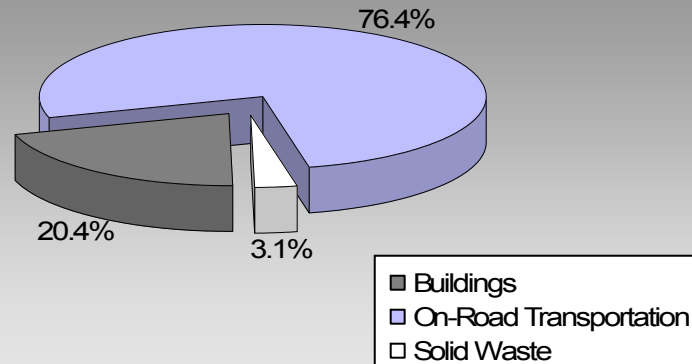


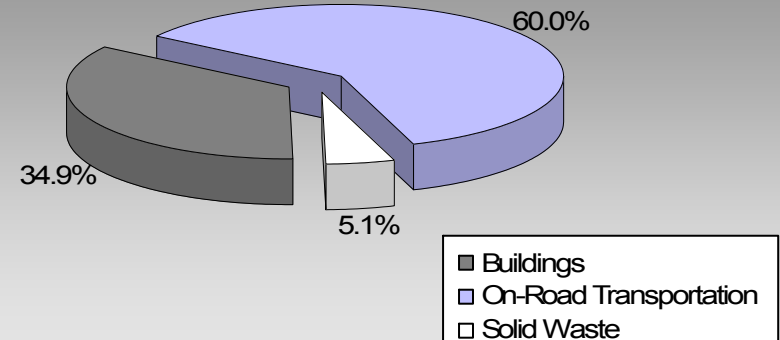
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

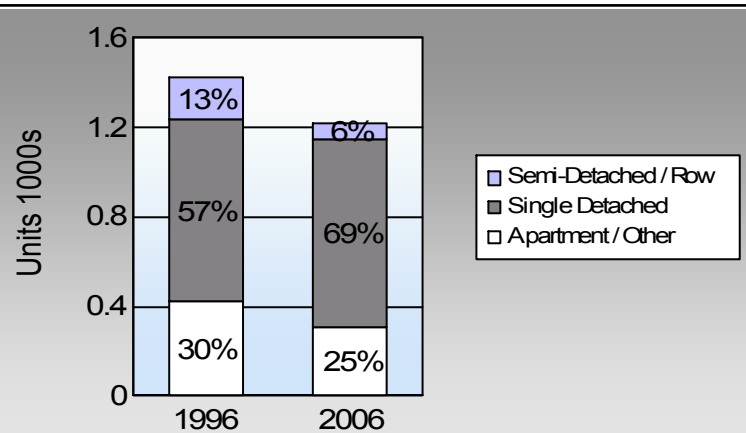
**Houston District Municipality
2007 GHG Emissions Sources**



**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
	79.0%	82.3%
	5.2%	9.2%
	0.0%	0.0%
	10.9%	7.3%
	2.0%	0.0%

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

Residential Density

Houston District Municipality: 0.8 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	415	588,375	Litres	13,800	20,593	1,396
	Diesel Fuel	16	19,543	Litres	14,583	749	53
Small Passenger Cars						21,342	1,449
Large Passenger Cars	Gasoline	263	683,954	Litres	19,853	23,938	1,629
	Diesel Fuel	< 10	19,028	Litres	20,743	729	52
	Other Fuel	< 10	6,313	Litres	16,449	242	10
Large Passenger Cars						24,909	1,691
Light Trucks, Vans, SUVs	Gasoline	1,262	4,073,573	Litres	20,332	142,575	9,739
	Diesel Fuel	418	1,181,443	Litres	21,615	45,249	3,228
	Other Fuel	13	35,638	Litres	13,417	1,365	55
Light Trucks, Vans, SUVs						189,189	13,022
Commercial Vehicles	Gasoline	16	80,353	Litres	15,320	2,812	188
	Diesel Fuel	49	211,720	Litres	20,152	8,109	570
	Other Fuel	< 10	5,028	Litres	11,356	193	8
Commercial Vehicles						11,114	766
Tractor Trailer Trucks	Gasoline	< 10	7,628	Litres	16,141	267	18
	Diesel Fuel	147	4,585,290	Litres	79,126	175,617	12,339
Tractor Trailer Trucks						175,884	12,357
Motorhomes	Gasoline	13	31,017	Litres	2,825	1,086	73
	Diesel Fuel	< 10	5,782	Litres	4,514	221	16
	Other Fuel	< 10	554	Litres		21	1
Motorhomes						1,328	90
Motorcycles, Mopeds	Gasoline	18	11,679	Litres	5,214	409	27
Motorcycles, Mopeds						409	27
Bus	Gasoline	< 10	8,778	Litres	15,902	307	21
	Diesel Fuel	< 10	21,283	Litres	39,051	815	57
Bus						1,122	78

Houston District Municipality Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	191,987	13,091
	Diesel:	231,489	16,315
	Other Fuel:	1,821	74
	All Fuels:	425,297	29,480

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	1,452	15,736,540	Kilowatt Hours	56,651	388
	Natural Gas	949	69,851	GigaJoules	69,851	3,563
	Heating Oil		3,210	GigaJoules	3,210	226
	Propane		8,719	GigaJoules	8,719	532
	Wood		23,800	GigaJoules	23,800	9
Residential					162,231	4,718
Commercial/Small-Medium Industrial	Electricity	270	19,549,388	Kilowatt Hours	70,378	482
	Natural Gas	147	52,523	GigaJoules	52,523	2,679
Commercial/Small-Medium Industrial					122,901	3,161
Buildings Totals	Electricity:				127,029	870
	Natural Gas:				122,374	6,242
	Propane:				8,719	532
	Wood:				23,800	9
	Heating Oil:				3,210	226
Buildings:					285,132	7,879

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	2,293	1,214

Houston District Municipality

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	6,044,089	L	231,489	16,315
Electricity	35,285,928	kWh	127,029	870
Gasoline	5,485,357	L	191,987	13,091
Heating Oil	3,210	GJ	3,210	226
Natural Gas	122,374	GJ	122,374	6,242
Other Fuel	47,533	L	1,821	74
Propane	8,719	GJ	8,719	532
Solid Waste	2,293	T	0	1,214
Wood	23,800	GJ	23,800	9
Total of Transportation / Buildings / Solid Waste:			710,429 GJ	38,573 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	2	withheld	Kilowatt Hours	-	-
	Natural Gas	2	withheld	GigaJoules	-	-
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	815	36	825	62	845	69
Semi-Detached House	15	1	10	1	10	1
Row House	170	8	80	6	60	5
Apartment, Duplex	10	0	5	0	5	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	195	9	175	13	145	12
Other Single Attached House	0	0	0	0	5	0
Movable Dwelling	215	10	240	18	150	12

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	1,375	79	1,375	82	1,305	82
Car, Truck, Van as Passenger	90	5	125	7	145	9
Public Transit	0	0	0	0	0	0
Walked	190	11	120	7	115	7
Bicycle	35	2	20	1	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	10	1
Other Method	50	3	35	2	10	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	2,958.0
Net Land Area (ha) *	3,516.7
Residential Density (people per net ha)	0.8

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	61.9	0.9
Agricultural Land Reserve	7,157.8	99.1
Other land use	6.3	0.1
Total Land Area	7,226.0	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.