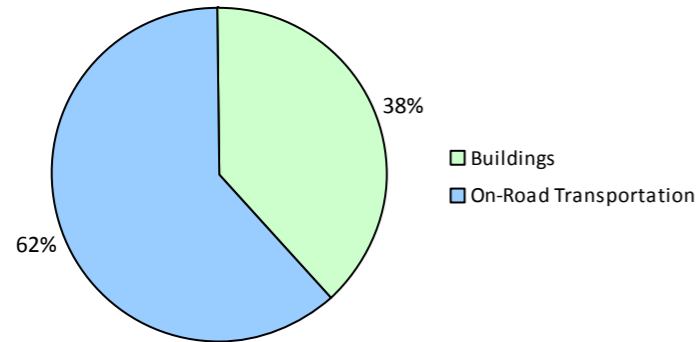
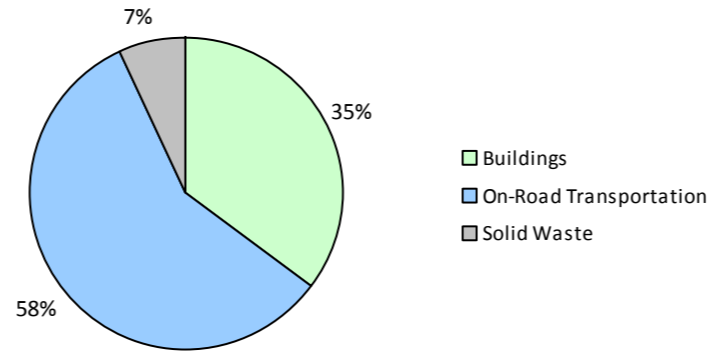


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2010 GHG Emissions Sources (Total for this Community)



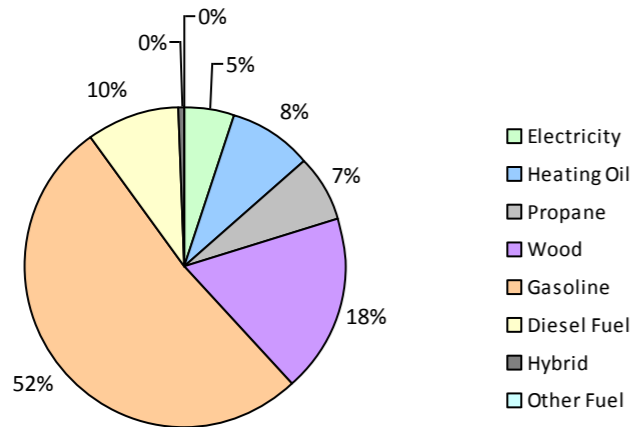
2010 GHG Emissions Sources (Total for BC)



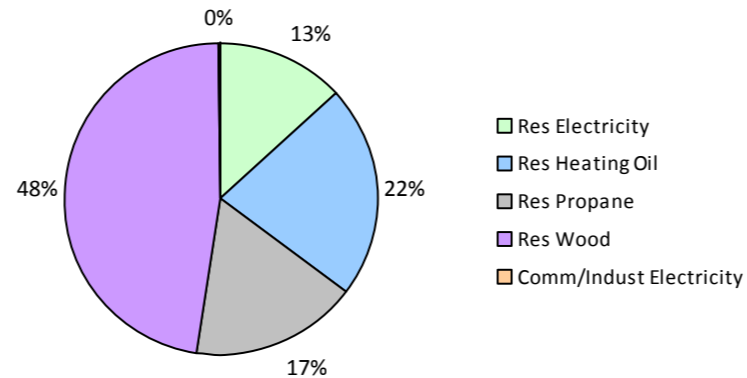
GHG Emissions Comparisons for this Community



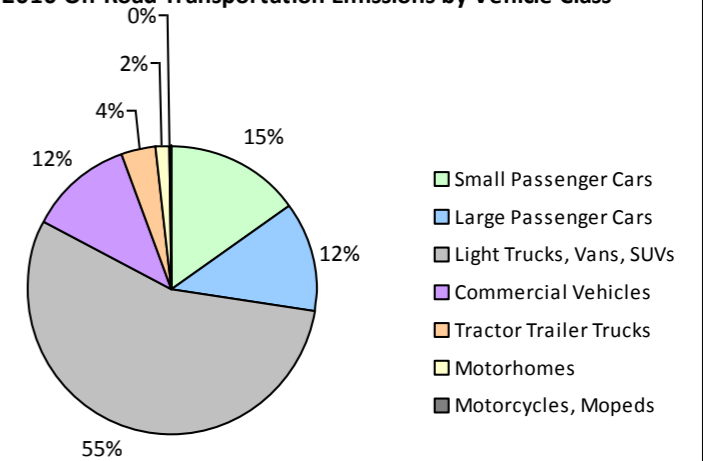
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



South Pender 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)	CO2e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	42	39,223 L	9,800	1,372	93	49	46,847 L	10,000	1,640	106
Large Passenger Cars	Hybrid								11,600	74	4
	Gasoline	20	24,208 L	10,600	848	57	28	35,811 L	11,200	1,253	81
	Diesel Fuel			5,900	23	0			5,000	19	0
Light Trucks, Vans, SUVs	Gasoline	96	170,584 L	12,800	5,971	410	99	161,139 L	11,800	5,639	367
	Diesel Fuel			13,800	371	27			12,900	240	17
	Other Fuel								6,600	28	1
Commercial Vehicles	Gasoline			12,600	294	21			11,800	408	26
	Diesel Fuel			17,800	870	61			18,100	830	55
	Other Fuel			10,500	50	4					
Tractor Trailer Trucks	Diesel Fuel			12,500	199	14			12,200	386	26
Motorhomes	Gasoline			16,400	80	6					
	Diesel Fuel			12,900	168	12			24,900	163	11
Motorcycles, Mopeds	Gasoline			3,000	29	2			3,300	26	1
Totals		158	234,015 L	11,724	10,275	707	176	234,015 L	11,203	10,706	695

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	10,431 GJ	10,431	211	N/A	10,118 GJ	10,118	205
	Heating Oil	N/A	1,384 GJ	1,384	98	N/A	1,342 GJ	1,342	95
	Propane	N/A	1,250 GJ	1,250	76	N/A	1,212 GJ	1,212	74
	Electricity	160	2,247,986 kWh	8,093	56	161	2,268,000 kWh	8,165	57
Commercial/Small-Medium Industrial	Electricity	5	30,462 kWh	110	1	9	57,000 kWh	205	1
Totals		165		21,268	442	170		21,042	432

South Pender Island Trust Area 2010 Community Energy and Emissions Inventory

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 229)			2010 (Population: 208)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	0		0 L	74	4
Gasoline	234,015 L	8,594	589	243,797 L	8,966	581
Diesel Fuel	0 L	1,631	114	0 L	1,638	109
Other Fuel	0 L	50	4	0 L	28	1
Wood	10,431 GJ	10,431	211	10,118 GJ	10,118	205
Heating Oil	1,384 GJ	1,384	98	1,342 GJ	1,342	95
Propane	1,250 GJ	1,250	76	1,212 GJ	1,212	74
Electricity	2,278,448 kWh	8,203	57	2,325,000 kWh	8,370	58
Grand Totals		31,543	1,149		31,748	1,127

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	80	100	85	94	115	92
Semi-Detached House	0	0	0	0	5	4
Row House	0	0	0	0	0	0
Apartment, Duplex	0	0	0	0	0	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	0	0	0	0	0	0
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	0	0	5	6	5	4

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	50	100	35	100	50	71
Car, Truck, Van as Passenger	0	0	0	0	10	14
Public Transit	0	0	0	0	0	0
Walked	0	0	0	0	10	14
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	0	0

Parks and Protected Greenspace

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

	2009	
	Units	%
National Parks	228	25
Provincial Parks / Protected Areas	57	6
Local Parks	13	1
Agricultural Land Reserve	159	17
Other land use	456	50
Total Parks and Protected Area	298	33
Total Land Area	913	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	228	25
Provincial Parks / Protected Areas	57	6
Local Parks	13	1
Agricultural Land Reserve	159	17
Other land use	456	50
Total Parks and Protected Area	298	33
Total Land Area	913	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,