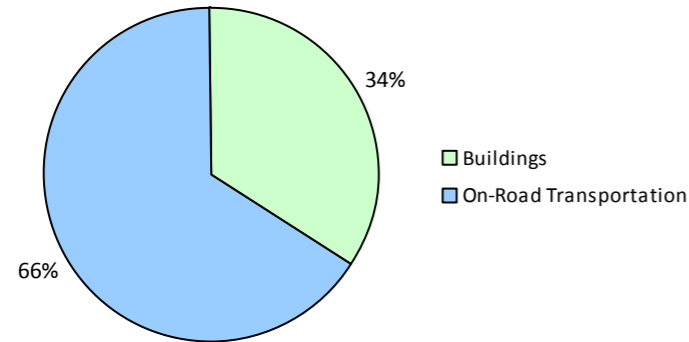


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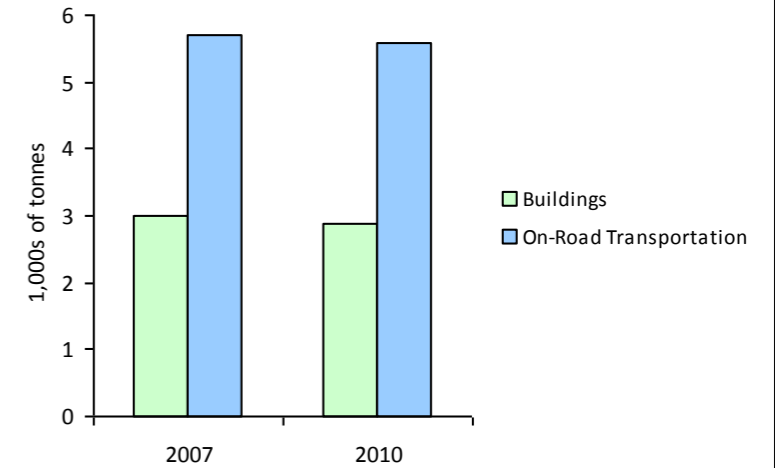
2010 GHG Emissions Sources (Total for this Community)



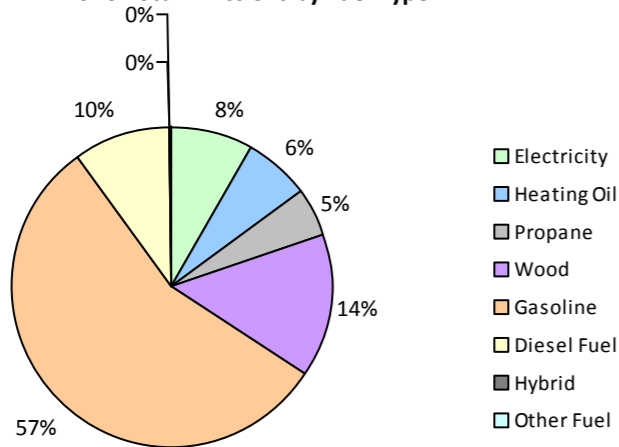
2010 GHG Emissions Sources (Total for BC)



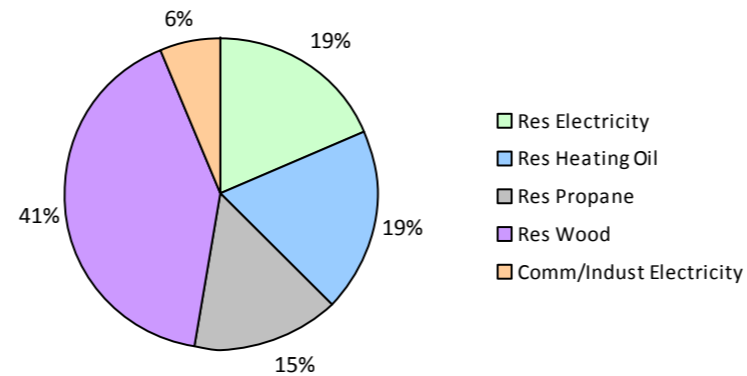
GHG Emissions Comparisons for this Community



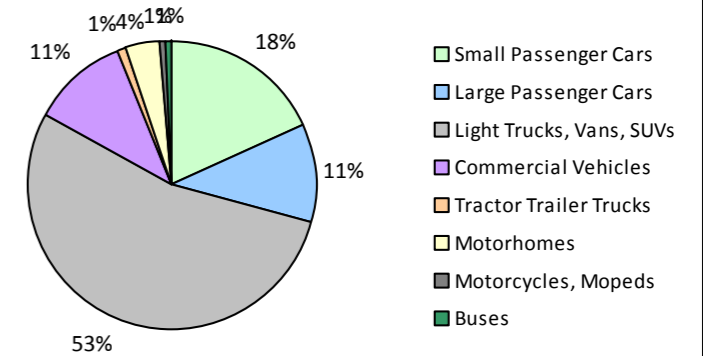
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



North Pender 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	Gasoline	459	426,593 L	9,700	14,930	1,025	469	442,675 L	9,900	15,494	1,003
	Diesel Fuel	12	9,746 L	12,400	374	27	12	9,709 L	12,300	372	25
Large Passenger Cars	Hybrid			11,800	55	4			10,400	83	6
	Gasoline	216	270,962 L	10,800	9,484	648	207	254,656 L	10,700	8,913	577
	Diesel Fuel			9,400	144	10			9,600	209	15
Light Trucks, Vans, SUVs	Hybrid			18,400	51	4			14,300	125	9
	Gasoline	678	1,147,824 L	12,100	40,175	2,760	737	1,216,849 L	11,900	42,589	2,772
	Diesel Fuel	61	117,028 L	11,000	4,482	318	40	84,554 L	12,300	3,239	224
	Other Fuel			9,900	208	12			10,500	177	11
Commercial Vehicles	Gasoline	41	75,753 L	11,100	2,651	177	46	82,107 L	10,700	2,873	185
	Diesel Fuel	43	128,899 L	15,800	4,936	346	50	158,402 L	17,100	6,067	414
	Other Fuel			13,800	64	4			9,000	43	3
Tractor Trailer Trucks	Diesel Fuel			20,600	972	68			22,000	1,021	70
Motorhomes	Gasoline	30	67,809 L	16,400	2,374	159	31	67,752 L	16,000	2,370	151
	Diesel Fuel	12	34,096 L	16,000	1,306	91			14,800	819	56
	Other Fuel			10,800	39	3					
Motorcycles, Mopeds	Gasoline	58	12,169 L	4,900	426	29	68	17,072 L	6,000	598	38
Buses	Gasoline			14,300	131	10			14,200	229	15
	Diesel Fuel								14,300	276	19
Totals		1,610	2,290,879 L	11,125	82,802	5,695	1,660	2,290,879 L	11,156	85,497	5,593

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	60,688 GJ	60,688	1,230	N/A	58,867 GJ	58,867	1,193
	Heating Oil	N/A	8,050 GJ	8,050	567	N/A	7,808 GJ	7,808	550
	Propane	N/A	7,272 GJ	7,272	444	N/A	7,054 GJ	7,054	430
	Electricity	1,707	23,129,260 kWh	83,265	578	1,718	21,490,000 kWh	77,364	537
Commercial/Small-Medium Industrial	Electricity	198	6,860,218 kWh	24,697	172	216	7,257,000 kWh	26,125	181
Totals		1,905		183,972	2,991	1,934		177,218	2,891

North 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: 2,004)			2010 (Population: 2,027)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	106	8	0 L	208	15
Gasoline	2,001,110 L	70,171	4,808	2,081,111 L	73,066	4,741
Diesel Fuel	289,769 L	12,214	860	252,665 L	12,003	823
Other Fuel	0 L	311	19	0 L	220	14
Wood	60,688 GJ	60,688	1,230	58,867 GJ	58,867	1,193
Heating Oil	8,050 GJ	8,050	567	7,808 GJ	7,808	550
Propane	7,272 GJ	7,272	444	7,054 GJ	7,054	430
Electricity	29,989,478 kWh	107,962	750	28,747,000 kWh	103,489	718
Grand Totals		266,774	8,686		262,715	8,484

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	780	96	875	96	945	95
Semi-Detached House	0	0	5	1	10	1
Row House	0	0	0	0	0	0
Apartment, Duplex	0	0	10	1	10	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	10	1	0	0	0	0
Other Single Attached House	0	0	0	0	5	1
Movable Dwelling	20	2	20	2	30	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	325	71	390	80	460	71
Car, Truck, Van as Passenger	60	13	20	4	90	14
Public Transit	45	10	40	8	35	5
Walked	25	5	10	2	45	7
Bicycle	0	0	15	3	10	2
Motorcycle	0	0	0	0	10	2
Taxicab	0	0	0	0	0	0
Other Method	0	0	10	2	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	447	9
Provincial Parks / Protected Areas	337	6
Local Parks	57	1
Agricultural Land Reserve	1,026	20
Other land use	3,372	64
Total Parks and Protected Area	841	16
Total Land Area	5,239	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	447	9
Provincial Parks / Protected Areas	337	6
Local Parks	57	1
Agricultural Land Reserve	1,026	20
Other land use	3,372	64
Total Parks and Protected Area	841	16
Total Land Area	5,239	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,