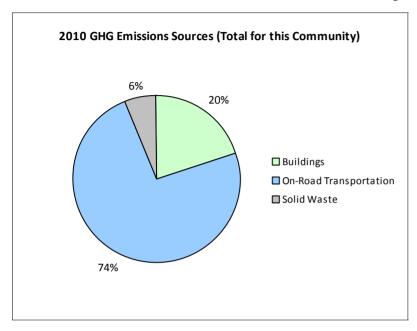
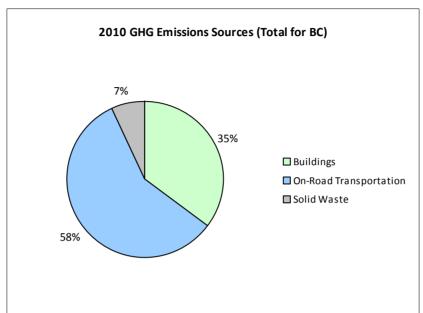
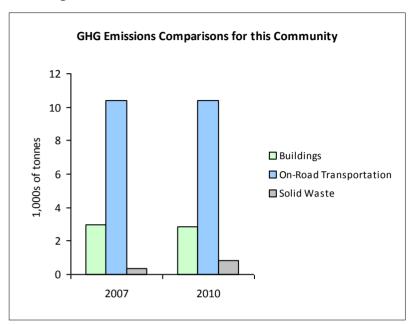


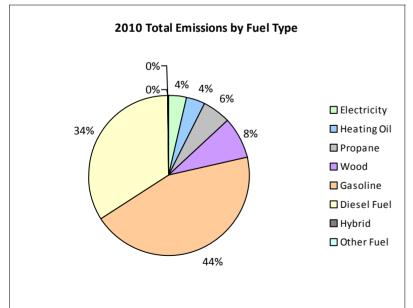
## **2010 Community Energy and Emissions Inventory**

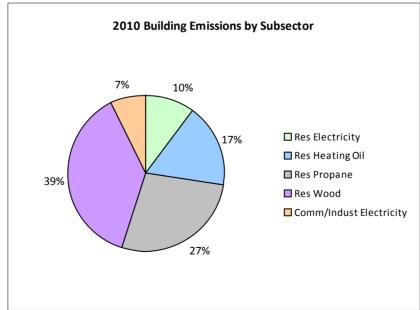
## Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

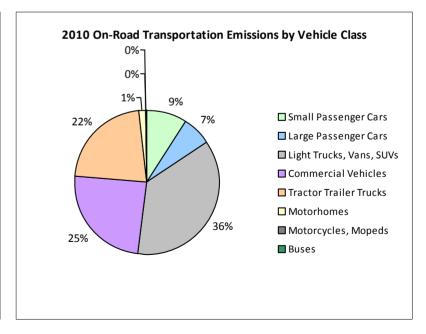














# 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

# **Core Items**

				2007					2010		
On-Road Transportation		Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Gasoline	263	421,744 L	17,000	14,761	992	263	408,717 L	16,500	14,305	911
	Diesel Fuel	13	20,968 L	23,300	803	57	13	20,006 L	22,800	766	52
	Other Fuel			6,900	19	0					
Large Passenger Cars	Hybrid								32,200	66	4
	Gasoline	176	340,711 L	17,200	11,925	803	167	307,139 L	16,400	10,750	686
	Diesel Fuel			10,500	121	8					
Light Trucks, Vans, SUVs	Gasoline	542	1,478,030 L	18,700	51,731	3,516	577	1,512,380 L	18,000	52,932	3,420
	Diesel Fuel	45	117,200 L	15,000	4,488	320	38	101,868 L	15,600	3,902	270
	Other Fuel			11,800	458	29			10,300	265	16
Commercial Vehicles	Gasoline	82	292,250 L	21,200	10,228	687	98	337,555 L	20,500	11,815	755
	Diesel Fuel	127	543,345 L	24,000	20,810	1,462	154	690,810 L	25,400	26,458	1,804
	Other Fuel			16,600	160	9			11,100	104	7
Tractor Trailer Trucks	Diesel Fuel	31	868,357 L	61,900	33,258	2,337	31	873,178 L	61,200	33,443	2,280
Motorhomes	Gasoline	11	30,119 L	18,200	1,055	70	11	31,417 L	19,300	1,099	70
	Diesel Fuel			19,700	971	68			21,000	1,064	72
Motorcycles, Mopeds	Gasoline	25	6,469 L	5,600	227	16	27	8,074 L	6,400	282	17
Buses	Gasoline			14,900	92	7			27,200	142	8
	Diesel Fuel			24,800	252	18			21,200	217	15
Totals		1,315	4,119,193 L	19,511	151,359	10,399	1,379	4,119,193 L	19,258	157,610	10,387

			200	7				2010	
Buildings		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	55,947 GJ	55,947	1,133	N/A	53,851 GJ	53,851	1,091
	Heating Oil	N/A	7,556 GJ	7,556	533	N/A	7,273 GJ	7,273	497
	Propane	N/A	13,316 GJ	13,316	812	N/A	12,817 GJ	12,817	782
	Electricity	790	11,116,485 kWh	40,019	278	841	11,671,918 kWh	42,019	292
Commercial/Small-Medium Industrial	Electricity	146	9,587,028 kWh	34,513	240	149	8,427,179 kWh	30,338	211
Totals		936		151,351	2,996	990		146,298	2,873

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## **2010 Community Energy and Emissions Inventory**

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

				2007				2010	
Solid Waste		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	1,845 t	N/A	366	0	1,421 t	N/A	847
Totals		0			366	0			847

# **Totals for Transportation, Buildings and Solid Waste**

	2007 (Po	pulation: 1,723)		2010 (Po	opulation: 1,712)	2)
Fuel Type	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	0		0 L	66	4
Gasoline	2,569,323 L	90,019	6,091	2,605,282 L	91,325	5,867
Diesel Fuel	1,549,870 L	60,703	4,270	1,685,862 L	65,850	4,493
Other Fuel	0 L	637	38	0 L	369	23
Wood	55,947 GJ	55,947	1,133	53,851 GJ	53,851	1,091
Heating Oil	7,556 GJ	7,556	533	7,273 GJ	7,273	497
Propane	13,316 GJ	13,316	812	12,817 GJ	12,817	782
Electricity	20,703,513 kWh	74,532	518	20,099,097 kWh	72,357	503
Solid Waste	1,845 t	0	366	1,421 t	0	847
Grand Totals		302,710	13,761		303,908	14,107

## 2010 Community Energy and Emissions Inventory

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

### Commute to Work - Employed labour force - by mode of commute

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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	0	0	0	0	0	0
Car, Truck, Van as Passenger	0	0	0	0	0	0
Public Transit	0	0	0	0	0	0
Walked	0	0	0	0	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	0	0	0	0	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	0	0		
Agricultural Land Reserve	243	19		
Other land use	1,013	81		
Total Parks and Protected Area	0	0		
Total Land Area	1,256	100		

<sup>\*</sup> Total is net of Indian Reserves

### **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.

	200	9
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	0	0
Local Parks	0	0
Agricultural Land Reserve	243	19
Other land use	1,013	81
Total Parks and Protected Area	0	0
Total Land Area	1,256	100

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

<sup>\*\*</sup> Quantity of parkland may be underestimated

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# 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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## 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

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) <a href="http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm">http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm</a>, and on the <a href="http://toolkit.bc.ca">http://toolkit.bc.ca</a> 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.



## 2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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## 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 (<a href="http://www.toolkit.bc.ca">http://www.toolkit.bc.ca</a>), 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: <a href="http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html">http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html</a> For guidance on target setting and community actions, go to <a href="http://www.toolkit.bc.ca">http://www.toolkit.bc.ca</a> and <a href="http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm">http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm</a>

#### We Need Your Feedback

To continue to guide us on CEEI, please take the time to contact us directly at <a href="mailto:CEEIRPT@gov.bc.ca">CEEIRPT@gov.bc.ca</a>

#### 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,