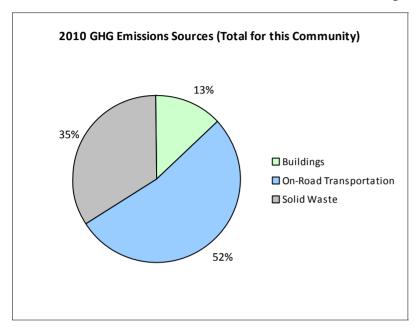
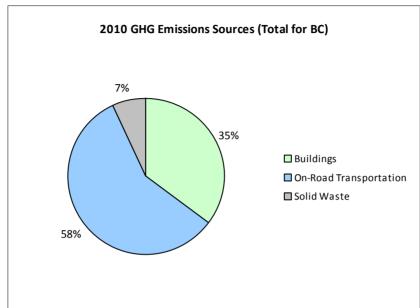
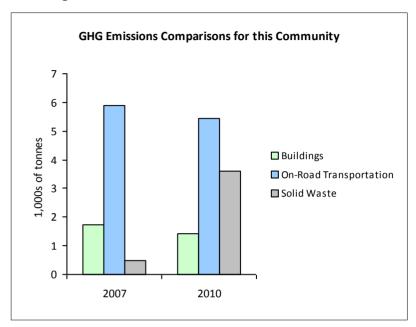


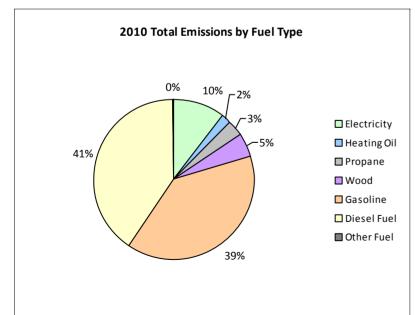
### **2010 Community Energy and Emissions Inventory**

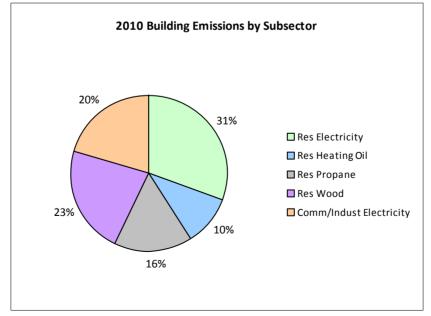
### Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

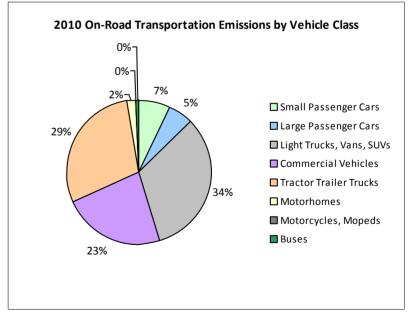














# 2010 Community Energy and Emissions Inventory

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	162	180,668 L	11,500	6,324	445	147	165,258 L	11,700	5,785	383
	Diesel Fuel			16,500	173	13			13,600	214	15
Large Passenger Cars	Gasoline	109	159,031 L	12,300	5,567	388	89	126,910 L	12,100	4,443	293
	Diesel Fuel			30,800	103	7			24,800	81	5
Light Trucks, Vans, SUVs	Gasoline	360	703,075 L	13,000	24,607	1,731	364	699,905 L	12,800	24,497	1,623
	Diesel Fuel	27	62,155 L	12,600	2,380	169	22	52,228 L	13,100	2,000	138
	Other Fuel			11,800	203	13			10,000	129	8
Commercial Vehicles	Gasoline	59	130,391 L	12,900	4,565	306	56	123,892 L	13,000	4,337	278
	Diesel Fuel	82	288,420 L	18,300	11,047	775	94	366,735 L	20,700	14,046	958
	Other Fuel			14,000	133	8			19,200	85	5
Tractor Trailer Trucks	Diesel Fuel	20	696,986 L	75,500	26,694	1,875	16	607,975 L	80,500	23,285	1,587
Motorhomes	Gasoline			20,200	802	53			19,400	786	51
	Diesel Fuel			19,800	1,001	71			20,000	868	59
Motorcycles, Mopeds	Gasoline			2,900	45	3	13	2,766 L	4,500	96	6
Buses	Gasoline								16,800	189	13
	Diesel Fuel			34,700	405	28			19,200	201	13
Totals		819	2,220,726 L	14,647	84,049	5,885	801	2,220,726 L	14,687	81,042	5,435

			20	007				2010	
Buildings		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	16,323 GJ	16,323	331	N/A	15,711 GJ	15,711	318
	Heating Oil	N/A	2,205 GJ	2,205	155	N/A	2,122 GJ	2,122	145
	Propane	N/A	3,885 GJ	3,885	237	N/A	3,740 GJ	3,740	228
	Electricity	1,790	25,263,689 kWh	90,949	632	1,240	17,121,578 kWh	61,638	428
Commercial/Small-Medium Industrial	Electricity	392	14,631,371 kWh	52,673	366	305	11,511,847 kWh	41,443	288
Totals		2,182		166,035	1,721	1,545		124,654	1,407



### 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	2,551 t	N/A	499	0	1,955 t	N/A	3,617
Totals		0			499	0			3,617

### Memo Items

			2007					2010	
Buildings		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Electricity	2		0	0				
Totals		2			0	0			

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

	2007 (Po	pulation: 2,383)		2010 (Population: 2,355)			
Fuel Type	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)	
Gasoline	1,173,165 L	41,910	2,926	1,118,731 L	40,133	2,647	
Diesel Fuel	1,047,561 L	41,803	2,938	1,026,938 L	40,695	2,775	
Other Fuel	0 L	336	21	0 L	214	13	
Wood	16,323 GJ	16,323	331	15,711 GJ	15,711	318	
Heating Oil	2,205 GJ	2,205	155	2,122 GJ	2,122	145	
Propane	3,885 GJ	3,885	237	3,740 GJ	3,740	228	
Electricity	39,895,060 kWh	143,622	998	28,633,425 kWh	103,081	716	
Solid Waste	2,551 t	0	499	1,955 t	0	3,617	
Grand Totals		250,084	8,105		205,696	10,459	

### 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.

	200	9
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	49	1
Local Parks	2	0
Agricultural Land Reserve	1,593	29
Other land use	3,826	70
Total Parks and Protected Area	50	1
Total Land Area	5,470	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.

	2009	)
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	49	1
Local Parks	2	0
Agricultural Land Reserve	1,593	29
Other land use	3,826	70
Total Parks and Protected Area	50	1
Total Land Area	5,470	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

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** 

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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) <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.

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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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## 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,