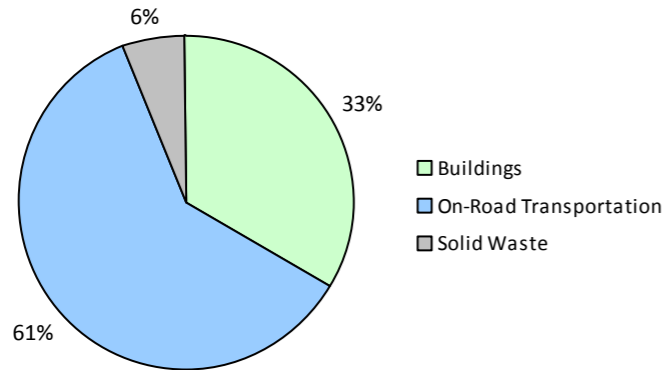
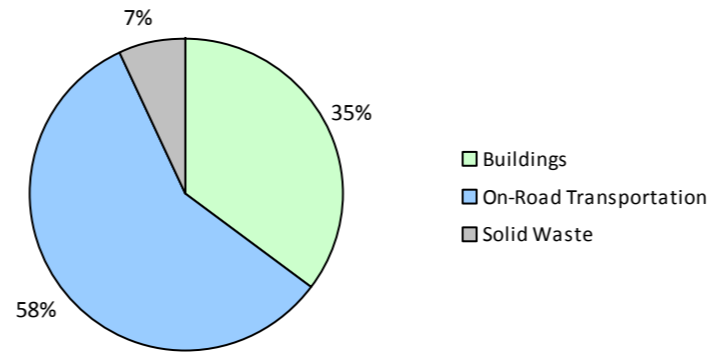


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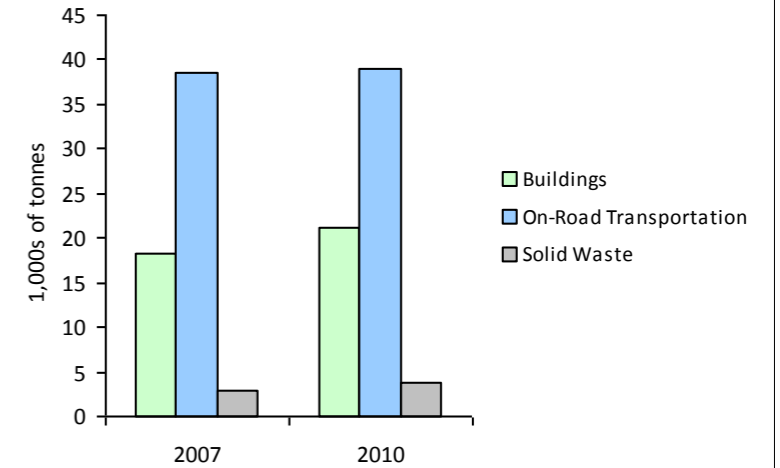
2010 GHG Emissions Sources (Total for this Community)



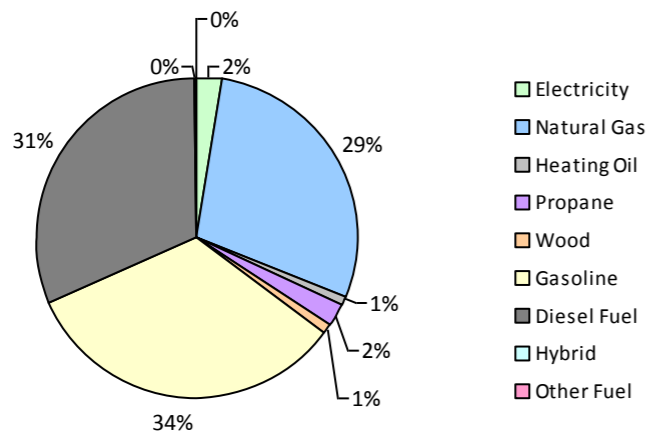
2010 GHG Emissions Sources (Total for BC)



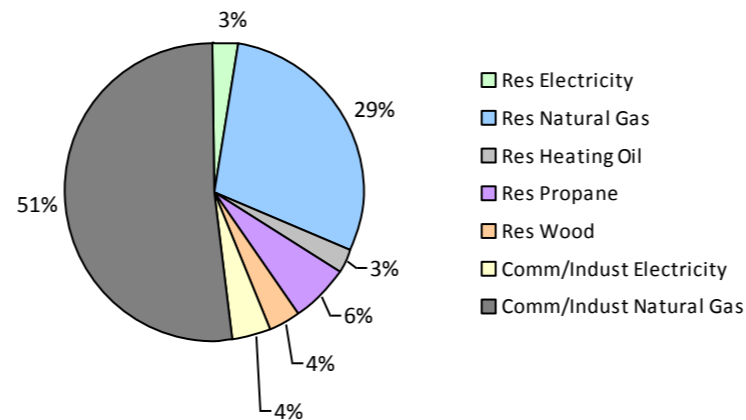
GHG Emissions Comparisons for this Community



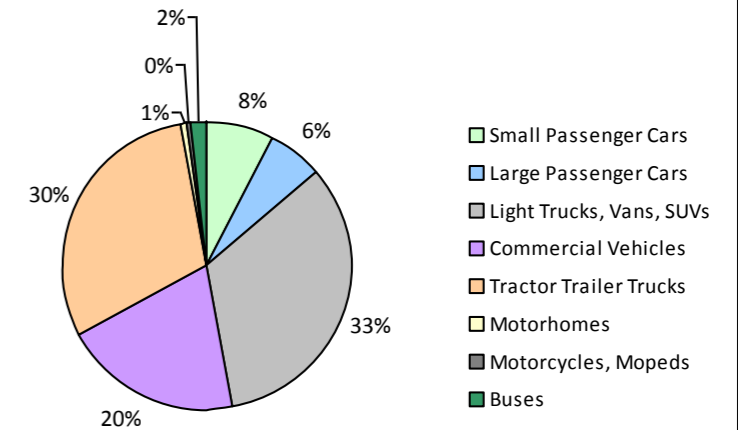
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Smithers Town 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							31,600	47	4	
	Gasoline	777	1,284,148 L	17,600	44,945	3,045	778	1,306,614 L	18,000	45,731	2,931
	Diesel Fuel	24	40,404 L	24,700	1,548	111	27	44,261 L	23,800	1,695	117
Large Passenger Cars	Hybrid						31	65,303 L	34,500	2,285	146
	Gasoline	454	1,020,923 L	20,200	35,732	2,420	452	973,831 L	19,200	34,084	2,187
	Diesel Fuel			12,900	424	30		10,600	314	21	
	Other Fuel							9,200	30	1	
Light Trucks, Vans, SUVs	Hybrid			29,400	473	33		27,900	658	43	
	Gasoline	1,909	5,221,978 L	18,300	182,770	12,493	2,022	5,572,287 L	18,600	195,029	12,637
	Diesel Fuel	71	166,815 L	13,300	6,389	455	44	108,803 L	14,500	4,167	287
	Other Fuel	10	19,380 L	11,500	491	30		11,900	282	17	
Commercial Vehicles	Gasoline	236	784,696 L	19,500	27,464	1,845	257	799,099 L	18,300	27,969	1,789
	Diesel Fuel	425	1,747,028 L	23,000	66,912	4,702	492	2,263,364 L	25,900	86,686	5,909
	Other Fuel			12,000	470	28		11,200	170	10	
Tractor Trailer Trucks	Diesel Fuel	140	4,532,358 L	73,400	173,590	12,197	135	4,509,612 L	74,700	172,718	11,774
Motorhomes	Gasoline	25	72,824 L	20,400	2,548	170	30	87,249 L	20,300	3,053	194
	Diesel Fuel	17	67,256 L	20,100	2,576	181	15	60,060 L	20,000	2,300	156
	Other Fuel			19,200	144	8		14,900	115	8	
Motorcycles, Mopeds	Gasoline	49	12,081 L	5,200	423	28	66	17,085 L	5,600	598	38
Buses	Gasoline	10	61,807 L	38,400	2,164	146	12	32,131 L	15,900	1,125	72
	Diesel Fuel	38	194,695 L	19,800	7,456	524	40	226,898 L	21,100	8,690	593
Totals		4,185	15,226,393 L	20,628	556,519	38,446	4,401	15,226,393 L	21,015	587,746	38,934

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	39,880 GJ	39,880	808	N/A	37,177 GJ	37,177	753
	Heating Oil	N/A	8,377 GJ	8,377	590	N/A	7,809 GJ	7,809	534
	Propane	N/A	22,763 GJ	22,763	1,389	N/A	21,220 GJ	21,220	1,295
	Natural Gas	1,593	136,348 GJ	136,348	6,839	1,593	121,875 GJ	121,875	6,113
	Electricity	2,318	23,033,521 kWh	82,921	576	2,376	24,125,215 kWh	86,851	603
Commercial/Small-Medium Industrial	Natural Gas	421	144,521 GJ	144,521	7,249	421	221,503 GJ	221,503	11,111
	Electricity	615	35,892,692 kWh	129,214	897	641	34,456,897 kWh	124,045	861
Totals		4,947		564,024	18,348	5,031		620,480	21,270

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	5,225 t	N/A	2,810	0	5,564 t	N/A	3,686
Totals		0			2,810	0			3,686

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	5	112,247 GJ	112,247	5,630	5	110,382 GJ	110,382	5,537
	Electricity	2		0	0	2		0	0
Totals		7		112,247	5,630	7		110,382	5,537

Smithers Town 2010 Community Energy and Emissions Inventory

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 5,206)			2010 (Population: 5,408)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	473	33	65,303 L	2,990	193
Gasoline	8,458,457 L	296,046	20,147	8,788,296 L	307,589	19,848
Diesel Fuel	6,748,556 L	258,895	18,200	7,212,998 L	276,570	18,857
Other Fuel	19,380 L	1,105	66	0 L	597	36
Wood	39,880 GJ	39,880	808	37,177 GJ	37,177	753
Heating Oil	8,377 GJ	8,377	590	7,809 GJ	7,809	534
Propane	22,763 GJ	22,763	1,389	21,220 GJ	21,220	1,295
Natural Gas	280,869 GJ	280,869	14,088	343,378 GJ	343,378	17,224
Electricity	58,926,213 kWh	212,135	1,473	58,582,112 kWh	210,896	1,464
Solid Waste	5,225 t	0	2,810	5,564 t	0	3,686
Grand Totals		1,120,543	59,604		1,208,226	63,890

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	1,255	38	1,385	67	1,365	66
Semi-Detached House	75	2	70	3	95	5
Row House	130	4	125	6	80	4
Apartment, Duplex	30	1	45	2	30	1
Apartment, 5 storeys or higher	0	0	15	1	0	0
Apartment, under 5 storeys	375	11	310	15	340	16
Other Single Attached House	10	0	0	0	50	2
Movable Dwelling	160	5	130	6	120	6

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	1,765	66	1,715	66	1,500	62
Car, Truck, Van as Passenger	180	7	155	6	180	7
Public Transit	0	0	0	0	0	0
Walked	545	20	530	21	565	23
Bicycle	155	6	105	4	120	5
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	15	1	0	0
Other Method	25	1	65	3	65	3

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	33	2
Agricultural Land Reserve	388	25
Other land use	1,155	73
Total Parks and Protected Area	33	2
Total Land Area	1,576	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	33	2
Agricultural Land Reserve	388	25
Other land use	1,155	73
Total Parks and Protected Area	33	2
Total Land Area	1,576	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,