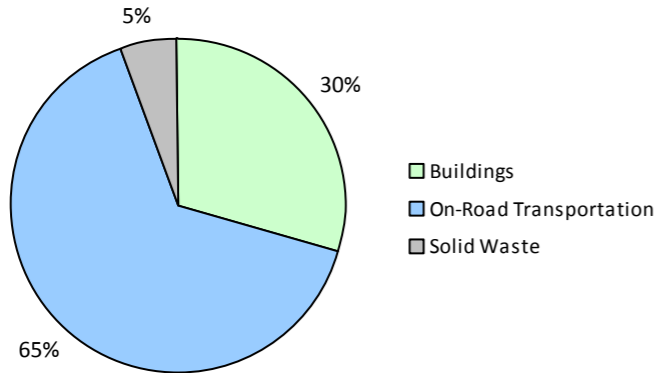


## Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

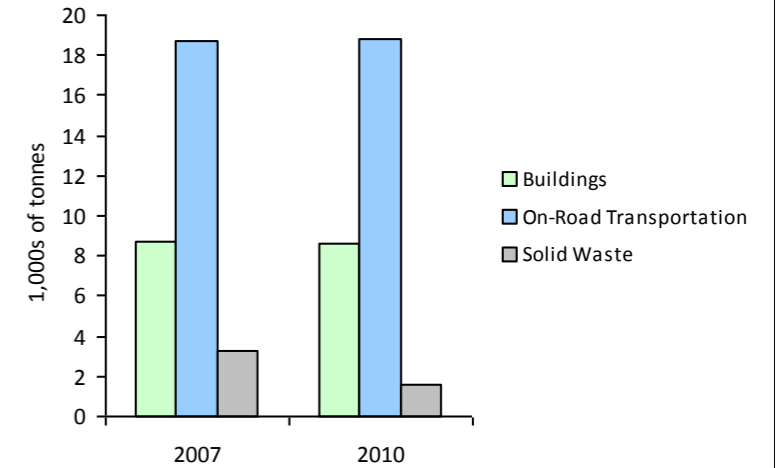
2010 GHG Emissions Sources (Total for this Community)



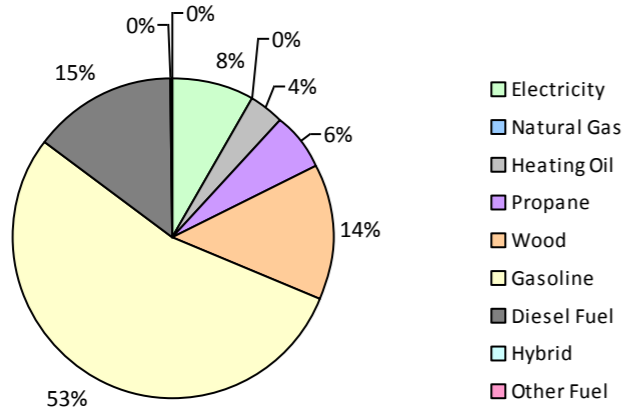
2010 GHG Emissions Sources (Total for BC)



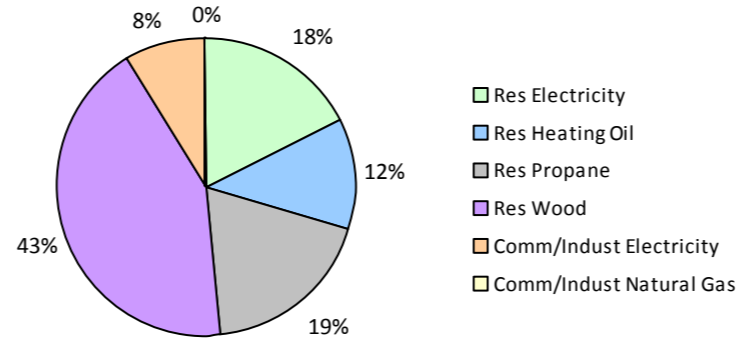
GHG Emissions Comparisons for this Community



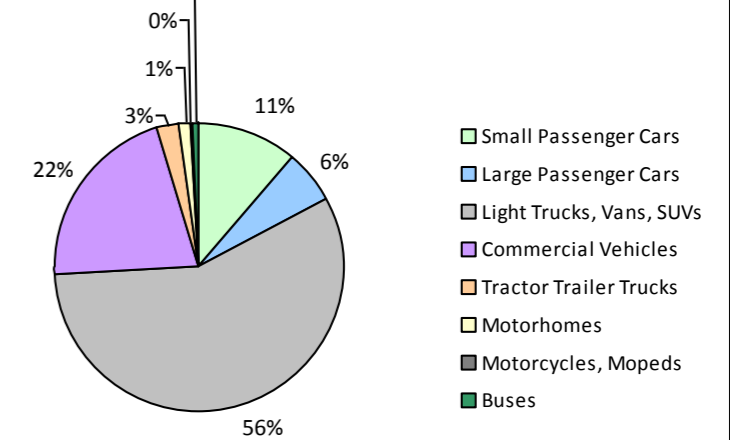
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



## Squamish-Lillooet 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	Gasoline	596	876,321 L	17,100	30,671	2,094	580	878,764 L	17,400	30,757	1,979
	Diesel Fuel	36	60,171 L	28,000	2,304	166	31	53,752 L	26,200	2,058	144
Large Passenger Cars	Hybrid			27,400	86	7			26,300	182	12
	Gasoline	330	594,609 L	17,200	20,811	1,414	297	508,346 L	16,700	17,792	1,144
	Diesel Fuel			13,800	227	16			11,500	261	19
Light Trucks, Vans, SUVs	Hybrid			27,400	204	13			27,100	247	16
	Gasoline	1,456	4,016,062 L	21,100	140,562	9,627	1,567	4,457,669 L	21,500	156,018	10,119
	Diesel Fuel	87	203,563 L	14,900	7,797	554	70	168,378 L	19,200	6,450	445
	Other Fuel	11	24,254 L	13,300	614	36			11,500	277	16
Commercial Vehicles	Gasoline	160	482,870 L	20,900	16,900	1,135	185	598,592 L	21,400	20,951	1,339
	Diesel Fuel	230	865,607 L	23,600	33,154	2,330	244	1,054,740 L	26,400	40,396	2,755
	Other Fuel			12,900	250	16					
Tractor Trailer Trucks	Diesel Fuel	30	337,246 L	36,700	12,917	907	25	187,159 L	29,300	7,168	488
Motorhomes	Gasoline	14	38,493 L	20,300	1,348	91	16	44,685 L	20,300	1,564	100
	Diesel Fuel			18,500	832	58	11	40,500 L	18,700	1,550	107
Motorcycles, Mopeds	Gasoline	43	7,156 L	5,000	250	17	53	12,660 L	6,000	443	27
Buses	Gasoline			20,600	546	37			19,900	554	35
	Diesel Fuel	18	70,730 L	48,900	2,711	191			135,000	1,064	72
<b>Totals</b>		<b>3,011</b>	<b>7,577,082 L</b>	<b>20,024</b>	<b>272,184</b>	<b>18,709</b>	<b>3,079</b>	<b>7,577,082 L</b>	<b>20,422</b>	<b>287,732</b>	<b>18,817</b>

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	192,091 GJ	192,091	3,892	N/A	184,894 GJ	184,894	3,746
	Heating Oil	N/A	15,639 GJ	15,639	1,102	N/A	15,053 GJ	15,053	1,029
	Propane	N/A	27,560 GJ	27,560	1,681	N/A	26,528 GJ	26,528	1,618
	Electricity	3,800	61,308,058 kWh	220,709	1,533	3,886	61,413,709 kWh	221,089	1,535
Commercial/Small-Medium Industrial	Natural Gas					1	0	0	0
	Electricity	724	22,031,257 kWh	79,312	551	771	29,411,160 kWh	105,880	735
<b>Totals</b>		<b>4,524</b>		<b>535,311</b>	<b>8,759</b>	<b>4,658</b>		<b>553,444</b>	<b>8,663</b>

## Squamish-Lillooet Regional District Unincorporated Areas 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	3,888 t	N/A	3,299	0	1,690 t	N/A	1,593
<b>Totals</b>	<b>0</b>			<b>3,299</b>	<b>0</b>			<b>1,593</b>

### Memo Items

Buildings	2007				2010			
	Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial      Electricity	2	0 kWh	0	0				
<b>Totals</b>	<b>2</b>			<b>0</b>	<b>0</b>			

### Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 6,719)			2010 (Population: 7,122)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	290	20	0 L	429	28
Gasoline	6,015,511 L	211,088	14,415	6,500,716 L	228,079	14,743
Diesel Fuel	1,537,317 L	59,942	4,222	1,504,529 L	58,947	4,030
Other Fuel	24,254 L	864	52	0 L	277	16
Wood	192,091 GJ	192,091	3,892	184,894 GJ	184,894	3,746
Heating Oil	15,639 GJ	15,639	1,102	15,053 GJ	15,053	1,029
Propane	27,560 GJ	27,560	1,681	26,528 GJ	26,528	1,618
Natural Gas	0 GJ	0		0 GJ	0	0
Electricity	83,339,315 kWh	300,021	2,084	90,824,869 kWh	326,969	2,270
Solid Waste	3,888 t	0	3,299	1,690 t	0	1,593
<b>Grand Totals</b>		<b>807,495</b>	<b>30,767</b>		<b>841,176</b>	<b>29,073</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	1,590	20	1,675	83	2,000	78
Semi-Detached House	10	0	5	0	60	2
Row House	40	1	80	4	115	5
Apartment, Duplex	25	0	5	0	85	3
Apartment, 5 storeys or higher	0	0	0	0	10	0
Apartment, under 5 storeys	10	0	25	1	40	2
Other Single Attached House	5	0	10	0	10	0
Movable Dwelling	300	4	225	11	235	9

**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	1,670	78	1,555	74	1,915	72
Car, Truck, Van as Passenger	225	11	255	12	340	13
Public Transit	5	0	55	3	70	3
Walked	155	7	165	8	205	8
Bicycle	35	2	30	1	65	2
Motorcycle	10	0	0	0	10	0
Taxicab	0	0	10	0	0	0
Other Method	40	2	45	2	65	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	279,235	17
Local Parks	1	0
Agricultural Land Reserve	23,983	1
Other land use	1,303,067	81
Total Parks and Protected Area	279,235	17
Total Land Area	1,606,285	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	279,235	17
Local Parks	1	0
Agricultural Land Reserve	23,983	1
Other land use	1,303,067	81
Total Parks and Protected Area	279,235	17
Total Land Area	1,606,285	100

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

**Squamish-Lillooet 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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### 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,