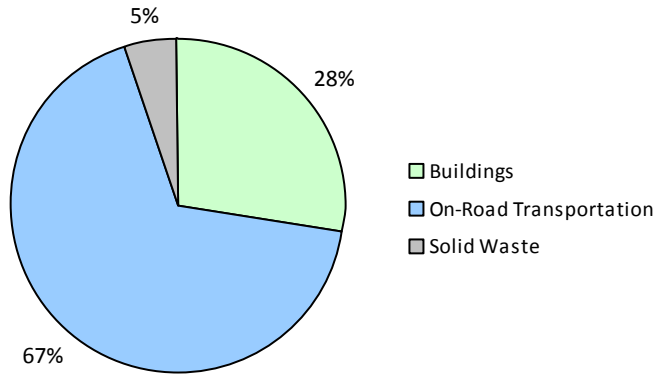
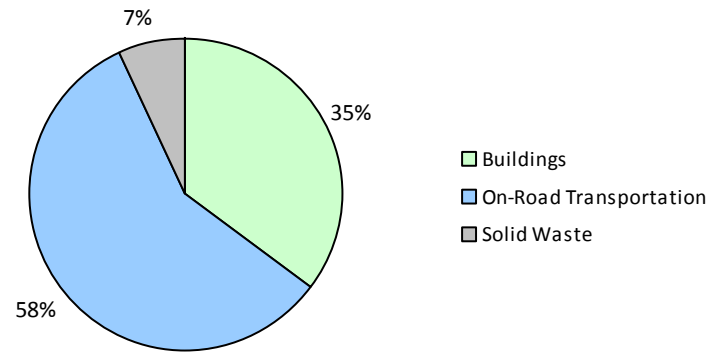


## Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

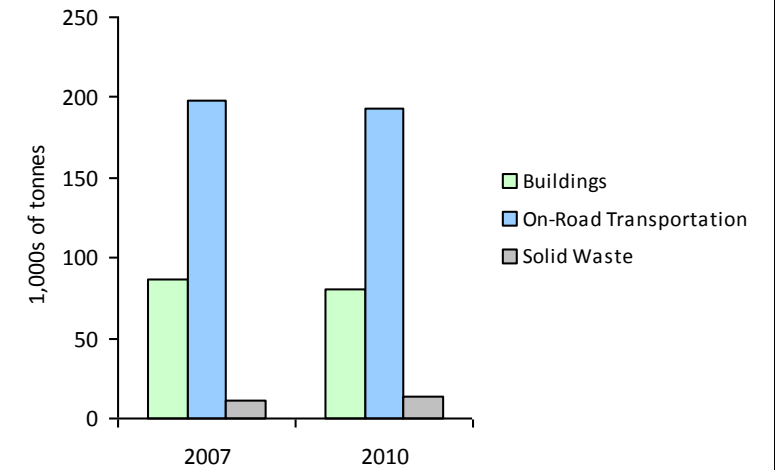
2010 GHG Emissions Sources (Total for this Community)



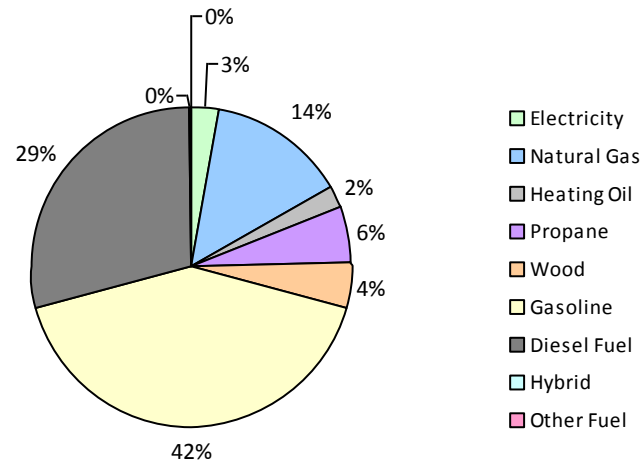
2010 GHG Emissions Sources (Total for BC)



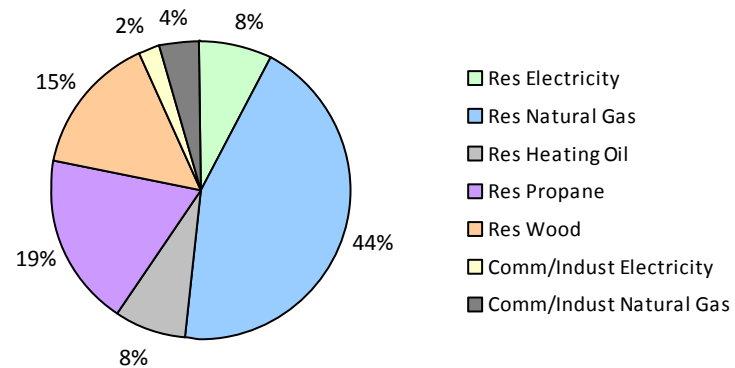
GHG Emissions Comparisons for this Community



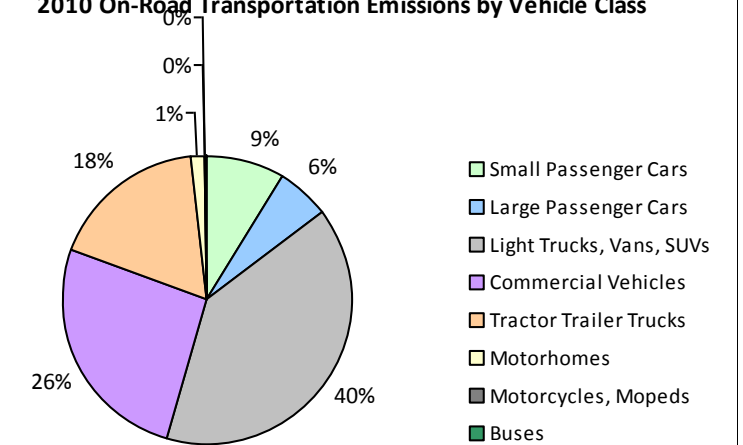
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



## Cariboo 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							20,400	142	10	
	Gasoline	4,971	7,736,727 L	17,000	270,785	18,392	4,733	7,239,734 L	16,800	253,391	16,267
	Diesel Fuel	189	292,377 L	22,900	11,199	798	204	319,145 L	22,300	12,222	848
Large Passenger Cars	Hybrid			27,500	496	34	26	43,324 L	29,200	1,516	95
	Gasoline	2,664	5,245,018 L	17,900	183,576	12,473	2,518	4,890,022 L	17,600	171,150	10,987
	Diesel Fuel	27	32,924 L	13,800	1,262	89	21	28,490 L	14,400	1,091	74
Light Trucks, Vans, SUVs	Hybrid							28,400	317	21	
	Gasoline	10,656	29,924,572 L	19,500	1,047,360	71,759	11,293	31,500,235 L	19,600	1,102,507	71,550
	Diesel Fuel	883	2,237,351 L	14,300	85,691	6,087	631	1,746,421 L	16,400	66,887	4,621
	Other Fuel	112	242,437 L	12,600	6,134	371	69	131,577 L	11,300	3,328	202
Commercial Vehicles	Gasoline	1,632	5,366,783 L	20,200	187,836	12,614	1,828	5,972,034 L	20,100	209,022	13,361
	Diesel Fuel	2,930	11,888,482 L	23,500	455,329	31,991	3,309	14,444,396 L	25,700	553,220	37,713
	Other Fuel	50	133,402 L	14,000	3,375	205	34	80,573 L	12,600	2,039	122
Tractor Trailer Trucks	Diesel Fuel	513	14,708,956 L	61,500	563,354	39,581	487	13,175,413 L	58,000	504,617	34,401
Motorhomes	Gasoline	171	551,266 L	22,100	19,295	1,287	176	568,208 L	22,100	19,889	1,264
	Diesel Fuel	136	523,322 L	20,800	20,044	1,408	131	525,705 L	21,000	20,134	1,372
	Other Fuel	10	30,336 L	21,500	768	46		23,300	551	33	
Motorcycles, Mopeds	Gasoline	316	71,062 L	4,800	2,488	166	439	118,126 L	5,800	4,133	261
Buses	Gasoline	19	55,669 L	18,100	1,949	132	16	47,677 L	18,100	1,667	106
	Diesel Fuel	15	87,601 L	19,700	3,355	236	23	136,449 L	20,100	5,226	357
<b>Totals</b>		<b>25,294</b>	<b>79,128,285 L</b>	<b>19,838</b>	<b>2,864,296</b>	<b>197,669</b>	<b>25,938</b>	<b>79,128,285 L</b>	<b>20,137</b>	<b>2,933,049</b>	<b>193,665</b>

## Cariboo 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)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	651,326 GJ	651,326	13,196	N/A	607,183 GJ	607,183	12,302
	Heating Oil	N/A	97,763 GJ	97,763	6,891	N/A	91,137 GJ	91,137	6,233
	Propane	N/A	265,670 GJ	265,670	16,209	N/A	247,664 GJ	247,664	15,110
	Natural Gas	9,595	755,519 GJ	755,519	37,897	9,520	691,304 GJ	691,304	34,677
	Electricity	21,998	259,355,433 kWh	933,679	6,485	22,488	254,560,817 kWh	916,418	6,365
Commercial/Small-Medium Industrial	Natural Gas	336	87,500 GJ	87,500	4,388	316	68,332 GJ	68,332	3,428
	Electricity	2,618	76,637,014 kWh	275,893	1,916	2,718	72,128,722 kWh	259,663	1,803
<b>Totals</b>		<b>34,547</b>		<b>3,067,350</b>	<b>86,982</b>	<b>35,042</b>		<b>2,881,701</b>	<b>79,918</b>

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	21,796 t	N/A	11,330	0	24,985 t	N/A	14,044
<b>Totals</b>		<b>0</b>			<b>11,330</b>	<b>0</b>			<b>14,044</b>

### Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	6		0	0	7		0	0
<b>Totals</b>		<b>6</b>			<b>0</b>	<b>7</b>			<b>0</b>

## Cariboo 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: 40,664)			2010 (Population: 42,490)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	496	34	43,324 L	1,975	126
Gasoline	48,951,097 L	1,713,289	116,823	50,336,036 L	1,761,759	113,796
Diesel Fuel	29,771,013 L	1,140,234	80,190	30,376,019 L	1,163,397	79,386
Other Fuel	406,175 L	10,277	622	212,150 L	5,918	357
Wood	651,326 GJ	651,326	13,196	607,183 GJ	607,183	12,302
Heating Oil	97,763 GJ	97,763	6,891	91,137 GJ	91,137	6,233
Propane	265,670 GJ	265,670	16,209	247,664 GJ	247,664	15,110
Natural Gas	843,019 GJ	843,019	42,285	759,636 GJ	759,636	38,105
Electricity	335,992,447 kWh	1,209,572	8,401	326,689,539 kWh	1,176,081	8,168
Solid Waste	21,796 t	0	11,330	24,985 t	0	14,044
<b>Grand Totals</b>		<b>5,931,646</b>	<b>295,981</b>		<b>5,814,750</b>	<b>287,627</b>

## 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	13,220	39	13,550	85	13,510	85
Semi-Detached House	115	0	165	1	250	2
Row House	65	0	40	0	80	1
Apartment, Duplex	80	0	160	1	135	1
Apartment, 5 storeys or higher	0	0	0	0	5	0
Apartment, under 5 storeys	130	0	120	1	80	1
Other Single Attached House	60	0	30	0	90	1
Movable Dwelling	2,395	7	1,970	12	1,755	11

#### 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	14,900	85	14,525	87	14,195	86
Car, Truck, Van as Passenger	1,525	9	1,205	7	1,480	9
Public Transit	115	1	45	0	50	0
Walked	590	3	710	4	390	2
Bicycle	130	1	70	0	100	1
Motorcycle	10	0	0	0	15	0
Taxicab	10	0	10	0	15	0
Other Method	225	1	185	1	225	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	1,052,511	13
Local Parks		
Agricultural Land Reserve	932,086	11
Other land use	6,255,035	76
Total Parks and Protected Area	1,052,511	13
Total Land Area	8,239,632	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	1,052,511	13
Local Parks		
Agricultural Land Reserve	932,086	11
Other land use	6,255,035	76
Total Parks and Protected Area	1,052,511	13
Total Land Area	8,239,632	100

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

**Cariboo 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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*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

**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](mailto: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](mailto: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,