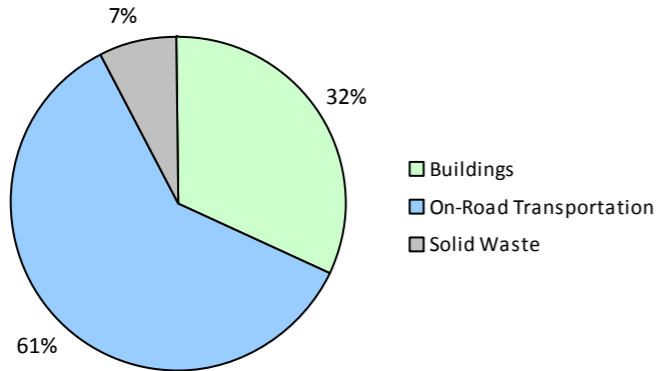


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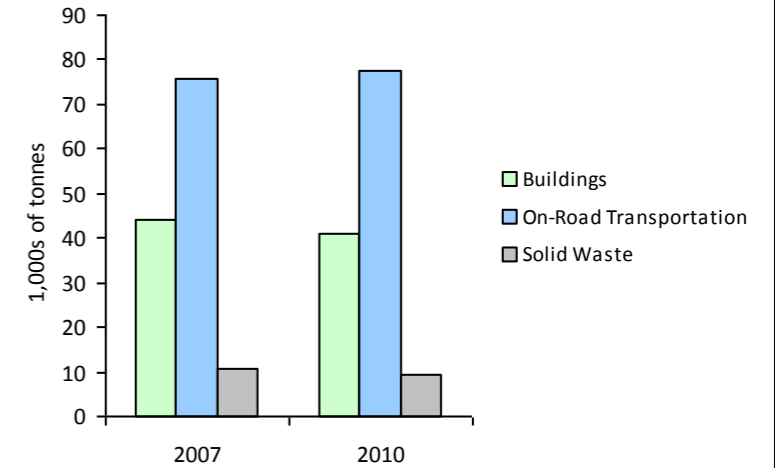
2010 GHG Emissions Sources (Total for this Community)



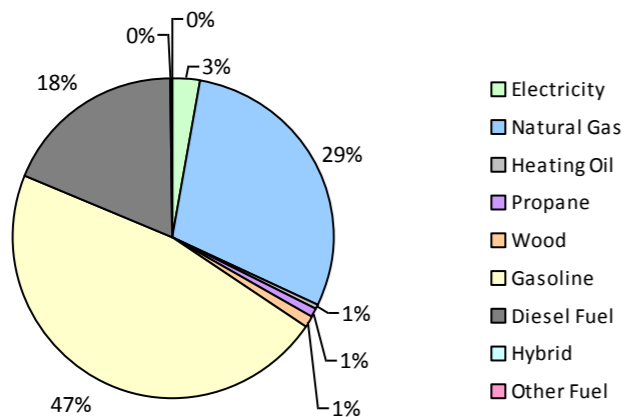
2010 GHG Emissions Sources (Total for BC)



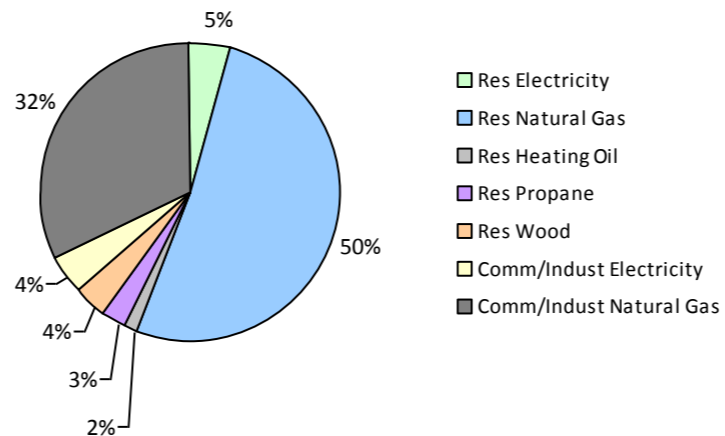
GHG Emissions Comparisons for this Community



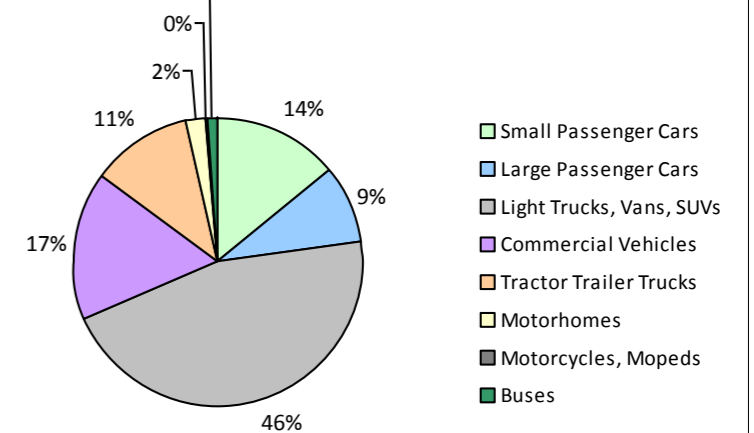
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Salmon Arm 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			18,700	93	6			15,900	145	10
	Gasoline	2,979	4,703,517 L	16,800	164,623	11,189	2,993	4,686,758 L	16,700	164,037	10,526
	Diesel Fuel	98	158,183 L	23,700	6,059	432	88	139,652 L	23,100	5,349	371
	Other Fuel			13,500	25	2			13,100	24	0
Large Passenger Cars	Hybrid	16	18,977 L	22,100	664	45	38	48,557 L	22,600	1,699	108
	Gasoline	1,685	3,304,578 L	17,300	115,660	7,840	1,601	3,038,355 L	16,800	106,342	6,823
	Diesel Fuel	18	24,048 L	13,600	921	65	16	21,366 L	14,200	817	57
	Other Fuel			16,900	53	3			11,300	67	4
Light Trucks, Vans, SUVs	Hybrid			27,400	535	36	18	41,673 L	26,800	1,458	93
	Gasoline	4,607	13,838,013 L	20,300	484,331	33,096	5,013	14,848,597 L	20,200	519,702	33,656
	Diesel Fuel	220	555,263 L	14,400	21,267	1,512	173	480,658 L	16,500	18,409	1,272
	Other Fuel	41	97,967 L	13,900	2,479	150	26	54,358 L	12,100	1,375	84
Commercial Vehicles	Gasoline	370	1,277,695 L	20,300	44,720	3,003	469	1,599,483 L	20,200	55,982	3,579
	Diesel Fuel	614	2,636,561 L	24,200	100,980	7,095	779	3,673,623 L	26,600	140,700	9,592
	Other Fuel	12	31,258 L	15,200	791	48	13	35,026 L	14,700	886	55
Tractor Trailer Trucks	Gasoline							12,500		120	7
	Diesel Fuel	142	3,273,304 L	54,300	125,367	8,808	163	3,381,026 L	49,700	129,493	8,827
Motorhomes	Gasoline	102	325,743 L	21,800	11,401	762	113	366,073 L	22,100	12,813	816
	Diesel Fuel	60	239,250 L	20,500	9,164	644	66	275,002 L	20,600	10,532	718
	Other Fuel			21,000	243	14			21,800	87	4
Motorcycles, Mopeds	Gasoline	197	44,296 L	5,000	1,550	103	251	68,043 L	6,000	2,381	151
Buses	Gasoline			19,600	1,041	70	11	30,317 L	16,400	1,062	67
	Diesel Fuel	44	253,377 L	21,200	9,705	681	50	289,887 L	21,200	11,103	756
Totals		11,205	30,782,030 L	19,189	1,101,672	75,604	11,881	30,782,030 L	19,359	1,184,583	77,576

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	73,425 GJ	73,425	1,488	N/A	70,675 GJ	70,675	1,432
	Heating Oil	N/A	9,910 GJ	9,910	699	N/A	9,539 GJ	9,539	652
	Propane	N/A	17,454 GJ	17,454	1,065	N/A	16,800 GJ	16,800	1,025
	Natural Gas	5,658	451,196 GJ	451,196	22,632	5,802	413,915 GJ	413,915	20,762
	Electricity	7,347	72,340,586 kWh	260,426	1,809	7,657	75,299,223 kWh	271,077	1,883
Commercial/Small-Medium Industrial	Natural Gas	729	287,585 GJ	287,585	14,425	729	264,493 GJ	264,493	13,267
	Electricity	1,191	72,669,101 kWh	261,609	1,817	1,229	73,213,851 kWh	263,570	1,830
Totals		14,925		1,361,605	43,935	15,417		1,310,069	40,851

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	13,825 t	N/A	10,489	0	10,669 t	N/A	9,505
Totals		0			10,489	0			9,505

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	3		0	0	4		0	0
	Electricity	1		0	0	1		0	0
Totals		4			0	5			0

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 16,650)			2010 (Population: 17,128)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	18,977 L	1,292	87	90,230 L	3,302	211
Gasoline	23,493,842 L	823,326	56,063	24,637,626 L	862,439	55,625
Diesel Fuel	7,139,986 L	273,463	19,237	8,261,214 L	316,403	21,593
Other Fuel	129,225 L	3,591	217	89,384 L	2,439	147
Wood	73,425 GJ	73,425	1,488	70,675 GJ	70,675	1,432
Heating Oil	9,910 GJ	9,910	699	9,539 GJ	9,539	652
Propane	17,454 GJ	17,454	1,065	16,800 GJ	16,800	1,025
Natural Gas	738,781 GJ	738,781	37,057	678,408 GJ	678,408	34,029
Electricity	145,009,687 kWh	522,035	3,626	148,513,074 kWh	534,647	3,713
Solid Waste	13,825 t	0	10,489	10,669 t	0	9,505
Grand Totals		2,463,277	130,028		2,494,652	127,932

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	3,885	40	4,240	68	4,655	71
Semi-Detached House	125	1	95	2	125	2
Row House	360	4	460	7	490	8
Apartment, Duplex	250	3	270	4	295	5
Apartment, 5 storeys or higher	0	0	5	0	0	0
Apartment, under 5 storeys	570	6	685	11	830	13
Other Single Attached House	0	0	15	0	10	0
Movable Dwelling	525	5	480	8	130	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	4,530	78	4,865	81	5,190	79
Car, Truck, Van as Passenger	555	10	440	7	605	9
Public Transit	15	0	55	1	40	1
Walked	475	8	480	8	585	9
Bicycle	130	2	100	2	110	2
Motorcycle	15	0	15	0	15	0
Taxicab	10	0	0	0	0	0
Other Method	105	2	60	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	62	0
Agricultural Land Reserve	6,148	35
Other land use	11,481	65
Total Parks and Protected Area	62	0
Total Land Area	17,691	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	62	0
Agricultural Land Reserve	6,148	35
Other land use	11,481	65
Total Parks and Protected Area	62	0
Total Land Area	17,691	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	3,560	64
5 to 9.9 km	1,085	19
25 km or more	615	11
15 to 24.9 km	290	5
10 to 14.9 km	50	1

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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,