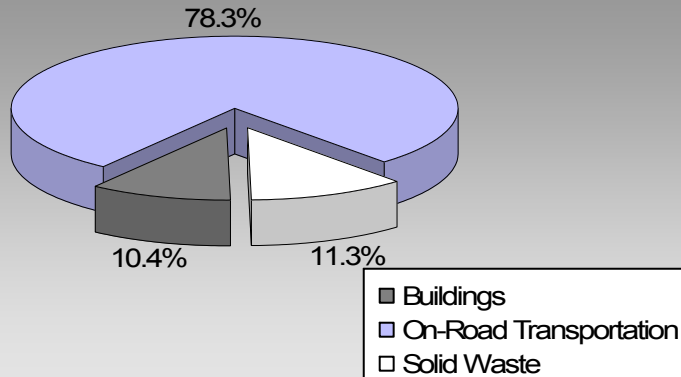


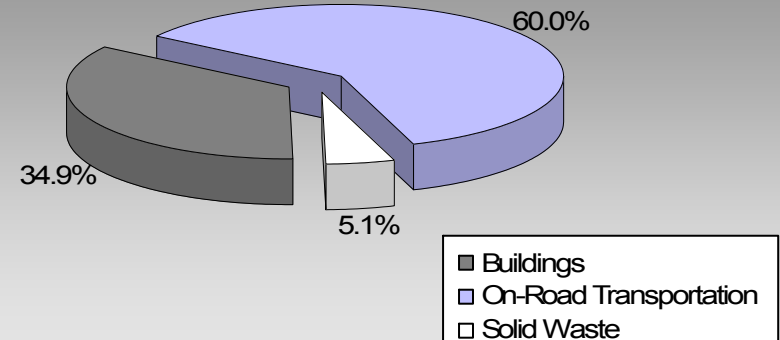
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

**Clearwater District Municipality
2007 GHG Emissions Sources**



**Total for BC
Communities**








Are we living more compactly? Housing Type

This data is currently unavailable in the CEEI 2007 Reports

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

Are we driving less? Commute To Work

	1996	2006
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%

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

Residential Density

Clearwater District Municipality: 0.7 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.

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	243	349,847	Litres	14,406	12,245	822
	Diesel Fuel	< 10	7,707	Litres	15,419	295	21
	Other Fuel	< 10	2,038	Litres	11,648	78	3
Small Passenger Cars						12,618	846
Large Passenger Cars	Gasoline	174	390,847	Litres	19,573	13,680	919
	Diesel Fuel	< 10	12,399	Litres	20,124	475	34
	Other Fuel	< 10	4,916	Litres	17,222	188	8
Large Passenger Cars						14,343	961
Light Trucks, Vans, SUVs	Gasoline	531	1,687,839	Litres	21,116	59,074	4,004
	Diesel Fuel	107	283,727	Litres	22,049	10,867	775
	Other Fuel	< 10	14,229	Litres	12,596	545	22
Light Trucks, Vans, SUVs						70,486	4,801
Commercial Vehicles	Gasoline	15	71,757	Litres	19,242	2,512	168
	Diesel Fuel	25	132,322	Litres	23,326	5,068	356
	Other Fuel	< 10	5,028	Litres	11,356	193	8
Commercial Vehicles						7,773	532
Tractor Trailer Trucks	Diesel Fuel	26	1,272,642	Litres	122,106	48,742	3,425
	Other Fuel	< 10	1,785	Litres		68	3
Tractor Trailer Trucks						48,810	3,428
Motorhomes	Gasoline	< 10	15,471	Litres	2,677	541	36
	Diesel Fuel	< 10	3,398	Litres	4,478	130	9
	Other Fuel	< 10	554	Litres		21	1
Motorhomes						692	46
Motorcycles, Mopeds	Gasoline	< 10	7,256	Litres	6,485	254	17
Motorcycles, Mopeds						254	17
Bus	Gasoline	< 10	20,396	Litres	20,629	714	48
	Diesel Fuel	< 10	31,240	Litres	38,697	1,197	84
Bus						1,911	132

Clearwater District Municipality Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	89,020	6,014
	Diesel:	66,774	4,704
	Other Fuel:	1,093	45
	All Fuels:	156,887	10,763

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	1,790	25,263,689	Kilowatt Hours	90,949	623
	Heating Oil		2,424	GigaJoules	2,424	171
	Propane		4,271	GigaJoules	4,271	261
	Wood		21,361	GigaJoules	21,361	8
Residential					119,005	1,063
Commercial/Small-Medium Industrial	Electricity	392	14,631,371	Kilowatt Hours	52,673	361
Commercial/Small-Medium Industrial					52,673	361
Electricity:					143,622	984
Natural Gas:						
Propane:					4,271	261
Wood:					21,361	8
Heating Oil:					2,424	171
Buildings Totals	Buildings:				171,678	1,424

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	2,596	1,556

Clearwater District Municipality

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO ₂ e (t)
Diesel Fuel	1,743,435	L	66,774	4,704
Electricity	39,895,060	kWh	143,622	984
Gasoline	2,543,413	L	89,020	6,014
Heating Oil	2,424	GJ	2,424	171
Other Fuel	28,550	L	1,093	45
Propane	4,271	GJ	4,271	261
Solid Waste	2,596	T	0	1,556
Wood	21,361	GJ	21,361	8
Total of Transportation / Buildings / Solid Waste:			328,565 GJ	13,743 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO ₂ e (t)
Large Industrial	Electricity	2	withheld	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	%

This data is currently unavailable in the CEEI 2007 Reports

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	2,348.0
Net Land Area (ha) *	3,539.6
Residential Density (people per net ha)	0.7

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	0	0
Car, Truck, Van as Passenger	0	0	0	0	0	0
Public Transit	0	0	0	0	0	0
Walked	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	0	0	0	0	0	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	%

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	48.6	0.9
Local Parks	1.8	0.0
Agricultural Land Reserve	1,593.0	29.1
Other land use	3,826.2	70.0
Total Land Area	5,469.6	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.