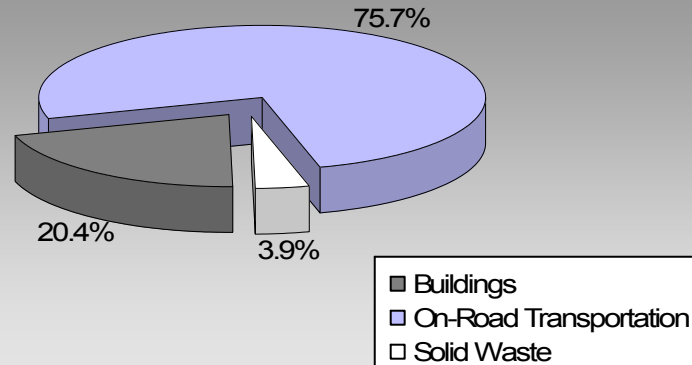


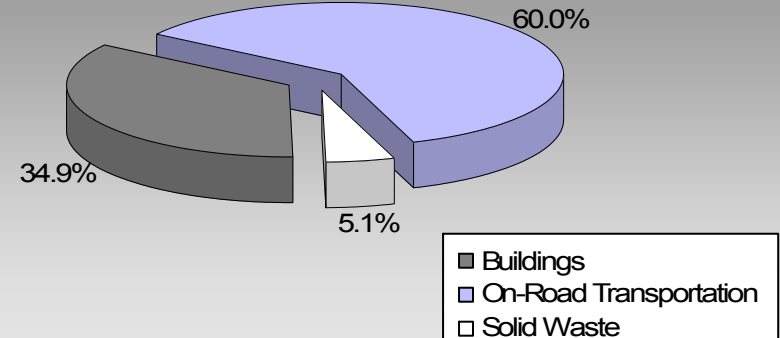
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

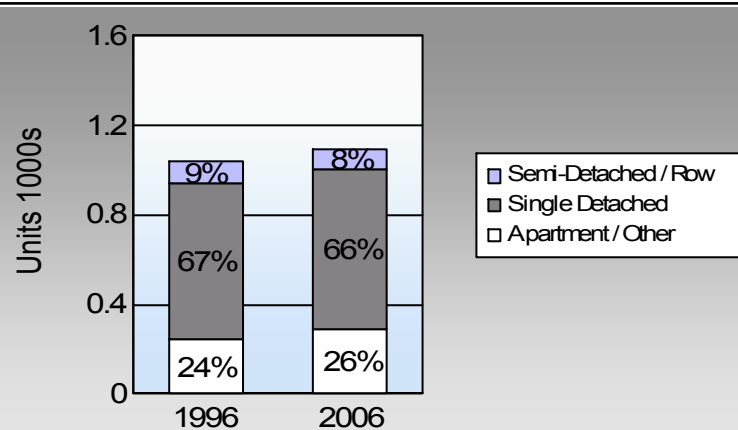
**Chase Village
2007 GHG Emissions Sources**



**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

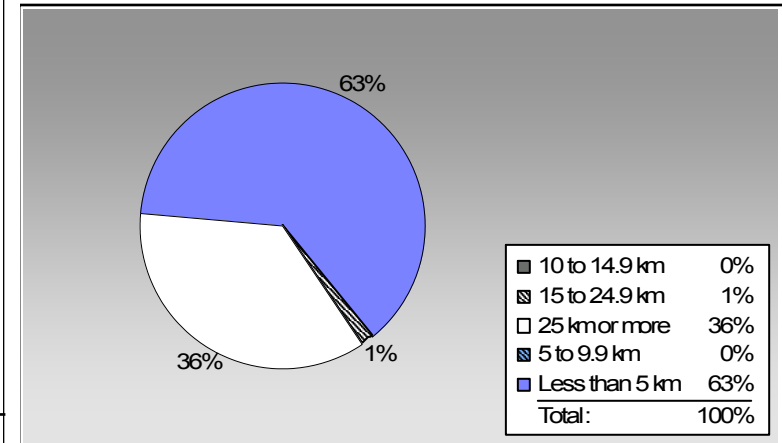
	1996	2006
	74.5%	78.0%
	4.8%	6.9%
	1.4%	1.2%
	19.3%	12.7%
	0.0%	1.2%

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

Residential Density

Chase Village: 7.4 people per net ha
BC municipal average: 7.4 people per net ha

Are we living closer to where we work? Commute Distance



In BC, 41% of people lived within 5km of their work in 2006.

Chase Village Updated 2007 Community Energy and Emissions Inventory

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	626	872,847	Litres	13,527	30,550	2,080
	Diesel Fuel	26	28,245	Litres	14,456	1,082	77
Small Passenger Cars						31,632	2,157
Large Passenger Cars	Gasoline	434	992,296	Litres	18,042	34,730	2,357
	Diesel Fuel	< 10	13,472	Litres	17,230	516	37
	Other Fuel	< 10	3,146	Litres	18,347	120	5
Large Passenger Cars						35,366	2,399
Light Trucks, Vans, SUVs	Gasoline	1,143	3,527,014	Litres	19,622	123,446	8,431
	Diesel Fuel	166	413,434	Litres	20,391	15,835	1,130
	Other Fuel	14	34,193	Litres	12,924	1,310	52
Light Trucks, Vans, SUVs						140,591	9,613
Commercial Vehicles	Gasoline	10	44,591	Litres	14,984	1,561	104
	Diesel Fuel	37	188,580	Litres	23,513	7,223	507
	Other Fuel	< 10	10,774	Litres	11,356	413	17
Commercial Vehicles						9,197	628
Tractor Trailer Trucks	Gasoline	< 10	2,253	Litres		79	5
	Diesel Fuel	55	1,534,667	Litres	75,634	58,778	4,130
Tractor Trailer Trucks						58,857	4,135
Motorhomes	Gasoline	34	45,135	Litres	2,997	1,580	105
	Diesel Fuel	< 10	9,829	Litres	6,655	376	26
	Other Fuel	< 10	1,800	Litres	2,189	69	3
Motorhomes						2,025	134
Motorcycles, Mopeds	Gasoline	27	15,925	Litres	5,917	557	37
Motorcycles, Mopeds						557	37
Bus	Gasoline	< 10	2,926	Litres		102	7
	Diesel Fuel	< 10	32,811	Litres	32,452	1,257	88
	Other Fuel	< 10	4,389	Litres		168	7
Bus						1,527	102

Chase Village

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	192,605	13,126
	Diesel:	85,067	5,995
	Other Fuel:	2,080	84
On Road Transportation Totals	All Fuels:	279,752	19,205

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>
Residential	Electricity	1,141	11,308,603	Kilowatt Hours	40,711	279
	Natural Gas	962	65,232	GigaJoules	65,232	3,327
Residential					105,943	3,606
Commercial/Small-Medium Industrial	Electricity	193	8,024,794	Kilowatt Hours	28,889	198
	Natural Gas	117	26,990	GigaJoules	26,990	1,376
Commercial/Small-Medium Industrial					55,879	1,574
					Electricity:	477
					Natural Gas:	4,703
					Propane:	
					Wood:	
					Heating Oil:	
Buildings Totals	Buildings:				161,822	5,180

Solid Waste	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	2,665	977

Chase Village

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION	ENERGY (GJ)	CO2e (t)
Diesel Fuel	2,221,038 L	85,067	5,995
Electricity	19,333,397 kWh	69,600	477
Gasoline	5,502,987 L	192,605	13,126
Natural Gas	92,222 GJ	92,222	4,703
Other Fuel	54,302 L	2,080	84
Solid Waste	2,665 T	0	977
Total of Transportation / Buildings / Solid Waste:		441,574 GJ	25,362 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
			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	695	40	715	66	720	66
Semi-Detached House	35	2	30	3	45	4
Row House	60	3	65	6	40	4
Apartment, Duplex	15	1	5	0	5	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	75	4	95	9	105	10
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	155	9	180	17	175	16

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	540	74	535	74	675	78
Car, Truck, Van as Passenger	35	5	65	9	60	7
Public Transit	10	1	0	0	10	1
Walked	140	19	110	15	110	13
Bicycle	0	0	15	2	10	1
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	0	0	0	0	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	2,478.0
Net Land Area (ha) *	333.1
Residential Density (people per net ha)	7.4

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	%
Less than 5 km	465	63
5 to 9.9 km	0	0
10 to 14.9 km	0	0
15 to 24.9 km	10	1
25 km or more	265	36

Chase Village Updated 2007 Community Energy and Emissions Inventory

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	9.7	2.1
Agricultural Land Reserve	38.7	8.5
Other land use	409.3	89.4
Total Land Area	457.7	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.