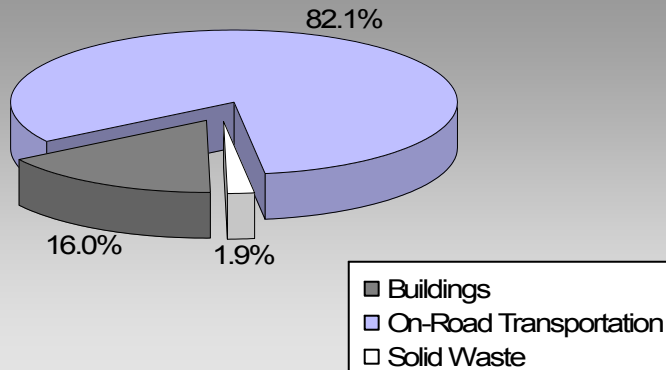


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

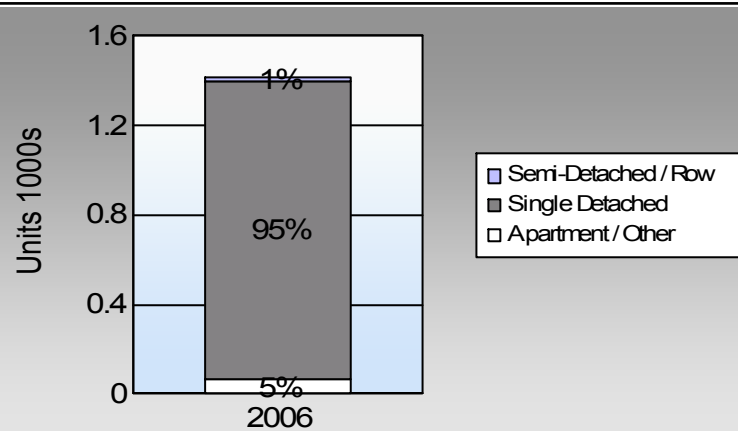
**Lantzville District Municipality
2007 GHG Emissions Sources**



**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

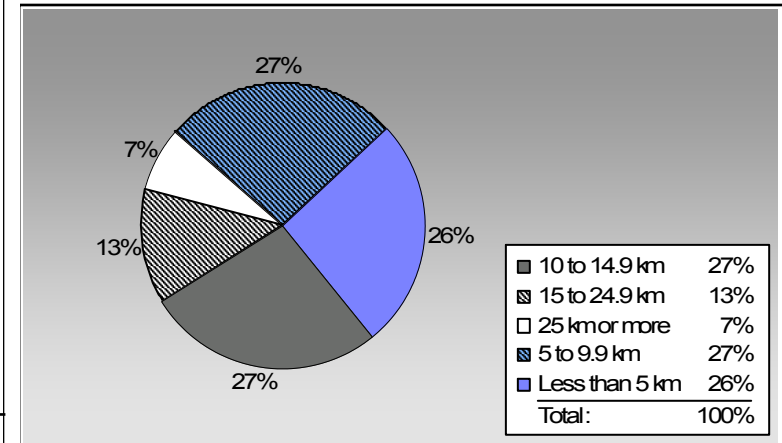
	1996	2006
	0.0%	87.3%
	0.0%	7.5%
	0.0%	0.9%
	0.0%	2.5%
	0.0%	0.6%

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

Residential Density

Lantzville District Municipality: 1.4 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		Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)	
Small Passenger Cars	Gasoline	805	1,021,038	Litres	12,928	35,736	2,441	
	Diesel Fuel	44	42,009	Litres	13,972	1,609	115	
Small Passenger Cars						37,345	2,556	
Large Passenger Cars	Gasoline	471	897,394	Litres	15,913	31,409	2,135	
	Diesel Fuel	15	26,289	Litres	15,253	1,007	72	
	Other Fuel	< 10	7,266	Litres	14,404	278	11	
Large Passenger Cars						32,694	2,218	
Light Trucks, Vans, SUVs	Gasoline	1,115	3,233,064	Litres	19,735	113,157	7,758	
	Diesel Fuel	144	358,010	Litres	19,730	13,712	978	
	Other Fuel	15	29,493	Litres	13,705	1,130	45	
Light Trucks, Vans, SUVs						127,999	8,781	
Commercial Vehicles	Gasoline	< 10	22,099	Litres	12,083	773	51	
	Diesel Fuel	33	157,520	Litres	23,581	6,033	424	
Commercial Vehicles						6,806	475	
Tractor Trailer Trucks	Diesel Fuel	25	728,709	Litres	73,583	27,910	1,961	
Tractor Trailer Trucks						27,910	1,961	
Motorhomes	Gasoline	45	46,557	Litres	3,005	1,629	109	
	Diesel Fuel	< 10	7,608	Litres	4,263	291	20	
	Other Fuel	< 10	138	Litres		5	-	
Motorhomes						1,925	129	
Motorcycles, Mopeds	Gasoline	52	28,059	Litres	6,179	982	65	
Motorcycles, Mopeds						982	65	
Bus	Gasoline	< 10	5,852	Litres	15,902	205	14	
	Diesel Fuel	< 10	74,467	Litres	52,764	2,852	200	
Bus						3,057	214	
On Road Transportation Totals						238,718	16,399	
						Gasoline:	183,891	12,573
						Diesel:	53,414	3,770
						Other Fuel:	1,413	56
						All Fuels:	238,718	16,399

Lantzville District Municipality

Updated 2007 Community Energy and Emissions Inventory

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (t)
Residential	Electricity	1,520	28,297,028	Kilowatt Hours	101,869	698
	Natural Gas	352	23,570	GigaJoules	23,570	1,202
	Heating Oil		11,028	GigaJoules	11,028	777
	Propane		1,900	GigaJoules	1,900	116
	Wood		13,462	GigaJoules	13,462	5
Residential					151,829	2,798
Commercial/Small-Medium Industrial	Electricity	118	3,749,236	Kilowatt Hours	13,497	92
	Natural Gas	41	6,115	GigaJoules	6,115	312
Commercial/Small-Medium Industrial					19,612	404
					Electricity:	790
					Natural Gas:	1,514
					Propane:	116
					Wood:	5
					Heating Oil:	777
Buildings Totals					Buildings:	3,202
					171,441	

Solid Waste	Mass (t)	CO ₂ e (t)
Community Solid Waste	1,879	385

Lantzville District Municipality

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO ₂ e (t)
Diesel Fuel	1,394,612	L	53,414	3,770
Electricity	32,046,264	kWh	115,366	790
Gasoline	5,254,063	L	183,891	12,573
Heating Oil	11,028	GJ	11,028	777
Natural Gas	29,685	GJ	29,685	1,514
Other Fuel	36,897	L	1,413	56
Propane	1,900	GJ	1,900	116
Solid Waste	1,879	T	0	385
Wood	13,462	GJ	13,462	5
Total of Transportation / Buildings / Solid Waste:			410,159 GJ	19,986 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (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					1,335	95
Semi-Detached House					10	1
Row House					0	0
Apartment, Duplex					45	3
Apartment, 5 storeys or higher					0	0
Apartment, under 5 storeys					10	1
Other Single Attached House					5	0
Movable Dwelling					5	0

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	0	0	0	0	1,405	87
Car, Truck, Van as Passenger	0	0	0	0	120	7
Public Transit	0	0	0	0	15	1
Walked	0	0	0	0	40	2
Bicycle	0	0	0	0	10	1
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	0	0	0	0	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	3,701.0
Net Land Area (ha) *	2,655.0
Residential Density (people per net ha)	1.4

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	345	26
5 to 9.9 km	350	27
10 to 14.9 km	355	27
15 to 24.9 km	170	13
25 km or more	95	7

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	141.2	5.0
Other land use	2,656.8	95.0
Total Land Area	2,797.9	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.

+++++

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.