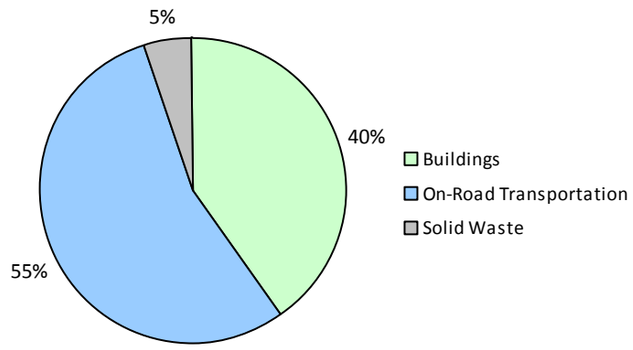
Port Moody City

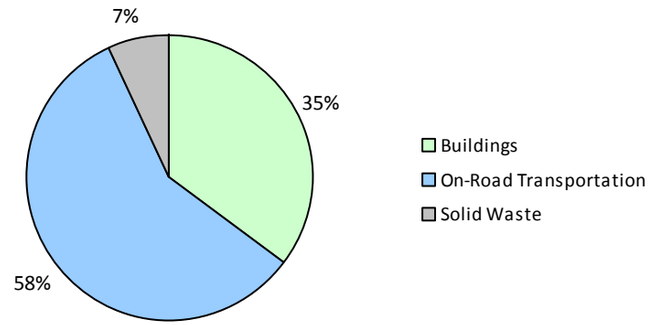
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

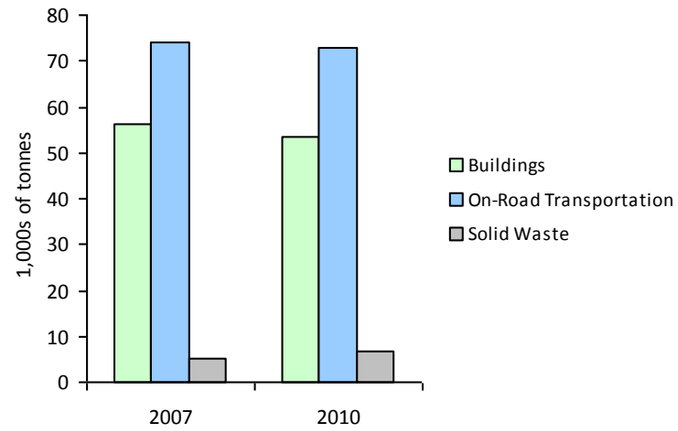
2010 GHG Emissions Sources (Total for this Community)



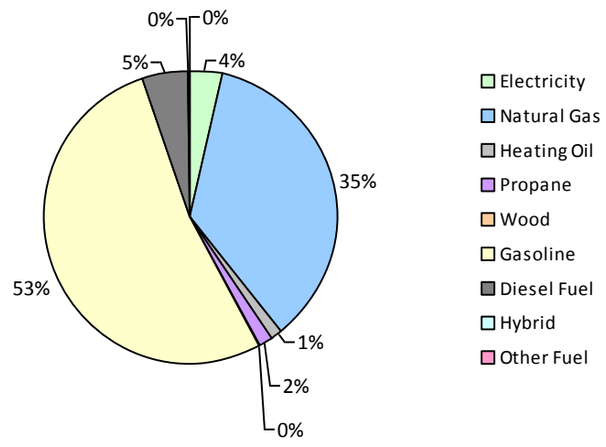
2010 GHG Emissions Sources (Total for BC)



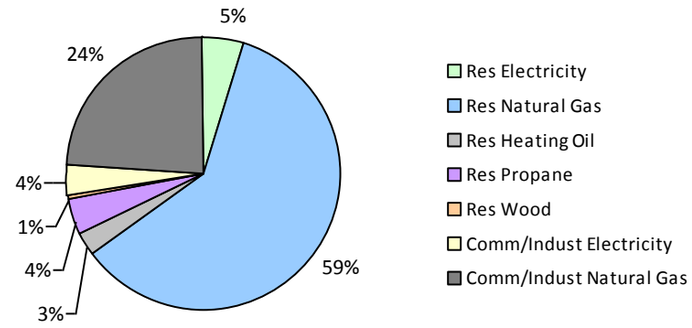
GHG Emissions Comparisons for this Community



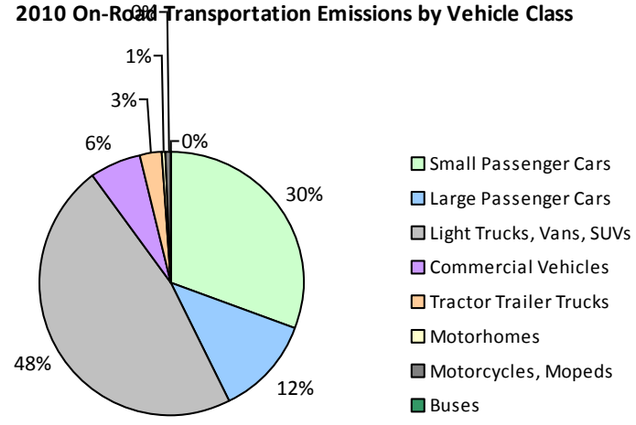
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Port Moody City

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			15,100	222	15	25	20,189 L	16,300	706	45
	Gasoline	6,954	9,362,535 L	14,200	327,689	22,127	7,357	9,676,172 L	13,800	338,666	21,655
	Diesel Fuel	132	157,829 L	18,000	6,044	430	166	194,963 L	17,100	7,467	517
Large Passenger Cars	Hybrid	28	25,381 L	16,300	888	60	81	74,490 L	15,800	2,607	166
	Gasoline	2,697	4,109,837 L	13,400	143,844	9,706	2,671	3,929,779 L	13,000	137,543	8,793
	Diesel Fuel	18	26,267 L	16,000	1,006	71	21	27,393 L	14,200	1,049	73
	Other Fuel			16,800	58	4			13,800	132	7
Light Trucks, Vans, SUVs	Hybrid	17	24,134 L	18,000	846	56	48	67,785 L	16,600	2,372	153
	Gasoline	6,157	13,221,694 L	15,500	462,760	31,468	7,132	14,758,618 L	15,100	516,552	33,355
	Diesel Fuel	78	185,669 L	14,100	7,111	507	110	301,429 L	18,500	11,544	799
	Other Fuel	24	47,516 L	11,800	1,202	73			10,000	338	21
Commercial Vehicles	Gasoline	358	1,046,610 L	17,500	36,631	2,460	307	855,852 L	16,700	29,956	1,915
	Diesel Fuel	228	838,008 L	18,600	32,096	2,255	284	1,012,956 L	18,500	38,796	2,644
	Other Fuel	20	40,254 L	11,000	1,017	62			9,500	351	21
Tractor Trailer Trucks	Diesel Fuel	72	1,469,393 L	51,700	56,278	3,954	43	728,595 L	42,900	27,905	1,902
Motorhomes	Gasoline	67	158,833 L	16,900	5,558	371	63	147,138 L	16,800	5,149	328
	Diesel Fuel	34	102,752 L	16,700	3,935	277	29	91,858 L	16,900	3,517	239
	Other Fuel			16,500	125	7					
Motorcycles, Mopeds	Gasoline	229	57,257 L	5,600	2,004	133	355	103,041 L	6,500	3,606	229
Buses	Gasoline			31,000	1,316	88			26,700	588	37
	Diesel Fuel			56,200	559	38			33,700	872	59
Totals		**17,113**	**30,873,969 L**	**14,758**	**1,091,189**	**74,162**	**18,692**	**30,873,969 L**	**14,321**	**1,129,716**	**72,958**

Port Moody City

2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	15,101 GJ	15,101	306	N/A	14,066 GJ	14,066	285
	Heating Oil	N/A	25,355 GJ	25,355	1,787	N/A	23,619 GJ	23,619	1,615
	Propane	N/A	37,535 GJ	37,535	2,290	N/A	34,964 GJ	34,964	2,133
	Natural Gas	7,246	723,945 GJ	723,945	36,313	7,264	635,866 GJ	635,866	31,895
	Electricity	11,120	100,847,302 kWh	363,050	2,521	12,430	108,580,075 kWh	390,888	2,715
Commercial/Small-Medium Industrial	Natural Gas	384	225,519 GJ	225,519	11,312	386	257,716 GJ	257,716	12,927
	Electricity	934	69,960,719 kWh	251,858	1,749	962	80,256,013 kWh	288,921	2,006
Totals		**19,684**		**1,642,363**	**56,278**	**21,042**		**1,646,040**	**53,576**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	18,129 t	N/A	4,960	0	14,382 t	N/A	6,822
Totals		**0**			**4,960**	**0**			**6,822**

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	10		0	0	9		0	0
	Electricity	3		0	0	2		0	0
Totals		**13**			**0**	**11**			**0**

Port Moody City

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: 29,945)			2010 (Population: 33,933)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	49,515 L	1,956	131	162,464 L	5,685	364
Gasoline	27,956,766 L	979,802	66,353	29,470,600 L	1,032,060	66,312
Diesel Fuel	2,779,918 L	107,029	7,532	2,357,194 L	91,150	6,233
Other Fuel	87,770 L	2,402	146	0 L	821	49
Wood	15,101 GJ	15,101	306	14,066 GJ	14,066	285
Heating Oil	25,355 GJ	25,355	1,787	23,619 GJ	23,619	1,615
Propane	37,535 GJ	37,535	2,290	34,964 GJ	34,964	2,133
Natural Gas	949,464 GJ	949,464	47,625	893,582 GJ	893,582	44,822
Electricity	170,808,021 kWh	614,908	4,270	188,836,088 kWh	679,809	4,721
Solid Waste	18,129 t	0	4,960	14,382 t	0	6,822
Grand Totals		**2,733,552**	**135,400**		**2,775,756**	**133,356**

Port Moody City

2010 Community Energy and Emissions Inventory

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	3,495	32	3,775	44	3,840	38
Semi-Detached House	140	1	315	4	395	4
Row House	1,795	17	1,700	20	2,380	23
Apartment, Duplex	550	5	750	9	940	9
Apartment, 5 storeys or higher	160	1	200	2	315	3
Apartment, under 5 storeys	1,125	10	1,740	20	2,250	22
Other Single Attached House	10	0	5	0	10	0
Movable Dwelling	35	0	45	1	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	8,480	80	9,655	81	10,415	74
Car, Truck,Van as Passenger	600	6	745	6	1,080	8
Public Transit	1,115	11	1,095	9	1,935	14
Walked	220	2	240	2	475	3
Bicycle	50	0	85	1	85	1
Motorcycle	20	0	10	0	40	0
Taxicab	10	0	0	0	0	0
Other Method	90	1	50	0	55	0

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	1,021	38
Agricultural Land Reserve	0	0
Other land use	1,633	62
Total Parks and Protected Area	1,021	38
Total Land Area	2,655	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	1,021	38
Agricultural Land Reserve	0	0
Other land use	1,633	62
Total Parks and Protected Area	1,021	38
Total Land Area	2,655	100

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

Commute Distance

Shorter commute distances generally reduce GHG emissions by increasing the likelihood of people walking, cycling or using transit. Commute distance is also indicative of the 'completeness' of a community from an employment perspective.

	2006	
	Units	%
Less than 5 km	2,880	23
5 to 9.9 km	2,675	21
25 km or more	415	3
15 to 24.9 km	4,215	34
10 to 14.9 km	2,390	19

This page intentionally left blank

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,