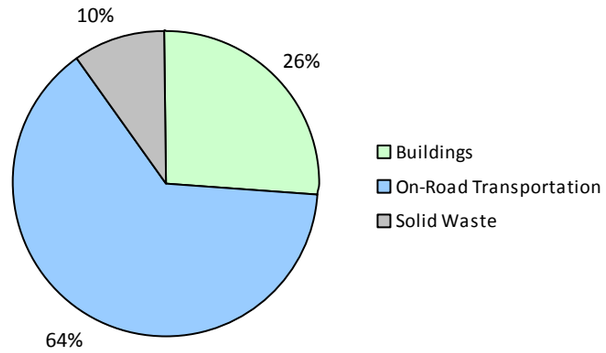
Port Hardy District Municipality

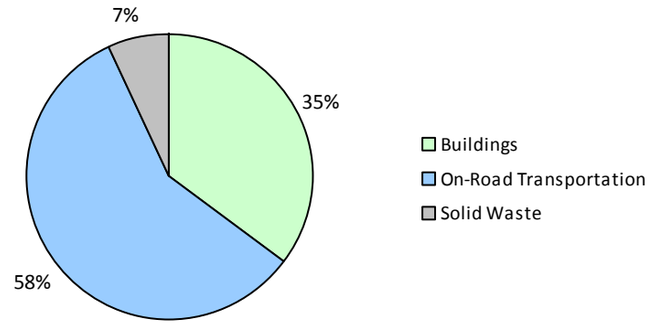
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

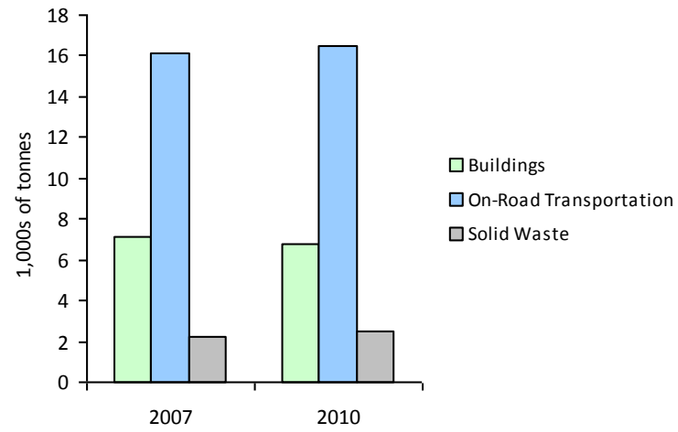
2010 GHG Emissions Sources (Total for this Community)



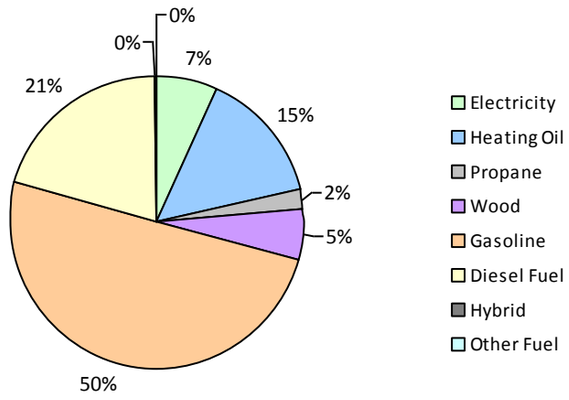
2010 GHG Emissions Sources (Total for BC)



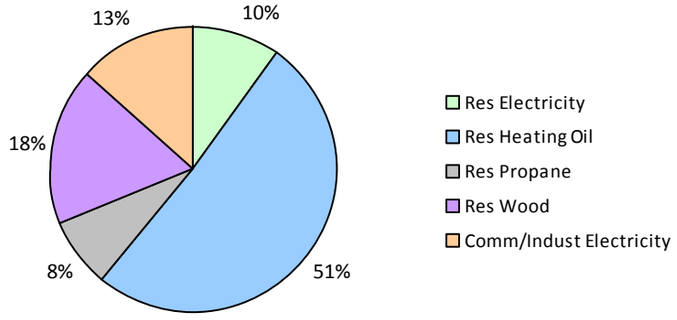
GHG Emissions Comparisons for this Community



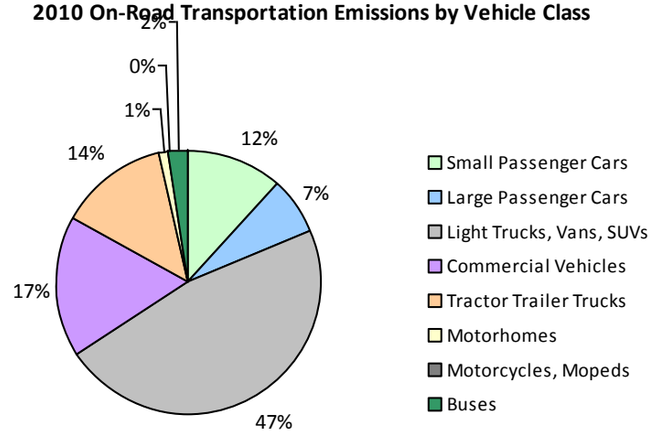
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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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								24,400	39	3
	Gasoline	516	813,912 L	17,000	28,487	1,930	503	821,876 L	17,600	28,766	1,843
	Diesel Fuel	23	47,452 L	30,900	1,817	130	27	50,332 L	27,400	1,928	134
	Other Fuel								15,900	44	4
Large Passenger Cars	Hybrid			14,900	44	4			28,800	264	18
	Gasoline	246	490,136 L	17,600	17,155	1,163	237	478,942 L	17,900	16,764	1,074
	Diesel Fuel			13,300	191	14			11,000	237	17
Light Trucks, Vans, SUVs	Hybrid			10,400	98	7					
	Gasoline	1,093	2,881,713 L	18,000	100,861	6,890	1,183	3,320,318 L	19,100	116,212	7,525
	Diesel Fuel	44	89,094 L	11,600	3,413	243	31	62,722 L	12,200	2,403	167
	Other Fuel	12	20,912 L	10,100	530	31			10,100	177	10
Commercial Vehicles	Gasoline	142	450,086 L	18,600	15,754	1,057	146	469,455 L	19,000	16,431	1,051
	Diesel Fuel	150	537,578 L	19,700	20,589	1,447	174	685,418 L	21,900	26,251	1,789
	Other Fuel			12,800	552	34			12,000	297	18
Tractor Trailer Trucks	Diesel Fuel	45	1,004,558 L	52,500	38,474	2,704	43	867,702 L	48,900	33,233	2,266
Motorhomes	Gasoline	13	28,995 L	16,100	1,015	67	15	36,253 L	17,400	1,268	80
	Diesel Fuel			15,500	1,075	76	12	36,595 L	16,000	1,401	97
Motorcycles, Mopeds	Gasoline	30	6,301 L	4,800	221	15	32	8,416 L	6,000	295	19
Buses	Gasoline			15,800	490	33			17,700	430	28
	Diesel Fuel	14	92,713 L	22,400	3,552	249	14	121,004 L	31,000	4,634	317
	Other Fuel			10,600	114	8					
Totals		**2,328**	**6,463,450 L**	**18,361**	**234,432**	**16,102**	**2,417**	**6,463,450 L**	**19,270**	**251,074**	**16,460**

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	62,236 GJ	62,236	1,261	N/A	60,247 GJ	60,247	1,221
	Heating Oil	N/A	51,859 GJ	51,859	3,656	N/A	50,201 GJ	50,201	3,433
	Propane	N/A	8,931 GJ	8,931	545	N/A	8,645 GJ	8,645	527
	Electricity	2,015	28,267,397 kWh	101,763	707	2,058	27,256,639 kWh	98,124	681
Commercial/Small-Medium Industrial	Electricity	436	37,238,949 kWh	134,060	931	453	36,416,638 kWh	131,100	910
Totals		**2,451**		**358,849**	**7,100**	**2,511**		**348,317**	**6,772**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	2,557 t	N/A	2,197	0	2,316 t	N/A	2,500
Totals		**0**			**2,197**	**0**			**2,500**

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 3,924)			2010 (Population: 3,950)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	142	11	0 L	303	21
Gasoline	4,671,143 L	163,983	11,155	5,135,260 L	180,166	11,620
Diesel Fuel	1,771,395 L	69,111	4,863	1,823,773 L	70,087	4,787
Other Fuel	20,912 L	1,196	73	0 L	518	32
Wood	62,236 GJ	62,236	1,261	60,247 GJ	60,247	1,221
Heating Oil	51,859 GJ	51,859	3,656	50,201 GJ	50,201	3,433
Propane	8,931 GJ	8,931	545	8,645 GJ	8,645	527
Electricity	65,506,346 kWh	235,823	1,638	63,673,277 kWh	229,224	1,591
Solid Waste	2,557 t	0	2,197	2,316 t	0	2,500
Grand Totals		**593,281**	**25,399**		**599,391**	**25,732**

Port Hardy District Municipality

2010 Community Energy and Emissions Inventory

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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	840	30	865	48	955	60
Semi-Detached House	55	2	60	3	60	4
Row House	165	6	230	13	170	11
Apartment, Duplex	10	0	15	1	0	0
Apartment, 5 storeys or higher	60	2	40	2	15	1
Apartment, under 5 storeys	380	14	300	17	275	17
Other Single Attached House	55	2	0	0	0	0
Movable Dwelling	380	14	295	16	110	7

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	2,065	76	1,715	71	1,390	75
Car, Truck,Van as Passenger	250	9	300	12	120	6
Public Transit	15	1	0	0	0	0
Walked	290	11	315	13	275	15
Bicycle	25	1	10	0	10	1
Motorcycle	10	0	0	0	0	0
Taxicab	0	0	10	0	0	0
Other Method	70	3	65	3	70	4

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	15	0
Agricultural Land Reserve	0	0
Other land use	4,039	100
Total Parks and Protected Area	15	0
Total Land Area	4,054	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	15	0
Agricultural Land Reserve	0	0
Other land use	4,039	100
Total Parks and Protected Area	15	0
Total Land Area	4,054	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,