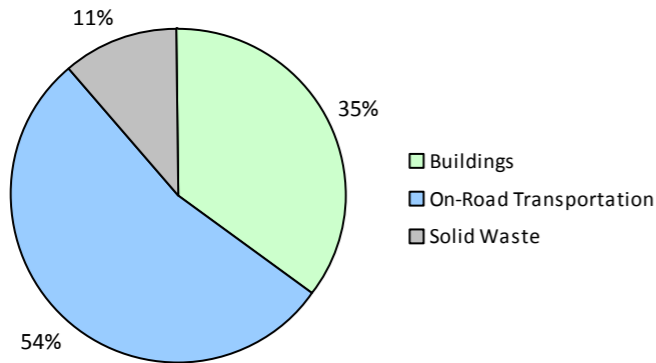


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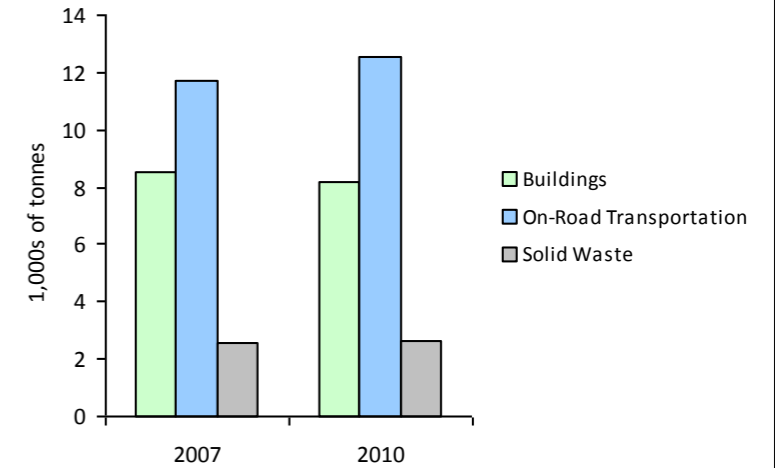
2010 GHG Emissions Sources (Total for this Community)



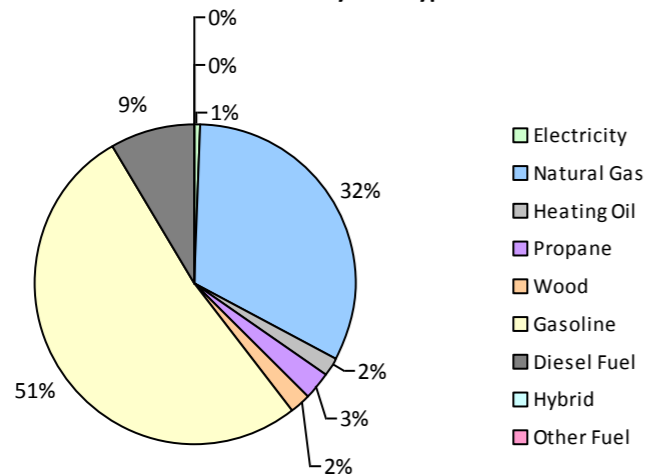
2010 GHG Emissions Sources (Total for BC)



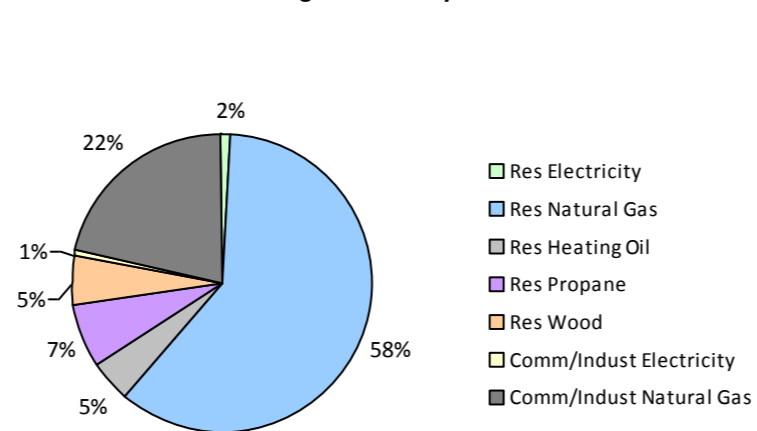
GHG Emissions Comparisons for this Community



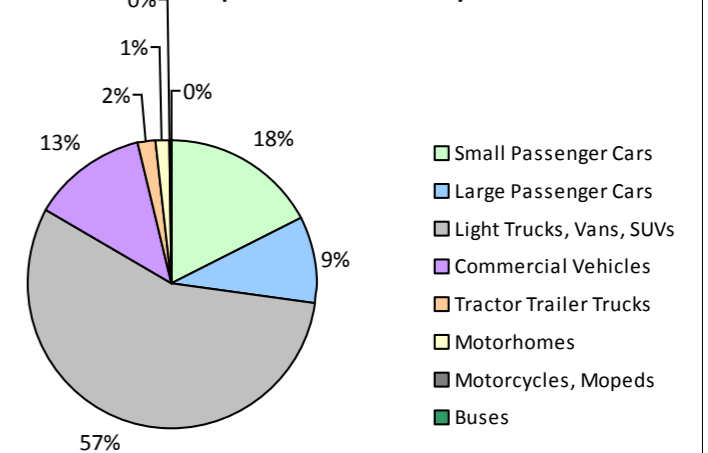
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Rossland 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							21,800	69	4	
	Gasoline	549	865,630 L	16,700	30,297	2,054	600	950,361 L	16,800	33,263	2,134
	Diesel Fuel	22	41,875 L	27,900	1,603	114	22	37,161 L	24,400	1,423	98
Large Passenger Cars	Hybrid			27,100	52	4		17,400	103	7	
	Gasoline	306	568,012 L	16,700	19,880	1,344	293	514,764 L	15,700	18,017	1,154
	Diesel Fuel			9,400	36	3		11,500	259	18	
	Other Fuel			13,400	39	4		11,800	34	2	
Light Trucks, Vans, SUVs	Hybrid			19,800	108	7		23,700	201	12	
	Gasoline	948	2,588,285 L	18,700	90,590	6,182	1,120	2,999,369 L	18,300	104,978	6,802
	Diesel Fuel	48	95,733 L	11,400	3,666	260	34	83,943 L	15,100	3,215	222
	Other Fuel			12,400	106	6					
Commercial Vehicles	Gasoline	61	181,358 L	17,500	6,347	426	79	226,117 L	17,000	7,913	505
	Diesel Fuel	79	284,425 L	20,300	10,894	766	116	435,561 L	21,300	16,682	1,137
	Other Fuel			10,200	150	9					
Tractor Trailer Trucks	Diesel Fuel	13	110,784 L	21,000	4,243	297	13	85,818 L	16,700	3,287	224
Motorhomes	Gasoline	12	34,653 L	20,000	1,212	82	14	41,585 L	20,500	1,455	93
	Diesel Fuel	11	35,781 L	18,100	1,370	96	10	32,798 L	17,200	1,256	86
	Other Fuel			17,300	59	3					
Motorcycles, Mopeds	Gasoline	36	8,191 L	4,900	287	19	42	10,812 L	5,500	379	25
Buses	Gasoline			19,800	480	32		15,100	273	17	
Totals		2,085	4,814,727 L	17,615	171,419	11,708	2,343	4,814,727 L	17,476	192,807	12,540

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	21,856 GJ	21,856	443	N/A	21,037 GJ	21,037	426
	Heating Oil	N/A	5,623 GJ	5,623	396	N/A	5,412 GJ	5,412	370
	Propane	N/A	9,894 GJ	9,894	604	N/A	9,523 GJ	9,523	581
	Natural Gas	1,361	101,202 GJ	101,202	5,076	1,399	96,762 GJ	96,762	4,853
	Electricity	2,309	19,286,019 kWh	69,430	116	1,965	20,655,950 kWh	74,361	124
Commercial/Small-Medium Industrial	Natural Gas	110	36,147 GJ	36,147	1,813	111	35,389 GJ	35,389	1,775
	Electricity	225	8,509,955 kWh	30,636	51	206	8,251,275 kWh	29,705	50
Totals		4,005		274,788	8,499	3,681		272,189	8,179

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	1,541 t	N/A	2,574	0	1,631 t	N/A	2,642
Totals		0			2,574	0			2,642

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 3,333)			2010 (Population: 3,554)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	160	11	0 L	373	23
Gasoline	4,246,129 L	149,093	10,139	4,743,008 L	166,278	10,730
Diesel Fuel	568,598 L	21,812	1,536	675,281 L	26,122	1,785
Other Fuel	0 L	354	22	0 L	34	2
Wood	21,856 GJ	21,856	443	21,037 GJ	21,037	426
Heating Oil	5,623 GJ	5,623	396	5,412 GJ	5,412	370
Propane	9,894 GJ	9,894	604	9,523 GJ	9,523	581
Natural Gas	137,349 GJ	137,349	6,889	132,151 GJ	132,151	6,628
Electricity	27,795,974 kWh	100,066	167	28,907,225 kWh	104,066	174
Solid Waste	1,541 t	0	2,574	1,631 t	0	2,642
Grand Totals		446,207	22,781		464,996	23,361

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	1,230	46	1,230	86	1,170	86
Semi-Detached House	10	0	5	0	10	1
Row House	10	0	25	2	15	1
Apartment, Duplex	10	0	25	2	10	1
Apartment, 5 storeys or higher	0	0	5	0	0	0
Apartment, under 5 storeys	175	7	125	9	125	9
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	20	1	20	1	30	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	1,240	70	1,285	75	1,300	84
Car, Truck, Van as Passenger	180	10	135	8	80	5
Public Transit	10	1	0	0	20	1
Walked	265	15	260	15	145	9
Bicycle	40	2	0	0	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	30	2	25	1	0	0

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	13	0
Agricultural Land Reserve	24	0
Other land use	5,550	99
Total Parks and Protected Area	13	0
Total Land Area	5,587	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	13	0
Agricultural Land Reserve	24	0
Other land use	5,550	99
Total Parks and Protected Area	13	0
Total Land Area	5,587	100

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

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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,