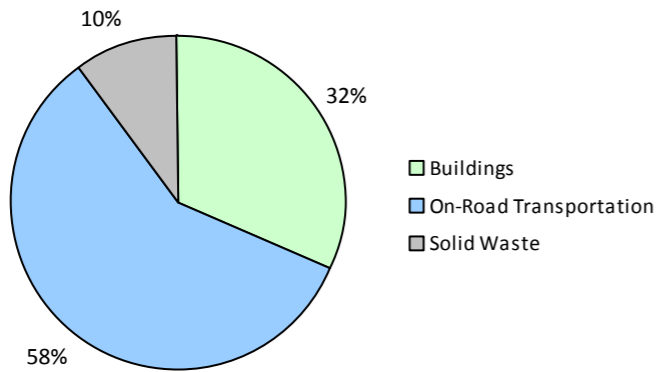


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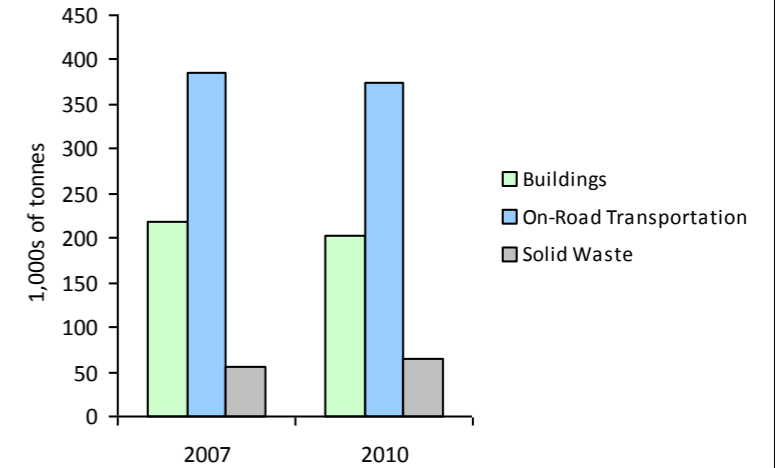
2010 GHG Emissions Sources (Total for this Community)



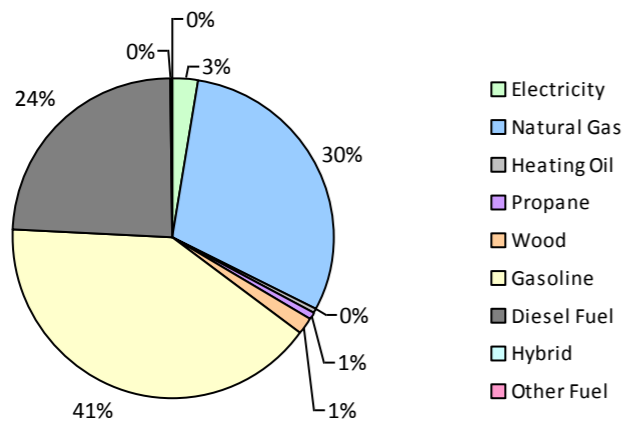
2010 GHG Emissions Sources (Total for BC)



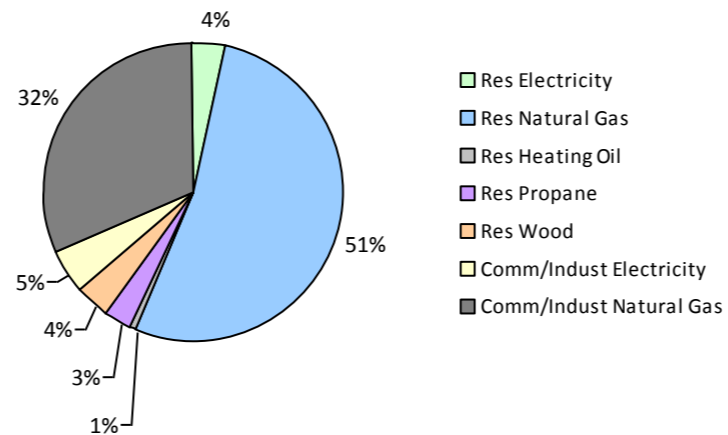
GHG Emissions Comparisons for this Community



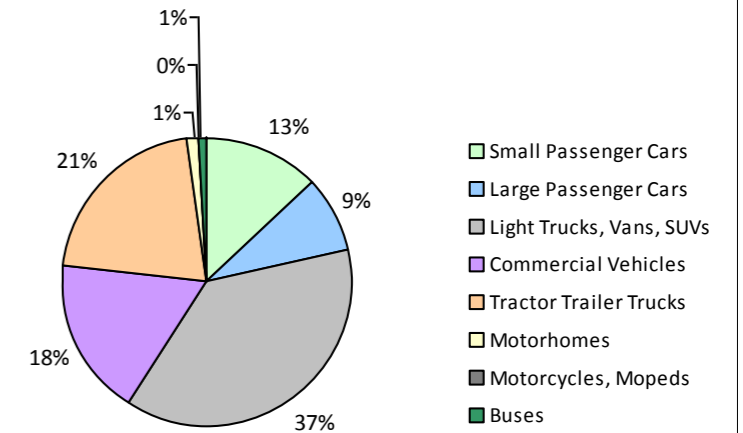
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Prince George 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			25,100	369	26	23	29,355 L	24,500	1,027	65
	Gasoline	12,864	22,573,763 L	18,700	790,082	53,509	12,109	20,828,036 L	18,400	728,981	46,678
	Diesel Fuel	465	902,223 L	28,200	34,555	2,464	464	842,502 L	26,300	32,268	2,234
	Other Fuel			11,200	33	3			18,700	50	4
Large Passenger Cars	Hybrid	27	44,597 L	29,900	1,562	105	70	120,806 L	30,000	4,229	268
	Gasoline	6,610	15,183,725 L	20,300	531,431	35,974	6,371	14,253,562 L	19,900	498,875	31,942
	Diesel Fuel	64	79,496 L	13,200	3,045	216	54	58,029 L	11,600	2,222	152
	Other Fuel	30	99,934 L	21,300	2,528	153	13	40,203 L	18,800	1,017	61
Light Trucks, Vans, SUVs	Hybrid	11	24,628 L	27,800	862	58	46	121,985 L	27,700	4,270	275
	Gasoline	19,308	55,146,658 L	19,400	1,930,133	131,753	20,431	59,071,328 L	19,800	2,067,496	133,796
	Diesel Fuel	832	2,177,761 L	14,800	83,408	5,931	594	1,742,646 L	17,300	66,744	4,610
	Other Fuel	184	393,212 L	12,400	9,949	602	104	196,804 L	10,900	4,979	301
Commercial Vehicles	Gasoline	2,459	8,130,595 L	19,500	284,570	19,115	2,724	8,809,980 L	19,200	308,350	19,715
	Diesel Fuel	3,210	14,016,637 L	24,200	536,837	37,719	3,564	17,721,899 L	27,800	678,749	46,271
	Other Fuel	73	175,390 L	13,200	4,438	268	49	102,286 L	11,300	2,588	156
Tractor Trailer Trucks	Gasoline	10	91,634 L	26,400	3,207	216			31,600	3,472	222
	Diesel Fuel	1,130	33,937,713 L	64,500	1,299,814	91,325	1,045	30,560,055 L	62,500	1,170,450	79,791
	Other Fuel			58,200	1,097	67			14,100	101	6
Motorhomes	Gasoline	250	708,228 L	19,700	24,787	1,652	269	770,646 L	19,700	26,973	1,714
	Diesel Fuel	185	689,679 L	19,900	26,415	1,855	176	667,370 L	19,800	25,559	1,741
	Other Fuel	13	38,095 L	19,400	965	59	12	35,592 L	19,500	901	56
Motorcycles, Mopeds	Gasoline	643	151,398 L	5,000	5,299	354	806	227,914 L	6,100	7,976	506
Buses	Gasoline	50	145,167 L	17,600	5,081	341	66	255,828 L	23,800	8,955	573
	Diesel Fuel	155	934,656 L	36,300	35,798	2,515	179	959,628 L	54,100	36,755	2,505
	Other Fuel								13,200	72	5
Totals		48,573	155,645,189 L	20,545	5,616,265	386,280	49,169	155,645,189 L	20,846	5,683,059	373,647

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	430,603 GJ	430,603	8,724	N/A	401,419 GJ	401,419	8,133
	Heating Oil	N/A	34,384 GJ	34,384	2,424	N/A	32,054 GJ	32,054	2,192
	Propane	N/A	93,520 GJ	93,520	5,706	N/A	87,182 GJ	87,182	5,319
	Natural Gas	23,711	2,307,866 GJ	2,307,866	115,762	23,881	2,106,893 GJ	2,106,893	105,682
	Electricity	29,292	283,788,900 kWh	1,021,639	7,095	29,731	284,212,402 kWh	1,023,164	7,106
Commercial/Small-Medium Industrial	Natural Gas	2,396	1,400,005 GJ	1,400,005	70,224	2,345	1,294,474 GJ	1,294,474	64,931
	Electricity	3,833	366,051,403 kWh	1,317,784	9,152	3,923	365,157,537 kWh	1,314,566	9,129
Totals		59,232		6,605,801	219,087	59,880		6,259,752	202,492

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	89,727 t	N/A	56,193	0	75,430 t	N/A	63,703
Totals		0			56,193	0			63,703

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	28	6,306,994 GJ	6,306,994	316,359	24	5,302,912 GJ	5,302,912	265,994
	Electricity	10		0	0	8	764,476,421 kWh	2,752,113	19,113
Totals		38		6,306,994	316,359	32		8,055,025	285,107

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 73,340)			2010 (Population: 75,568)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	69,225 L	2,793	189	272,146 L	9,526	608
Gasoline	102,131,168 L	3,574,590	242,914	104,217,294 L	3,651,078	235,146
Diesel Fuel	52,738,165 L	2,019,872	142,025	52,552,129 L	2,012,747	137,304
Other Fuel	706,631 L	19,010	1,152	374,885 L	9,708	589
Wood	430,603 GJ	430,603	8,724	401,419 GJ	401,419	8,133
Heating Oil	34,384 GJ	34,384	2,424	32,054 GJ	32,054	2,192
Propane	93,520 GJ	93,520	5,706	87,182 GJ	87,182	5,319
Natural Gas	3,707,871 GJ	3,707,871	185,986	3,401,367 GJ	3,401,367	170,613
Electricity	649,840,303 kWh	2,339,423	16,247	649,369,939 kWh	2,337,730	16,235
Solid Waste	89,727 t	0	56,193	75,430 t	0	63,703
Grand Totals		12,222,066	661,560		11,942,811	639,842

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	17,295	39	17,825	65	17,550	62
Semi-Detached House	1,615	4	1,495	5	1,285	5
Row House	1,210	3	1,500	5	1,485	5
Apartment, Duplex	1,120	3	1,000	4	1,750	6
Apartment, 5 storeys or higher	395	1	360	1	410	1
Apartment, under 5 storeys	3,605	8	3,330	12	4,255	15
Other Single Attached House	90	0	30	0	10	0
Movable Dwelling	1,440	3	2,060	7	1,460	5

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	28,505	81	27,975	82	28,910	80
Car, Truck, Van as Passenger	3,290	9	2,710	8	3,135	9
Public Transit	730	2	615	2	720	2
Walked	1,730	5	1,795	5	2,190	6
Bicycle	470	1	470	1	430	1
Motorcycle	70	0	40	0	45	0
Taxicab	135	0	75	0	80	0
Other Method	410	1	410	1	525	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	672	2
Agricultural Land Reserve	8,034	24
Other land use	24,237	74
Total Parks and Protected Area	672	2
Total Land Area	32,944	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	672	2
Agricultural Land Reserve	8,034	24
Other land use	24,237	74
Total Parks and Protected Area	672	2
Total Land Area	32,944	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	17,110	54
5 to 9.9 km	10,025	32
25 km or more	1,420	4
15 to 24.9 km	570	2
10 to 14.9 km	2,665	8

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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,