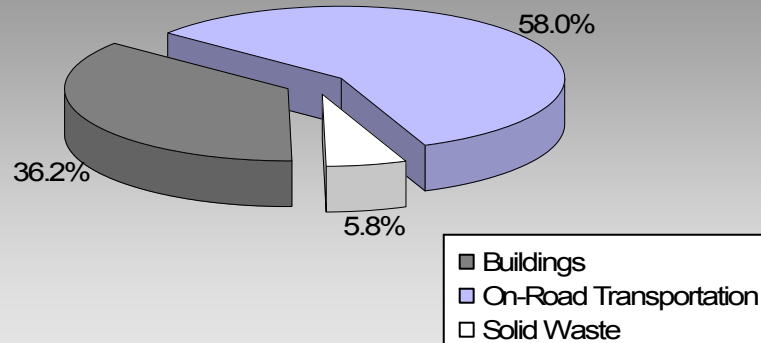


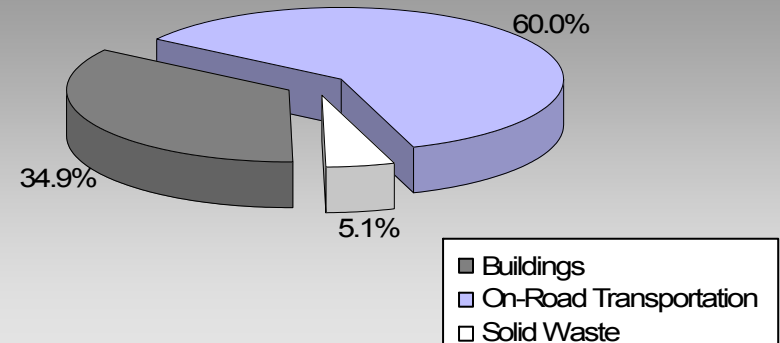
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

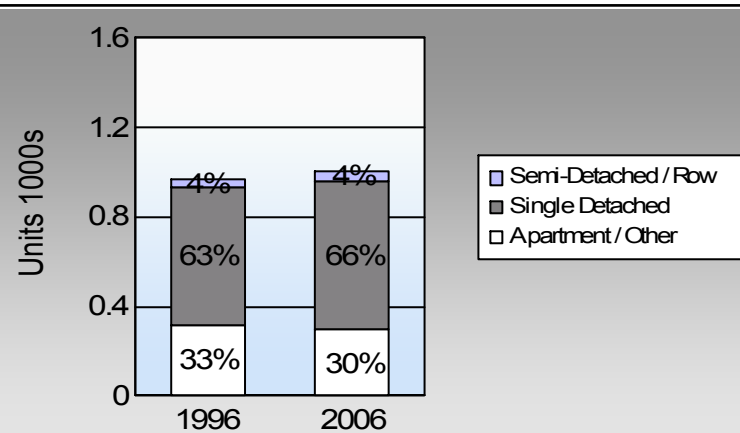
Logan Lake District Municipality
2007 GHG Emissions Sources



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

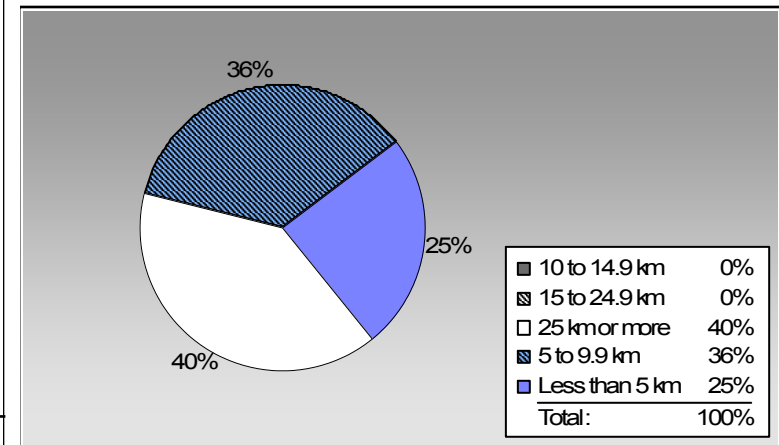
	1996	2006
	64.3%	74.7%
	21.2%	14.7%
	1.1%	0.0%
	7.8%	5.9%
	1.1%	0.0%

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

Residential Density

Logan Lake District Municipality: 0.2 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	311	441,777	Litres	13,872	15,462	1,046
	Diesel Fuel	12	13,136	Litres	15,152	503	36
Small Passenger Cars						15,965	1,082
Large Passenger Cars	Gasoline	210	468,907	Litres	18,517	16,412	1,109
	Diesel Fuel	< 10	3,090	Litres	13,859	118	8
	Other Fuel	< 10	1,649	Litres		63	3
Large Passenger Cars						16,593	1,120
Light Trucks, Vans, SUVs	Gasoline	609	1,859,027	Litres	19,609	65,066	4,439
	Diesel Fuel	101	243,498	Litres	20,392	9,326	665
	Other Fuel	< 10	17,298	Litres	12,692	663	27
Light Trucks, Vans, SUVs						75,055	5,131
Commercial Vehicles	Gasoline	< 10	37,324	Litres	17,959	1,306	88
	Diesel Fuel	12	64,303	Litres	23,333	2,463	173
	Other Fuel	< 10	4,310	Litres	11,356	165	7
Commercial Vehicles						3,934	268
Tractor Trailer Trucks	Gasoline	< 10	10,586	Litres	31,507	371	25
	Diesel Fuel	11	411,639	Litres	111,228	15,766	1,108
Tractor Trailer Trucks						16,137	1,133
Motorhomes	Gasoline	29	29,231	Litres	2,891	1,023	68
	Diesel Fuel	< 10	1,121	Litres	2,748	43	3
	Other Fuel	< 10	554	Litres		21	1
Motorhomes						1,087	72
Motorcycles, Mopeds	Gasoline	12	7,528	Litres	5,274	263	18
Motorcycles, Mopeds						263	18
Bus	Gasoline	< 10	7,451	Litres		261	18
	Diesel Fuel	< 10	6,110	Litres	15,912	234	16
Bus						495	34

Logan Lake District Municipality

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	100,164	6,811
	Diesel:	28,453	2,009
	Other Fuel:	912	38
On Road Transportation Totals	All Fuels:	129,529	8,858

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)	
Residential	Electricity	1,104	8,023,947	Kilowatt Hours	28,886	198	
	Natural Gas	817	71,302	GigaJoules	71,302	3,636	
	Wood		6,424	GigaJoules	6,424	2	
Residential					106,612	3,836	
Commercial/Small-Medium Industrial	Electricity	85	5,153,588	Kilowatt Hours	18,553	127	
	Natural Gas	49	30,571	GigaJoules	30,571	1,559	
Commercial/Small-Medium Industrial					49,124	1,686	
					Electricity:	47,439	325
					Natural Gas:	101,873	5,195
					Propane:		
					Wood:	6,424	2
					Heating Oil:		
Buildings Totals	Buildings:				155,736	5,522	

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	2,417	886

Logan Lake District Municipality

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION	ENERGY (GJ)	CO2e (t)
Diesel Fuel	742,897 L	28,453	2,009
Electricity	13,177,535 kWh	47,439	325
Gasoline	2,861,831 L	100,164	6,811
Natural Gas	101,873 GJ	101,873	5,195
Other Fuel	23,811 L	912	38
Solid Waste	2,417 T	0	886
Wood	6,424 GJ	6,424	2
Total of Transportation / Buildings / Solid Waste:		285,265 GJ	15,266 tonnes

Memo Items

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-
	Natural Gas	1	withheld	GigaJoules	-	-
	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	610	39	605	64	660	66
Semi-Detached House	0	0	10	1	5	1
Row House	35	2	40	4	40	4
Apartment, Duplex	0	0	5	1	0	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	235	15	165	17	215	21
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	85	5	125	13	85	8

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	575	64	650	68	635	75
Car, Truck, Van as Passenger	190	21	170	18	125	15
Public Transit	10	1	0	0	0	0
Walked	70	8	100	11	50	6
Bicycle	10	1	10	1	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	40	4	20	2	40	5

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	2,189.0
Net Land Area (ha) *	10,587.3
Residential Density (people per net ha)	0.2

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	185	25
5 to 9.9 km	270	36
10 to 14.9 km	0	0
15 to 24.9 km	0	0
25 km or more	300	40

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	29.2	0.1
Agricultural Land Reserve	230.2	0.7
Other land use	32,473.0	99.2
Total Land Area	32,732.4	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.