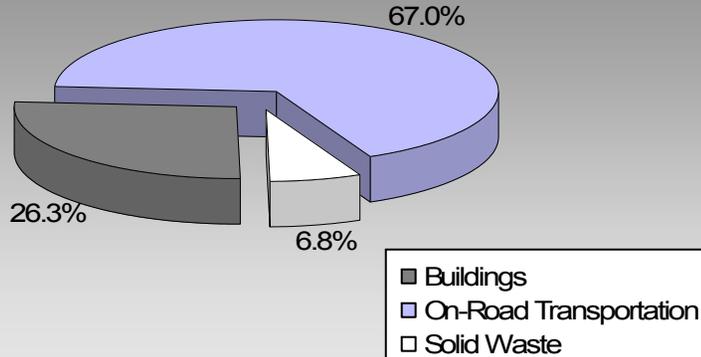


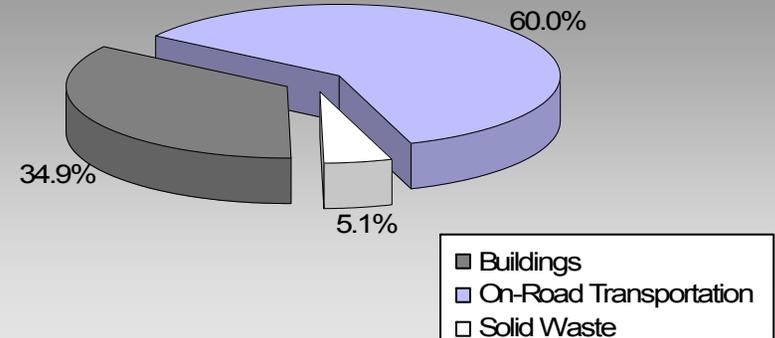
*BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities*

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

**West Kelowna 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

West Kelowna District Municipality:  
2.6 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

<b>On Road Transportation</b>		<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	5,476	7,264,645	Litres	12,882	254,263	17,298
	Diesel Fuel	196	201,013	Litres	13,867	7,699	549
	Other Fuel	< 10	744	Litres	7,997	28	1
<b>Small Passenger Cars</b>						<b>261,990</b>	<b>17,848</b>
Large Passenger Cars	Gasoline	3,500	7,366,774	Litres	17,062	257,837	17,471
	Diesel Fuel	66	131,511	Litres	16,389	5,037	359
	Other Fuel	< 10	20,802	Litres	14,391	797	32
<b>Large Passenger Cars</b>						<b>263,671</b>	<b>17,862</b>
Light Trucks, Vans, SUVs	Gasoline	8,508	25,665,715	Litres	20,166	898,300	61,327
	Diesel Fuel	798	2,061,128	Litres	20,100	78,941	5,631
	Other Fuel	53	131,560	Litres	13,225	5,039	202
<b>Light Trucks, Vans, SUVs</b>						<b>982,280</b>	<b>67,160</b>
Commercial Vehicles	Gasoline	37	160,915	Litres	13,824	5,632	376
	Diesel Fuel	205	1,042,251	Litres	23,114	39,918	2,805
	Other Fuel	< 10	17,413	Litres	11,455	667	27
<b>Commercial Vehicles</b>						<b>46,217</b>	<b>3,208</b>
Tractor Trailer Trucks	Gasoline	< 10	17,545	Litres	13,523	614	41
	Diesel Fuel	252	9,629,563	Litres	98,042	368,812	25,913
	Other Fuel	< 10	1,190	Litres		46	2
<b>Tractor Trailer Trucks</b>						<b>369,472</b>	<b>25,956</b>
Motorhomes	Gasoline	196	281,106	Litres	3,244	9,839	658
	Diesel Fuel	44	56,507	Litres	4,866	2,164	152
	Other Fuel	< 10	2,077	Litres	2,189	80	3
<b>Motorhomes</b>						<b>12,083</b>	<b>813</b>
Motorcycles, Mopeds	Gasoline	406	190,658	Litres	5,623	6,673	445
<b>Motorcycles, Mopeds</b>						<b>6,673</b>	<b>445</b>
Bus	Gasoline	11	141,006	Litres	26,789	4,935	331
	Diesel Fuel	< 10	86,703	Litres	27,611	3,321	233
	Other Fuel	< 10	1,463	Litres		56	2
<b>Bus</b>						<b>8,312</b>	<b>566</b>

# West Kelowna District Municipality

## Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	1,438,093	97,947
	Diesel:	505,892	35,642
	Other Fuel:	6,713	269
<b>On Road Transportation Totals</b>	<b>All Fuels:</b>	<b>1,950,698</b>	<b>133,858</b>

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	11,385	134,193,773	Kilowatt Hours	483,097	3,310
	Natural Gas	8,981	790,832	GigaJoules	790,832	40,332
<b>Residential</b>					<b>1,273,929</b>	<b>43,642</b>
Commercial/Small-Medium Industrial	Electricity	1,098	70,565,660	Kilowatt Hours	254,036	1,741
	Natural Gas	356	139,802	GigaJoules	139,802	7,130
<b>Commercial/Small-Medium Industrial</b>					<b>393,838</b>	<b>8,871</b>
					Electricity:	5,051
					Natural Gas:	47,462
					Propane:	
					Wood:	
					Heating Oil:	
<b>Buildings Totals</b>	<b>Buildings:</b>				<b>1,667,767</b>	<b>52,513</b>

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	28,711	13,548

# West Kelowna District Municipality

## Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION	ENERGY (GJ)	CO2e (t)
Diesel Fuel	13,208,676 L	505,892	35,642
Electricity	204,759,433 kWh	737,133	5,051
Gasoline	41,088,364 L	1,438,093	97,947
Natural Gas	930,634 GJ	930,634	47,462
Other Fuel	175,249 L	6,713	269
Solid Waste	28,711 T	0	13,548
<b>Total of Transportation / Buildings / Solid Waste:</b>		<b>3,618,465 GJ</b>	<b>199,919 tonnes</b>

### Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-
<b>Large Industrial</b>					-	-

## 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](mailto: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

### 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

### 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	27,303.0
Net Land Area (ha) *	10,573.1
Residential Density (people per net ha)	2.6

### 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	511.9	3.2
Agricultural Land Reserve	1,176.1	7.4
Other land use	14,142.0	89.3
<b>Total Land Area</b>	<b>15,830.1</b>	<b>100.0</b>

## 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](mailto:CEEIRPT@gov.bc.ca) (see survey on CEEI website).

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### 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

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### Buildings

Residential; Public Building Energy Intensity	Average energy use per person per square metre of floor space
Floor Space	Average residential dwelling unit size

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### Solid Waste (and Water)

Waste Diversion	Tonnes of waste diverted
Avoided Waste Emissions	Tonnes of CO <sub>2</sub> e of avoided future emissions due to reduced waste since 2007
Water Use	Per capita residential water use

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### Land-Use Change

Impervious Surface Cover	% change in impervious surface cover
Tree Canopy Cover	% change in tree canopy cover

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### 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)

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## 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](mailto: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.