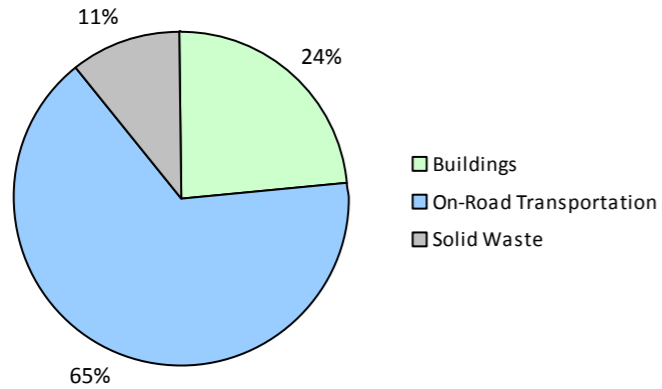


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

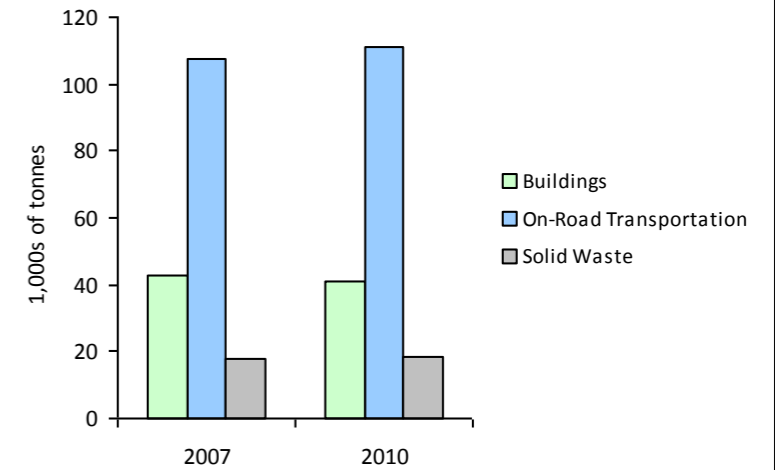
2010 GHG Emissions Sources (Total for this Community)



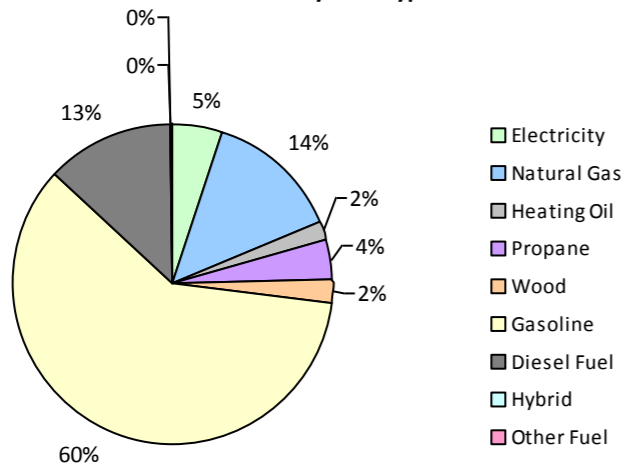
2010 GHG Emissions Sources (Total for BC)



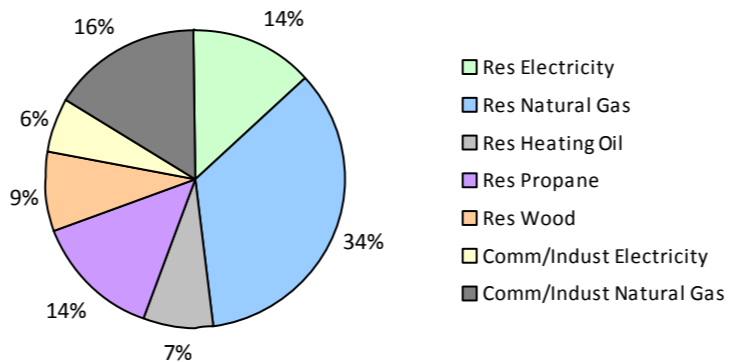
GHG Emissions Comparisons for this Community



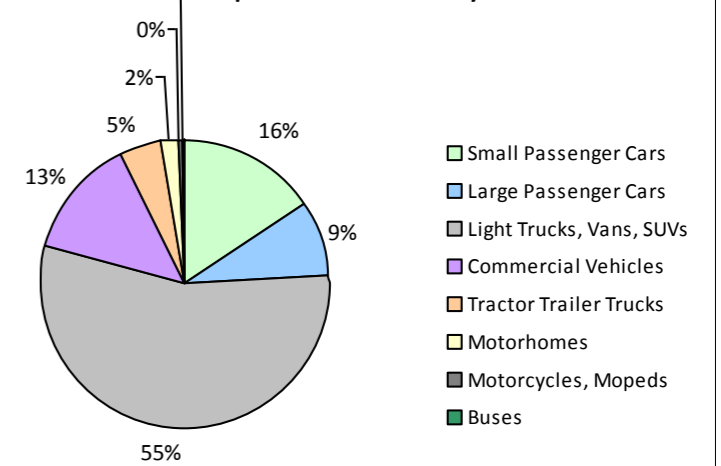
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Sunshine Coast Regional District 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			17,200	162	11	13	10,721 L	17,300	375	23
	Gasoline	5,209	7,297,809 L	14,800	255,422	17,388	5,449	7,500,259 L	14,500	262,508	16,876
	Diesel Fuel	145	226,244 L	23,700	8,666	619	171	251,984 L	22,000	9,652	668
Large Passenger Cars	Hybrid	16	14,823 L	22,200	519	34	49	53,512 L	21,600	1,872	119
	Gasoline	2,790	4,491,422 L	14,200	157,200	10,696	2,694	4,157,565 L	13,600	145,514	9,363
	Diesel Fuel	43	58,827 L	14,100	2,254	159	66	74,811 L	11,900	2,866	198
	Other Fuel			10,700	106	7					
Light Trucks, Vans, SUVs	Hybrid	11	22,681 L	24,700	794	54	31	63,616 L	24,400	2,226	143
	Gasoline	8,604	23,185,412 L	18,800	811,489	55,536	9,593	25,654,332 L	18,700	897,901	58,217
	Diesel Fuel	386	915,561 L	13,600	35,066	2,494	312	841,722 L	16,400	32,238	2,227
	Other Fuel	49	101,871 L	12,500	2,577	157	42	82,450 L	12,500	2,086	126
Commercial Vehicles	Gasoline	624	2,002,118 L	19,100	70,074	4,703	714	2,245,203 L	18,700	78,582	5,021
	Diesel Fuel	697	2,730,255 L	21,600	104,569	7,348	866	3,776,541 L	24,200	144,642	9,861
	Other Fuel	35	90,561 L	14,000	2,291	138	25	50,861 L	10,900	1,287	78
Tractor Trailer Trucks	Diesel Fuel	200	2,002,654 L	23,900	76,702	5,389	207	2,038,311 L	23,300	78,068	5,322
Motorhomes	Gasoline	177	495,904 L	20,100	17,357	1,158	196	548,098 L	20,000	19,183	1,220
	Diesel Fuel	109	377,066 L	18,300	14,442	1,013	96	341,139 L	18,500	13,065	891
	Other Fuel			18,700	365	22			19,800	310	18
Motorcycles, Mopeds	Gasoline	360	78,918 L	4,800	2,762	184	449	115,834 L	5,700	4,054	257
Buses	Gasoline	14	42,940 L	20,600	1,503	101	14	39,267 L	17,700	1,375	88
	Diesel Fuel	16	74,472 L	20,800	2,853	201	28	127,243 L	27,300	4,872	332
	Other Fuel			13,300	668	41			14,800	251	16
Totals		19,485	44,209,538 L	16,892	1,567,841	107,453	21,015	44,209,538 L	16,937	1,702,927	111,064

Sunshine Coast Regional District 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	178,970 GJ	178,970	3,626	N/A	173,250 GJ	173,250	3,510
	Heating Oil	N/A	46,017 GJ	46,017	3,244	N/A	44,546 GJ	44,546	3,047
	Propane	N/A	97,068 GJ	97,068	5,922	N/A	93,965 GJ	93,965	5,733
	Natural Gas	4,919	290,542 GJ	290,542	14,574	5,386	278,147 GJ	278,147	13,953
	Electricity	15,806	228,518,867 kWh	822,667	5,713	16,386	222,858,624 kWh	802,290	5,572
Commercial/Small-Medium Industrial	Natural Gas	489	143,415 GJ	143,415	7,195	379	132,800 GJ	132,800	6,661
	Electricity	1,989	97,778,571 kWh	352,003	2,445	2,066	95,910,270 kWh	345,277	2,398
Totals		23,203		1,930,682	42,719	24,217		1,870,275	40,874

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	14,088 t	N/A	17,931	0	12,994 t	N/A	18,309
Totals		0			17,931	0			18,309

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	2		0	0	2		0	0
Totals		3			0	2			0

Agriculture		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Enteric Fermentation	Methane	444	13 t	0	273				
Totals		444			273	0			

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Land-use Change - Deforestation		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Agriculture	Deforestation	1	0 ha	0	1,234				
Settlement	Deforestation	43	0 ha	0	38,106				
Totals		44			39,340	0			

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 28,590)			2010 (Population: 29,984)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	37,504 L	1,475	99	127,849 L	4,473	285
Gasoline	37,594,523 L	1,315,807	89,766	40,260,558 L	1,409,117	91,042
Diesel Fuel	6,385,079 L	244,552	17,223	7,451,751 L	285,403	19,499
Other Fuel	192,432 L	6,007	365	133,311 L	3,934	238
Wood	178,970 GJ	178,970	3,626	173,250 GJ	173,250	3,510
Heating Oil	46,017 GJ	46,017	3,244	44,546 GJ	44,546	3,047
Propane	97,068 GJ	97,068	5,922	93,965 GJ	93,965	5,733
Natural Gas	433,957 GJ	433,957	21,769	410,947 GJ	410,947	20,614
Electricity	326,297,438 kWh	1,174,670	8,158	318,768,894 kWh	1,147,567	7,970
Solid Waste	14,088 t	0	17,931	12,994 t	0	18,309
Grand Totals		3,498,523	168,103		3,573,202	170,247

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	8,425	45	9,075	82	9,805	81
Semi-Detached House	205	1	195	2	300	2
Row House	360	2	410	4	445	4
Apartment, Duplex	400	2	295	3	345	3
Apartment, 5 storeys or higher	0	0	5	0	15	0
Apartment, under 5 storeys	545	3	565	5	710	6
Other Single Attached House	10	0	20	0	50	0
Movable Dwelling	445	2	520	5	510	4

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	7,120	74	7,335	75	8,680	76
Car, Truck, Van as Passenger	1,000	10	865	9	1,025	9
Public Transit	455	5	405	4	640	6
Walked	710	7	795	8	780	7
Bicycle	80	1	90	1	80	1
Motorcycle	25	0	30	0	0	0
Taxicab	10	0	10	0	0	0
Other Method	255	3	190	2	245	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	13,456	4
Local Parks	1,364	0
Agricultural Land Reserve	4,109	1
Other land use	362,733	95
Total Parks and Protected Area	14,820	4
Total Land Area	381,662	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	13,456	4
Local Parks	1,364	0
Agricultural Land Reserve	4,109	1
Other land use	362,733	95
Total Parks and Protected Area	14,820	4
Total Land Area	381,662	100

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

Sunshine Coast 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,