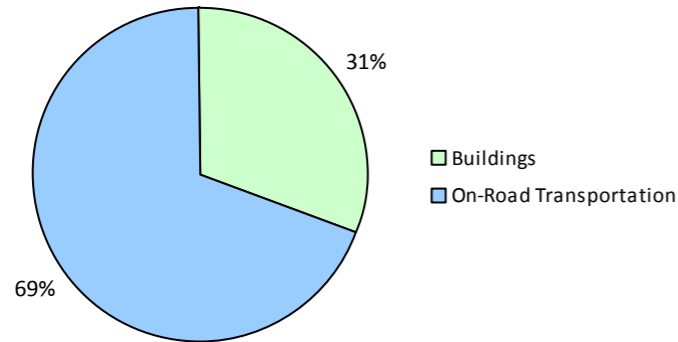
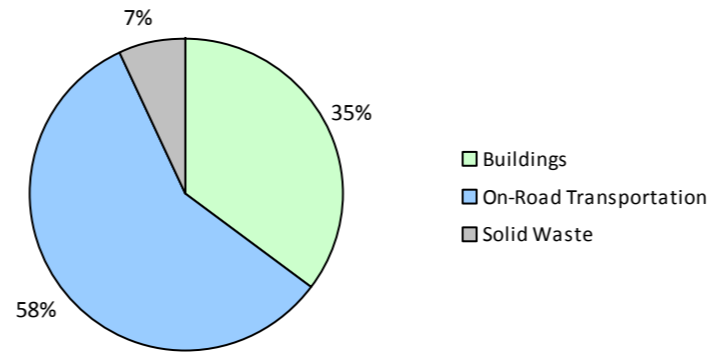


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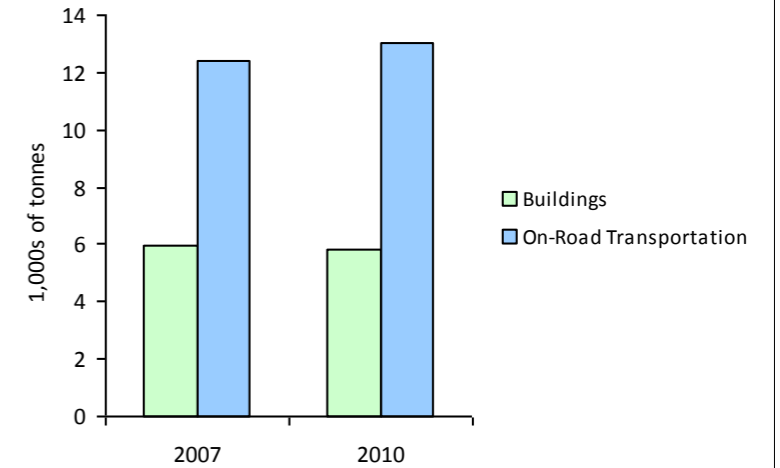
2010 GHG Emissions Sources (Total for this Community)



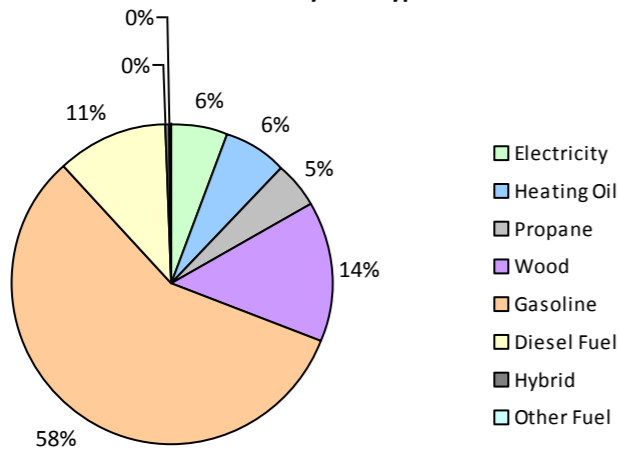
2010 GHG Emissions Sources (Total for BC)



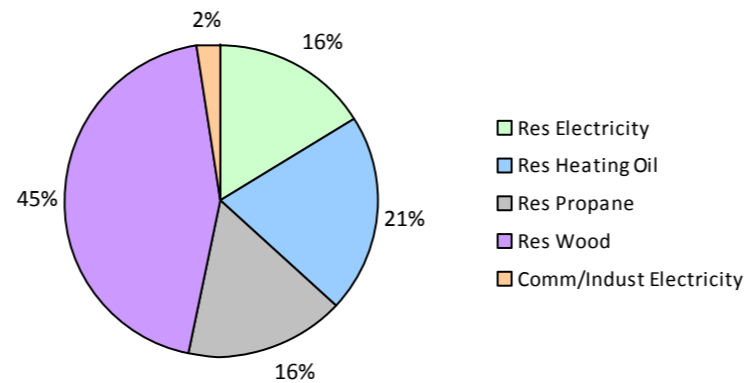
GHG Emissions Comparisons for this Community



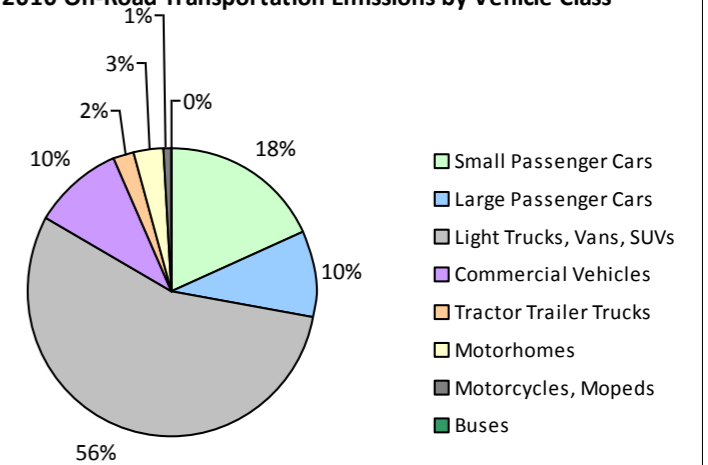
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Gabriola Island Trust Area 2010 Community Energy and Emissions Inventory

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Core Items

On-Road Transportation		2007					2010				
		Connections	Consumption	Avg VKT (km)	Energy (GJ)	CO2e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Hybrid			14,700	47	3			12,300	40	4
	Gasoline	753	886,865 L	12,400	31,041	2,130	785	960,165 L	12,900	33,606	2,174
	Diesel Fuel	55	82,773 L	22,000	3,171	227	57	77,516 L	20,100	2,969	205
Large Passenger Cars	Hybrid			17,300	173	11	13	14,823 L	20,900	519	33
	Gasoline	362	550,715 L	13,100	19,275	1,317	342	508,259 L	13,000	17,790	1,148
	Diesel Fuel	14	16,654 L	12,200	638	45	25	25,829 L	10,700	989	69
Light Trucks, Vans, SUVs	Hybrid								18,500	223	14
	Gasoline	1,249	2,619,032 L	14,800	91,667	6,305	1,397	2,952,687 L	15,000	103,344	6,733
	Diesel Fuel	93	180,953 L	11,200	6,930	493	73	170,560 L	14,400	6,533	451
	Other Fuel	20	39,481 L	11,700	998	59	11	19,877 L	10,500	504	30
Commercial Vehicles	Gasoline	63	146,988 L	13,900	5,144	345	75	188,822 L	15,000	6,608	422
	Diesel Fuel	78	240,054 L	16,600	9,194	646	112	355,543 L	17,100	13,618	929
	Other Fuel			10,700	146	9			15,700	145	9
Tractor Trailer Trucks	Diesel Fuel	15	88,571 L	14,600	3,392	238	16	108,796 L	17,400	4,167	284
Motorhomes	Gasoline	50	115,268 L	16,100	4,035	270	57	129,249 L	16,000	4,524	288
	Diesel Fuel	23	68,946 L	16,300	2,640	186	20	61,193 L	16,100	2,343	160
	Other Fuel			14,000	208	12			23,600	88	5
Motorcycles, Mopeds	Gasoline	148	35,162 L	5,300	1,231	81	146	38,575 L	5,900	1,351	85
Buses	Gasoline							25,800	145	9	
Totals		2,923	5,071,462 L	13,539	179,930	12,377	3,129	5,071,462 L	13,996	199,506	13,052

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	132,101 GJ	132,101	2,676	N/A	128,138 GJ	128,138	2,596
	Heating Oil	N/A	17,518 GJ	17,518	1,235	N/A	16,993 GJ	16,993	1,198
	Propane	N/A	15,823 GJ	15,823	965	N/A	15,348 GJ	15,348	936
	Electricity	2,800	38,008,049 kWh	136,829	950	2,891	37,840,232 kWh	136,225	946
Commercial/Small-Medium Industrial	Electricity	189	5,540,534 kWh	19,946	139	213	5,472,250 kWh	19,700	137
Totals		2,989		322,217	5,965	3,104		316,404	5,813

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 4,049)			2010 (Population: 4,046)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	220	14	14,823 L	782	51
Gasoline	4,354,030 L	152,393	10,448	4,777,757 L	167,368	10,859
Diesel Fuel	677,951 L	25,965	1,835	799,437 L	30,619	2,098
Other Fuel	39,481 L	1,352	80	19,877 L	737	44
Wood	132,101 GJ	132,101	2,676	128,138 GJ	128,138	2,596
Heating Oil	17,518 GJ	17,518	1,235	16,993 GJ	16,993	1,198
Propane	15,823 GJ	15,823	965	15,348 GJ	15,348	936
Electricity	43,548,583 kWh	156,775	1,089	43,312,482 kWh	155,925	1,083
Grand Totals		502,147	18,342		515,910	18,865

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	1,505	96	1,610	94	1,845	92
Semi-Detached House	40	3	40	2	35	2
Row House	0	0	0	0	0	0
Apartment, Duplex	0	0	15	1	25	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	0	0	20	1	20	1
Other Single Attached House	0	0	0	0	15	1
Movable Dwelling	30	2	30	2	65	3

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	810	72	755	70	745	60
Car, Truck, Van as Passenger	80	7	35	3	150	12
Public Transit	105	9	70	6	105	9
Walked	65	6	145	13	155	13
Bicycle	40	4	50	5	45	4
Motorcycle	10	1	0	0	15	1
Taxicab	0	0	0	0	0	0
Other Method	20	2	30	3	20	2

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	53	1
Local Parks	81	1
Agricultural Land Reserve	973	17
Other land use	4,729	81
Total Parks and Protected Area	134	2
Total Land Area	5,836	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	53	1
Local Parks	81	1
Agricultural Land Reserve	973	17
Other land use	4,729	81
Total Parks and Protected Area	134	2
Total Land Area	5,836	100

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

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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,