gasoline	2,040	6,102,608	Litres	19,822	213,591	14,618
	Diesel Fuel	115	290,652	Litres	20,066	11,132	794
	Other Fuel	16	43,652	Litres	14,512	1,672	67
Light Trucks, Vans, SUVs						226,395	15,479
Commercial Vehicles	Gasoline	14	58,817	Litres	13,825	2,059	137
	Diesel Fuel	38	173,362	Litres	19,982	6,640	467
	Other Fuel	< 10	6,464	Litres	11,356	248	10
Commercial Vehicles						8,947	614
Tractor Trailer Trucks	Gasoline	< 10	20,149	Litres	10,789	705	47
	Diesel Fuel	64	2,205,087	Litres	88,242	84,455	5,934
	Other Fuel	< 10	29,569	Litres	11,104	1,132	45
Tractor Trailer Trucks						86,292	6,026
Motorhomes	Gasoline	44	57,013	Litres	3,081	1,995	133
	Diesel Fuel	< 10	2,850	Litres	5,171	109	8
Motorhomes						2,104	141
Motorcycles, Mopeds	Gasoline	53	27,200	Litres	5,309	952	64
Motorcycles, Mopeds						952	64
Bus	Gasoline	< 10	58,009	Litres	29,295	2,030	136
	Diesel Fuel	37	543,321	Litres	30,119	20,809	1,462
Bus						22,839	1,598

Trail City

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	369,648	25,216
	Diesel:	124,835	8,786
	Other Fuel:	3,171	127
On Road Transportation Totals	All Fuels:	497,654	34,129

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	3,565	42,357,179	Kilowatt Hours	152,486	254	
	Natural Gas	2,884	202,767	GigaJoules	202,767	10,341	
	Heating Oil		8,010	GigaJoules	8,010	565	
	Propane		14,103	GigaJoules	14,103	860	
Residential					377,366	12,020	
Commercial/Small-Medium Industrial	Electricity	690	46,730,548	Kilowatt Hours	168,230	280	
	Natural Gas	356	174,317	GigaJoules	174,317	8,890	
Commercial/Small-Medium Industrial					342,547	9,170	
					Electricity:	320,716	534
					Natural Gas:	377,084	19,231
					Propane:	14,103	860
					Wood:		
					Heating Oil:	8,010	565
Buildings Totals	Buildings:				719,913	21,190	

Solid Waste		<u>Mass (t)</u>	<u>CO2e (t)</u>
	Community Solid Waste	3,659	5,996

Trail City

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	3,259,394	L	124,835	8,786
Electricity	89,087,727	kWh	320,716	534
Gasoline	10,561,387	L	369,648	25,216
Heating Oil	8,010	GJ	8,010	565
Natural Gas	377,084	GJ	377,084	19,231
Other Fuel	82,792	L	3,171	127
Propane	14,103	GJ	14,103	860
Solid Waste	3,659	T	0	5,996
Total of Transportation / Buildings / Solid Waste:			1,217,567 GJ	61,315 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	3	27,240,929	Kilowatt Hours	98,067	163
	Natural Gas	2	withheld	GigaJoules	-	-
Large Industrial					98,067	163

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	2,650	43	2,770	77	2,630	75
Semi-Detached House	55	1	55	2	80	2
Row House	145	2	150	4	170	5
Apartment, Duplex	170	3	110	3	145	4
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	475	8	465	13	450	13
Other Single Attached House	0	0	10	0	20	1
Movable Dwelling	25	0	35	1	20	1

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	1,920	72	2,110	78	2,215	74
Car, Truck, Van as Passenger	200	7	125	5	240	8
Public Transit	50	2	40	1	65	2
Walked	450	17	420	15	370	12
Bicycle	40	1	15	1	55	2
Motorcycle	10	0	0	0	0	0
Taxicab	0	0	0	0	10	0
Other Method	10	0	10	0	20	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	
Population	7,353.0
Net Land Area (ha) *	1,936.4
Residential Density (people per net ha)	3.8

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	0.0	0.0
Local Parks	45.5	1.7
Agricultural Land Reserve	145.3	5.4
Other land use	2,510.5	92.9
Total Land Area	2,701.3	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.