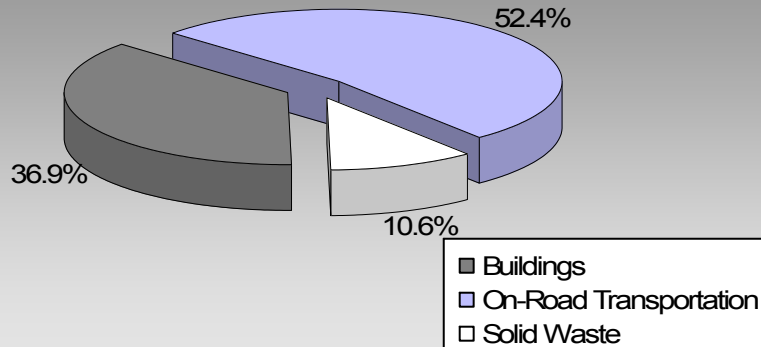


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

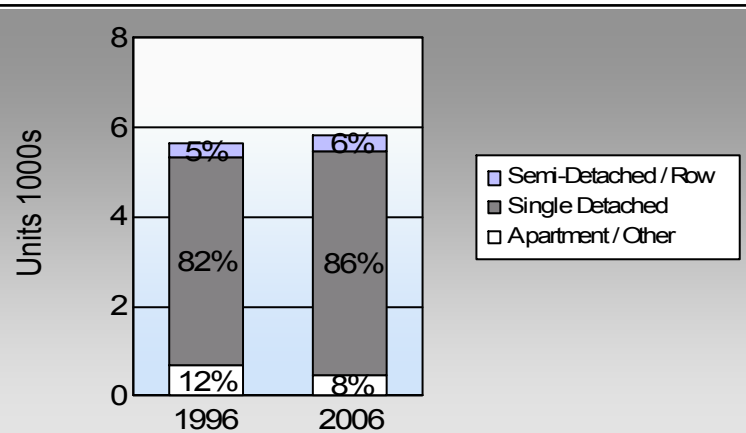
**Kitimat-Stikine Regional District Unincorporated Areas
2007 GHG Emissions Sources**



**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
	70.3%	73.7%
	10.6%	10.0%
	0.9%	1.0%
	13.8%	11.9%
	1.6%	1.1%

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

Residential Density

This data is only available for municipalities.
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	1,688	2,409,294	Litres	13,662	84,325	5,750
	Diesel Fuel	81	88,043	Litres	14,522	3,372	240
	Other Fuel	< 10	2,490	Litres	9,199	95	4
Small Passenger Cars						87,792	5,994
Large Passenger Cars	Gasoline	977	2,539,605	Litres	20,485	88,886	6,032
	Diesel Fuel	30	79,002	Litres	21,247	3,026	216
	Other Fuel	< 10	10,471	Litres	17,196	401	16
Large Passenger Cars						92,313	6,264
Light Trucks, Vans, SUVs	Gasoline	3,952	12,487,528	Litres	20,325	437,063	29,930
	Diesel Fuel	686	1,780,588	Litres	20,038	68,197	4,864
	Other Fuel	44	115,265	Litres	13,986	4,415	177
Light Trucks, Vans, SUVs						509,675	34,971
Commercial Vehicles	Gasoline	51	226,675	Litres	16,032	7,934	530
	Diesel Fuel	152	676,684	Litres	20,691	25,917	1,821
	Other Fuel	< 10	27,294	Litres	11,356	1,045	42
Commercial Vehicles						34,896	2,393
Tractor Trailer Trucks	Gasoline	0	0	Litres	0	-	-
	Diesel Fuel	170	4,033,517	Litres	60,758	154,484	10,854
	Other Fuel	< 10	1,785	Litres	7,085	68	3
Tractor Trailer Trucks						154,552	10,857
Motorhomes	Gasoline	45	56,749	Litres	2,786	1,986	132
	Diesel Fuel	< 10	8,906	Litres	4,316	341	24
	Other Fuel	< 10	1,108	Litres	2,189	42	2
Motorhomes						2,369	158
Motorcycles, Mopeds	Gasoline	41	26,980	Litres	5,105	944	63
Motorcycles, Mopeds						944	63
Bus	Gasoline	17	137,035	Litres	21,302	4,796	322
	Diesel Fuel	14	135,144	Litres	45,720	5,176	364
	Other Fuel	< 10	5,852	Litres	15,902	224	9
Bus						10,196	695

Kitimat-Stikine Regional District Unincorporated Areas Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	625,934	42,759
	Diesel:	260,513	18,383
	Other Fuel:	6,290	253
	All Fuels:	892,737	61,395

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	7,253	105,665,465	Kilowatt Hours	380,395	2,606
	Natural Gas	2,130	707,891	GigaJoules	707,891	36,103
	Heating Oil		6,046	GigaJoules	6,046	426
	Propane		16,469	GigaJoules	16,469	1,005
	Wood		44,685	GigaJoules	44,685	17
Residential					1,155,486	40,157
Commercial/Small-Medium Industrial	Electricity	1,171	41,285,352	Kilowatt Hours	148,627	1,018
	Natural Gas	171	40,095	GigaJoules	40,095	2,045
Commercial/Small-Medium Industrial					188,722	3,063
Buildings Totals	Electricity:				529,022	3,624
	Natural Gas:				747,986	38,148
	Propane:				16,469	1,005
	Wood:				44,685	17
	Heating Oil:				6,046	426
	Buildings:				1,344,208	43,220

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	8,180	12,467

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	6,801,884	L	260,513	18,383
Electricity	146,950,817	kWh	529,022	3,624
Gasoline	17,883,866	L	625,934	42,759
Heating Oil	6,046	GJ	6,046	426
Natural Gas	747,986	GJ	747,986	38,148
Other Fuel	164,265	L	6,290	253
Propane	16,469	GJ	16,469	1,005
Solid Waste	8,180	T	0	12,467
Wood	44,685	GJ	44,685	17
Total of Transportation / Buildings / Solid Waste:			2,236,945 GJ	117,082 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
	Natural Gas	1	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	4,640	29	4,875	85	5,000	86
Semi-Detached House	190	1	195	3	235	4
Row House	110	1	130	2	95	2
Apartment, Duplex	55	0	20	0	35	1
Apartment, 5 storeys or higher	0	0	5	0	0	0
Apartment, under 5 storeys	30	0	45	1	45	1
Other Single Attached House	0	0	10	0	0	0
Movable Dwelling	605	4	485	8	400	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	4,705	70	4,420	74	4,170	74
Car, Truck, Van as Passenger	710	11	515	9	565	10
Public Transit	60	1	40	1	55	1
Walked	925	14	710	12	675	12
Bicycle	105	2	95	2	60	1
Motorcycle	5	0	10	0	5	0
Taxicab	10	0	15	0	5	0
Other Method	175	3	135	2	125	2

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

This data is currently unavailable in the CEEI 2007 Reports.

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	1,689,016.3	16.1
Local Parks	11.8	0.0
Agricultural Land Reserve	64,609.6	0.6
Other land use	8,761,549.3	83.3
Total Land Area	10,515,186.9	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.