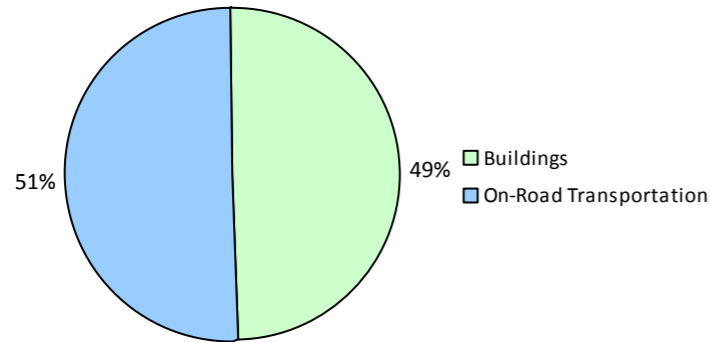
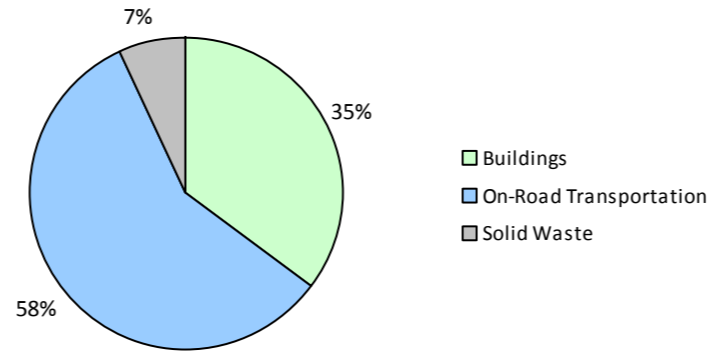


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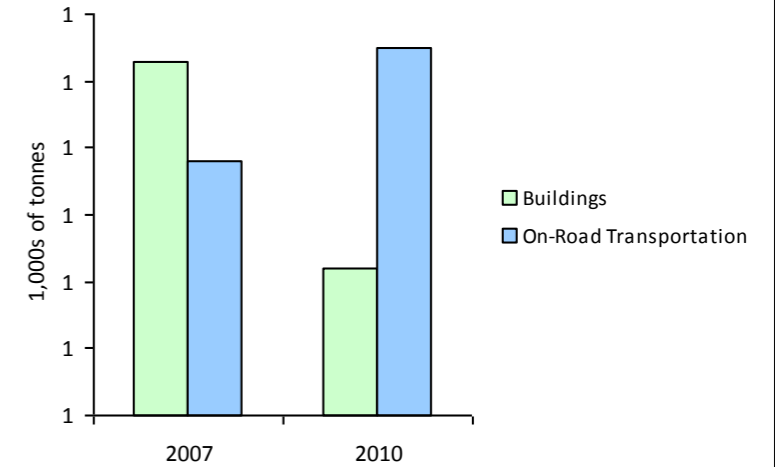
2010 GHG Emissions Sources (Total for this Community)



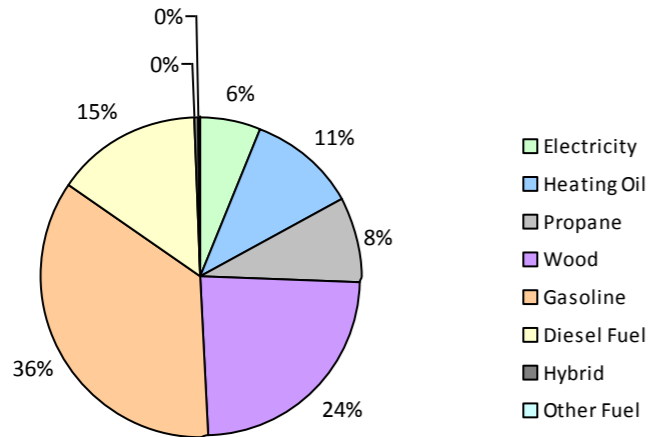
2010 GHG Emissions Sources (Total for BC)



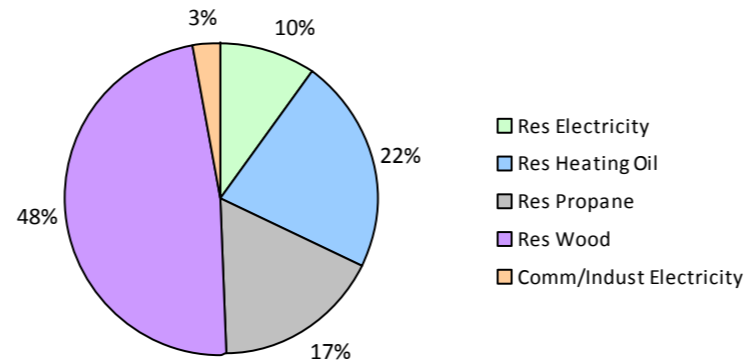
GHG Emissions Comparisons for this Community



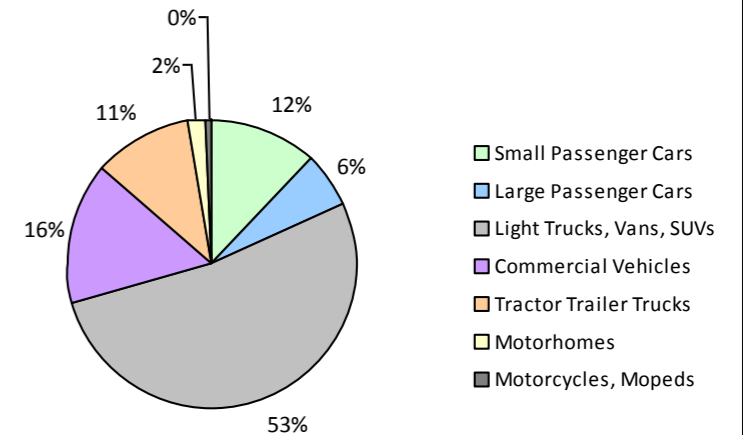
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Saturna Island Trust Area 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	Gasoline	62	54,080 L	9,100	1,892	130	59	51,930 L	9,200	1,817	118
	Diesel Fuel			9,400	101	7		9,900	56	4	
Large Passenger Cars	Hybrid	25	30,079 L	9,500	31	3	22	25,337 L	13,600	71	4
	Gasoline			10,400	1,053	72			10,100	887	58
	Diesel Fuel			10,400	41	4					
Light Trucks, Vans, SUVs	Hybrid	119	188,176 L				138	210,469 L	10,800	31	3
	Gasoline			11,300	6,586	453			10,900	7,367	480
	Diesel Fuel			9,800	596	42			12,000	566	39
	Other Fuel			9,300	78	5			8,700	37	3
Commercial Vehicles	Gasoline	14	42,772 L	9,700	395	27	15	48,926 L	10,200	476	31
	Diesel Fuel			16,100	1,638	115			17,200	1,873	128
	Other Fuel								6,400	28	0
Tractor Trailer Trucks	Diesel Fuel			12,600	1,403	99			13,100	1,656	113
Motorhomes	Gasoline			14,000	224	15			13,800	196	12
	Diesel Fuel			24,200	169	13			15,800	114	7
Motorcycles, Mopeds	Gasoline			5,200	54	3			6,300	84	5
Totals		220	315,107 L	10,883	14,261	988	234	315,107 L	10,800	15,259	1,005

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	23,652 GJ	23,652	479	N/A	22,943 GJ	22,943	465
	Heating Oil	N/A	3,137 GJ	3,137	221	N/A	3,043 GJ	3,043	215
	Propane	N/A	2,834 GJ	2,834	173	N/A	2,749 GJ	2,749	168
	Electricity	440	4,010,193 kWh	14,437	100	446	3,922,120 kWh	14,120	98
Commercial/Small-Medium Industrial	Electricity	45	1,213,594 kWh	4,369	30	51	1,052,934 kWh	3,791	26
Totals		485		48,429	1,003	497		46,646	972

Saturna Island Trust Area
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 354)			2010 (Population: 340)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	31	3	0 L	102	7
Gasoline	272,335 L	10,204	700	287,736 L	10,827	704
Diesel Fuel	42,772 L	3,948	280	48,926 L	4,265	291
Other Fuel	0 L	78	5	0 L	65	3
Wood	23,652 GJ	23,652	479	22,943 GJ	22,943	465
Heating Oil	3,137 GJ	3,137	221	3,043 GJ	3,043	215
Propane	2,834 GJ	2,834	173	2,749 GJ	2,749	168
Electricity	5,223,787 kWh	18,806	130	4,975,054 kWh	17,911	124
Grand Totals		62,690	1,991		61,905	1,977

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	135	87	150	88	170	89
Semi-Detached House	0	0	0	0	5	3
Row House	10	6	5	3	0	0
Apartment, Duplex	0	0	5	3	0	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	10	6	5	3	0	0
Other Single Attached House	0	0	0	0	5	3
Movable Dwelling	0	0	5	3	10	5

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	95	76	105	100	75	58
Car, Truck, Van as Passenger	10	8	0	0	10	8
Public Transit	0	0	0	0	10	8
Walked	20	16	0	0	20	15
Bicycle	0	0	0	0	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	0	0	0	0	15	12

Parks and Protected Greenspace

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

	2009	
	Units	%
National Parks	1,537	45
Provincial Parks / Protected Areas	4	0
Local Parks	6	0
Agricultural Land Reserve	409	12
Other land use	1,476	43
Total Parks and Protected Area	1,547	45
Total Land Area	3,432	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	1,537	45
Provincial Parks / Protected Areas	4	0
Local Parks	6	0
Agricultural Land Reserve	409	12
Other land use	1,476	43
Total Parks and Protected Area	1,547	45
Total Land Area	3,432	100

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

Saturna Island Trust Area
2010 Community Energy and Emissions Inventory
Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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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,