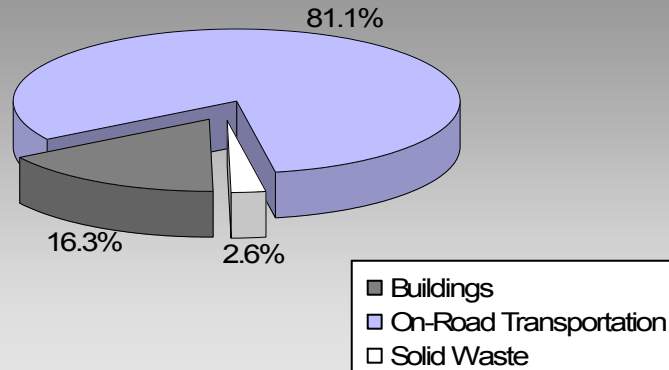


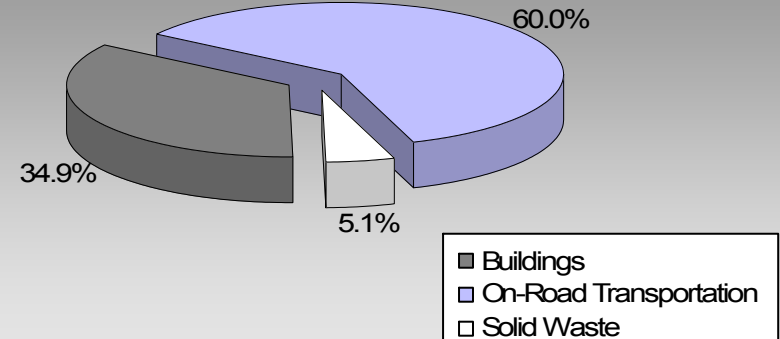
*BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities*

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

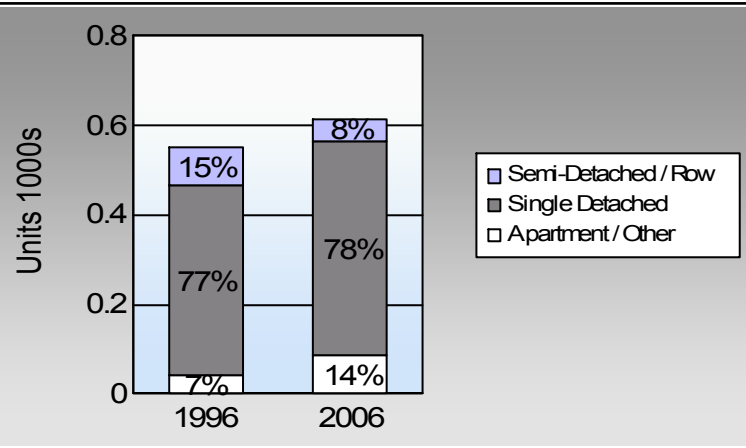
**Keremeos Village  
2007 GHG Emissions Sources**



**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
	78.4%	66.2%
	6.8%	4.4%
	0.0%	0.0%
	9.5%	23.5%
	2.7%	5.9%

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

### Residential Density

Keremeos Village: 9.7 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

<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	595	730,866	Litres	11,659	25,580	1,752
	Diesel Fuel	21	19,767	Litres	11,726	757	54
<b>Small Passenger Cars</b>						<b>26,337</b>	<b>1,806</b>
Large Passenger Cars	Gasoline	412	905,173	Litres	16,832	31,681	2,161
	Diesel Fuel	< 10	16,772	Litres	17,435	642	46
	Other Fuel	< 10	2,418	Litres	13,632	93	4
<b>Large Passenger Cars</b>						<b>32,416</b>	<b>2,211</b>
Light Trucks, Vans, SUVs	Gasoline	952	2,788,427	Litres	18,452	97,595	6,717
	Diesel Fuel	146	322,096	Litres	16,515	12,336	880
	Other Fuel	14	31,261	Litres	13,207	1,197	48
<b>Light Trucks, Vans, SUVs</b>						<b>111,128</b>	<b>7,645</b>
Commercial Vehicles	Gasoline	11	45,027	Litres	12,293	1,576	105
	Diesel Fuel	19	98,806	Litres	19,934	3,784	266
	Other Fuel	< 10	11,475	Litres	12,106	439	18
<b>Commercial Vehicles</b>						<b>5,799</b>	<b>389</b>
Tractor Trailer Trucks	Gasoline	< 10	2,380	Litres	7,085	83	6
	Diesel Fuel	23	515,507	Litres	43,886	19,744	1,387
<b>Tractor Trailer Trucks</b>						<b>19,827</b>	<b>1,393</b>
Motorhomes	Gasoline	51	64,757	Litres	3,039	2,267	151
	Diesel Fuel	14	12,249	Litres	4,018	469	33
	Other Fuel	< 10	2,769	Litres	2,189	106	4
<b>Motorhomes</b>						<b>2,842</b>	<b>188</b>
Motorcycles, Mopeds	Gasoline	27	12,874	Litres	5,138	451	30
<b>Motorcycles, Mopeds</b>						<b>451</b>	<b>30</b>
Bus	Gasoline	< 10	23,118	Litres	26,435	809	54
<b>Bus</b>						<b>809</b>	<b>54</b>

# Keremeos Village

## Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	160,042	10,976
	Diesel:	37,732	2,666
	Other Fuel:	1,835	74
<b>On Road Transportation Totals</b>	<b>All Fuels:</b>	<b>199,609</b>	<b>13,716</b>

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)	
Residential	Electricity	725	8,014,916	Kilowatt Hours	28,854	48	
	Natural Gas	394	23,335	GigaJoules	23,335	1,190	
	Heating Oil			GigaJoules	1,656	117	
	Propane			GigaJoules	2,920	178	
	Wood			GigaJoules	14,588	5	
<b>Residential</b>					<b>71,353</b>	<b>1,538</b>	
Commercial/Small-Medium Industrial	Electricity	375	15,583,975	Kilowatt Hours	56,102	93	
	Natural Gas	81	22,148	GigaJoules	22,148	1,130	
<b>Commercial/Small-Medium Industrial</b>					<b>78,250</b>	<b>1,223</b>	
					Electricity:	84,956	141
					Natural Gas:	45,483	2,320
					Propane:	2,920	178
					Wood:	14,588	5
					Heating Oil:	1,656	117
<b>Buildings Totals</b>	<b>Buildings:</b>				<b>149,603</b>	<b>2,761</b>	

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	531	445

# Keremeos Village

## Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO <sub>2</sub> e (t)
Diesel Fuel	985,197	L	37,732	2,666
Electricity	23,598,891	kWh	84,956	141
Gasoline	4,572,622	L	160,042	10,976
Heating Oil	1,656	GJ	1,656	117
Natural Gas	45,483	GJ	45,483	2,320
Other Fuel	47,923	L	1,835	74
Propane	2,920	GJ	2,920	178
Solid Waste	531	T	0	445
Wood	14,588	GJ	14,588	5
<b>Total of Transportation / Buildings / Solid Waste:</b>			<b>349,212 GJ</b>	<b>16,922 tonnes</b>

### Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO <sub>2</sub> e (t)
Large Industrial - data unavailable in 2007 CEEI reports						

### 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	%
Single Detached House	425	44	485	83	480	78
Semi-Detached House	30	3	25	4	20	3
Row House	55	6	25	4	30	5
Apartment, Duplex	0	0	5	1	0	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	15	2	45	8	35	6
Other Single Attached House	10	1	0	0	15	2
Movable Dwelling	15	2	0	0	35	6

#### 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	290	78	200	80	225	66
Car, Truck, Van as Passenger	25	7	10	4	15	4
Public Transit	0	0	0	0	0	0
Walked	35	9	40	16	80	24
Bicycle	10	3	0	0	20	6
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	10	3	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	1,479.0
Net Land Area (ha) *	153.1
Residential Density (people per net ha)	9.7

#### 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	4.0	1.8
Agricultural Land Reserve	54.2	24.5
Other land use	162.8	73.7
<b>Total Land Area</b>	<b>220.9</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).

#### 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 <sub>2</sub> 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](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.