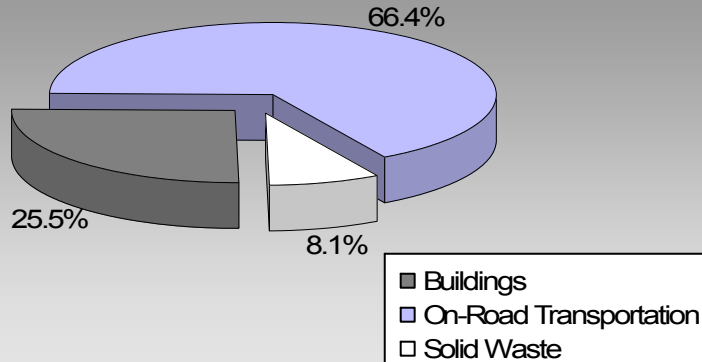


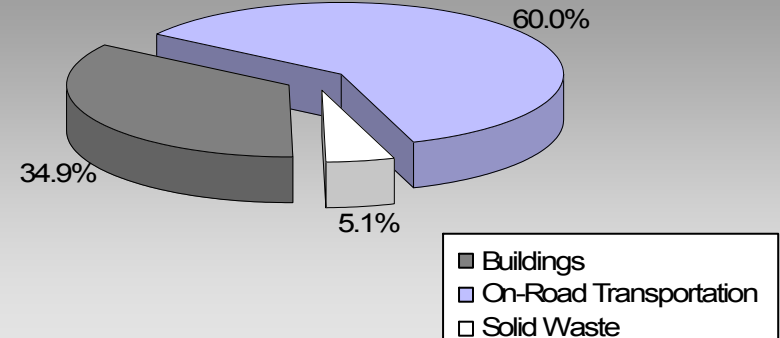
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

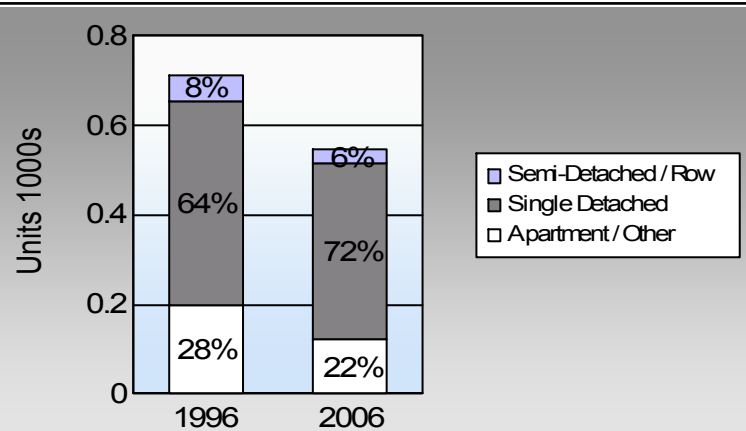
**Fort St. James District Municipality
2007 GHG Emissions Sources**



**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
	74.9%	77.9%
	7.6%	8.4%
	0.0%	0.0%
	14.2%	10.7%
	2.4%	1.5%

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

Residential Density

Fort St. James District Municipality:
0.6 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	168	252,363	Litres	14,455	8,833	592
	Diesel Fuel	< 10	7,398	Litres	15,600	283	20
Small Passenger Cars						9,116	612
Large Passenger Cars	Gasoline	132	344,985	Litres	21,756	12,074	812
	Diesel Fuel	< 10	10,976	Litres	23,705	420	30
	Other Fuel	< 10	462	Litres		18	1
Large Passenger Cars						12,512	843
Light Trucks, Vans, SUVs	Gasoline	625	2,213,905	Litres	22,422	77,487	5,251
	Diesel Fuel	98	323,617	Litres	24,929	12,395	884
	Other Fuel	< 10	18,012	Litres	13,303	690	28
Light Trucks, Vans, SUVs						90,572	6,163
Commercial Vehicles	Gasoline	< 10	33,626	Litres	16,249	1,177	79
	Diesel Fuel	30	134,892	Litres	23,182	5,166	363
	Other Fuel	< 10	3,591	Litres	11,356	138	6
Commercial Vehicles						6,481	448
Tractor Trailer Trucks	Gasoline	< 10	12,692	Litres	27,444	444	30
	Diesel Fuel	50	2,115,138	Litres	110,313	81,010	5,692
Tractor Trailer Trucks						81,454	5,722
Motorhomes	Gasoline	< 10	14,237	Litres	3,124	498	33
	Diesel Fuel	< 10	558	Litres	2,189	21	2
	Other Fuel	< 10	415	Litres		16	1
Motorhomes						535	36
Motorcycles, Mopeds	Gasoline	< 10	3,943	Litres		138	9
Motorcycles, Mopeds						138	9
Bus	Gasoline	< 10	5,852	Litres	15,902	205	14
	Diesel Fuel	< 10	38,030	Litres	34,177	1,457	102
	Other Fuel	< 10	1,463	Litres		56	2
Bus						1,718	118

Fort St. James District Municipality

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	100,856	6,820
	Diesel:	100,752	7,093
	Other Fuel:	918	38
On Road Transportation Totals	All Fuels:	202,526	13,951

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	773	7,838,820	Kilowatt Hours	28,220	193	
	Natural Gas	522	43,708	GigaJoules	43,708	2,229	
	Heating Oil		2,400	GigaJoules	2,400	169	
	Propane		6,520	GigaJoules	6,520	398	
	Wood			17,804	GigaJoules	17,804	7
Residential					98,652	2,996	
Commercial/Small-Medium Industrial	Electricity	229	13,181,934	Kilowatt Hours	47,455	325	
	Natural Gas	145	40,000	GigaJoules	40,000	2,040	
Commercial/Small-Medium Industrial					87,455	2,365	
					Electricity:	75,675	518
					Natural Gas:	83,708	4,269
					Propane:	6,520	398
					Wood:	17,804	7
					Heating Oil:	2,400	169
Buildings Totals	Buildings:				186,107	5,361	

Solid Waste	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	1,872	1,703

Fort St. James District Municipality

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	2,630,609	L	100,752	7,093
Electricity	21,020,754	kWh	75,675	518
Gasoline	2,881,603	L	100,856	6,820
Heating Oil	2,400	GJ	2,400	169
Natural Gas	83,708	GJ	83,708	4,269
Other Fuel	23,943	L	918	38
Propane	6,520	GJ	6,520	398
Solid Waste	1,872	T	0	1,703
Wood	17,804	GJ	17,804	7
Total of Transportation / Buildings / Solid Waste:			388,633 GJ	21,015 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	3	withheld	Kilowatt Hours	-	-
	Natural Gas	3	296,814	GigaJoules	296,814	15,138
Large Industrial					296,814	15,138

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	455	39	450	62	395	72
Semi-Detached House	10	1	20	3	5	1
Row House	45	4	55	8	25	5
Apartment, Duplex	10	1	10	1	5	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	125	11	105	14	85	16
Other Single Attached House	0	0	5	1	5	1
Movable Dwelling	65	6	80	11	25	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	790	75	760	79	510	78
Car, Truck, Van as Passenger	80	8	105	11	55	8
Public Transit	0	0	0	0	0	0
Walked	150	14	90	9	70	11
Bicycle	25	2	0	0	10	2
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	10	1	0	0
Other Method	10	1	0	0	10	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
Population	1,322.0
Net Land Area (ha) *	2,245.4
Residential Density (people per net ha)	0.6

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	6.6	0.3
Agricultural Land Reserve	20.7	0.9
Other land use	2,382.7	98.9
Total Land Area	2,410.0	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.

+++++

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.