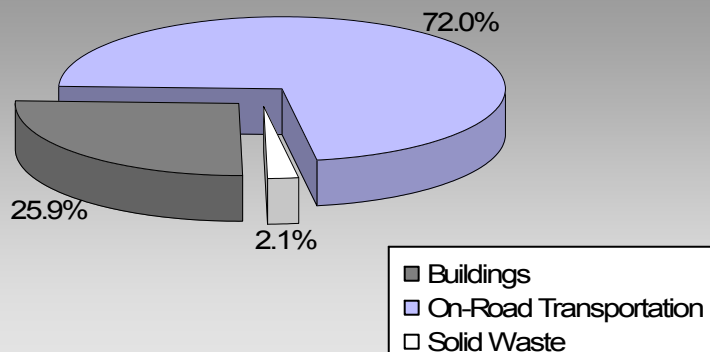


Updated 2007 Community Energy and Emissions Inventory

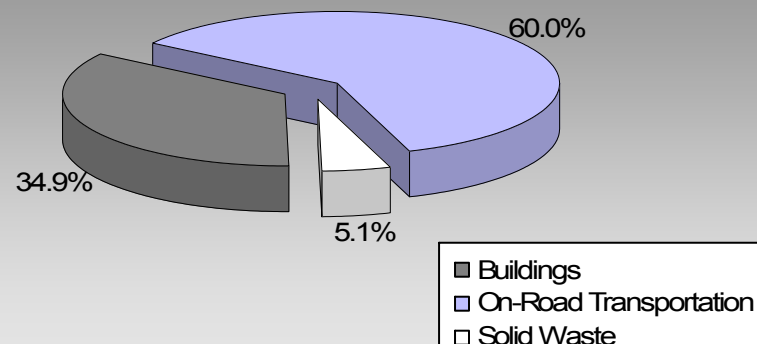
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

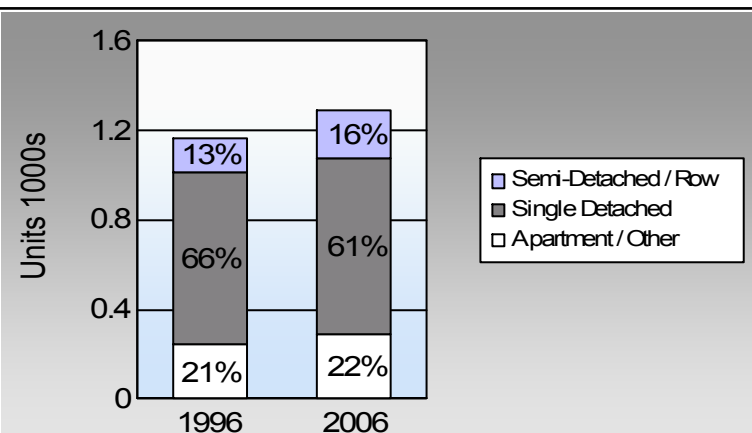
**Enderby City
2007 GHG Emissions Sources**



**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
	75.3%	78.0%
	11.7%	10.8%
	0.0%	0.0%
	8.6%	11.2%
	4.3%	0.0%

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

Residential Density

Enderby City: 8.4 people per net ha

BC municipal average: 7.4 people per net ha

Are we living closer to where we work? Commute Distance

This data is currently unavailable in the CEEI 2007 Reports

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

Enderby City

Updated 2007 Community Energy and Emissions Inventory

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	656	918,252	Litres	13,272	32,139	2,200
	Diesel Fuel	19	21,625	Litres	13,665	828	59
Small Passenger Cars						32,967	2,259
Large Passenger Cars	Gasoline	403	918,890	Litres	17,390	32,161	2,190
	Diesel Fuel	10	22,183	Litres	18,210	850	61
	Other Fuel	< 10	2,541	Litres	13,739	97	4
Large Passenger Cars						33,108	2,255
Light Trucks, Vans, SUVs	Gasoline	998	3,073,576	Litres	19,271	107,575	7,379
	Diesel Fuel	116	291,292	Litres	18,035	11,156	796
	Other Fuel	14	28,532	Litres	12,086	1,093	44
Light Trucks, Vans, SUVs						119,824	8,219
Commercial Vehicles	Gasoline	10	41,029	Litres	12,512	1,436	96
	Diesel Fuel	33	149,254	Litres	19,257	5,716	402
	Other Fuel	< 10	8,619	Litres	11,356	330	13
Commercial Vehicles						7,482	511
Tractor Trailer Trucks	Gasoline	< 10	25,575	Litres	16,011	895	60
	Diesel Fuel	55	1,558,877	Litres	70,122	59,705	4,195
Tractor Trailer Trucks						60,600	4,255
Motorhomes	Gasoline	28	38,460	Litres	3,078	1,346	90
	Diesel Fuel	< 10	4,251	Litres	3,406	163	11
	Other Fuel	< 10	969	Litres		37	1
Motorhomes						1,546	102
Motorcycles, Mopeds	Gasoline	28	12,404	Litres	4,098	434	29
Motorcycles, Mopeds						434	29
Bus	Diesel Fuel	< 10	6,113	Litres	15,918	234	16
Bus						234	16

Enderby City

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	175,986	12,044
	Diesel:	78,652	5,540
	Other Fuel:	1,557	62
On Road Transportation Totals	All Fuels:	256,195	17,646

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	1,474	15,042,470	Kilowatt Hours	54,153	371	
	Natural Gas	1,022	73,491	GigaJoules	73,491	3,748	
	Wood		9,107	GigaJoules	9,107	3	
Residential					136,751	4,122	
Commercial/Small-Medium Industrial	Electricity	256	10,985,529	Kilowatt Hours	39,548	271	
	Natural Gas	154	38,620	GigaJoules	38,620	1,970	
Commercial/Small-Medium Industrial					78,168	2,241	
					Electricity:	93,701	642
					Natural Gas:	112,111	5,718
					Propane:		
					Wood:	9,107	3
					Heating Oil:		
Buildings Totals					Buildings:	214,919	6,363

Solid Waste	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	631	515

Enderby City

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	2,053,595	L	78,652	5,540
Electricity	26,027,999	kWh	93,701	642
Gasoline	5,028,186	L	175,986	12,044
Natural Gas	112,111	GJ	112,111	5,718
Other Fuel	40,661	L	1,557	62
Solid Waste	631	T	0	515
Wood	9,107	GJ	9,107	3
Total of Transportation / Buildings / Solid Waste:			471,114 GJ	24,524 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	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	770	40	830	69	790	61
Semi-Detached House	80	4	65	5	95	7
Row House	70	4	100	8	115	9
Apartment, Duplex	0	0	20	2	20	2
Apartment, 5 storeys or higher	0	0	5	0	0	0
Apartment, under 5 storeys	215	11	180	15	195	15
Other Single Attached House	0	0	10	1	10	1
Movable Dwelling	30	2	0	0	60	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	610	75	635	77	835	78
Car, Truck, Van as Passenger	95	12	55	7	115	11
Public Transit	0	0	0	0	0	0
Walked	70	9	105	13	120	11
Bicycle	35	4	25	3	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	0	0	0	0	0	0

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	2,906.0
Net Land Area (ha) *	348.2
Residential Density (people per net ha)	8.4

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	%
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	8.3	2.0
Agricultural Land Reserve	63.9	15.3
Other land use	346.9	82.8
Total Land Area	419.1	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.