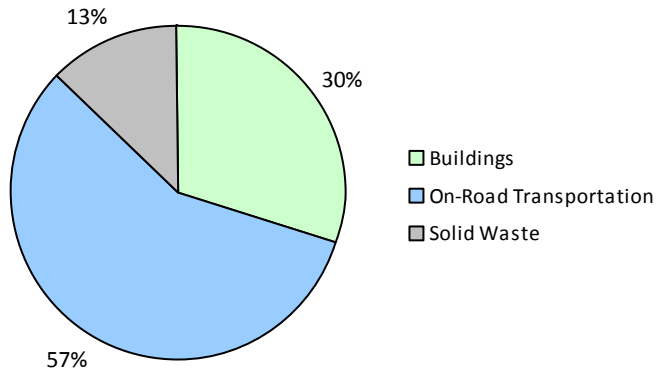


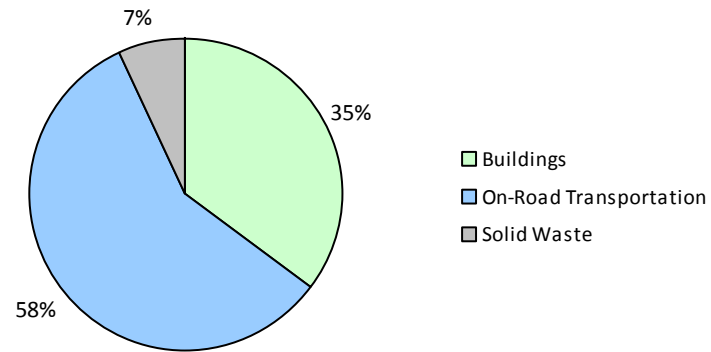
2010 Community Energy and Emissions Inventory

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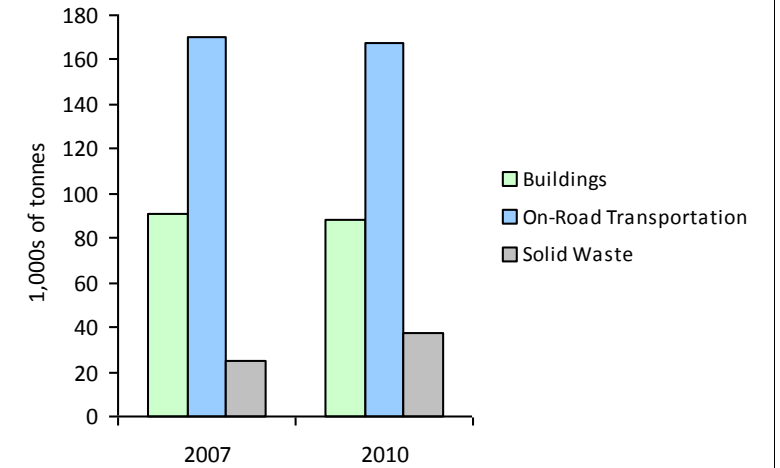
2010 GHG Emissions Sources (Total for this Community)



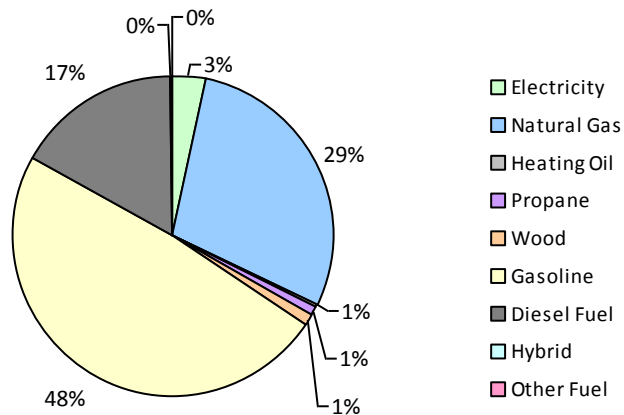
2010 GHG Emissions Sources (Total for BC)



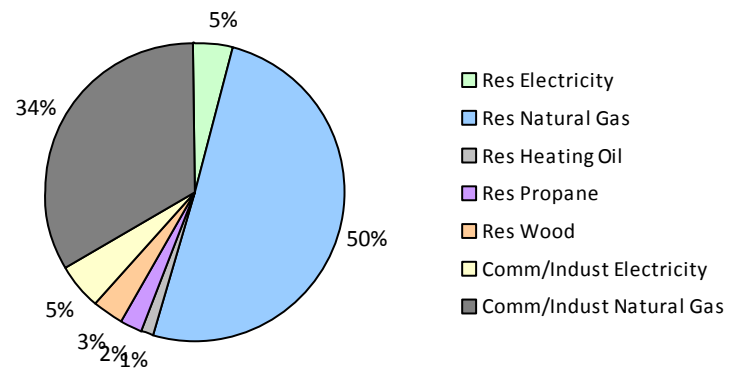
GHG Emissions Comparisons for this Community



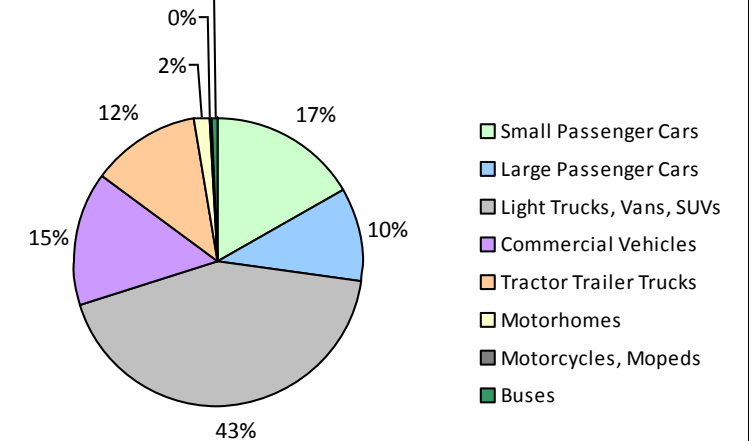
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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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	10	9,811 L	21,000	344	23	19	19,930 L	20,700	697	45
	Gasoline	7,790	11,675,052 L	15,900	408,626	27,752	8,074	12,217,868 L	16,000	427,626	27,426
	Diesel Fuel	214	329,758 L	22,600	12,630	900	224	330,473 L	21,800	12,656	875
Large Passenger Cars	Hybrid	26	30,304 L	22,100	1,061	71	76	107,019 L	24,100	3,746	238
	Gasoline	4,437	8,151,716 L	16,100	285,311	19,374	4,186	7,536,707 L	15,900	263,785	16,939
	Diesel Fuel	40	55,985 L	14,400	2,144	152	43	52,717 L	13,000	2,019	140
	Other Fuel			11,300	192	12					
Light Trucks, Vans, SUVs	Hybrid	14	31,095 L	27,400	1,089	73	33	73,892 L	25,800	2,586	167
	Gasoline	10,087	27,780,509 L	18,900	972,318	66,444	10,952	30,306,238 L	19,200	1,060,718	68,688
	Diesel Fuel	429	1,087,518 L	14,400	41,652	2,961	334	979,984 L	17,500	37,532	2,592
	Other Fuel	114	243,995 L	12,500	6,173	374	56	107,324 L	11,100	2,715	164
Commercial Vehicles	Gasoline	1,027	3,570,202 L	20,700	124,957	8,393	1,199	4,106,622 L	20,500	143,732	9,189
	Diesel Fuel	1,079	4,816,712 L	24,700	184,480	12,961	1,280	6,273,210 L	27,400	240,264	16,378
	Other Fuel	41	104,685 L	13,700	2,649	161	20	50,323 L	13,500	1,274	77
Tractor Trailer Trucks	Diesel Fuel	434	9,668,002 L	50,000	370,285	26,016	407	7,914,256 L	44,500	303,116	20,664
	Other Fuel			11,300	172	11			10,200	81	4
Motorhomes	Gasoline	200	568,698 L	19,600	19,905	1,328	221	629,605 L	19,700	22,036	1,402
	Diesel Fuel	141	536,321 L	20,100	20,540	1,442	121	482,772 L	20,200	18,490	1,260
	Other Fuel			19,000	435	26			19,300	515	31
Motorcycles, Mopeds	Gasoline	493	113,813 L	5,100	3,984	265	589	159,963 L	5,900	5,599	355
Buses	Gasoline	51	132,815 L	15,900	4,649	312	40	105,739 L	16,500	3,702	236
	Diesel Fuel	64	341,000 L	18,300	13,060	917	64	355,437 L	18,600	13,614	927
	Other Fuel			11,800	577	35					
Totals		26,691	69,247,991 L	18,042	2,477,233	170,003	27,938	69,247,991 L	18,296	2,566,503	167,797

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	144,593 GJ	144,593	2,929	N/A	139,176 GJ	139,176	2,820
	Heating Oil	N/A	19,560 GJ	19,560	1,379	N/A	18,827 GJ	18,827	1,288
	Propane	N/A	34,518 GJ	34,518	2,106	N/A	33,225 GJ	33,225	2,027
	Natural Gas	12,352	918,712 GJ	918,712	46,082	12,886	872,831 GJ	872,831	43,782
	Electricity	16,861	156,049,522 kWh	561,778	3,901	17,522	161,501,365 kWh	581,404	4,038
Commercial/Small-Medium Industrial	Natural Gas	1,562	605,846 GJ	605,846	30,389	1,620	595,430 GJ	595,430	29,867
	Electricity	2,801	181,936,801 kWh	654,972	4,549	2,867	184,771,864 kWh	665,178	4,619
Totals		33,576		2,939,979	91,335	34,895		2,906,071	88,441

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	26,238 t	N/A	24,976	0	31,892 t	N/A	37,463
Totals		0			24,976	0			37,463

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	8	155,913 GJ	155,913	7,821	8	154,129 GJ	154,129	7,731
Totals		8		155,913	7,821	8		154,129	7,731

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 37,550)			2010 (Population: 38,895)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	71,210 L	2,494	167	200,841 L	7,029	450
Gasoline	51,992,805 L	1,819,750	123,868	55,062,742 L	1,927,198	124,235
Diesel Fuel	16,835,296 L	644,791	45,349	16,388,849 L	627,691	42,836
Other Fuel	348,680 L	10,198	619	157,647 L	4,585	276
Wood	144,593 GJ	144,593	2,929	139,176 GJ	139,176	2,820
Heating Oil	19,560 GJ	19,560	1,379	18,827 GJ	18,827	1,288
Propane	34,518 GJ	34,518	2,106	33,225 GJ	33,225	2,027
Natural Gas	1,524,558 GJ	1,524,558	76,471	1,468,261 GJ	1,468,261	73,649
Electricity	337,986,323 kWh	1,216,750	8,450	346,273,229 kWh	1,246,582	8,657
Solid Waste	26,238 t	0	24,976	31,892 t	0	37,463
Grand Totals		5,417,212	286,314		5,472,574	293,701

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	7,240	35	7,945	54	8,010	51
Semi-Detached House	765	4	880	6	1,095	7
Row House	1,195	6	1,445	10	1,390	9
Apartment, Duplex	330	2	365	3	910	6
Apartment, 5 storeys or higher	160	1	300	2	310	2
Apartment, under 5 storeys	3,335	16	3,385	23	3,780	24
Other Single Attached House	35	0	30	0	35	0
Movable Dwelling	240	1	260	2	155	1

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	9,305	80	10,585	81	11,665	78
Car, Truck, Van as Passenger	805	7	940	7	1,280	9
Public Transit	85	1	140	1	145	1
Walked	1,090	9	1,060	8	1,395	9
Bicycle	285	2	200	2	345	2
Motorcycle	30	0	30	0	35	0
Taxicab	10	0	25	0	10	0
Other Method	80	1	160	1	85	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	228	2
Local Parks	57	1
Agricultural Land Reserve	2,367	21
Other land use	8,779	77
Total Parks and Protected Area	285	2
Total Land Area	11,431	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	228	2
Local Parks	57	1
Agricultural Land Reserve	2,367	21
Other land use	8,779	77
Total Parks and Protected Area	285	2
Total Land Area	11,431	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	8,420	66
5 to 9.9 km	1,465	11
25 km or more	1,390	11
15 to 24.9 km	1,075	8
10 to 14.9 km	445	3

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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,