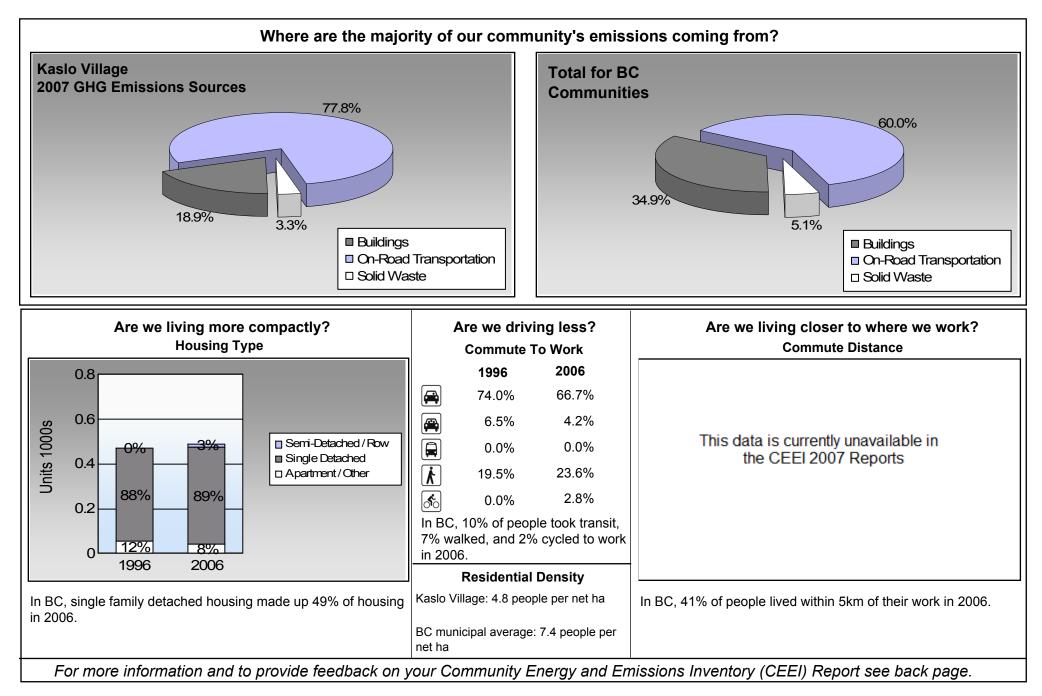


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities





Page 2 of 8 June 30, 2010

Sectors

On Road Transport	ation	<u>Vehicles</u>	Consumption	<u>Measurement</u>	Average-VKT(km)	Energy (GJ)	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	303	428,159	Litres	13,309	14,986	1,027
	Diesel Fuel	13	13,381	Litres	13,407	512	37
				Small Pa	assenger Cars	15,498	1,064
Large Passenger Cars	Gasoline	150	314,868	Litres	15,607	11,020	753
	Diesel Fuel	< 10	7,436	Litres	13,540	285	20
	Other Fuel	< 10	1,832	Litres	12,130	70	3
				Large Pa	assenger Cars	11,375	776
Light Trucks, Vans, SUVs	Gasoline	731	2,085,745	Litres	18,958	73,001	5,005
0	Diesel Fuel	82	177,435	Litres	16,683	6,796	485
	Other Fuel	< 10	12,846	Litres	12,390	492	20
				Light Tr	ucks, Vans, SUVs	80,289	5,510
Commercial Vehicles	Gasoline	< 10	28,415	Litres	12,468	995	66
	Diesel Fuel	22	118,470	Litres	23,464	4,537	319
	Other Fuel	< 10	893	Litres		34	1
				Commei	rcial Vehicles	5,566	386
Tractor Trailer Trucks	Diesel Fuel	16	593,271	Litres	95,531	22,722	1,596
			Tractor Trailer Trucks			22,722	1,596
Motorhomes	Gasoline	12	13,251	Litres	2,502	464	31
	Diesel Fuel	< 10	2,151	Litres	3,546	82	6
	Other Fuel	< 10	277	Litres		11	-
				Motorho	omes	557	37
Motorcycles, Mopeds	Gasoline	22	11,498	Litres	4,447	402	27
				Motorcy	cles, Mopeds	402	27
Bus	Gasoline	< 10	13,303	Litres	21,504	466	31
	Other Fuel	< 10	4,389	Litres		168	7
				Bus		634	38



			Gasol	ine:	101,334	6,940	
			Diesel	:	34,934	2,463	
			Other	Fuel:	775	31	
On Road Transportation Totals			All Fu	iels:	137,043	9,434	
Buildings	Туре	Connections	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>	
Residential	Electricity	459	5,090,338	Kilowatt Hours	18,325	31	
	Heating Oil		12,507	GigaJoules	12,507	882	
	Propane		22,001	GigaJoules	22,001	1,342	
	Wood		26,235	GigaJoules	26,235	10	
			Residential		79,068	2,265	
Commercial/Small-Medium Industrial	Electricity	178	4,833,798	Kilowatt Hours	17,402	29	
			Commercial/Sma	II-Medium Industrial	17,402	29	
			Electri	city:	35,727	60	
			Natura	al Gas:			
			Propa	ne:	22,001	1,342	
			Wood		26,235	10	
			Heatin	g Oil:	12,507	882	
Buildings Totals			Buildi	ngs:	96,470	2,294	
Buildings Totals Solid Waste			Buildi	ngs:	96,470 Mass (t)	2,29 CO2e (t	
JUIU WASLE					11000 (1)	0010(0)	



Grand Total			CONSUMPTION		ENERGY (GJ)	<u>CO2e (t)</u>
	Diesel Fuel		912,144	L	34,934	2,463
	Electricity		9,924,136	kWh	35,727	60
	Gasoline		2,895,239	L	101,334	6,940
	Heating Oil		12,507	GJ	12,507	882
	Other Fuel		20,237	L	775	31
	Propane		22,001	GJ	22,001	1,342
	Solid Waste		597	Т	0	398
	Wood		26,235	GJ	26,235	10
Total of Transportation /	Buildings / Solid Waste:				233,513 GJ	12,126 tonnes
		Ме	mo Items	5		
Buildings	Туре	<u>Connections</u>	Consumption	Measurement	Energy (GJ)	<u>CO2e (t)</u>
Large Industrial - data	a unavailable in 2007 CEEI re	ports				



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/cas/mitigation/ceei/index.html or

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.

	199 Units	6 %	200 Units	1 %	2006 Units	8 %	
Single Detached House	415	47	390	87	435	89	
Semi-Detached House	0	0	0	0	5	1	
Row House	0	0	10	2	10	2	
Apartment, Duplex	10	1	20	4	15	3	
Apartment, 5 storeys or higher	0	0	0	0	0	0	
Apartment, under 5 storeys	20	2	10	2	5	1	
Other Single Attached House	10	1	5	1	15	3	
Movable Dwelling	15	2	15	3	5	1	

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		20	2001		2006	
	People	%	People	%	People	%	
Car, Truck, Van as Driver	285	74	280	74	240	67	
Car, Truck,Van as Passenge	25	6	25	7	15	4	
Public Transit	0	0	0	0	0	0	
Walked	75	19	65	17	85	24	
Bicycle	0	0	0	0	10	3	
Motorcycle	0	0	0	0	0	0	
Taxicab	0	0	0	0	0	0	
Other Method	0	0	10	3	10	3	

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
1,184.0
246.3
4.8

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 %

This data is currently unavailable in the CEEI 2007 Reports.



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	0.0	0.0			
Local Parks	0.0	0.0			
Agricultural Land Reserve	0.0	0.0			
Total Land Area	313.2	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 <u>CEEIRPT@gov.bc.ca</u> (see survey on CEEI website).

On-Road Transportation (and Land Use) Proximity to Transit Persons, dwelling units (du) and employment within 400m of a guality transit stop/line Persons and dwelling units (du) within 400m of services (e.g. grocery store, school, other retail etc.) Proximity to Services Transit Ridership Annual per capita transit ridership **Buildings** Residential; Public Building Average energy use per person per square metre of floor space Energy Intensity Average residential dwelling unit size Floor Space Solid Waste (and Water) Waste Diversion Tonnes of waste diverted Avoided Waste Emissions Tonnes of CO2e 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 (<<u>http://www.toolkit.bc.ca></u>), 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.

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 <<u>http://www.toolkit.bc.ca></u> and <<u>http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm></u>.

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/cas/mitigation/ceei/index.html or contact us directly at http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html or contact us directly at http://www.env.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.