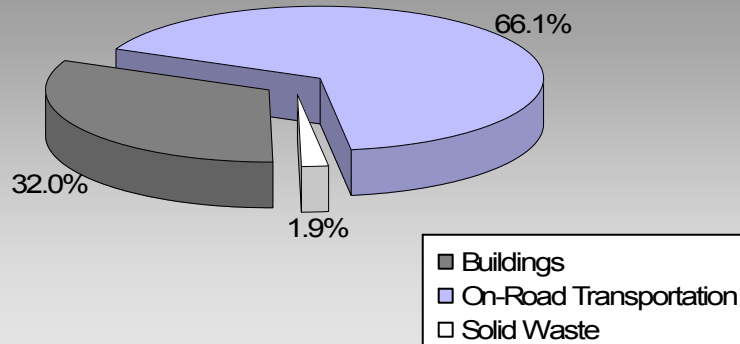


Updated 2007 Community Energy and Emissions Inventory

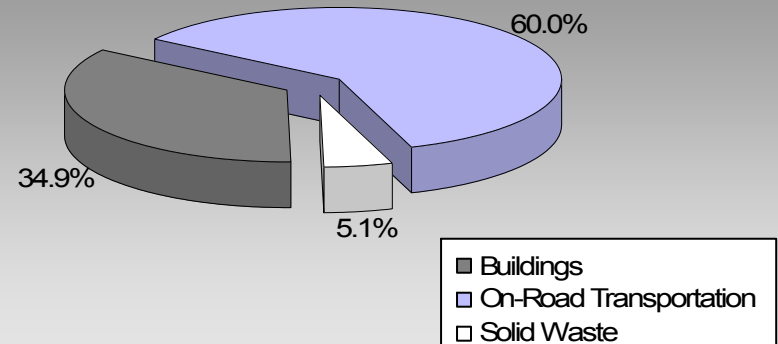
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

Where are the majority of our community's emissions coming from?

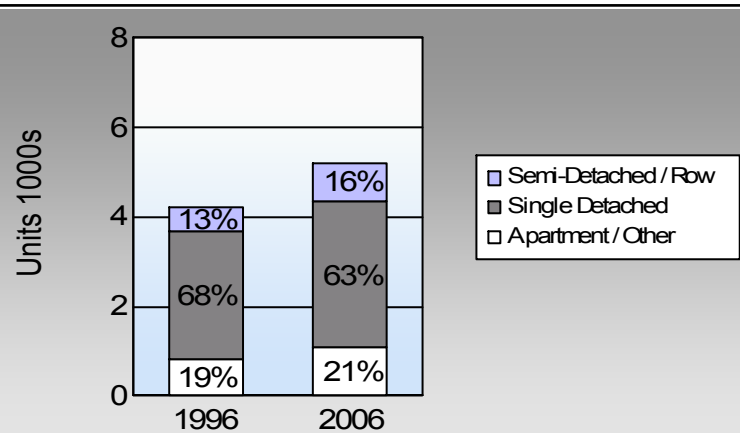
**Parksville City
2007 GHG Emissions Sources**



**Total for BC
Communities**



**Are we living more compactly?
Housing Type**



In BC, single family detached housing made up 49% of housing in 2006.

**Are we driving less?
Commute To Work**

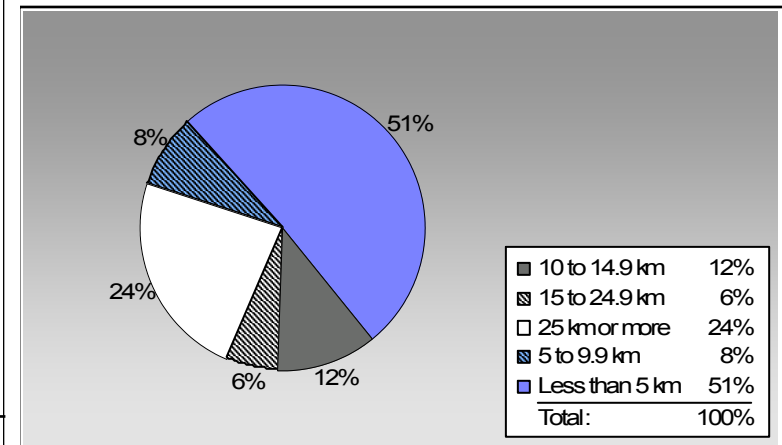
	1996	2006
	79.1%	80.1%
	7.2%	6.3%
	0.8%	1.4%
	9.2%	9.8%
	2.2%	1.7%

In BC, 10% of people took transit, 7% walked, and 2% cycled to work in 2006.

Residential Density

Parksville City: 11.0 people per net ha
BC municipal average: 7.4 people per net ha

**Are we living closer to where we work?
Commute Distance**



In BC, 41% of people lived within 5km of their work in 2006.

Sectors

On Road Transportation		<u>Vehicles</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Average-VKT(km)</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	2,637	3,380,577	Litres	12,952	118,320	8,072
	Diesel Fuel	77	75,528	Litres	13,701	2,893	206
	Other Fuel	< 10	1,754	Litres	10,911	67	3
Small Passenger Cars						121,280	8,281
Large Passenger Cars	Gasoline	1,733	3,241,765	Litres	15,372	113,462	7,703
	Diesel Fuel	29	57,748	Litres	14,854	2,212	158
	Other Fuel	< 10	8,298	Litres	12,115	318	13
Large Passenger Cars						115,992	7,874
Light Trucks, Vans, SUVs	Gasoline	2,939	8,487,016	Litres	19,400	297,046	20,332
	Diesel Fuel	222	530,970	Litres	18,677	20,336	1,451
	Other Fuel	20	45,975	Litres	12,748	1,761	70
Light Trucks, Vans, SUVs						319,143	21,853
Commercial Vehicles	Gasoline	19	85,424	Litres	14,514	2,990	200
	Diesel Fuel	45	196,733	Litres	20,512	7,535	529
	Other Fuel	< 10	16,520	Litres	11,356	633	25
Commercial Vehicles						11,158	754
Tractor Trailer Trucks	Diesel Fuel	55	1,325,917	Litres	64,909	50,783	3,568
Tractor Trailer Trucks						50,783	3,568
Motorhomes	Gasoline	111	115,248	Litres	2,946	4,034	269
	Diesel Fuel	10	10,824	Litres	4,522	415	29
	Other Fuel	< 10	2,077	Litres	2,189	80	3
Motorhomes						4,529	301
Motorcycles, Mopeds	Gasoline	123	47,869	Litres	5,430	1,675	112
Motorcycles, Mopeds						1,675	112
Bus	Gasoline	< 10	26,265	Litres	23,079	919	62
	Diesel Fuel	31	214,580	Litres	16,953	8,218	577
	Other Fuel	12	71,688	Litres	15,902	2,746	110
Bus						11,883	749

Parksville City

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	538,446	36,750
	Diesel:	92,392	6,518
	Other Fuel:	5,605	224
On Road Transportation Totals	All Fuels:	636,443	43,492

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)	
Residential	Electricity	6,274	73,278,233	Kilowatt Hours	263,801	1,808	
	Natural Gas	2,912	142,347	GigaJoules	142,347	7,260	
	Heating Oil		59,960	GigaJoules	59,960	4,227	
	Propane		10,344	GigaJoules	10,344	631	
	Wood		73,075	GigaJoules	73,075	27	
Residential					549,527	13,953	
Commercial/Small-Medium Industrial	Electricity	865	56,381,795	Kilowatt Hours	202,974	1,391	
	Natural Gas	287	111,467	GigaJoules	111,467	5,685	
Commercial/Small-Medium Industrial					314,441	7,076	
					Electricity:	466,775	3,199
					Natural Gas:	253,814	12,945
					Propane:	10,344	631
					Wood:	73,075	27
					Heating Oil:	59,960	4,227
Buildings Totals	Buildings:				863,968	21,029	

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	6,042	1,239

Parksville City

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	2,412,300	L	92,392	6,518
Electricity	129,660,028	kWh	466,775	3,199
Gasoline	15,384,164	L	538,446	36,750
Heating Oil	59,960	GJ	59,960	4,227
Natural Gas	253,814	GJ	253,814	12,945
Other Fuel	146,312	L	5,605	224
Propane	10,344	GJ	10,344	631
Solid Waste	6,042	T	0	1,239
Wood	73,075	GJ	73,075	27
Total of Transportation / Buildings / Solid Waste:			1,500,411 GJ	65,760 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
Large Industrial					-	-

Supporting Indicators

Below you will find supporting indicators for which data is provided. These are the first five supporting indicators for which data is provided as a part of the updated 2007 CEEI. Columns with all zeros indicate data unavailable in these CEEI reports. Thirteen additional supporting indicators are under consideration for future reports (see next page). Local government feedback is requested on all supporting indicators. Please take the time to complete the short CEEI Survey at <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html> or contact us directly at CEEIRPT@gov.bc.ca

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	
	People	%	People	%	People	%
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

Residential Density

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

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	
Population	11,783.0
Net Land Area (ha) *	1,074.2
Residential Density (people per net ha)	11.0

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		
	People	%
Less than 5 km	1,455	51
5 to 9.9 km	240	8
10 to 14.9 km	330	12
15 to 24.9 km	165	6
25 km or more	680	24

Parks and Protected Greenspace

* Total is net of Indian Reserves

** The quantity of parkland may be underestimated

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Area (ha)	%
National Parks	0.0	0.0
Provincial Parks / Protected Areas	134.4	9.4
Local Parks	77.0	5.4
Agricultural Land Reserve	100.6	7.0
Other land use	1,119.6	78.2
Total Land Area	1,431.6	100.0

Supporting Indicators Under Consideration

The following supporting indicators are under consideration for inclusion in future CEEI reports. The 2007 CEEI reports provide these 'placeholder' indicators to give indication of data that may be provided in the future by the Province on an ongoing basis to assist in monitoring actions to reduce GHG emissions and energy consumption. Please submit feedback to CEEIRPT@gov.bc.ca (see survey on CEEI website).

On-Road Transportation (and Land Use)

Proximity to Transit	Persons, dwelling units (du) and employment within 400m of a quality transit stop/line
Proximity to Services	Persons and dwelling units (du) within 400m of services (e.g. grocery store, school, other retail etc.)
Transit Ridership	Annual per capita transit ridership

Buildings

Residential; Public Building Energy Intensity	Average energy use per person per square metre of floor space
Floor Space	Average residential dwelling unit size

Solid Waste (and Water)

Waste Diversion	Tonnes of waste diverted
Avoided Waste Emissions	Tonnes of CO ₂ e of avoided future emissions due to reduced waste since 2007
Water Use	Per capita residential water use

Land-Use Change

Impervious Surface Cover	% change in impervious surface cover
Tree Canopy Cover	% change in tree canopy cover

Community and Renewable Energy Supply

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)

This is your local government's Updated 2007 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 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, and fulfill Milestone One requirements for those local government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program.

A first in North America!

CEEI is a first in North America and a first step for BC communities. The 2007 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 and medium from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items', and the first of a suite of 'supporting indicators'. 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.

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For More Information:

- The full list of all BC local government Updated 2007 CEEI Reports, CEEI Data Summary Report, Technical Methods and Guidance Document, and additional information on the Secondary 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, particularly now with the new Indicators. Please take the time to complete the short CEEI Survey at <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html> or 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, where you do note inaccuracies, please contact us.