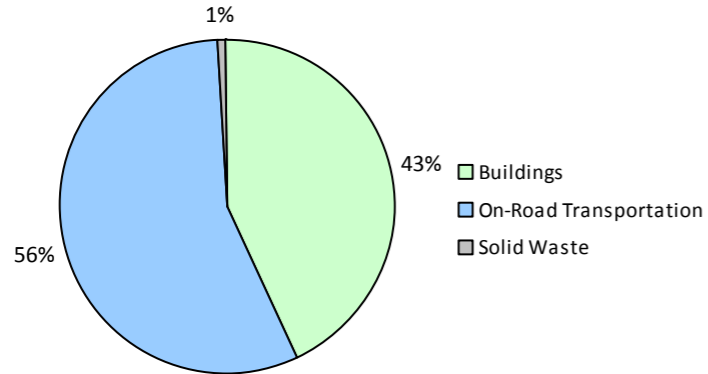


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

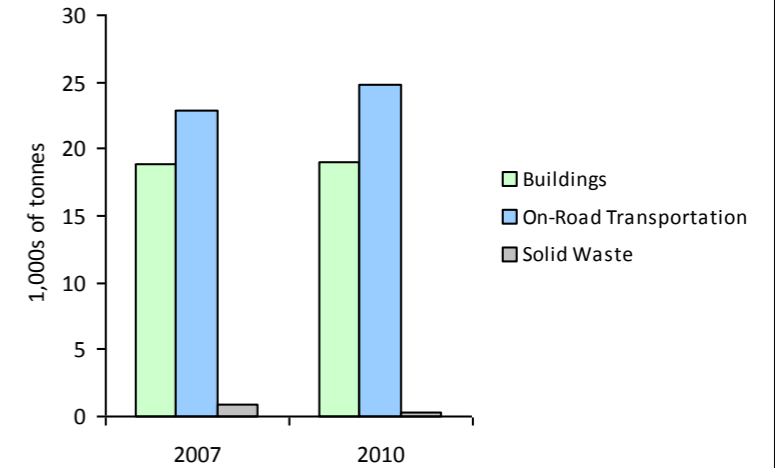
2010 GHG Emissions Sources (Total for this Community)



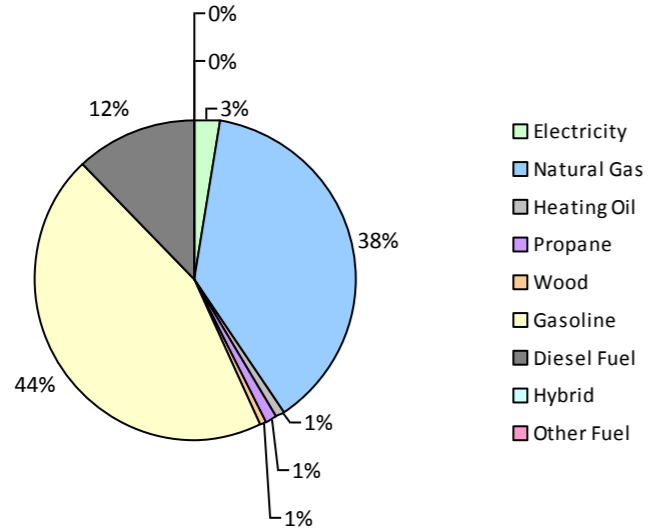
2010 GHG Emissions Sources (Total for BC)



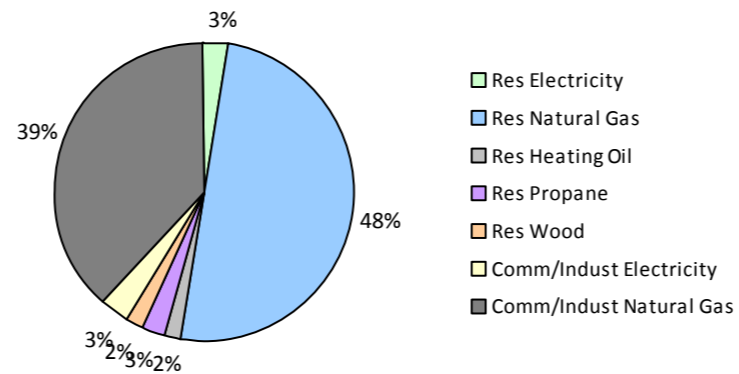
GHG Emissions Comparisons for this Community



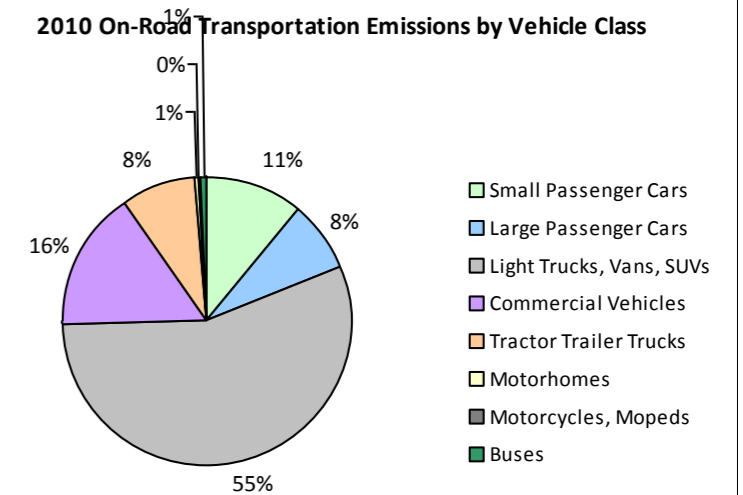
2010 Total Emissions by Fuel Type



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	Gasoline	714	1,084,710 L	15,900	37,966	2,579	727	1,127,850 L	16,200	39,475	2,533
	Diesel Fuel	47	85,386 L	26,400	3,271	233	49	83,600 L	24,200	3,203	223
Large Passenger Cars	Hybrid								20,800	45	4
	Gasoline	551	947,302 L	15,000	33,155	2,247	510	888,362 L	15,200	31,093	1,995
	Diesel Fuel			13,400	344	25		8,800	138	10	
Light Trucks, Vans, SUVs	Hybrid								26,800	179	13
	Gasoline	1,914	4,943,373 L	17,300	173,019	11,822	2,229	5,827,219 L	17,600	203,953	13,214
	Diesel Fuel	119	233,307 L	10,800	8,936	634	82	186,580 L	12,900	7,146	494
	Other Fuel	11	21,341 L	11,100	540	33		10,100	221	13	
Commercial Vehicles	Gasoline	153	473,667 L	18,200	16,578	1,113	215	652,948 L	18,000	22,853	1,461
	Diesel Fuel	179	624,683 L	19,300	23,926	1,681	248	943,761 L	21,300	36,146	2,463
	Other Fuel			13,200	186	12		6,300	30	2	
Tractor Trailer Trucks	Gasoline			22,000	249	16		23,300	256	16	
	Diesel Fuel	43	765,687 L	41,600	29,325	2,061	42	771,965 L	44,000	29,566	2,015
Motorhomes	Gasoline	15	41,381 L	19,300	1,449	96	13	36,667 L	19,300	1,283	81
	Diesel Fuel	11	33,672 L	16,700	1,290	91	12	37,100 L	16,700	1,421	98
	Other Fuel			17,600	136	8		22,900	88	5	
Motorcycles, Mopeds	Gasoline	59	13,632 L	5,000	477	33	65	18,175 L	6,000	636	40
Buses	Gasoline	13	45,271 L	20,800	1,585	106	14	40,846 L	17,800	1,430	91
	Diesel Fuel			18,200	763	53		15,300	617	43	
	Other Fuel			11,200	61	4		12,700	70	4	
Totals		3,829	9,313,412 L	16,831	333,256	22,847	4,206	9,313,412 L	17,379	379,849	24,818

Fernie City 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	18,838 GJ	18,838	382	N/A	18,132 GJ	18,132	367
	Heating Oil	N/A	4,840 GJ	4,840	341	N/A	4,659 GJ	4,659	319
	Propane	N/A	8,508 GJ	8,508	519	N/A	8,189 GJ	8,189	500
	Natural Gas	2,028	189,320 GJ	189,320	9,496	2,044	186,382 GJ	186,382	9,348
	Electricity	2,651	20,932,793 kWh	75,358	523	2,759	22,117,965 kWh	79,625	553
Commercial/Small-Medium Industrial	Natural Gas	282	140,458 GJ	140,458	7,045	286	145,867 GJ	145,867	7,317
	Electricity	438	23,703,200 kWh	85,331	593	441	23,539,010 kWh	84,740	588
Totals		5,399		522,653	18,899	5,530		527,594	18,992

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	4,184 t	N/A	877	0	4,333 t	N/A	358
Totals		0			877	0			358

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	2		0	0	2		0	0
Totals		2			0	2			0

Fernie City 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 4,293)			2010 (Population: 4,410)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	0		0 L	224	17
Gasoline	7,549,336 L	264,478	18,012	8,592,067 L	300,979	19,431
Diesel Fuel	1,742,735 L	67,855	4,778	2,023,006 L	78,237	5,346
Other Fuel	21,341 L	923	57	0 L	409	24
Wood	18,838 GJ	18,838	382	18,132 GJ	18,132	367
Heating Oil	4,840 GJ	4,840	341	4,659 GJ	4,659	319
Propane	8,508 GJ	8,508	519	8,189 GJ	8,189	500
Natural Gas	329,778 GJ	329,778	16,541	332,249 GJ	332,249	16,665
Electricity	44,635,993 kWh	160,689	1,116	45,656,975 kWh	164,365	1,141
Solid Waste	4,184 t	0	877	4,333 t	0	358
Grand Totals		855,909	42,623		907,443	44,168

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	1,400	42	1,365	70	1,190	63
Semi-Detached House	50	2	40	2	35	2
Row House	50	2	120	6	110	6
Apartment, Duplex	10	0	15	1	5	0
Apartment, 5 storeys or higher	0	0	35	2	15	1
Apartment, under 5 storeys	300	9	260	13	335	18
Other Single Attached House	10	0	20	1	5	0
Movable Dwelling	95	3	95	5	185	10

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	1,395	63	1,455	66	1,375	63
Car, Truck, Van as Passenger	275	12	290	13	315	14
Public Transit	85	4	40	2	20	1
Walked	270	12	305	14	285	13
Bicycle	35	2	30	1	150	7
Motorcycle	0	0	0	0	0	0
Taxicab	10	0	0	0	0	0
Other Method	140	6	70	3	45	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	0	0
Local Parks	49	3
Agricultural Land Reserve	52	4
Other land use	1,373	93
Total Parks and Protected Area	49	3
Total Land Area	1,475	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	49	3
Agricultural Land Reserve	52	4
Other land use	1,373	93
Total Parks and Protected Area	49	3
Total Land Area	1,475	100

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

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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,