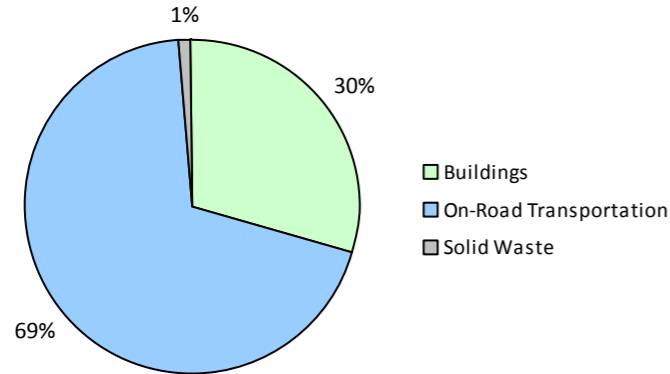
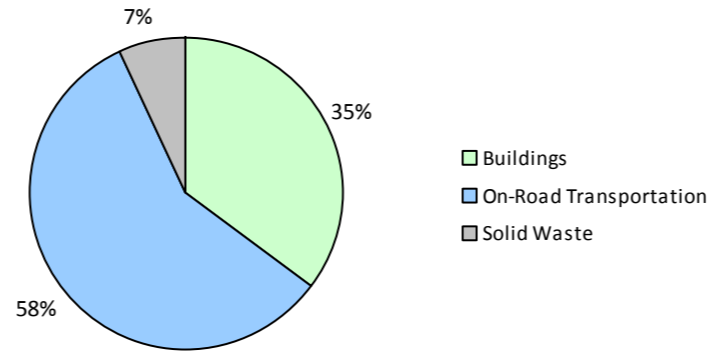


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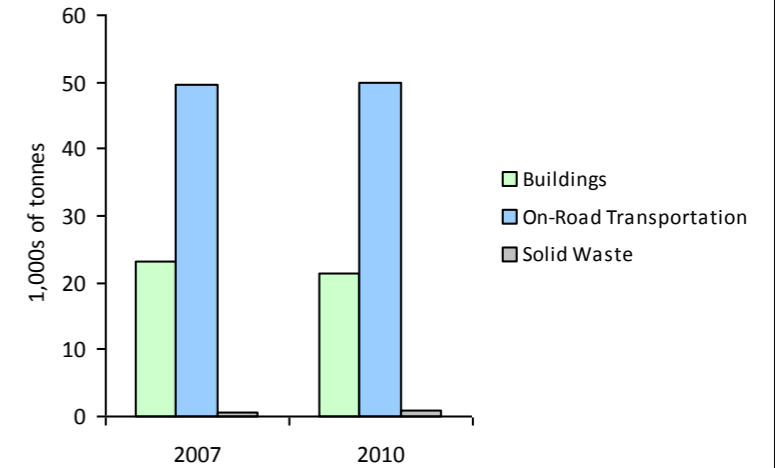
2010 GHG Emissions Sources (Total for this Community)



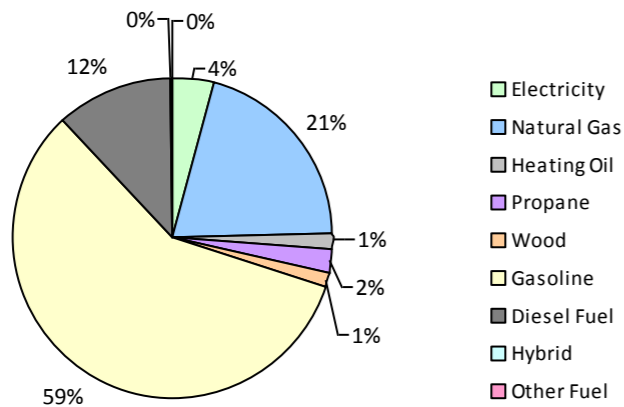
2010 GHG Emissions Sources (Total for BC)



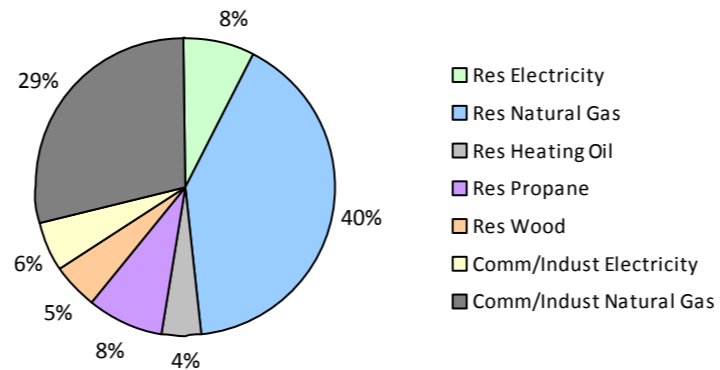
GHG Emissions Comparisons for this Community



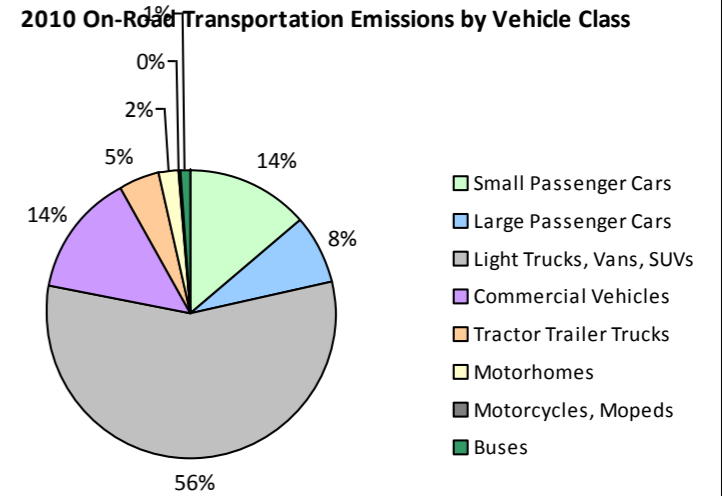
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Powell River City 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	Hybrid			24,300	40	4			22,000	205	12
	Gasoline	2,209	2,977,778 L	14,300	104,223	7,114	2,181	2,975,349 L	14,600	104,137	6,702
	Diesel Fuel	47	64,969 L	20,400	2,489	178	48	64,499 L	20,500	2,471	171
Large Passenger Cars	Hybrid			21,000	124	8	13	19,798 L	27,000	693	43
	Gasoline	1,238	1,906,307 L	13,500	66,721	4,552	1,122	1,692,713 L	13,300	59,245	3,820
	Diesel Fuel	12	13,774 L	11,700	528	37	15	15,840 L	11,000	607	42
Light Trucks, Vans, SUVs	Hybrid			19,300	157	10			23,000	489	32
	Gasoline	4,205	10,907,079 L	17,900	381,747	26,183	4,561	11,939,749 L	18,000	417,891	27,151
	Diesel Fuel	261	564,153 L	12,000	21,608	1,534	156	367,116 L	13,400	14,061	971
	Other Fuel	16	34,488 L	12,600	872	53	12	23,770 L	12,000	601	37
Commercial Vehicles	Gasoline	353	1,097,738 L	18,400	38,422	2,579	398	1,238,091 L	18,600	43,334	2,769
	Diesel Fuel	311	1,156,563 L	20,600	44,296	3,112	382	1,556,840 L	22,700	59,627	4,065
	Other Fuel	13	30,861 L	12,800	780	46	14	33,448 L	13,000	846	51
Tractor Trailer Trucks	Gasoline			11,200	423	28			10,300	391	24
	Diesel Fuel	92	971,483 L	25,200	37,208	2,614	98	926,000 L	21,800	35,467	2,418
Motorhomes	Gasoline	90	254,469 L	20,100	8,906	594	97	277,052 L	20,200	9,697	615
	Diesel Fuel	50	165,092 L	18,600	6,324	445	42	147,184 L	18,800	5,638	385
	Other Fuel			25,600	105	7			19,900	77	5
Motorcycles, Mopeds	Gasoline	205	45,078 L	5,000	1,578	105	235	61,161 L	5,900	2,140	136
Buses	Gasoline	21	58,903 L	18,500	2,062	138	27	71,676 L	17,500	2,509	160
	Diesel Fuel	21	97,966 L	18,200	3,752	264	29	129,082 L	41,800	4,945	337
Totals		9,144	20,346,701 L	16,177	722,365	49,605	9,430	20,346,701 L	16,629	765,071	49,946

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	53,266 GJ	53,266	1,079	N/A	51,563 GJ	51,563	1,045
	Heating Oil	N/A	13,707 GJ	13,707	966	N/A	13,269 GJ	13,269	907
	Propane	N/A	28,935 GJ	28,935	1,765	N/A	28,010 GJ	28,010	1,709
	Natural Gas	2,937	193,158 GJ	193,158	9,689	2,978	171,069 GJ	171,069	8,581
	Electricity	6,041	68,682,508 kWh	247,257	1,717	6,172	67,139,472 kWh	241,702	1,679
Commercial/Small-Medium Industrial	Natural Gas	286	133,702 GJ	133,702	6,706	262	123,903 GJ	123,903	6,215
	Electricity	889	51,286,910 kWh	184,633	1,282	925	49,078,351 kWh	176,682	1,227
Totals		10,153		854,658	23,204	10,337		806,198	21,363

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	2,958 t	N/A	627	0	3,053 t	N/A	899
Totals		0			627	0			899

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	1		0	0				
	Electricity	1		0	0	1		0	0
Totals		2			0	1			0

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 13,144)			2010 (Population: 13,574)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	321	22	19,798 L	1,387	87
Gasoline	17,247,352 L	604,082	41,293	18,255,791 L	639,344	41,377
Diesel Fuel	3,034,000 L	116,205	8,184	3,206,561 L	122,816	8,389
Other Fuel	65,349 L	1,757	106	57,218 L	1,524	93
Wood	53,266 GJ	53,266	1,079	51,563 GJ	51,563	1,045
Heating Oil	13,707 GJ	13,707	966	13,269 GJ	13,269	907
Propane	28,935 GJ	28,935	1,765	28,010 GJ	28,010	1,709
Natural Gas	326,860 GJ	326,860	16,395	294,972 GJ	294,972	14,796
Electricity	119,969,418 kWh	431,890	2,999	116,217,823 kWh	418,384	2,906
Solid Waste	2,958 t	0	627	3,053 t	0	899
Grand Totals		1,577,023	73,436		1,571,269	72,208

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	4,250	44	4,070	74	4,295	75
Semi-Detached House	130	1	140	3	195	3
Row House	80	1	75	1	95	2
Apartment, Duplex	145	2	225	4	225	4
Apartment, 5 storeys or higher	0	0	0	0	20	0
Apartment, under 5 storeys	670	7	685	13	760	13
Other Single Attached House	20	0	25	0	5	0
Movable Dwelling	45	0	260	5	95	2

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	4,170	79	4,120	80	3,990	79
Car, Truck, Van as Passenger	355	7	340	7	415	8
Public Transit	70	1	60	1	75	1
Walked	435	8	470	9	370	7
Bicycle	200	4	135	3	105	2
Motorcycle	15	0	10	0	15	0
Taxicab	10	0	0	0	10	0
Other Method	40	1	45	1	45	1

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	85	3
Agricultural Land Reserve	475	15
Other land use	2,548	82
Total Parks and Protected Area	85	3
Total Land Area	3,108	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	85	3
Agricultural Land Reserve	475	15
Other land use	2,548	82
Total Parks and Protected Area	85	3
Total Land Area	3,108	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	3,260	78
5 to 9.9 km	560	13
25 km or more	265	6
15 to 24.9 km	25	1
10 to 14.9 km	95	2

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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,