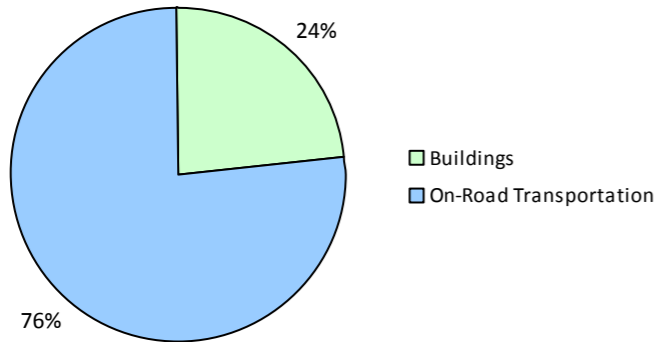
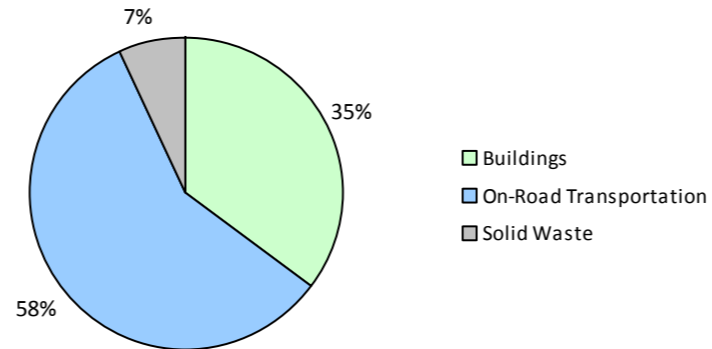


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

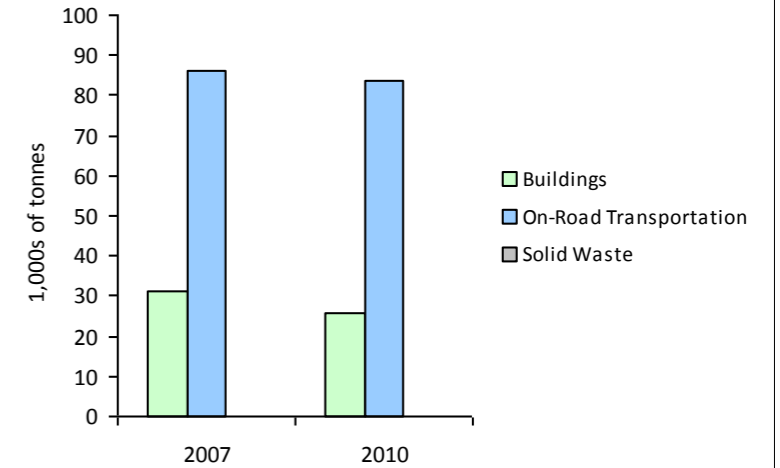
2010 GHG Emissions Sources (Total for this Community)



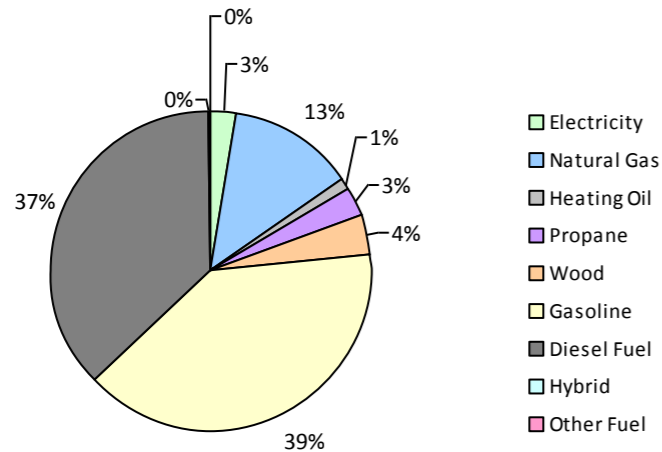
2010 GHG Emissions Sources (Total for BC)



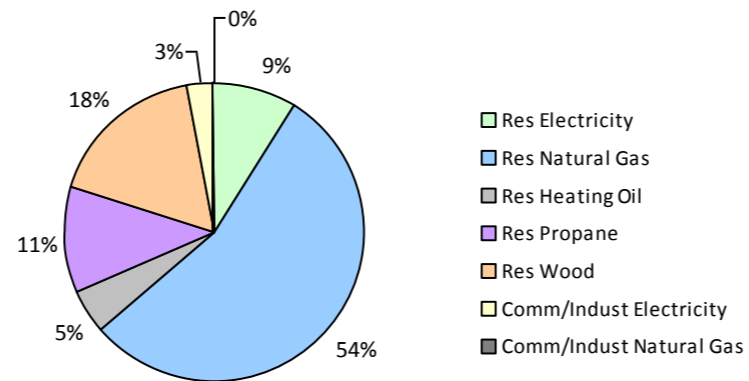
GHG Emissions Comparisons for this Community



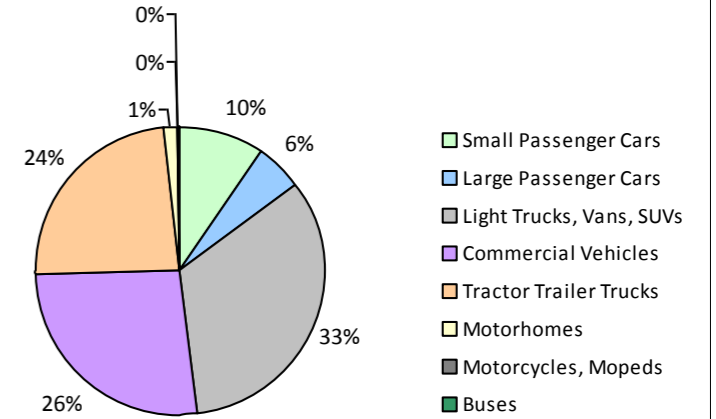
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Fraser-Fort George Regional District Unincorporated Areas 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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			24,000	24	0					
	Gasoline	2,115	3,462,677 L	18,500	121,193	8,235	1,982	3,179,608 L	18,200	111,285	7,146
	Diesel Fuel	186	344,416 L	27,900	13,190	941	194	342,959 L	25,900	13,136	909
Large Passenger Cars	Hybrid			29,700	323	20	13	21,816 L	29,900	764	48
	Gasoline	1,049	2,237,616 L	20,100	78,316	5,323	962	2,007,570 L	19,600	70,266	4,514
	Diesel Fuel	13	12,419 L	12,600	476	33	15	15,744 L	11,700	604	41
	Other Fuel			20,800	42	3			17,200	17	1
Light Trucks, Vans, SUVs	Hybrid			26,400	30	2			27,700	683	43
	Gasoline	4,177	10,521,644 L	19,000	368,257	25,253	4,345	11,265,903 L	19,300	394,307	25,594
	Diesel Fuel	361	919,223 L	14,800	35,207	2,503	256	711,093 L	17,000	27,235	1,881
	Other Fuel	43	87,487 L	12,300	2,214	133	28	51,362 L	10,900	1,298	78
Commercial Vehicles	Gasoline	763	2,133,279 L	18,700	74,665	5,011	795	2,205,216 L	18,400	77,183	4,934
	Diesel Fuel	1,321	5,309,782 L	23,600	203,364	14,289	1,463	6,518,320 L	26,800	249,651	17,019
	Other Fuel	25	55,639 L	12,900	1,408	85	16	31,436 L	11,400	796	49
Tractor Trailer Trucks	Gasoline			20,900	346	24			31,600	47	2
	Diesel Fuel	336	8,584,070 L	62,100	328,770	23,100	274	7,689,927 L	61,400	294,524	20,079
Motorhomes	Gasoline	77	218,106 L	19,700	7,634	510	77	220,823 L	19,700	7,729	490
	Diesel Fuel	51	189,732 L	19,900	7,266	509	51	194,096 L	19,900	7,434	507
	Other Fuel			19,900	287	18			20,400	139	7
Motorcycles, Mopeds	Gasoline	143	32,511 L	5,000	1,139	77	203	54,911 L	6,000	1,922	122
Buses	Gasoline			17,600	708	47	12	31,968 L	22,500	1,120	72
	Diesel Fuel			35,300	2,005	141			52,000	1,830	125
Totals		10,660	34,108,601 L	20,702	1,246,864	86,257	10,686	34,108,601 L	20,952	1,261,970	83,661

Fraser-Fort George Regional District Unincorporated Areas 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	241,231 GJ	241,231	4,887	N/A	224,882 GJ	224,882	4,556
	Heating Oil	N/A	19,229 GJ	19,229	1,355	N/A	17,926 GJ	17,926	1,226
	Propane	N/A	52,223 GJ	52,223	3,186	N/A	48,684 GJ	48,684	2,970
	Natural Gas	3,325	290,490 GJ	290,490	14,571	3,342	277,379 GJ	277,379	13,913
	Electricity	6,876	96,721,033 kWh	348,195	2,418	7,021	98,000,386 kWh	352,801	2,450
Commercial/Small-Medium Industrial	Natural Gas	116	84,890 GJ	84,890	4,258	113	0 GJ	0	0
	Electricity	1,053	29,053,906 kWh	104,594	726	1,064	28,609,712 kWh	102,995	715
Totals		11,370		1,140,852	31,401	11,540		1,024,667	25,830

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	1 t	N/A	0				
Totals		0			0	0			

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	3		0	0	3		0	0
	Electricity	9		0	0	7	642,952,230 kWh	2,314,626	16,074
Totals		12			0	10		2,314,626	16,074

Fraser-Fort George Regional District Unincorporated Areas 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: 15,371)			2010 (Population: 15,562)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	377	22	21,816 L	1,447	91
Gasoline	18,605,833 L	652,258	44,480	18,965,999 L	663,859	42,874
Diesel Fuel	15,359,642 L	590,278	41,516	15,472,139 L	594,414	40,561
Other Fuel	143,126 L	3,951	239	82,798 L	2,250	135
Wood	241,231 GJ	241,231	4,887	224,882 GJ	224,882	4,556
Heating Oil	19,229 GJ	19,229	1,355	17,926 GJ	17,926	1,226
Propane	52,223 GJ	52,223	3,186	48,684 GJ	48,684	2,970
Natural Gas	375,380 GJ	375,380	18,829	277,379 GJ	277,379	13,913
Electricity	125,774,939 kWh	452,789	3,144	126,610,098 kWh	455,796	3,165
Solid Waste	1 t	0	0	0 t	0	0
Grand Totals		2,387,716	117,658		2,286,637	109,491

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	4,725	16	4,960	86	5,170	89
Semi-Detached House	15	0	10	0	25	0
Row House	5	0	10	0	0	0
Apartment, Duplex	15	0	40	1	45	1
Apartment, 5 storeys or higher	0	0	5	0	0	0
Apartment, under 5 storeys	5	0	10	0	0	0
Other Single Attached House	5	0	0	0	10	0
Movable Dwelling	615	2	720	13	530	9

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	5,640	85	5,935	87	6,145	85
Car, Truck, Van as Passenger	465	7	480	7	535	7
Public Transit	10	0	10	0	40	1
Walked	325	5	290	4	315	4
Bicycle	70	1	20	0	50	1
Motorcycle	20	0	10	0	5	0
Taxicab	0	0	0	0	5	0
Other Method	125	2	110	2	105	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	516,683	10
Local Parks	343	0
Agricultural Land Reserve	397,487	8
Other land use	4,226,141	82
Total Parks and Protected Area	517,026	10
Total Land Area	5,140,654	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	516,683	10
Local Parks	343	0
Agricultural Land Reserve	397,487	8
Other land use	4,226,141	82
Total Parks and Protected Area	517,026	10
Total Land Area	5,140,654	100

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

Fraser-Fort George 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,