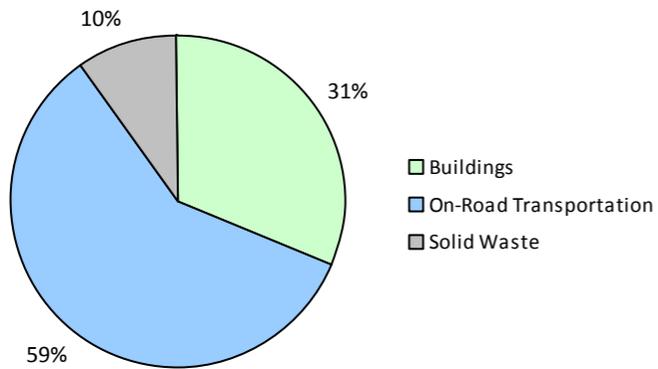
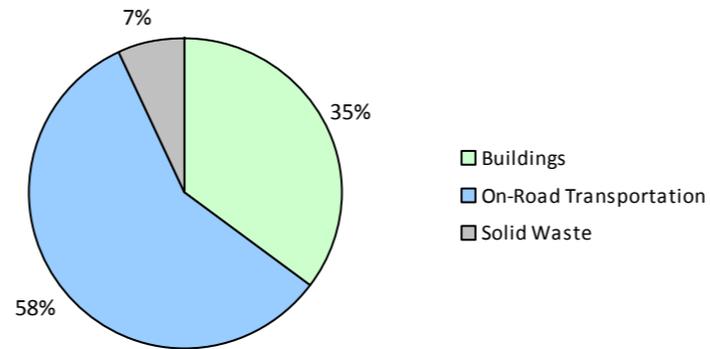


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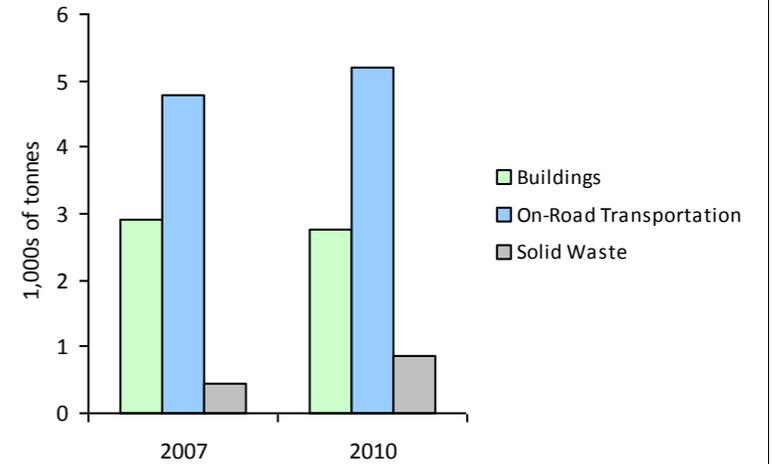
**2010 GHG Emissions Sources (Total for this Community)**



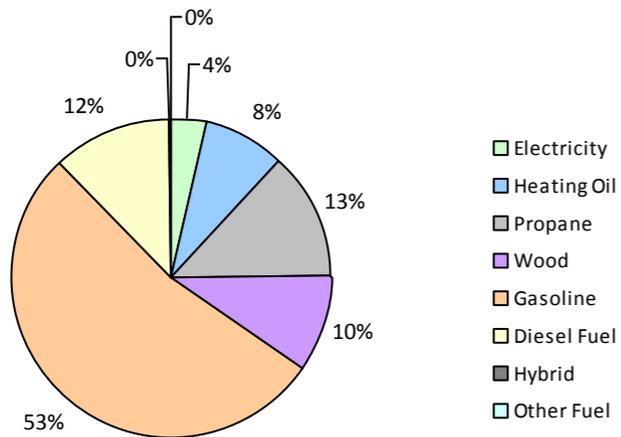
**2010 GHG Emissions Sources (Total for BC)**



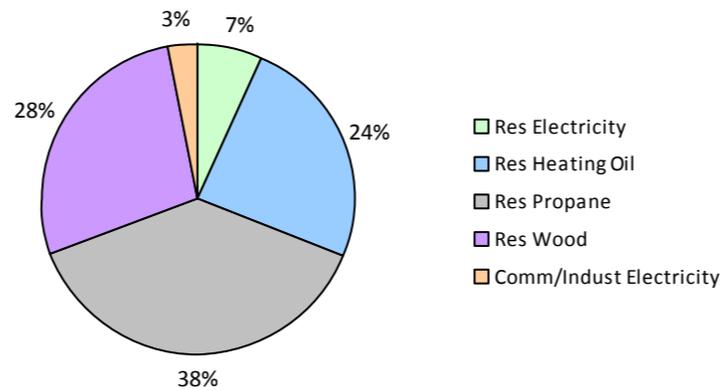
**GHG Emissions Comparisons for this Community**



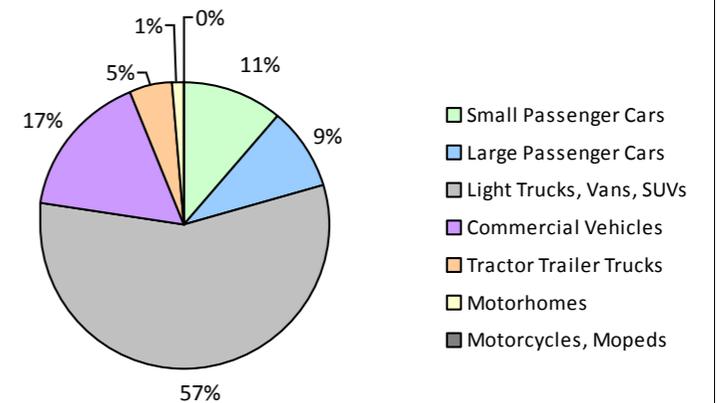
**2010 Total Emissions by Fuel Type**



**2010 Building Emissions by Subsector**



**2010 On-Road Transportation Emissions by Vehicle Class**



## Radium Hot Springs Village 2010 Community Energy and Emissions Inventory

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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	Gasoline	149	230,504 L	16,200	8,068	549	151	243,361 L	16,900	8,519	545
	Diesel Fuel	10	18,801 L	27,100	720	52	10	19,154 L	27,500	733	51
Large Passenger Cars	Hybrid							24,800	113	8	
	Gasoline	116	211,599 L	16,100	7,405	501	110	209,837 L	16,600	7,345	471
	Diesel Fuel			27,300	184	14		18,100	127	8	
Light Trucks, Vans, SUVs	Gasoline	410	1,096,527 L	18,000	38,378	2,622	446	1,255,790 L	19,100	43,953	2,845
	Diesel Fuel	19	37,212 L	10,900	1,426	101	14	35,820 L	15,000	1,371	94
	Other Fuel			10,900	142	8					
Commercial Vehicles	Gasoline	31	83,802 L	15,900	2,933	197	42	149,973 L	21,200	5,250	335
	Diesel Fuel	48	172,745 L	19,800	6,617	465	50	200,498 L	22,400	7,680	522
	Other Fuel			18,000	86	5		18,200	87	5	
Tractor Trailer Trucks	Diesel Fuel			37,500	3,101	218		32,700	3,605	246	
Motorhomes	Gasoline			18,900	479	32		18,000	565	36	
	Diesel Fuel			13,700	196	13		16,500	463	32	
Motorcycles, Mopeds	Gasoline	12	2,525 L	4,500	88	7	11	3,291 L	6,500	115	7
<b>Totals</b>		<b>795</b>	<b>1,853,715 L</b>	<b>17,153</b>	<b>69,823</b>	<b>4,784</b>	<b>834</b>	<b>1,853,715 L</b>	<b>18,541</b>	<b>79,926</b>	<b>5,205</b>

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	39,425 GJ	39,425	799	N/A	37,948 GJ	37,948	769
	Heating Oil	N/A	10,141 GJ	10,141	715	N/A	9,761 GJ	9,761	668
	Propane	N/A	17,840 GJ	17,840	1,088	N/A	17,172 GJ	17,172	1,048
	Electricity	559	8,035,858 kWh	28,929	201	565	7,809,479 kWh	28,114	195
Commercial/Small-Medium Industrial	Electricity	75	3,742,571 kWh	13,473	94	67	3,456,035 kWh	12,442	86
<b>Totals</b>		<b>634</b>		<b>109,808</b>	<b>2,897</b>	<b>632</b>		<b>105,437</b>	<b>2,766</b>

## Radium Hot Springs Village 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	869 t	N/A	457	0	998 t	N/A	849
<b>Totals</b>	<b>0</b>			<b>457</b>	<b>0</b>			<b>849</b>

### Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 892)			2010 (Population: 1,015)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	0		0 L	113	8
Gasoline	1,624,957 L	57,351	3,908	1,862,252 L	65,747	4,239
Diesel Fuel	228,758 L	12,244	863	255,472 L	13,979	953
Other Fuel	0 L	228	13	0 L	87	5
Wood	39,425 GJ	39,425	799	37,948 GJ	37,948	769
Heating Oil	10,141 GJ	10,141	715	9,761 GJ	9,761	668
Propane	17,840 GJ	17,840	1,088	17,172 GJ	17,172	1,048
Electricity	11,778,429 kWh	42,402	295	11,265,514 kWh	40,556	281
Solid Waste	869 t	0	457	998 t	0	849
<b>Grand Totals</b>		<b>179,631</b>	<b>8,138</b>		<b>185,363</b>	<b>8,820</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	140	41	125	54	140	50
Semi-Detached House	0	0	5	2	5	2
Row House	0	0	0	0	40	14
Apartment, Duplex	0	0	15	7	5	2
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	45	13	5	2	50	18
Other Single Attached House	0	0	50	22	15	5
Movable Dwelling	15	4	30	13	25	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	130	57	195	71	320	72
Car, Truck, Van as Passenger	20	9	20	7	50	11
Public Transit	0	0	0	0	10	2
Walked	70	30	40	15	65	15
Bicycle	0	0	10	4	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	10	4	10	4	0	0

#### 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	3	1
Agricultural Land Reserve	160	25
Other land use	484	75
Total Parks and Protected Area	3	1
Total Land Area	648	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	3	1
Agricultural Land Reserve	160	25
Other land use	484	75
Total Parks and Protected Area	3	1
Total Land Area	648	100

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

**Radium Hot Springs Village**  
**2010 Community Energy and Emissions Inventory**  
*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

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## Radium Hot Springs Village 2010 Community Energy and Emissions Inventory *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](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,