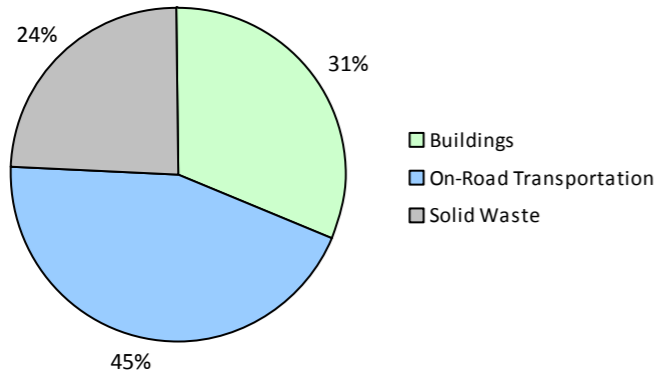
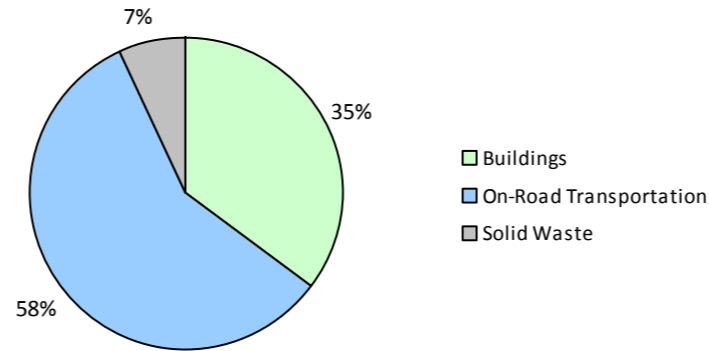


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

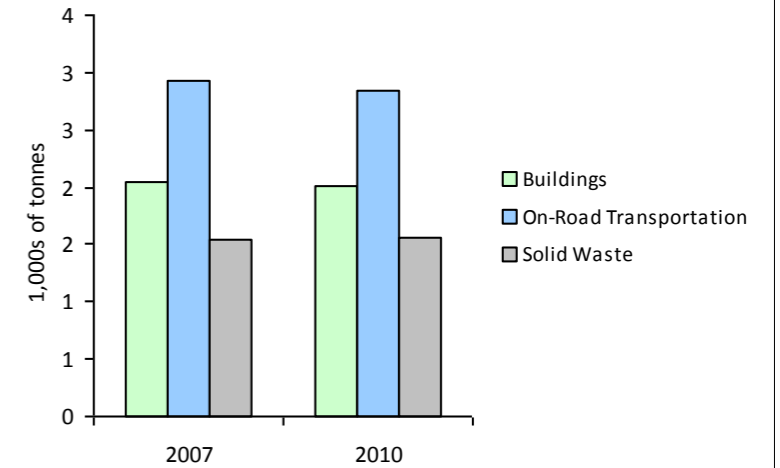
2010 GHG Emissions Sources (Total for this Community)



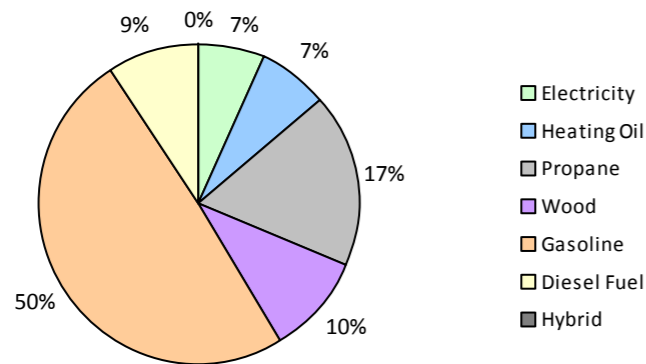
2010 GHG Emissions Sources (Total for BC)



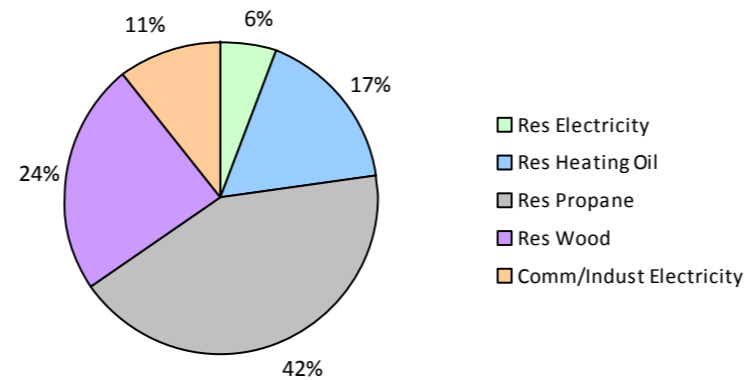
GHG Emissions Comparisons for this Community



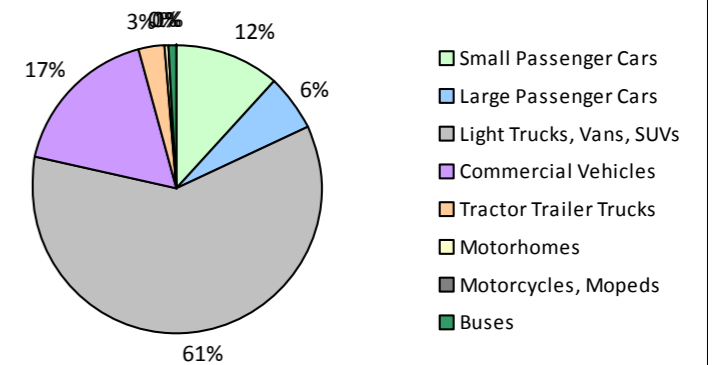
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Masset Village 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Core Items

On-Road Transportation		2007					2010				
		Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Hybrid			14,000	23	0					
	Gasoline	86	149,257 L	18,700	5,224	350	84	142,591 L	18,300	4,991	318
	Diesel Fuel			32,700	341	24			30,500	308	21
Large Passenger Cars	Gasoline	29	71,902 L	22,200	2,517	169	32	75,609 L	20,900	2,646	168
	Diesel Fuel			11,300	42	3			7,600	113	8
Light Trucks, Vans, SUVs	Hybrid			29,100	76	4			24,300	63	4
	Gasoline	243	703,932 L	20,000	24,638	1,670	257	726,160 L	19,700	25,416	1,639
	Diesel Fuel	12	32,894 L	16,200	1,260	90			18,200	1,078	74
	Other Fuel			13,300	117	8					
Commercial Vehicles	Gasoline	25	97,365 L	22,700	3,408	229	30	113,489 L	22,300	3,972	254
	Diesel Fuel	23	90,021 L	22,300	3,447	242	22	91,629 L	23,400	3,510	239
Tractor Trailer Trucks	Gasoline			11,100	123	8			10,400	124	8
	Diesel Fuel			13,400	1,467	104			14,100	1,081	74
Motorhomes	Diesel Fuel			12,000	82	7			14,300	180	13
Motorcycles, Mopeds	Gasoline			6,800	65	5			7,000	49	3
Buses	Gasoline			11,300	61	4			19,800	205	12
	Diesel Fuel			20,300	200	13			17,800	174	12
Totals		418	1,145,371 L	20,064	43,091	2,930	425	1,145,371 L	19,889	43,910	2,847

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	25,818 GJ	25,818	523	N/A	24,068 GJ	24,068	488
	Heating Oil	N/A	5,454 GJ	5,454	384	N/A	5,085 GJ	5,085	348
	Propane	N/A	14,895 GJ	14,895	909	N/A	13,886 GJ	13,886	847
	Electricity	446	4,681,513 kWh	16,853	117	437	4,603,927 kWh	16,574	115
Commercial/Small-Medium Industrial	Electricity	67	4,144,119 kWh	14,919	104	69	8,499,083 kWh	30,597	212
Totals		513		77,939	2,037	506		90,210	2,010

Masset Village 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	702 t	N/A	1,547	0	741 t	N/A	1,561
Totals		0			1,547	0			1,561

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 937)			2010 (Population: 920)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	99	4	0 L	63	4
Gasoline	1,022,456 L	36,036	2,435	1,057,849 L	37,403	2,402
Diesel Fuel	122,915 L	6,839	483	91,629 L	6,444	441
Other Fuel	0 L	117	8	0 L	0	
Wood	25,818 GJ	25,818	523	24,068 GJ	24,068	488
Heating Oil	5,454 GJ	5,454	384	5,085 GJ	5,085	348
Propane	14,895 GJ	14,895	909	13,886 GJ	13,886	847
Electricity	8,825,632 kWh	31,772	221	13,103,010 kWh	47,171	327
Solid Waste	702 t	0	1,547	741 t	0	1,561
Grand Totals		121,030	6,514		134,120	6,418

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Supporting Indicators

No new supporting indicator data have been provided in the 2010 reports. Work is currently underway to produce a complete second round of data for the indicators below in the 2012 reports (available in 2014). In the interim, we are including the same supporting indicator data that was provided in the 2007 reports. Feedback is requested on all supporting indicators; please contact us directly at

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	
	Units	%	Units	%	Units	%
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

Parks and Protected Greenspace

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	0	0
Local Parks	1	0
Agricultural Land Reserve	584	27
Other land use	1,596	73
Total Parks and Protected Area	1	0
Total Land Area	2,181	100

* Total is net of Indian Reserves
** Quantity of parkland may be underestimated

Residential Density

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	
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	0	0
Local Parks	1	0
Agricultural Land Reserve	584	27
Other land use	1,596	73
Total Parks and Protected Area	1	0
Total Land Area	2,181	100

* Net of Crown land, parks, Indian Reserves, water features, airports, ALR, waste disposal site

Masset Village
2010 Community Energy and Emissions Inventory
Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

This page
intentionally left
blank

Masset Village
2010 Community Energy and Emissions Inventory
Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Supporting Indicators Under Consideration

Work is currently underway to produce a complete second round of supporting indicators for the 2012 reports (available in 2014). These reports will new data for the five supporting indicators included in the 2007 and 2010 Reports:

- **Housing Type:** Private dwellings by structural type
- **Commute to Work:** Employed labour force - by mode of commute
- **Commute Distance**
- **Residential Density**
- **Parks and Protected Greenspace**

And in addition, the 2012 reports we are working to be able to include:

- **Proximity to Transit**
- **Building Energy Intensity**
- **Building Floor Space**
- **Waste Diversion**

We are continuing to work towards reporting on even more supporting indicators in the future including:

- **Proximity to Services** (e.g. destinations such as grocery store, school, other retail etc.)
- **Transit Ridership**
- **Water Use**
- **Impervious Surface Cover:** % change in impervious surface cover
- **Tree Canopy Cover:** % change in tree canopy cover
- **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)

Please give us feedback by contacting us directly at CEEIRPT@gov.bc.ca

Many local governments have been undertaking a significant amount of climate action in both the corporate and community-wide spheres, as demonstrated in both the public reports from the Climate Action Revenue Incentive Program (CARIP) <http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm>, and on the <http://toolkit.bc.ca> website. These two resources may be helpful to those who are interested in learning from other BC local governments. The toolkit also contains additional information and resources including decision-support/planning frameworks and tools for undertaking actions to reduce GHG emissions and energy consumption.

This is your local government's 2010 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 as well as supporting indicators 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, fulfill Milestone One requirements for those local government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program, as well as supporting local government efforts to monitor progress towards Regional Growth Strategy objectives.

A first in North America!

CEEI is a first in North America and a first step for BC communities. The 2010 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 from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items'. 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 2010 CEEI Reports, User Guide, Technical Methods and Guidance Document, and additional information on the Supporting 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, please take the time to 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,