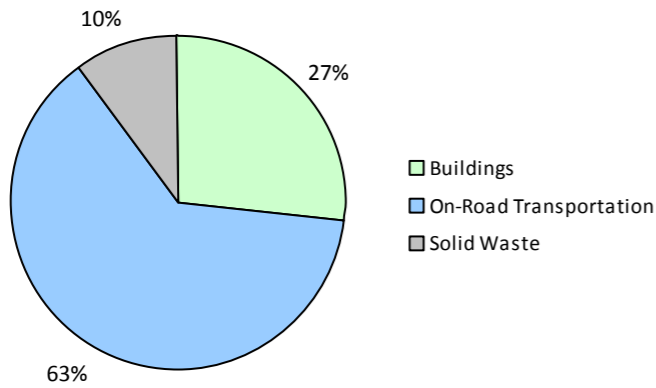
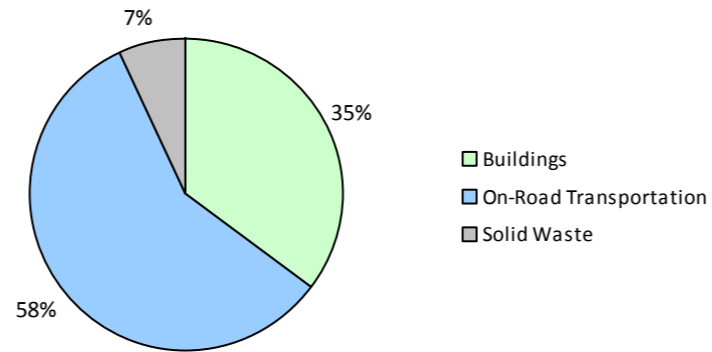


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

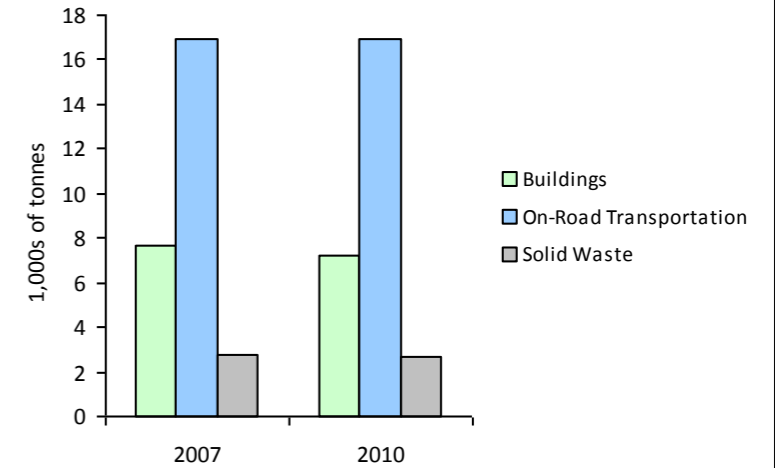
2010 GHG Emissions Sources (Total for this Community)



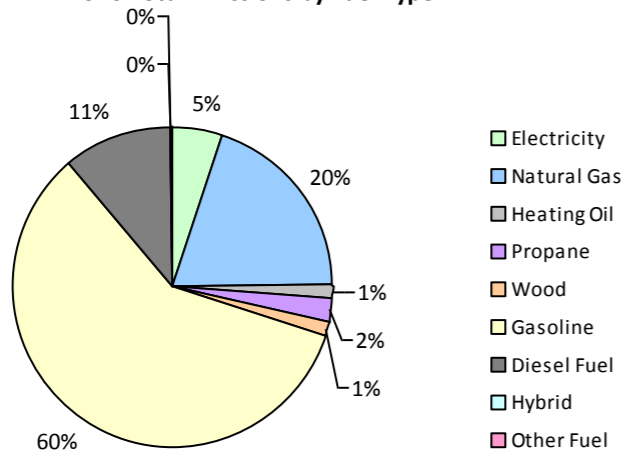
2010 GHG Emissions Sources (Total for BC)



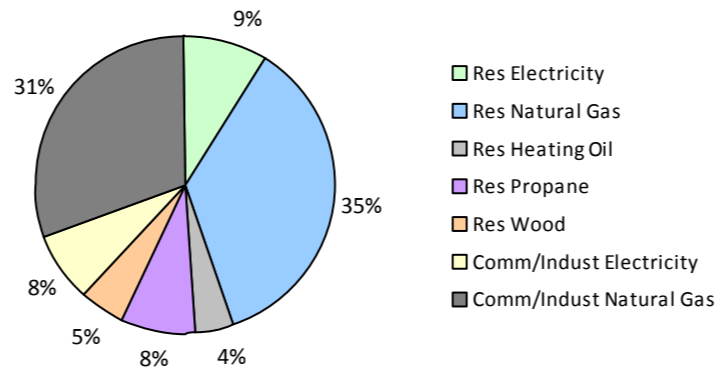
GHG Emissions Comparisons for this Community



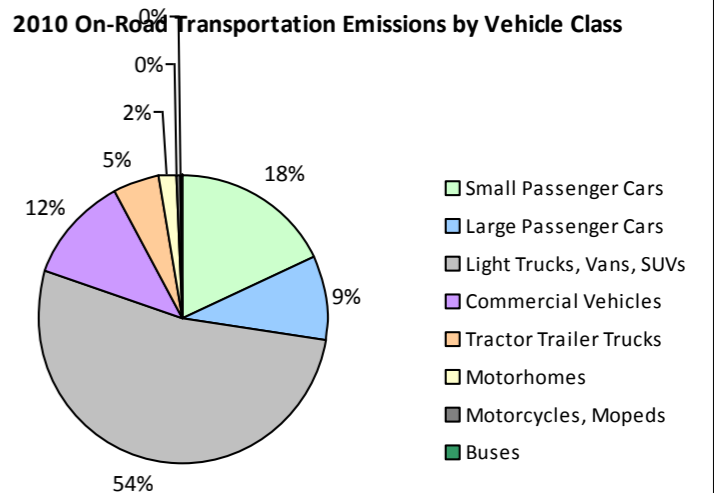
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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			13,600	46	4			13,400	67	5
	Gasoline	914	1,300,338 L	15,000	45,512	3,090	944	1,330,831 L	14,900	46,580	2,985
	Diesel Fuel	21	33,274 L	23,900	1,275	91	21	32,022 L	23,600	1,227	85
Large Passenger Cars	Hybrid			25,900	38	3			23,900	210	13
	Gasoline	481	790,619 L	14,500	27,671	1,876	444	674,183 L	13,400	23,596	1,516
	Diesel Fuel			10,800	292	21			13,200	422	28
Light Trucks, Vans, SUVs	Hybrid			21,300	58	4			23,500	341	22
	Gasoline	1,260	3,552,376 L	19,700	124,333	8,485	1,384	3,814,914 L	19,300	133,522	8,644
	Diesel Fuel	64	159,063 L	14,300	6,092	434	40	101,410 L	15,200	3,884	269
	Other Fuel	11	21,389 L	11,700	541	32			10,100	346	22
Commercial Vehicles	Gasoline	86	305,715 L	21,100	10,700	719	97	344,644 L	21,100	12,063	772
	Diesel Fuel	90	391,006 L	24,200	14,975	1,052	104	478,998 L	25,700	18,346	1,251
	Other Fuel			14,300	135	9			10,200	244	15
Tractor Trailer Trucks	Diesel Fuel	26	276,072 L	25,200	10,573	743	29	337,687 L	27,800	12,933	881
Motorhomes	Gasoline	30	84,599 L	20,200	2,962	199	35	103,095 L	20,800	3,609	229
	Diesel Fuel	16	53,968 L	18,000	2,067	144	12	37,978 L	17,100	1,455	99
Motorcycles, Mopeds	Gasoline	52	12,492 L	5,300	436	29	59	15,935 L	6,000	558	35
Buses	Gasoline			21,300	596	39			19,500	648	43
	Diesel Fuel								27,000	211	14
Totals		3,051	6,980,911 L	17,329	248,302	16,974	3,169	6,980,911 L	17,243	260,262	16,928

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	17,723 GJ	17,723	359	N/A	17,156 GJ	17,156	348
	Heating Oil	N/A	4,565 GJ	4,565	322	N/A	4,419 GJ	4,419	302
	Propane	N/A	9,643 GJ	9,643	588	N/A	9,335 GJ	9,335	570
	Natural Gas	971	54,294 GJ	54,294	2,724	1,070	50,911 GJ	50,911	2,554
	Electricity	2,181	27,923,305 kWh	100,524	698	2,265	27,003,597 kWh	97,213	675
Commercial/Small-Medium Industrial	Natural Gas	141	48,796 GJ	48,796	2,448	125	44,558 GJ	44,558	2,235
	Electricity	462	22,308,385 kWh	80,310	558	467	22,734,698 kWh	81,845	568
Totals		3,755		315,855	7,697	3,927		305,437	7,252

Gibsons Town 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Solid Waste	2007				2010			
	Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste Solid Waste	0	2,137 t	N/A	2,719	0	1,914 t	N/A	2,696
Totals	0			2,719	0			2,696

Memo Items

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

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 4,336)			2010 (Population: 4,416)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	142	11	0 L	618	40
Gasoline	6,046,139 L	212,210	14,437	6,283,602 L	220,576	14,224
Diesel Fuel	913,383 L	35,274	2,485	988,095 L	38,478	2,627
Other Fuel	21,389 L	676	41	0 L	590	37
Wood	17,723 GJ	17,723	359	17,156 GJ	17,156	348
Heating Oil	4,565 GJ	4,565	322	4,419 GJ	4,419	302
Propane	9,643 GJ	9,643	588	9,335 GJ	9,335	570
Natural Gas	103,090 GJ	103,090	5,172	95,469 GJ	95,469	4,789
Electricity	50,231,690 kWh	180,834	1,256	49,738,295 kWh	179,058	1,243
Solid Waste	2,137 t	0	2,719	1,914 t	0	2,696
Grand Totals		564,157	27,390		565,699	26,876

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	960	37	1,050	58	1,045	55
Semi-Detached House	95	4	120	7	145	8
Row House	195	7	195	11	230	12
Apartment, Duplex	75	3	110	6	75	4
Apartment, 5 storeys or higher	0	0	5	0	0	0
Apartment, under 5 storeys	315	12	285	16	360	19
Other Single Attached House	0	0	10	1	20	1
Movable Dwelling	25	1	30	2	10	1

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	905	63	1,000	68	1,065	66
Car, Truck, Van as Passenger	200	14	135	9	140	9
Public Transit	95	7	65	4	175	11
Walked	210	15	200	14	190	12
Bicycle	0	0	15	1	10	1
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	20	1	45	3	35	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	0	0
Local Parks	33	7
Agricultural Land Reserve	24	5
Other land use	393	87
Total Parks and Protected Area	33	7
Total Land Area	450	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	33	7
Agricultural Land Reserve	24	5
Other land use	393	87
Total Parks and Protected Area	33	7
Total Land Area	450	100

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

Gibsons Town
2010 Community Energy and Emissions Inventory
Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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

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,