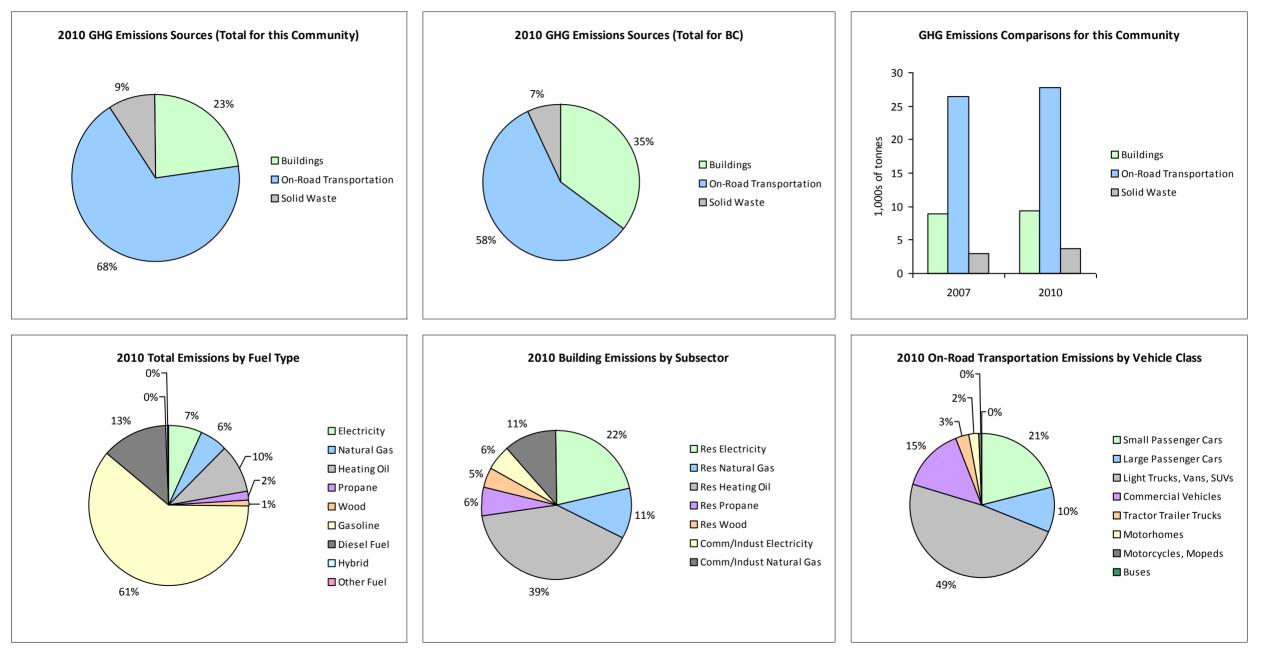


2010 Community Energy and Emissions Inventory

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Core Items

				2007					2010		
On-Road Transportation		Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Hybrid			18,300	91	6			13,200	98	6
	Gasoline	2,055	2,266,875 L	11,600	79,341	5,412	2,292	2,516,984 L	11,600	88,095	5,670
	Diesel Fuel	111	105,248 L	14,500	4,031	287	91	83,505 L	14,000	3,198	221
	Other Fuel			9,500	21	0			6,500	14	0
Large Passenger Cars	Hybrid			16,000	194	14	23	19,582 L	15,700	685	44
	Gasoline	843	1,147,856 L	11,900	40,175	2,739	855	1,169,008 L	12,000	40,915	2,633
	Diesel Fuel	25	24,754 L	10,300	947	66	14	11,908 L	8,600	456	32
	Other Fuel			11,100	74	4			7,300	50	3
Light Trucks, Vans, SUVs	Hybrid			16,500	223	15	12	15,994 L	16,200	560	37
	Gasoline	2,668	4,773,417 L	12,700	167,070	11,475	3,154	5,619,624 L	12,800	196,688	12,784
	Diesel Fuel	176	350,802 L	11,500	13,436	955	111	245,133 L	13,100	9,388	648
	Other Fuel	33	53,757 L	9,800	1,360	83	24	35,374 L	8,800	896	54
Commercial Vehicles	Gasoline	186	383,272 L	12,400	13,415	900	221	461,887 L	12,500	16,166	1,033
	Diesel Fuel	276	936,709 L	17,900	35,876	2,520	315	1,150,045 L	19,500	44,048	3,003
	Other Fuel	18	31,821 L	9,500	805	48	10	16,476 L	9,000	418	25
Tractor Trailer Trucks	Diesel Fuel	55	434,828 L	19,000	16,653	1,169	37	300,787 L	19,700	11,520	785
Motorhomes	Gasoline	55	122,067 L	16,300	4,272	285	72	159,400 L	16,300	5,580	353
	Diesel Fuel	47	133,038 L	16,400	5,096	357	36	104,727 L	16,800	4,011	273
	Other Fuel			21,000	79	4			15,800	178	11
Motorcycles, Mopeds	Gasoline	223	48,809 L	5,000	1,708	114	225	59,179 L	6,200	2,072	132
Buses	Gasoline			17,200	428	28			14,100	519	33
	Diesel Fuel			13,400	141	10			· · · · · · · · · · · · · · · · · · ·		
Totals		6,771	10,813,253 L	12,290	385,436	26,491	7,492	10,813,253 L	12,511	425,555	27,780



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			20	07				2010	
Buildings		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	21,667 GJ	21,667	439	N/A	20,974 GJ	20,974	425
	Heating Oil	N/A	56,455 GJ	56,455	3,980	N/A	54,651 GJ	54,651	3,738
	Propane	N/A	9,744 GJ	9,744	594	N/A	9,432 GJ	9,432	575
	Natural Gas	431	13,145 GJ	13,145	660	702	20,402 GJ	20,402	1,023
	Electricity	4,704	76,497,134 kWh	275,389	1,912	5,177	81,440,862 kWh	293,187	2,036
Commercial/Small-Medium Industrial	Natural Gas	20	16,507 GJ	16,507	828	33	21,402 GJ	21,402	1,074
	Electricity	492	19,981,556 kWh	71,934	500	528	20,752,858 kWh	74,710	519
Totals		5,647		464,841	8,913	6,440		494,758	9,390

				2007				2010	
Solid Waste		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	4,353 t	N/A	2,912	0	4,231 t	N/A	3,745
Totals		0			2,912	0			3,745

Totals for Transportation, Buildings and Solid Waste

	2007 (Pop	oulation: 10,333)		2010 (Population: 10,876)			
Fuel Type	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)	
Hybrid	0 L	508	35	35,576 L	1,343	87	
Gasoline	8,742,296 L	306,409	20,953	9,986,082 L	350,035	22,638	
Diesel Fuel	1,985,379 L	76,180	5,364	1,896,105 L	72,621	4,962	
Other Fuel	85,578 L	2,339	139	51,850 L	1,556	93	
Wood	21,667 GJ	21,667	439	20,974 GJ	20,974	425	
Heating Oil	56,455 GJ	56,455	3,980	54,651 GJ	54,651	3,738	
Propane	9,744 GJ	9,744	594	9,432 GJ	9,432	575	
Natural Gas	29,652 GJ	29,652	1,488	41,804 GJ	41,804	2,097	
Electricity	96,478,690 kWh	347,323	2,412	102,193,720 kWh	367,897	2,555	
Solid Waste	4,353 t	0	2,912	4,231 t	0	3,745	
Grand Totals		850,277	38,316		920,313	40,915	



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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			2,395	69	2,875	74
Semi-Detached House			270	8	275	7
Row House			80	2	80	2
Apartment, Duplex			90	3	260	7
Apartment, 5 storeys or higher			5	0	5	0
Apartment, under 5 storeys			260	8	280	7
Other Single Attached House			5	0	5	0
Movable Dwelling			355	10	80	2

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	9	0	
Local Parks	1,121	19	
Agricultural Land Reserve	554	10	
Other land use	4,123	71	
Total Parks and Protected Area	1,130	19	
Total Land Area	5,807	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	9	0
Local Parks	1,121	19
Agricultural Land Reserve	554	10
Other land use	4,123	71
Total Parks and Protected Area	1,130	19
Total Land Area	5,807	100

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

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	0	0	3,135	78	3,590	77
Car, Truck, Van as Passenger	0	0	295	7	340	7
Public Transit	0	0	350	9	370	8
Walked	0	0	175	4	180	4
Bicycle	0	0	20	0	45	1
Motorcycle	0	0	20	0	30	1
Taxicab	0	0	0	0	0	0
Other Method	0	0	50	1	85	2

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	885	24
5 to 9.9 km	130	4
25 km or more	1,270	34
15 to 24.9 km	1,210	33
10 to 14.9 km	220	6



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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) <u>http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm</u>, and on the <u>http://toolkit.bc.ca</u> 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.



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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 (<u>http://www.toolkit.bc.ca</u>), 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

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,