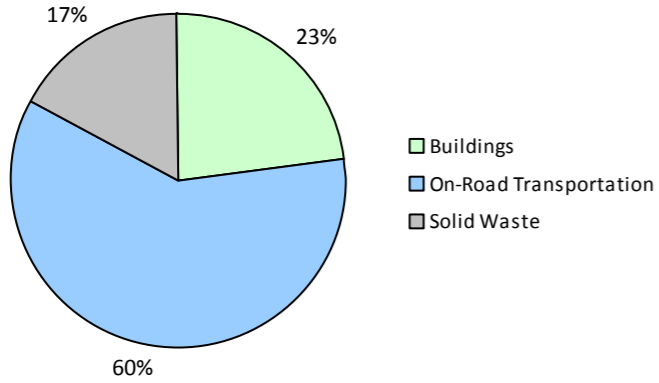
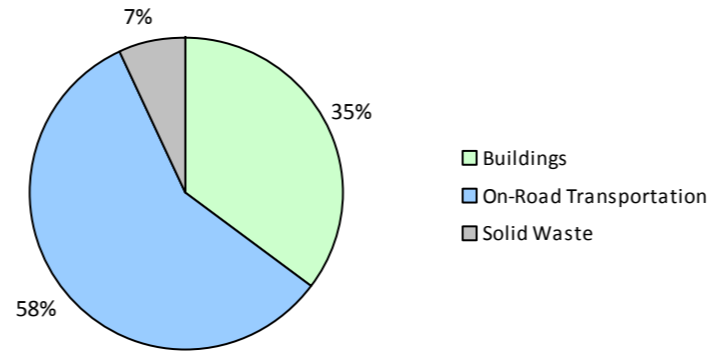


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

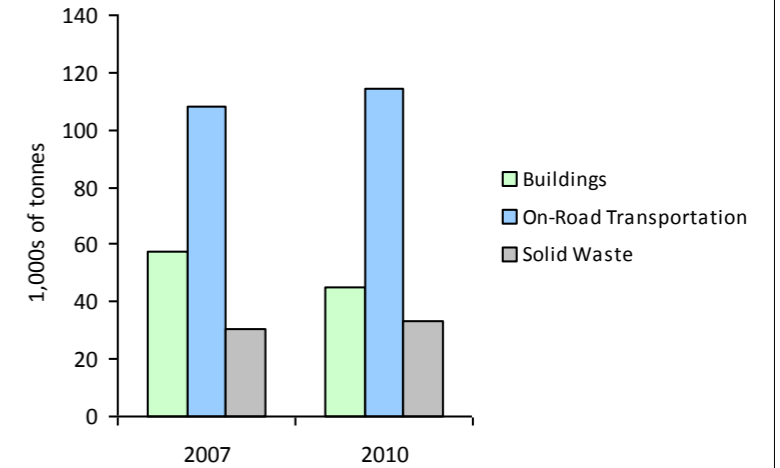
2010 GHG Emissions Sources (Total for this Community)



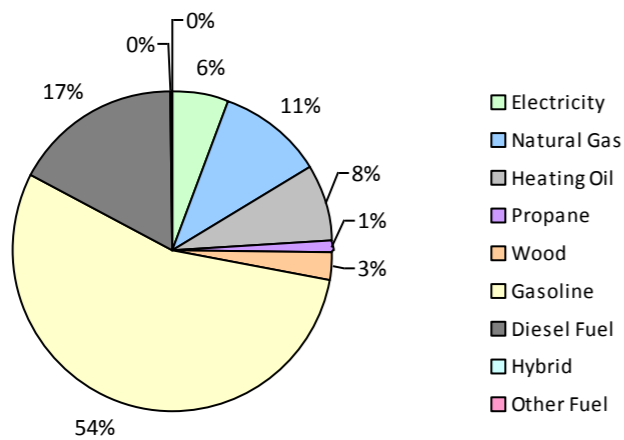
2010 GHG Emissions Sources (Total for BC)



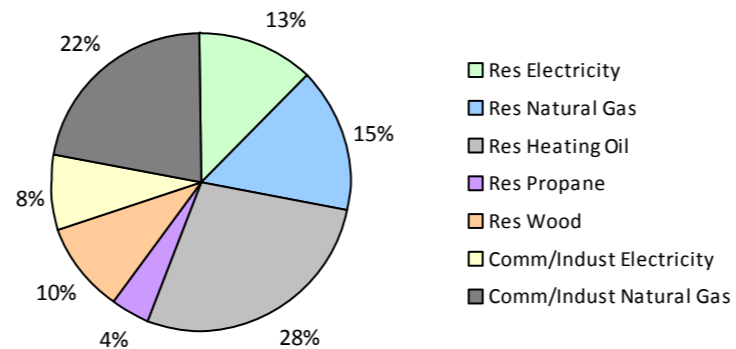
GHG Emissions Comparisons for this Community



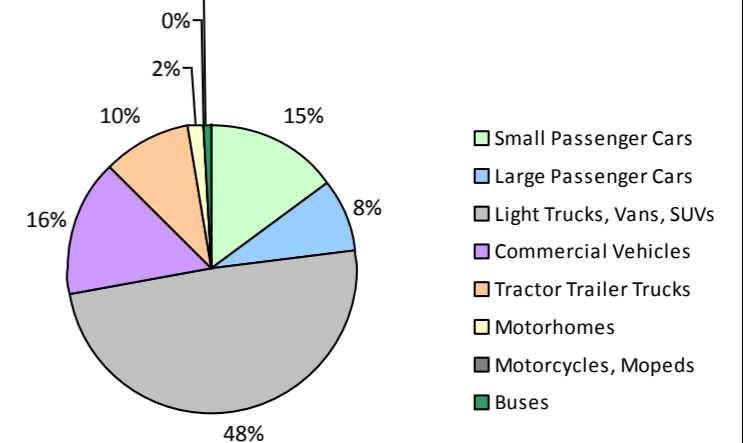
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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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			18,800	190	12			17,800	179	12
	Gasoline	5,132	7,033,348 L	14,600	246,168	16,755	5,123	7,284,934 L	15,200	254,973	16,381
	Diesel Fuel	158	259,994 L	24,600	9,958	710	175	287,192 L	24,400	10,999	761
	Other Fuel			9,300	19	0			26,100	64	3
Large Passenger Cars	Hybrid	22	25,723 L	23,000	900	61	52	67,717 L	23,700	2,371	151
	Gasoline	2,770	4,397,648 L	13,900	153,918	10,496	2,570	4,139,354 L	14,200	144,877	9,329
	Diesel Fuel	54	55,836 L	10,600	2,139	152	40	43,251 L	11,700	1,656	115
	Other Fuel			18,000	340	21			0	32	2
Light Trucks, Vans, SUVs	Hybrid			23,500	195	13	17	35,317 L	24,600	1,235	80
	Gasoline	8,997	20,667,039 L	15,800	723,346	49,597	9,851	23,361,781 L	16,500	817,663	53,095
	Diesel Fuel	609	1,198,700 L	11,000	45,910	3,261	423	905,662 L	12,200	34,686	2,394
	Other Fuel	84	157,316 L	11,100	3,980	241	48	84,132 L	10,200	2,128	128
Commercial Vehicles	Gasoline	888	2,512,634 L	16,600	87,943	5,903	1,099	3,100,646 L	16,700	108,522	6,936
	Diesel Fuel	918	2,909,768 L	17,300	111,444	7,830	1,166	4,182,577 L	19,800	160,192	10,921
	Other Fuel	33	72,666 L	11,700	1,838	112	18	37,657 L	11,700	953	58
Tractor Trailer Trucks	Gasoline			32,300	763	52			49,700	1,893	120
	Diesel Fuel	250	3,819,066 L	35,700	146,271	10,277	267	4,348,716 L	37,800	166,556	11,354
	Other Fuel			9,900	183	12			8,900	112	7
Motorhomes	Gasoline	177	417,736 L	16,500	14,621	974	164	392,319 L	16,700	13,731	872
	Diesel Fuel	111	333,052 L	16,700	12,755	896	106	336,196 L	16,600	12,876	878
	Other Fuel			16,500	317	19			14,200	168	11
Motorcycles, Mopeds	Gasoline	321	67,677 L	4,700	2,369	158	362	90,550 L	5,600	3,168	202
Buses	Gasoline	43	134,263 L	18,400	4,699	316	51	148,335 L	17,100	5,191	332
	Diesel Fuel	41	184,972 L	18,200	7,084	497	40	203,245 L	18,200	7,784	531
	Other Fuel			12,400	172	11			9,200	51	4
Totals		20,608	44,247,438 L	15,331	1,577,522	108,376	21,572	44,247,438 L	16,170	1,752,060	114,677

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	222,889 GJ	222,889	4,516	N/A	215,764 GJ	215,764	4,371
	Heating Oil	N/A	185,988 GJ	185,988	13,110	N/A	180,044 GJ	180,044	12,313
	Propane	N/A	32,068 GJ	32,068	1,956	N/A	31,043 GJ	31,043	1,894
	Natural Gas	4,260	260,223 GJ	260,223	13,053	2,585	138,393 GJ	138,393	6,942
	Electricity	15,941	234,752,123 kWh	845,107	5,869	16,281	228,834,930 kWh	823,805	5,721
Commercial/Small-Medium Industrial	Natural Gas	511	309,387 GJ	309,387	15,519	311	199,464 GJ	199,464	10,005
	Electricity	2,412	148,388,853 kWh	534,199	3,710	2,537	146,579,848 kWh	527,687	3,665
Totals		23,124		2,389,861	57,733	21,714		2,116,200	44,911

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	27,645 t	N/A	30,400	0	45,786 t	N/A	33,098
Totals		0			30,400	0			33,098

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	1		0	0				
	Electricity	1		0	0	1		0	0
Totals		2			0	1			0

Agriculture		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Enteric Fermentation	Methane	1,816	119 t	0	2,499				
Totals		1,816			2,499	0			

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Land-use Change - Deforestation	2007				2010			
	Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Settlement Deforestation	49	0 ha	0	42,953				
Totals	49			42,953	0			

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 31,138)			2010 (Population: 31,635)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	25,723 L	1,285	86	103,034 L	3,785	243
Gasoline	35,230,345 L	1,233,827	84,251	38,517,919 L	1,350,018	87,267
Diesel Fuel	8,761,388 L	335,561	23,623	10,306,839 L	394,749	26,954
Other Fuel	229,982 L	6,849	416	121,789 L	3,508	213
Wood	222,889 GJ	222,889	4,516	215,764 GJ	215,764	4,371
Heating Oil	185,988 GJ	185,988	13,110	180,044 GJ	180,044	12,313
Propane	32,068 GJ	32,068	1,956	31,043 GJ	31,043	1,894
Natural Gas	569,610 GJ	569,610	28,572	337,857 GJ	337,857	16,947
Electricity	383,140,976 kWh	1,379,306	9,579	375,414,778 kWh	1,351,492	9,386
Solid Waste	27,645 t	0	30,400	45,786 t	0	33,098
Grand Totals		3,967,383	196,509		3,868,260	192,686

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	9,305	43	9,645	77	9,530	74
Semi-Detached House	290	1	310	2	305	2
Row House	330	2	425	3	500	4
Apartment, Duplex	420	2	255	2	365	3
Apartment, 5 storeys or higher	125	1	105	1	110	1
Apartment, under 5 storeys	1,065	5	1,160	9	1,355	11
Other Single Attached House	45	0	55	0	35	0
Movable Dwelling	655	3	535	4	650	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	9,670	77	8,945	77	9,480	75
Car, Truck, Van as Passenger	750	6	850	7	1,120	9
Public Transit	85	1	130	1	120	1
Walked	1,420	11	1,120	10	1,350	11
Bicycle	245	2	120	1	220	2
Motorcycle	20	0	70	1	15	0
Taxicab	25	0	25	0	0	0
Other Method	320	3	360	3	355	3

Parks and Protected Greenspace

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Units	%
National Parks	22,291	3
Provincial Parks / Protected Areas	117,281	17
Local Parks	83	0
Agricultural Land Reserve	7,756	1
Other land use	537,097	78
Total Parks and Protected Area	139,654	20
Total Land Area	684,508	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	22,291	3
Provincial Parks / Protected Areas	117,281	17
Local Parks	83	0
Agricultural Land Reserve	7,756	1
Other land use	537,097	78
Total Parks and Protected Area	139,654	20
Total Land Area	684,508	100

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

Alberni-Clayoquot Regional District
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

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,