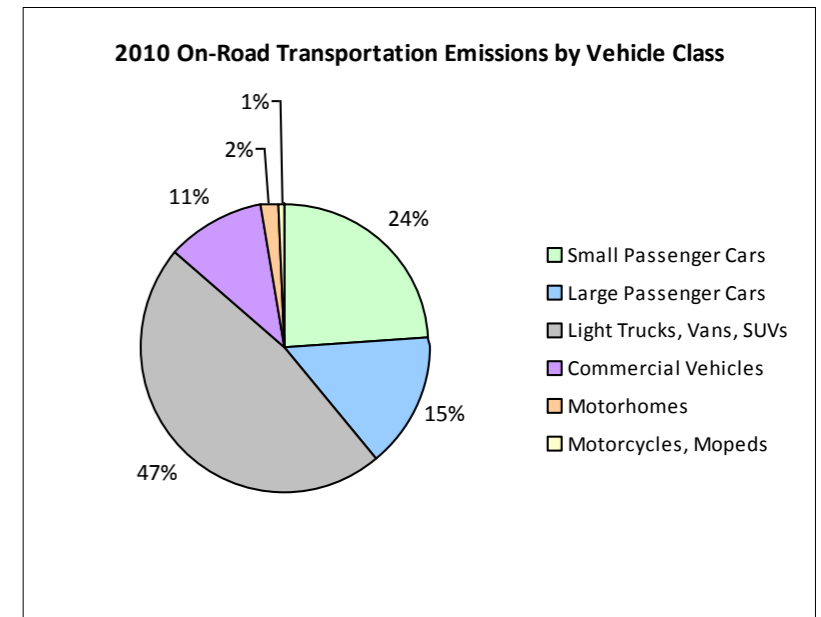
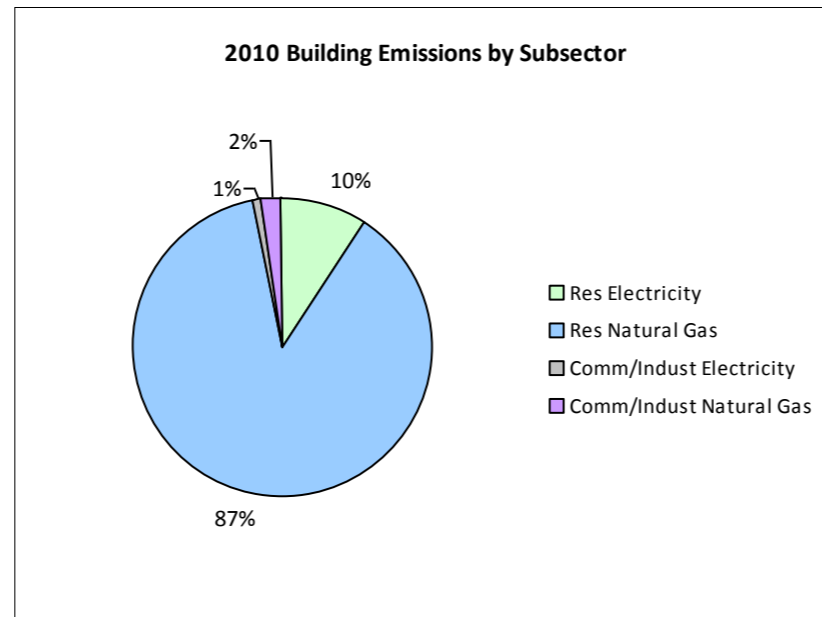
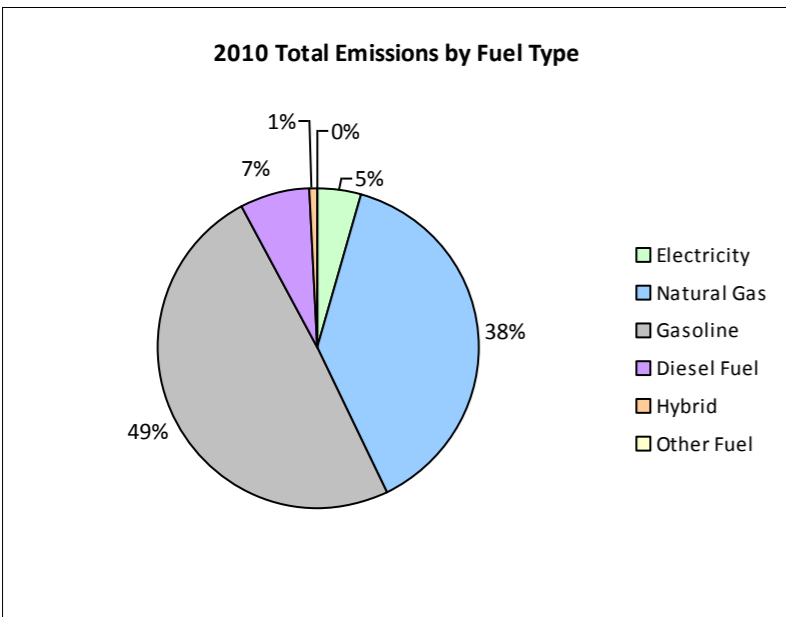
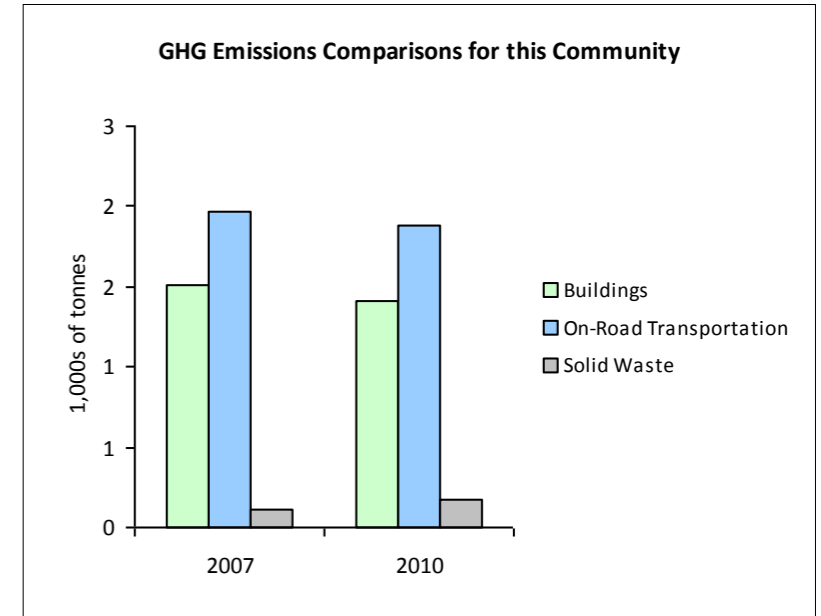
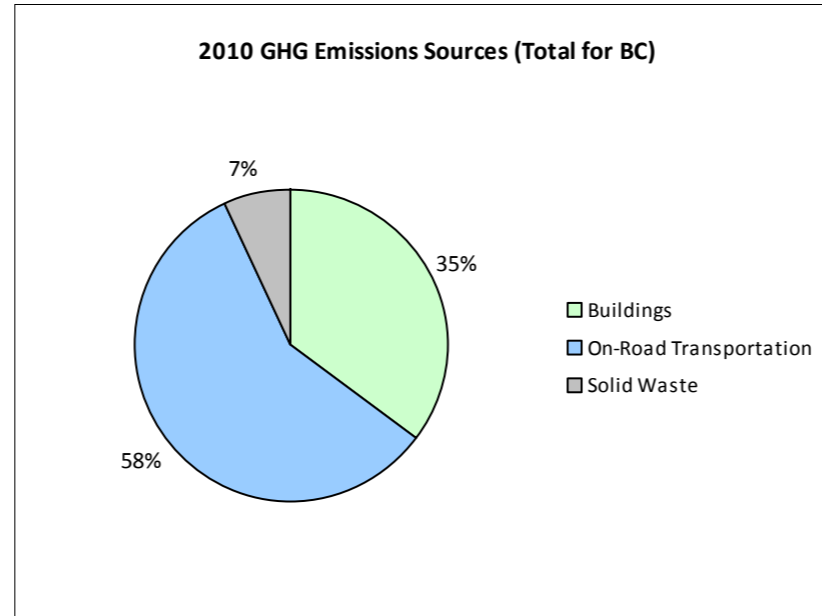
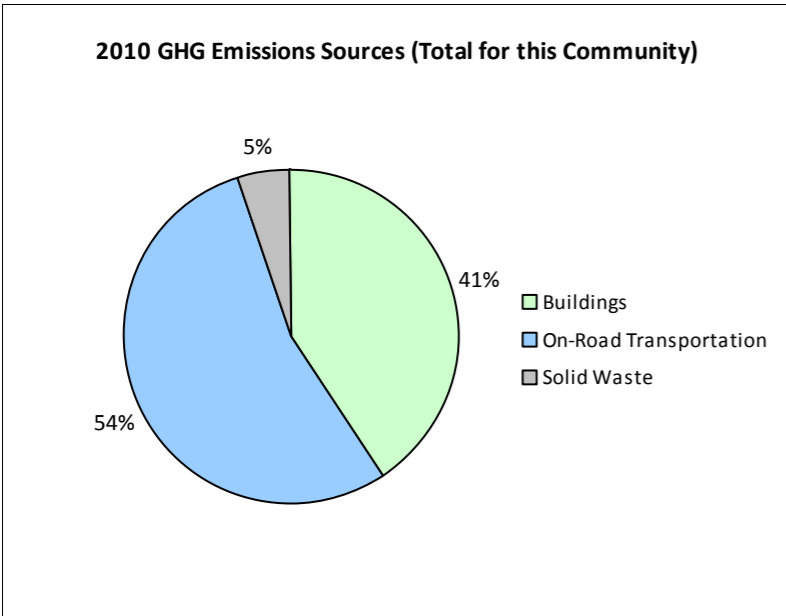


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets



Belcarra 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	Hybrid			11,200	19	0			14,300	25	1
	Gasoline	173	226,726 L	13,800	7,935	539	147	193,297 L	13,800	6,766	433
	Diesel Fuel	10	10,429 L	15,800	400	28			15,000	309	21
Large Passenger Cars	Hybrid								13,900	28	1
	Gasoline	87	131,416 L	13,300	4,599	309	89	118,858 L	11,800	4,160	266
	Diesel Fuel			11,600	79	4			13,400	136	10
Light Trucks, Vans, SUVs	Hybrid			19,600	164	11			16,600	389	25
	Gasoline	172	347,301 L	14,500	12,156	826	194	376,078 L	14,100	13,162	850
	Diesel Fuel			15,800	99	8			21,200	212	14
	Other Fuel								9,500	81	4
Commercial Vehicles	Gasoline	12	31,257 L	15,500	1,094	74			17,400	920	59
	Diesel Fuel	13	46,302 L	19,000	1,773	124	17	58,704 L	18,500	2,249	153
Motorhomes	Gasoline			17,900	259	17			16,700	83	6
	Diesel Fuel			16,700	223	15			14,500	424	30
Motorcycles, Mopeds	Gasoline	11	3,005 L	6,200	105	8	17	5,149 L	6,800	180	11
Totals		478	796,436 L	14,012	28,905	1,963	464	796,436 L	13,458	29,124	1,884

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Natural Gas	208	26,397 GJ	26,397	1,324	213	24,571 GJ	24,571	1,233
	Electricity	271	5,658,230 kWh	20,370	141	273	5,506,639 kWh	19,824	138
Commercial/Small-Medium Industrial	Natural Gas	5	645 GJ	645	32	5	537 GJ	537	27
	Electricity	25	544,574 kWh	1,960	14	24	614,089 kWh	2,211	15
Totals		509		49,372	1,511	515		47,143	1,413

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	496 t	N/A	110	0	374 t	N/A	177
Totals		0			110	0			177

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 678)			2010 (Population: 690)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	183	11	0 L	442	27
Gasoline	739,705 L	26,148	1,773	693,382 L	25,271	1,625
Diesel Fuel	56,731 L	2,574	179	58,704 L	3,330	228
Other Fuel	0 L	0		0 L	81	4
Natural Gas	27,042 GJ	27,042	1,356	25,108 GJ	25,108	1,260
Electricity	6,202,804 kWh	22,330	155	6,120,728 kWh	22,035	153
Solid Waste	496 t	0	110	374 t	0	177
Grand Totals		78,277	3,584		76,267	3,474

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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	205	48	230	90	225	85
Semi-Detached House	0	0	0	0	5	2
Row House	0	0	0	0	0	0
Apartment, Duplex	20	5	25	10	30	11
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	0	0	0	0	0	0
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	0	0	0	0	5	2

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	355	89	280	79	315	89
Car, Truck, Van as Passenger	15	4	10	3	0	0
Public Transit	0	0	45	13	40	11
Walked	20	5	10	3	0	0
Bicycle	0	0	0	0	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	10	3	10	3	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	38	7
Local Parks	281	53
Agricultural Land Reserve	0	0
Other land use	213	40
Total Parks and Protected Area	320	60
Total Land Area	533	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	38	7
Local Parks	281	53
Agricultural Land Reserve	0	0
Other land use	213	40
Total Parks and Protected Area	320	60
Total Land Area	533	100

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

Commute Distance

Shorter commute distances generally reduce GHG emissions by increasing the likelihood of people walking, cycling or using transit. Commute distance is also indicative of the 'completeness' of a community from an employment perspective.

	2006	
	Units	%
Less than 5 km	10	3
5 to 9.9 km	75	25
25 km or more	30	10
15 to 24.9 km	85	28
10 to 14.9 km	105	34

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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

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,