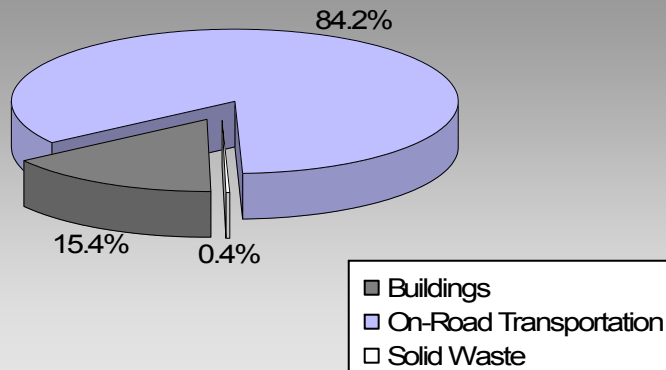


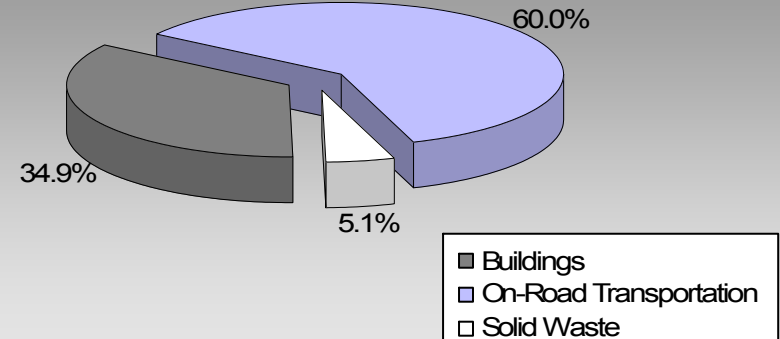
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

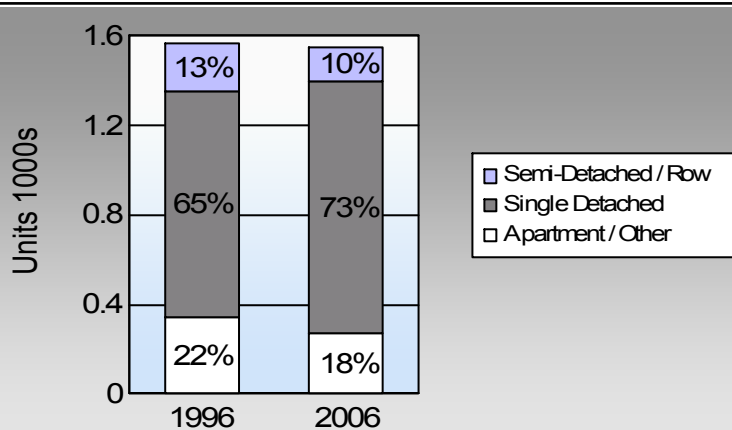
**Vanderhoof District Municipality
2007 GHG Emissions Sources**



**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
	75.0%	80.0%
	11.1%	8.7%
	0.0%	0.0%
	10.6%	11.4%
	1.6%	0.0%

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

Residential Density

Vanderhoof District Municipality: 2.0 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	988	1,432,005	Litres	13,743	50,120	3,404
	Diesel Fuel	58	60,603	Litres	14,471	2,321	166
	Other Fuel	< 10	784	Litres		30	1
Small Passenger Cars						52,471	3,571
Large Passenger Cars	Gasoline	685	1,724,151	Litres	20,316	60,345	4,079
	Diesel Fuel	17	48,533	Litres	19,721	1,859	132
	Other Fuel	< 10	6,614	Litres	14,825	253	10
Large Passenger Cars						62,457	4,221
Light Trucks, Vans, SUVs	Gasoline	2,421	7,816,971	Litres	20,315	273,594	18,684
	Diesel Fuel	551	1,563,484	Litres	21,675	59,881	4,272
	Other Fuel	20	57,278	Litres	14,101	2,194	88
Light Trucks, Vans, SUVs						335,669	23,044
Commercial Vehicles	Gasoline	54	230,633	Litres	14,031	8,072	539
	Diesel Fuel	121	621,391	Litres	22,315	23,799	1,672
	Other Fuel	< 10	17,238	Litres	11,356	660	26
Commercial Vehicles						32,531	2,237
Tractor Trailer Trucks	Gasoline	< 10	10,712	Litres	7,085	375	25
	Diesel Fuel	265	8,964,829	Litres	85,991	343,353	24,124
	Other Fuel	< 10	595	Litres		23	1
Tractor Trailer Trucks						343,751	24,150
Motorhomes	Gasoline	32	52,701	Litres	2,757	1,845	123
	Diesel Fuel	< 10	8,369	Litres	4,696	321	23
	Other Fuel	< 10	3,599	Litres		138	6
Motorhomes						2,304	152
Motorcycles, Mopeds	Gasoline	20	20,637	Litres	5,109	722	48
Motorcycles, Mopeds						722	48
Bus	Gasoline	12	91,160	Litres	19,138	3,191	214
	Diesel Fuel	40	281,357	Litres	17,119	10,776	757
	Other Fuel	16	96,559	Litres	15,902	3,698	148
Bus						17,665	1,119

Vanderhoof District Municipality

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	398,264	27,116
	Diesel:	442,310	31,146
	Other Fuel:	6,996	280
On Road Transportation Totals	All Fuels:	847,570	58,542

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	1,898	22,748,230	Kilowatt Hours	81,894	561	
	Natural Gas	1,262	94,837	GigaJoules	94,837	4,836	
	Heating Oil		2,957	GigaJoules	2,957	208	
	Propane		8,031	GigaJoules	8,031	490	
	Wood			21,930	GigaJoules	21,930	8
Residential					209,649	6,103	
Commercial/Small-Medium Industrial	Electricity	400	25,084,859	Kilowatt Hours	90,305	619	
	Natural Gas	265	78,849	GigaJoules	78,849	4,021	
Commercial/Small-Medium Industrial					169,154	4,640	
					Electricity:	172,199	1,180
					Natural Gas:	173,686	8,857
					Propane:	8,031	490
					Wood:	21,930	8
					Heating Oil:	2,957	208
Buildings Totals	Buildings:				378,803	10,743	

Solid Waste	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	4,016	275

Vanderhoof District Municipality

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	11,548,566	L	442,310	31,146
Electricity	47,833,089	kWh	172,199	1,180
Gasoline	11,378,970	L	398,264	27,116
Heating Oil	2,957	GJ	2,957	208
Natural Gas	173,686	GJ	173,686	8,857
Other Fuel	182,667	L	6,996	280
Propane	8,031	GJ	8,031	490
Solid Waste	4,016	T	0	275
Wood	21,930	GJ	21,930	8
Total of Transportation / Buildings / Solid Waste:			1,226,373 GJ	69,560 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	2	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	1,015	39	1,220	77	1,125	73
Semi-Detached House	65	3	80	5	60	4
Row House	145	6	80	5	90	6
Apartment, Duplex	10	0	15	1	15	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	145	6	105	7	135	9
Other Single Attached House	0	0	0	0	5	0
Movable Dwelling	185	7	90	6	120	8

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	1,380	75	1,485	77	1,480	80
Car, Truck, Van as Passenger	205	11	200	10	160	9
Public Transit	0	0	0	0	0	0
Walked	195	11	215	11	210	11
Bicycle	30	2	15	1	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	30	2	10	1	0	0

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	4,143.0
Net Land Area (ha) *	2,105.4
Residential Density (people per net ha)	2.0

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	10.9	0.2
Agricultural Land Reserve	3,608.4	60.8
Other land use	2,311.3	39.0
Total Land Area	5,930.6	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.