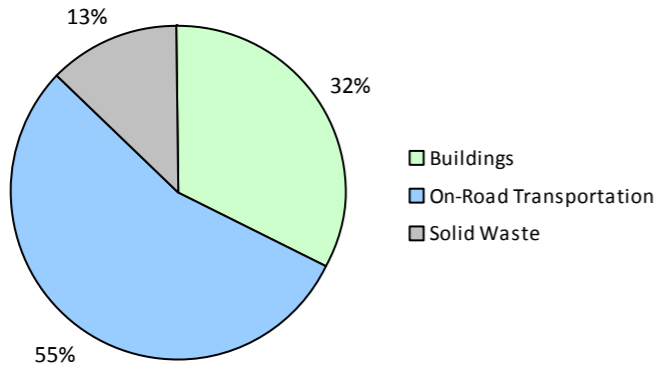


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

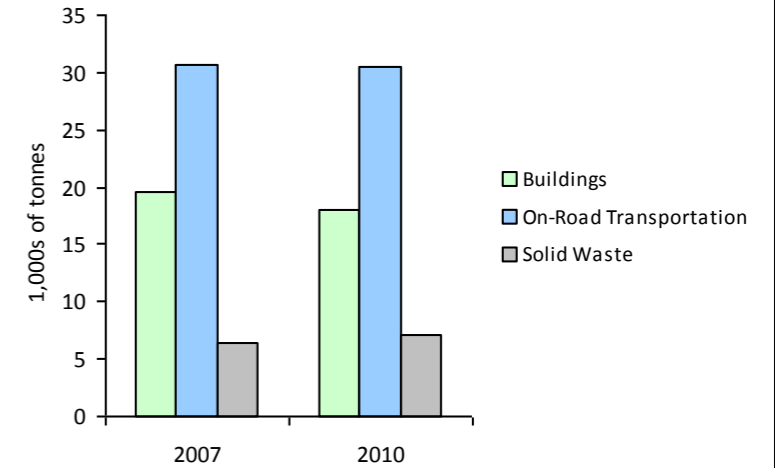
2010 GHG Emissions Sources (Total for this Community)



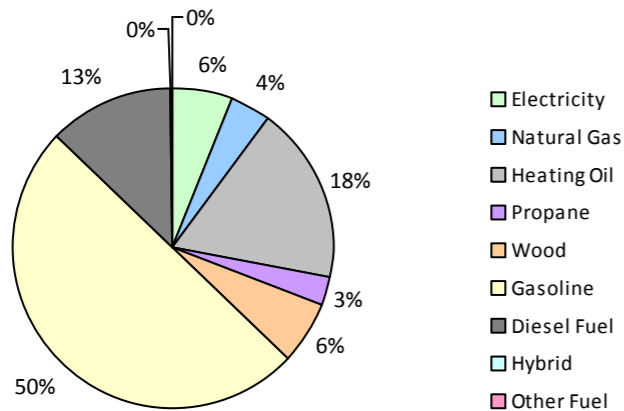
2010 GHG Emissions Sources (Total for BC)



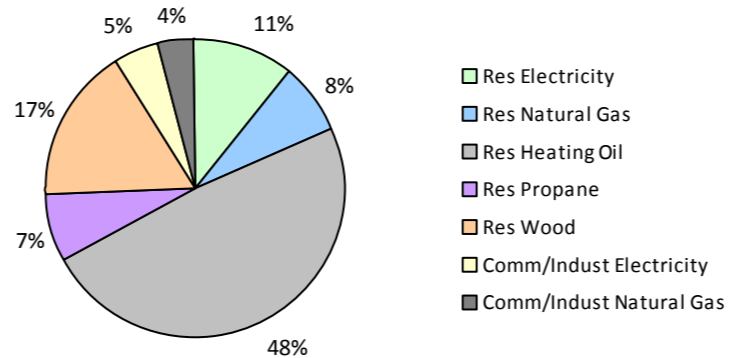
GHG Emissions Comparisons for this Community



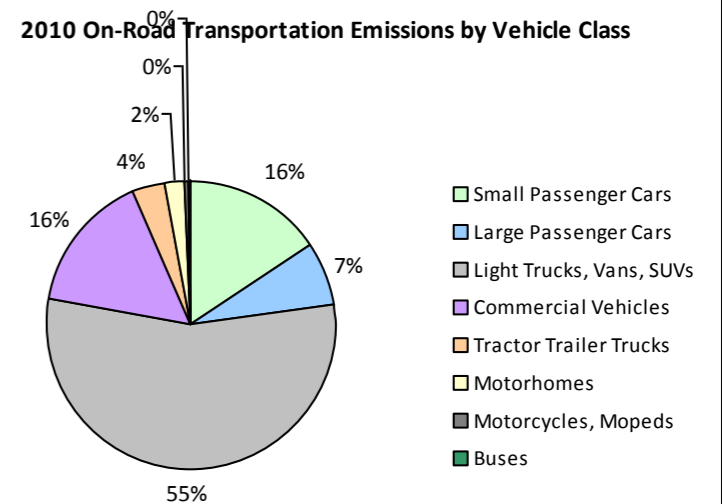
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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			19,800	98	6			19,700	128	9
	Gasoline	1,388	1,908,087 L	15,600	66,782	4,557	1,378	1,958,064 L	16,000	68,534	4,406
	Diesel Fuel	95	150,258 L	25,600	5,754	411	94	148,417 L	24,600	5,683	393
Large Passenger Cars	Hybrid			24,300	123	8	16	18,810 L	22,300	658	41
	Gasoline	614	1,041,361 L	15,400	36,447	2,479	567	941,603 L	15,200	32,955	2,118
	Diesel Fuel	14	17,043 L	13,900	652	46	32	34,434 L	12,200	1,319	93
Light Trucks, Vans, SUVs	Hybrid			21,500	208	14			24,400	300	20
	Gasoline	2,775	6,377,201 L	16,900	223,202	15,320	2,926	6,892,676 L	17,600	241,243	15,679
	Diesel Fuel	203	414,752 L	12,300	15,885	1,130	150	333,693 L	14,100	12,780	883
	Other Fuel	23	46,724 L	12,100	1,182	71	13	22,204 L	11,500	562	33
Commercial Vehicles	Gasoline	207	564,237 L	17,100	19,748	1,326	258	693,627 L	17,200	24,277	1,551
	Diesel Fuel	325	1,049,264 L	19,700	40,187	2,823	368	1,253,478 L	21,100	48,009	3,271
	Other Fuel			12,200	492	30			10,800	301	17
Tractor Trailer Trucks	Diesel Fuel	48	647,555 L	40,200	24,801	1,743	41	440,243 L	29,100	16,861	1,150
Motorhomes	Gasoline	52	121,531 L	16,500	4,253	283	64	152,128 L	16,700	5,323	337
	Diesel Fuel	30	89,878 L	16,600	3,443	243	38	114,658 L	16,700	4,392	299
Motorcycles, Mopeds	Gasoline	150	32,970 L	4,800	1,154	77	178	45,645 L	5,700	1,598	101
Buses	Gasoline			17,300	964	66			17,200	638	41
	Diesel Fuel			18,500	308	22			21,400	558	39
Totals		5,924	12,460,861 L	16,434	445,683	30,655	6,123	12,460,861 L	16,920	466,119	30,481

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	156,763 GJ	156,763	3,176	N/A	151,752 GJ	151,752	3,074
	Heating Oil	N/A	130,565 GJ	130,565	9,204	N/A	126,391 GJ	126,391	8,644
	Propane	N/A	22,476 GJ	22,476	1,371	N/A	21,758 GJ	21,758	1,327
	Natural Gas	671	34,852 GJ	34,852	1,748	528	27,990 GJ	27,990	1,404
	Electricity	5,353	80,728,110 kWh	290,621	2,019	5,496	79,704,836 kWh	286,937	1,994
Commercial/Small-Medium Industrial	Natural Gas	32	21,189 GJ	21,189	1,063	21	13,915 GJ	13,915	698
	Electricity	526	38,803,576 kWh	139,693	970	557	36,788,350 kWh	132,438	920
Totals		6,582		796,159	19,551	6,602		761,181	18,061

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Solid Waste	2007				2010			
	Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste Solid Waste	0	6,761 t	N/A	6,468	0	6,460 t	N/A	7,058
Totals	0			6,468	0			7,058

Memo Items

Buildings	2007				2010			
	Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial Electricity	1		0	0	1		0	0
Totals	1			0	1			0

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 10,380)			2010 (Population: 10,515)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	429	28	18,810 L	1,086	70
Gasoline	10,045,387 L	352,550	24,108	10,683,743 L	374,568	24,233
Diesel Fuel	2,368,750 L	91,030	6,418	2,324,923 L	89,602	6,128
Other Fuel	46,724 L	1,674	101	22,204 L	863	50
Wood	156,763 GJ	156,763	3,176	151,752 GJ	151,752	3,074
Heating Oil	130,565 GJ	130,565	9,204	126,391 GJ	126,391	8,644
Propane	22,476 GJ	22,476	1,371	21,758 GJ	21,758	1,327
Natural Gas	56,041 GJ	56,041	2,811	41,905 GJ	41,905	2,102
Electricity	119,531,686 kWh	430,314	2,989	116,493,186 kWh	419,375	2,914
Solid Waste	6,761 t	0	6,468	6,460 t	0	7,058
Grand Totals		1,241,842	56,674		1,227,300	55,600

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	265	78	3,585	87	3,760	87
Semi-Detached House	10	3	50	1	65	2
Row House	0	0	0	0	15	0
Apartment, Duplex	0	0	55	1	55	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	0	0	20	0	40	1
Other Single Attached House	10	3	10	0	10	0
Movable Dwelling	55	16	405	10	365	8

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	130	38	3,160	74	3,320	76
Car, Truck, Van as Passenger	50	14	340	8	260	6
Public Transit	0	0	80	2	100	2
Walked	90	26	280	7	315	7
Bicycle	0	0	110	3	125	3
Motorcycle	0	0	15	0	10	0
Taxicab	0	0	0	0	0	0
Other Method	75	22	295	7	225	5

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	237,128	13
Local Parks	319	0
Agricultural Land Reserve	13,982	1
Other land use	1,579,443	86
Total Parks and Protected Area	237,446	13
Total Land Area	1,830,872	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	237,128	13
Local Parks	319	0
Agricultural Land Reserve	13,982	1
Other land use	1,579,443	86
Total Parks and Protected Area	237,446	13
Total Land Area	1,830,872	100

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

Strathcona Regional District Unincorporated Areas
2010 Community Energy and Emissions Inventory
Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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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,