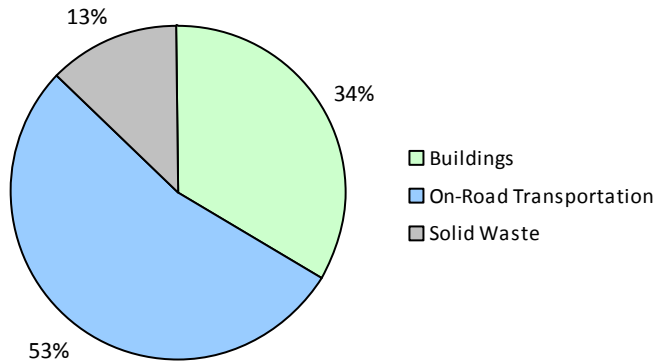
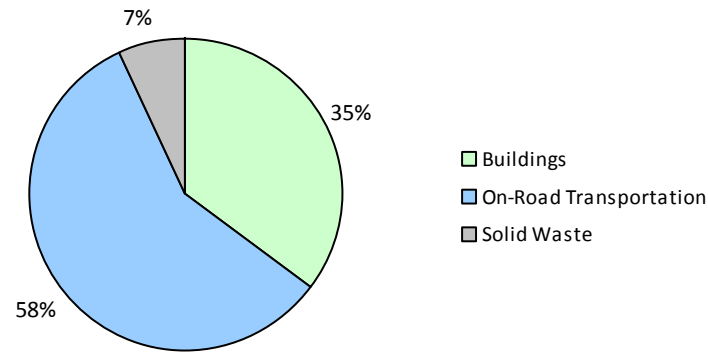


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

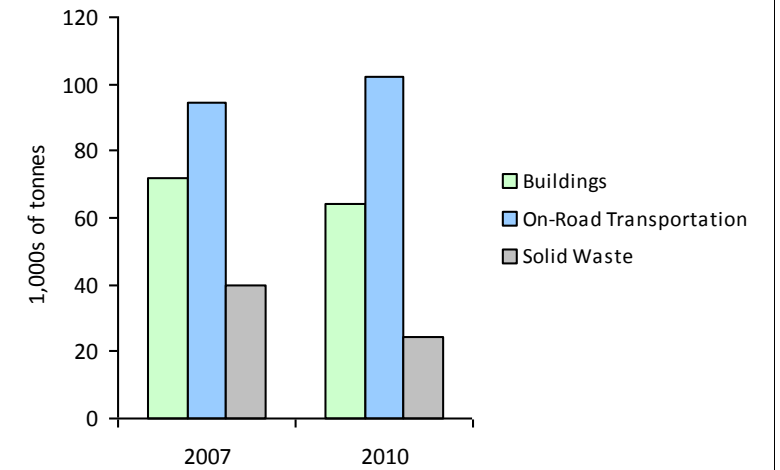
2010 GHG Emissions Sources (Total for this Community)



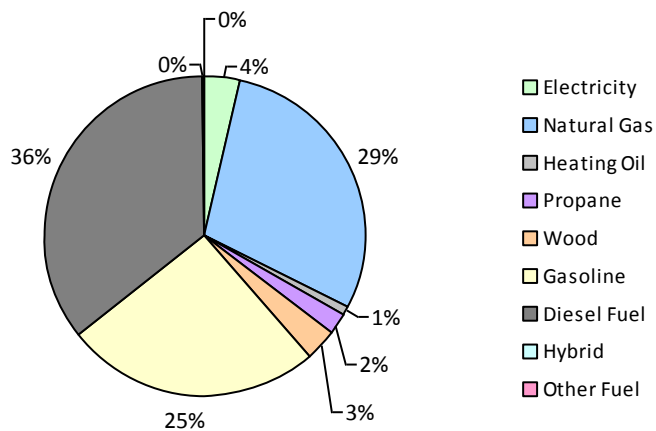
2010 GHG Emissions Sources (Total for BC)



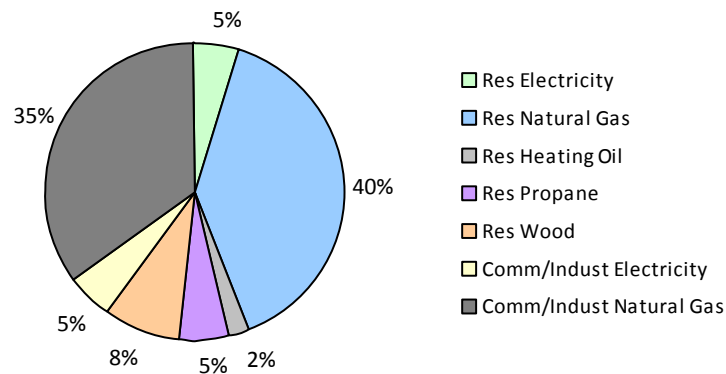
GHG Emissions Comparisons for this Community



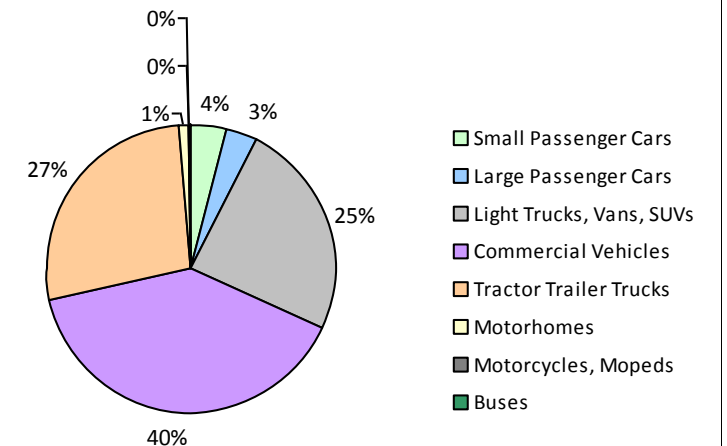
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Peace River 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	Gasoline	1,050	1,794,014 L	19,500	62,790	4,261	1,024	1,814,382 L	19,700	63,504	4,072
	Diesel Fuel	74	137,687 L	27,600	5,275	376	62	122,911 L	28,100	4,708	326
Large Passenger Cars	Hybrid								32,200	471	28
	Gasoline	668	1,441,602 L	20,300	50,456	3,429	614	1,369,689 L	20,400	47,939	3,079
	Diesel Fuel	15	24,185 L	13,800	926	66	14	18,268 L	12,700	699	48
Light Trucks, Vans, SUVs	Hybrid								29,800	291	20
	Gasoline	3,387	9,547,126 L	20,300	334,150	22,850	3,507	10,490,407 L	21,600	367,165	23,774
	Diesel Fuel	192	531,065 L	15,800	20,339	1,447	145	463,978 L	18,900	17,771	1,228
	Other Fuel	59	125,655 L	12,500	3,179	192	30	61,383 L	11,500	1,553	95
Commercial Vehicles	Gasoline	1,147	3,874,945 L	22,200	135,624	9,107	1,339	4,885,614 L	23,400	170,997	10,932
	Diesel Fuel	1,896	8,702,181 L	26,400	333,293	23,417	2,029	11,253,474 L	32,000	431,008	29,382
	Other Fuel	38	94,136 L	13,000	2,382	145	23	53,645 L	12,400	1,358	82
Tractor Trailer Trucks	Gasoline			24,000	678	44			28,200	1,188	74
	Diesel Fuel	622	10,473,871 L	45,000	401,149	28,186	638	10,692,406 L	45,200	409,520	27,918
Motorhomes	Gasoline	54	155,346 L	19,900	5,437	361	59	172,678 L	19,900	6,044	382
	Diesel Fuel	41	161,815 L	19,800	6,198	435	52	206,922 L	19,800	7,926	540
	Other Fuel			19,600	261	16			20,100	178	10
Motorcycles, Mopeds	Gasoline	70	15,913 L	5,100	557	35	112	32,472 L	6,200	1,137	72
Buses	Gasoline	13	44,362 L	19,000	1,552	104	17	61,120 L	21,600	2,139	137
	Diesel Fuel	13	71,103 L	24,300	2,722	190	10	60,297 L	22,900	2,309	158
	Other Fuel			15,300	328	20			14,900	251	16
Totals		9,339	37,195,006 L	23,088	1,367,296	94,681	9,675	37,195,006 L	25,047	1,538,156	102,373

Peace River 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	278,727 GJ	278,727	5,647	N/A	259,836 GJ	259,836	5,264
	Heating Oil	N/A	22,171 GJ	22,171	1,563	N/A	20,668 GJ	20,668	1,413
	Propane	N/A	60,102 GJ	60,102	3,667	N/A	56,029 GJ	56,029	3,418
	Natural Gas	4,561	520,392 GJ	520,392	26,103	4,554	501,679 GJ	501,679	25,165
	Electricity	8,600	124,835,047 kWh	449,406	3,121	8,881	126,478,414 kWh	455,322	3,161
Commercial/Small-Medium Industrial	Natural Gas	749	570,589 GJ	570,589	28,621	749	453,199 GJ	453,199	22,733
	Electricity	1,757	132,839,670 kWh	478,222	3,322	1,809	129,550,116 kWh	466,380	3,239
Totals		15,667		2,379,609	72,044	15,993		2,213,113	64,393

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	54,805 t	N/A	39,853	0	23,885 t	N/A	24,540
Totals		0			39,853	0			24,540

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	1		0	0	1		0	0
	Electricity	6		0	0	9	199,826,698 kWh	719,376	4,996
Totals		7			0	10		719,376	4,996

**Peace River 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: 22,306)			2010 (Population: 23,148)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	0		0 L	762	48
Gasoline	16,873,308 L	591,244	40,191	18,826,362 L	660,113	42,522
Diesel Fuel	20,101,907 L	769,902	54,117	22,818,256 L	873,941	59,600
Other Fuel	219,791 L	6,150	373	115,028 L	3,340	203
Wood	278,727 GJ	278,727	5,647	259,836 GJ	259,836	5,264
Heating Oil	22,171 GJ	22,171	1,563	20,668 GJ	20,668	1,413
Propane	60,102 GJ	60,102	3,667	56,029 GJ	56,029	3,418
Natural Gas	1,090,981 GJ	1,090,981	54,724	954,878 GJ	954,878	47,898
Electricity	257,674,717 kWh	927,628	6,443	256,028,530 kWh	921,702	6,400
Solid Waste	54,805 t	0	39,853	23,885 t	0	24,540
Grand Totals		3,746,905	206,578		3,751,269	191,306

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	5,370	26	5,630	80	6,450	86
Semi-Detached House	15	0	35	1	95	1
Row House	5	0	5	0	25	0
Apartment, Duplex	30	0	5	0	20	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	45	0	20	0	45	1
Other Single Attached House	5	0	30	0	5	0
Movable Dwelling	1,065	5	1,270	18	880	12

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	6,160	82	6,895	86	7,920	84
Car, Truck, Van as Passenger	745	10	680	8	910	10
Public Transit	20	0	0	0	45	0
Walked	430	6	360	4	375	4
Bicycle	25	0	5	0	30	0
Motorcycle	10	0	0	0	45	0
Taxicab	0	0	0	0	5	0
Other Method	140	2	120	1	145	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	1,113,673	10
Local Parks	70	0
Agricultural Land Reserve	1,249,949	11
Other land use	9,344,658	80
Total Parks and Protected Area	1,113,743	10
Total Land Area	11,708,350	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	1,113,673	10
Local Parks	70	0
Agricultural Land Reserve	1,249,949	11
Other land use	9,344,658	80
Total Parks and Protected Area	1,113,743	10
Total Land Area	11,708,350	100

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

Peace River 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,