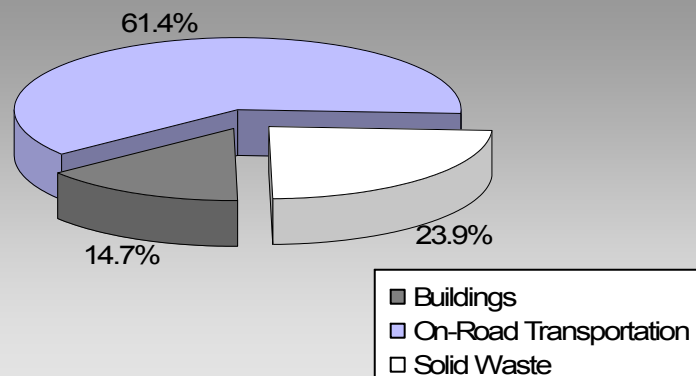


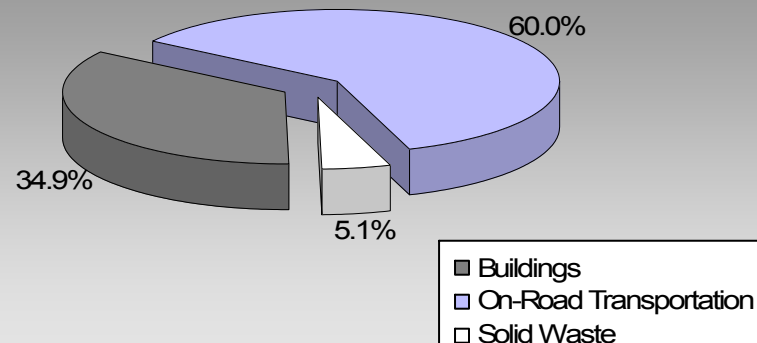
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

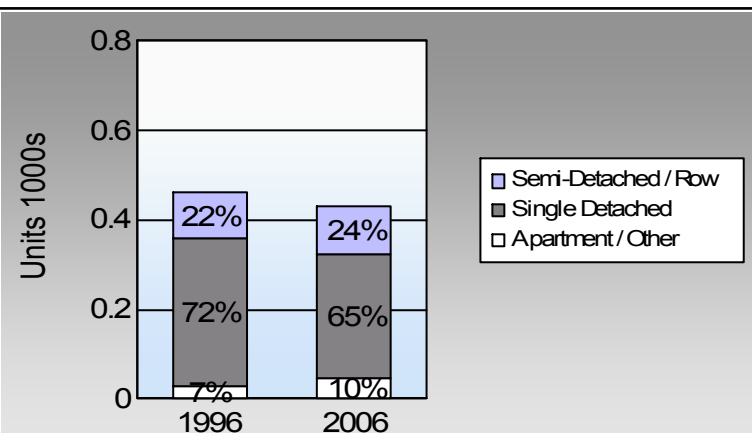
**Masset Village
2007 GHG Emissions Sources**



**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
	55.0%	56.7%
	6.1%	8.9%
	1.5%	0.0%
	27.5%	25.6%
	3.8%	4.4%

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

Residential Density

Masset Village: 0.7 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.

Masset 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	111	160,400	Litres	13,648	5,614	381
	Diesel Fuel	< 10	8,049	Litres	14,277	308	22
Small Passenger Cars						5,922	403
Large Passenger Cars	Gasoline	49	110,090	Litres	18,385	3,853	260
	Diesel Fuel	< 10	15,741	Litres	18,342	603	43
	Other Fuel	< 10	1,308	Litres		50	2
Large Passenger Cars						4,506	305
Light Trucks, Vans, SUVs	Gasoline	343	1,057,511	Litres	20,569	37,013	2,524
	Diesel Fuel	41	98,910	Litres	19,854	3,788	270
	Other Fuel	< 10	9,013	Litres	12,822	345	14
Light Trucks, Vans, SUVs						41,146	2,808
Commercial Vehicles	Gasoline	< 10	32,326	Litres	19,001	1,131	76
	Diesel Fuel	< 10	21,449	Litres	23,331	821	58
	Other Fuel	< 10	3,733	Litres	14,757	143	6
Commercial Vehicles						2,095	140
Tractor Trailer Trucks	Gasoline	< 10	2,380	Litres	7,085	83	6
	Diesel Fuel	14	132,833	Litres	25,454	5,087	357
Tractor Trailer Trucks						5,170	363
Motorhomes	Gasoline	< 10	4,555	Litres	3,274	159	11
	Diesel Fuel	< 10	335	Litres		13	1
Motorhomes						172	12
Motorcycles, Mopeds	Gasoline	< 10	3,303	Litres	6,310	116	8
Motorcycles, Mopeds						116	8
Bus	Gasoline	< 10	17,032	Litres	22,321	596	40
	Diesel Fuel	< 10	32,810	Litres	32,450	1,257	88
Bus						1,853	128

Masset Village

Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	48,565	3,306
	Diesel:	11,877	839
	Other Fuel:	538	22
	All Fuels:	60,980	4,167

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	446	4,681,513	Kilowatt Hours	16,853	115
	Heating Oil		3,248	GigaJoules	3,248	229
	Propane		8,870	GigaJoules	8,870	541
	Wood		23,940	GigaJoules	23,940	9
Residential					52,911	894
Commercial/Small-Medium Industrial	Electricity	67	4,144,119	Kilowatt Hours	14,919	102
Commercial/Small-Medium Industrial					14,919	102
Electricity:					31,772	217
Natural Gas:						
Propane:					8,870	541
Wood:					23,940	9
Heating Oil:					3,248	229
Buildings Totals	Buildings:				67,830	996

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	735	1,621

Masset Village

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO ₂ e (t)
Diesel Fuel	310,127	L	11,877	839
Electricity	8,825,632	kWh	31,772	217
Gasoline	1,387,597	L	48,565	3,306
Heating Oil	3,248	GJ	3,248	229
Other Fuel	14,054	L	538	22
Propane	8,870	GJ	8,870	541
Solid Waste	735	T	0	1,621
Wood	23,940	GJ	23,940	9
Total of Transportation / Buildings / Solid Waste:			128,810 GJ	6,784 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (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	330	42	225	56	280	65
Semi-Detached House	100	13	100	25	105	24
Row House	0	0	0	0	0	0
Apartment, Duplex	10	1	5	1	0	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	20	3	25	6	40	9
Other Single Attached House	0	0	5	1	5	1
Movable Dwelling	0	0	40	10	0	0

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	360	55	275	66	255	57
Car, Truck, Van as Passenger	40	6	35	8	40	9
Public Transit	10	2	0	0	0	0
Walked	180	27	75	18	115	26
Bicycle	25	4	0	0	20	4
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	40	6	30	7	20	4

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	929.0
Net Land Area (ha) *	1,385.6
Residential Density (people per net ha)	0.7

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	0.9	0.0
Agricultural Land Reserve	584.2	26.8
Other land use	1,596.0	73.2
Total Land Area	2,181.0	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.