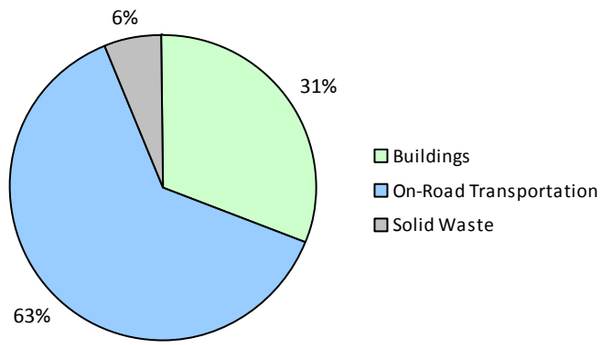
Peachland District Municipality

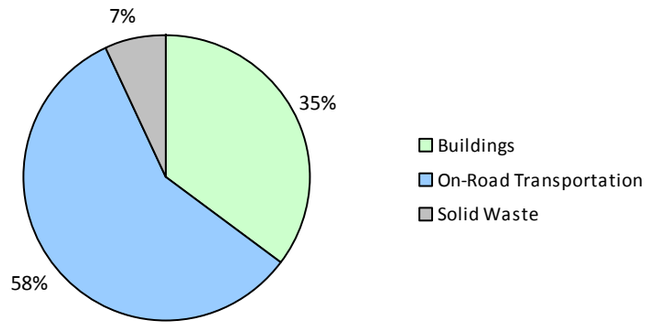
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

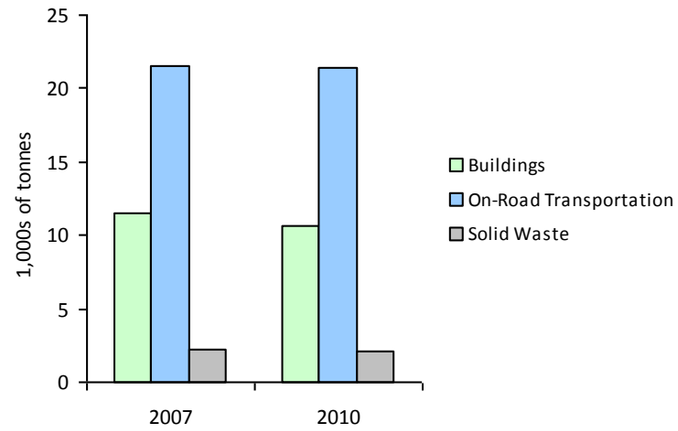
2010 GHG Emissions Sources (Total for this Community)



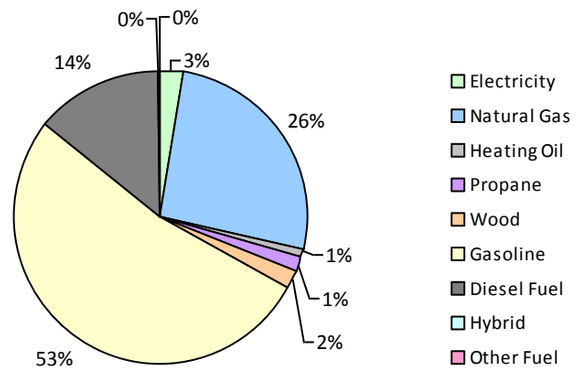
2010 GHG Emissions Sources (Total for BC)



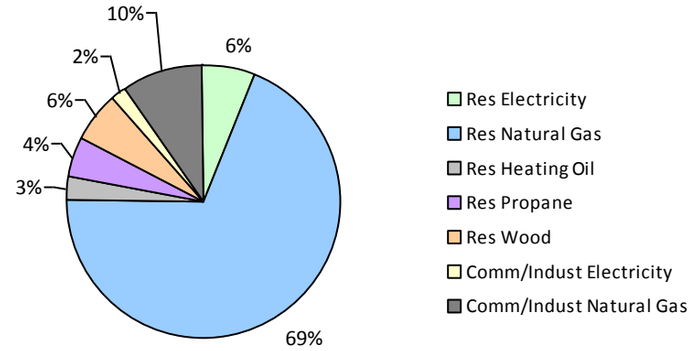
GHG Emissions Comparisons for this Community



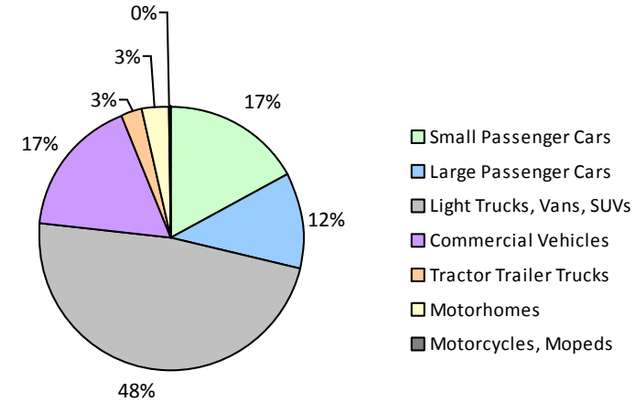
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Peachland District Municipality

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)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Hybrid			13,800	45	2			16,300	86	5
	Gasoline	961	1,476,482 L	16,000	51,677	3,495	998	1,523,009 L	15,800	53,306	3,412
	Diesel Fuel	71	115,168 L	24,200	4,410	315	70	110,201 L	23,600	4,220	292
	Other Fuel								27,300	72	4
Large Passenger Cars	Hybrid			27,100	198	14	18	22,977 L	23,400	804	51
	Gasoline	657	1,175,603 L	15,600	41,146	2,789	596	1,069,005 L	15,700	37,415	2,399
	Diesel Fuel	13	22,466 L	19,200	860	61	15	18,843 L	14,300	722	51
Light Trucks, Vans, SUVs	Hybrid			16,400	46	4			21,100	447	29
	Gasoline	1,505	4,012,113 L	18,600	140,424	9,584	1,625	4,246,647 L	18,200	148,633	9,625
	Diesel Fuel	82	210,994 L	14,700	8,082	574	65	202,402 L	19,100	7,751	535
	Other Fuel	14	27,103 L	11,400	685	42			10,000	348	21
Commercial Vehicles	Gasoline	115	385,936 L	20,000	13,507	907	137	473,089 L	20,500	16,558	1,059
	Diesel Fuel	176	772,917 L	24,200	29,602	2,081	221	1,010,965 L	25,600	38,721	2,640
	Other Fuel			14,900	223	14			9,500	183	10
Tractor Trailer Trucks	Gasoline			11,500	124	8			7,700	89	6
	Diesel Fuel	25	351,415 L	36,200	13,460	944	19	227,582 L	31,100	8,717	594
Motorhomes	Gasoline	50	139,214 L	19,000	4,873	326	56	157,502 L	19,300	5,512	350
	Diesel Fuel	28	103,617 L	19,600	3,968	279	28	110,034 L	19,700	4,214	288
Motorcycles, Mopeds	Gasoline	72	17,219 L	5,300	603	39	97	27,356 L	6,200	958	61
Totals		**3,769**	**8,810,247 L**	**17,590**	**313,933**	**21,478**	**3,945**	**8,810,247 L**	**17,622**	**328,756**	**21,432**

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	34,081 GJ	34,081	690	N/A	32,804 GJ	32,804	665
	Heating Oil	N/A	4,605 GJ	4,605	325	N/A	4,433 GJ	4,433	303
	Propane	N/A	8,120 GJ	8,120	495	N/A	7,816 GJ	7,816	477
	Natural Gas	2,142	160,278 GJ	160,278	8,039	2,200	145,448 GJ	145,448	7,296
	Electricity	2,493	27,415,850 kWh	98,697	685	2,567	27,001,517 kWh	97,205	675
Commercial/Small-Medium Industrial	Natural Gas	81	22,652 GJ	22,652	1,136	80	20,711 GJ	20,711	1,039
	Electricity	197	7,151,001 kWh	25,744	179	207	6,783,615 kWh	24,421	170
Totals		**4,913**		**354,177**	**11,549**	**5,054**		**332,838**	**10,625**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	4,317 t	N/A	2,208	0	3,616 t	N/A	2,098
Totals		**0**			**2,208**	**0**			**2,098**

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 5,112)			2010 (Population: 5,172)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	289	20	22,977 L	1,337	85
Gasoline	7,206,567 L	252,354	17,148	7,496,608 L	262,471	16,912
Diesel Fuel	1,576,577 L	60,382	4,254	1,680,027 L	64,345	4,400
Other Fuel	27,103 L	908	56	0 L	603	35
Wood	34,081 GJ	34,081	690	32,804 GJ	32,804	665
Heating Oil	4,605 GJ	4,605	325	4,433 GJ	4,433	303
Propane	8,120 GJ	8,120	495	7,816 GJ	7,816	477
Natural Gas	182,930 GJ	182,930	9,175	166,159 GJ	166,159	8,335
Electricity	34,566,851 kWh	124,441	864	33,785,132 kWh	121,626	845
Solid Waste	4,317 t	0	2,208	3,616 t	0	2,098
Grand Totals		**668,110**	**35,235**		**661,594**	**34,155**

Peachland District Municipality

2010 Community Energy and Emissions Inventory

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	1,655	47	1,615	81	1,660	77
Semi-Detached House	10	0	40	2	40	2
Row House	40	1	20	1	45	2
Apartment, Duplex	20	1	50	3	110	5
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	90	3	160	8	230	11
Other Single Attached House	20	1	5	0	5	0
Movable Dwelling	0	0	105	5	70	3

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	1,310	87	1,255	81	1,590	86
Car, Truck,Van as Passenger	75	5	90	6	140	8
Public Transit	20	1	35	2	45	2
Walked	65	4	55	4	45	2
Bicycle	0	0	20	1	0	0
Motorcycle	0	0	10	1	0	0
Taxicab	0	0	0	0	0	0
Other Method	35	2	75	5	25	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	64	4
Agricultural Land Reserve	127	7
Other land use	1,576	89
Total Parks and Protected Area	64	4
Total Land Area	1,767	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	64	4
Agricultural Land Reserve	127	7
Other land use	1,576	89
Total Parks and Protected Area	64	4
Total Land Area	1,767	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	305	20
5 to 9.9 km	175	12
25 km or more	395	26
15 to 24.9 km	470	31
10 to 14.9 km	170	11

This page intentionally left blank

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