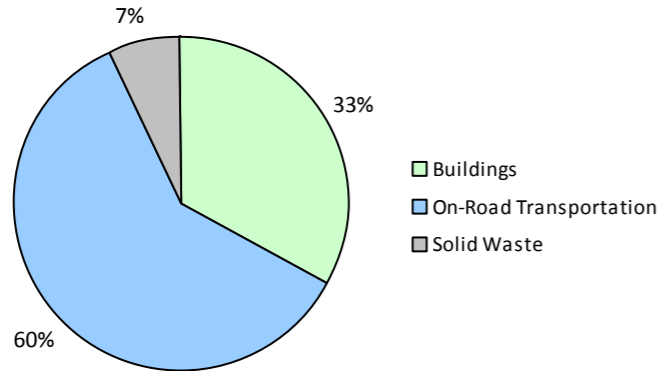


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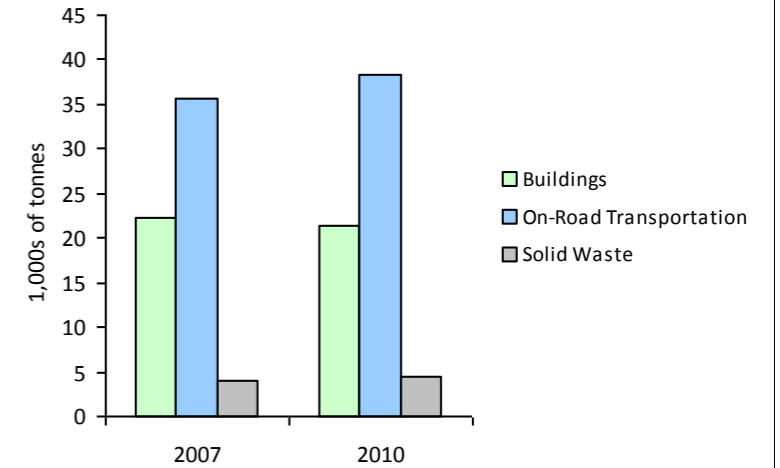
2010 GHG Emissions Sources (Total for this Community)



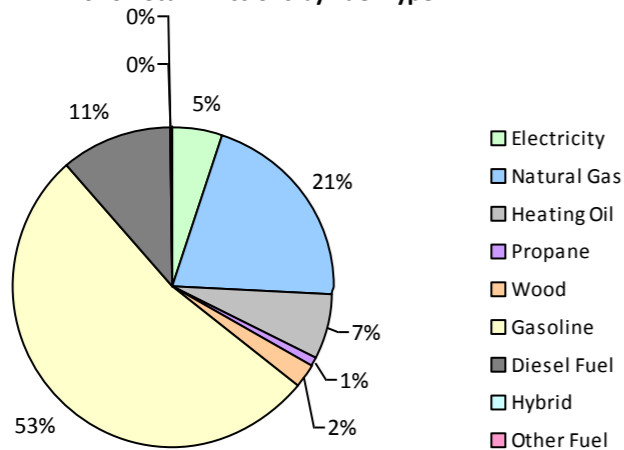
2010 GHG Emissions Sources (Total for BC)



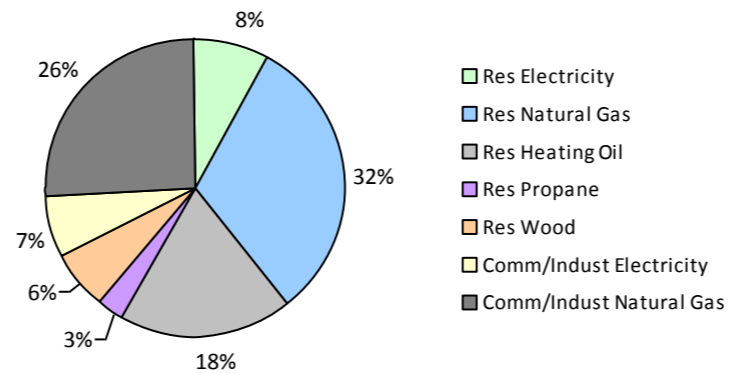
GHG Emissions Comparisons for this Community



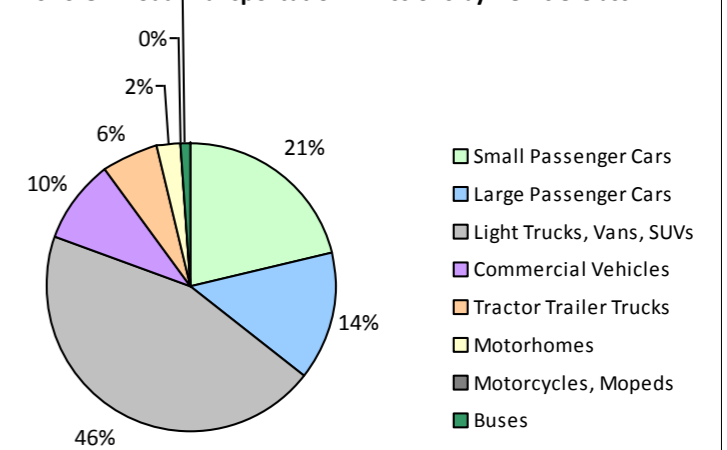
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



## Parksville City 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	Hybrid							24,000	267	17	
	Gasoline	2,355	3,252,360 L	14,700	113,833	7,733	2,473	3,504,875 L	15,100	122,671	7,870
	Diesel Fuel	63	116,315 L	27,100	4,456	318	74	128,126 L	25,400	4,907	340
Large Passenger Cars	Hybrid	11	10,802 L	18,700	378	26	31	33,421 L	20,300	1,170	75
	Gasoline	1,518	2,484,132 L	14,400	86,945	5,899	1,429	2,396,770 L	14,800	83,888	5,375
	Diesel Fuel	21	30,032 L	15,500	1,150	82	19	25,578 L	14,700	980	67
Light Trucks, Vans, SUVs	Hybrid			20,300	391	26			18,500	421	26
	Gasoline	2,736	6,342,587 L	16,500	221,990	15,174	3,023	7,281,580 L	17,200	254,855	16,515
	Diesel Fuel	115	259,612 L	13,200	9,943	708	89	238,454 L	16,600	9,132	631
	Other Fuel	13	27,506 L	12,500	696	42			12,000	369	22
Commercial Vehicles	Gasoline	150	427,592 L	16,900	14,966	1,005	189	575,730 L	18,200	20,150	1,287
	Diesel Fuel	215	764,450 L	19,200	29,278	2,057	232	907,004 L	21,200	34,739	2,369
	Other Fuel			12,600	526	32	10	19,118 L	10,400	483	29
Tractor Trailer Trucks	Diesel Fuel	35	385,711 L	26,300	14,773	1,038	53	941,560 L	40,800	36,062	2,459
	Other Fuel			11,200	59	4			10,300	51	4
Motorhomes	Gasoline	90	211,610 L	16,400	7,406	495	101	237,134 L	16,400	8,299	529
	Diesel Fuel	48	144,581 L	16,300	5,538	389	43	130,787 L	16,200	5,009	342
	Other Fuel			16,100	177	11			21,200	79	4
Motorcycles, Mopeds	Gasoline	121	28,392 L	5,300	993	66	138	38,555 L	6,200	1,349	86
Buses	Gasoline			18,000	580	38			17,100	195	13
	Diesel Fuel	30	156,317 L	20,000	5,987	421	26	123,975 L	18,500	4,749	324
	Other Fuel	10	26,803 L	12,500	679	42			14,600	641	38
<b>Totals</b>		<b>7,531</b>	<b>14,668,802 L</b>	<b>15,502</b>	<b>520,744</b>	<b>35,606</b>	<b>7,930</b>	<b>14,668,802 L</b>	<b>16,276</b>	<b>590,466</b>	<b>38,422</b>

## Parksville City 2010 Community Energy and Emissions Inventory

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

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	70,490 GJ	70,490	1,428	N/A	68,237 GJ	68,237	1,382
	Heating Oil	N/A	58,858 GJ	58,858	4,149	N/A	56,977 GJ	56,977	3,897
	Propane	N/A	10,154 GJ	10,154	619	N/A	9,829 GJ	9,829	600
	Natural Gas	2,912	142,347 GJ	142,347	7,140	3,088	132,657 GJ	132,657	6,654
	Electricity	6,274	73,278,233 kWh	263,801	1,832	6,543	71,797,714 kWh	258,472	1,795
Commercial/Small-Medium Industrial	Natural Gas	287	111,467 GJ	111,467	5,591	284	111,947 GJ	111,947	5,615
	Electricity	865	56,381,795 kWh	202,974	1,410	948	56,137,466 kWh	202,095	1,403
<b>Totals</b>		<b>10,338</b>		<b>860,091</b>	<b>22,169</b>	<b>10,863</b>		<b>840,214</b>	<b>21,346</b>

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	5,934 t	N/A	4,047	0	4,970 t	N/A	4,555
<b>Totals</b>		<b>0</b>			<b>4,047</b>	<b>0</b>			<b>4,555</b>

### Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 11,314)			2010 (Population: 11,831)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	10,802 L	769	52	33,421 L	1,858	118
Gasoline	12,746,673 L	446,713	30,410	14,034,644 L	491,407	31,675
Diesel Fuel	1,857,018 L	71,125	5,013	2,495,484 L	95,578	6,532
Other Fuel	54,309 L	2,137	131	19,118 L	1,623	97
Wood	70,490 GJ	70,490	1,428	68,237 GJ	68,237	1,382
Heating Oil	58,858 GJ	58,858	4,149	56,977 GJ	56,977	3,897
Propane	10,154 GJ	10,154	619	9,829 GJ	9,829	600
Natural Gas	253,814 GJ	253,814	12,731	244,604 GJ	244,604	12,269
Electricity	129,660,028 kWh	466,775	3,242	127,935,180 kWh	460,567	3,198
Solid Waste	5,934 t	0	4,047	4,970 t	0	4,555
<b>Grand Totals</b>		<b>1,380,835</b>	<b>61,822</b>		<b>1,430,680</b>	<b>64,323</b>

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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	2,860	40	3,200	67	3,275	63
Semi-Detached House	110	2	160	3	285	5
Row House	435	6	545	11	570	11
Apartment, Duplex	25	0	90	2	90	2
Apartment, 5 storeys or higher	0	0	5	0	0	0
Apartment, under 5 storeys	680	10	665	14	735	14
Other Single Attached House	0	0	10	0	5	0
Movable Dwelling	115	2	85	2	245	5

**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	2,530	79	2,675	81	2,780	80
Car, Truck, Van as Passenger	230	7	230	7	220	6
Public Transit	25	1	20	1	50	1
Walked	295	9	250	8	340	10
Bicycle	70	2	80	2	60	2
Motorcycle	10	0	0	0	0	0
Taxicab	0	0	10	0	0	0
Other Method	40	1	45	1	20	1

**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	134	9
Local Parks	77	5
Agricultural Land Reserve	101	7
Other land use	1,120	78
Total Parks and Protected Area	211	15
Total Land Area	1,432	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	134	9
Local Parks	77	5
Agricultural Land Reserve	101	7
Other land use	1,120	78
Total Parks and Protected Area	211	15
Total Land Area	1,432	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	1,455	51
5 to 9.9 km	240	8
25 km or more	680	24
15 to 24.9 km	165	6
10 to 14.9 km	330	12

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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,