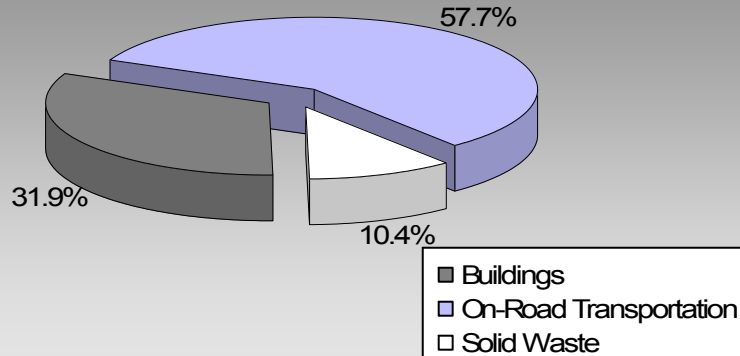


BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

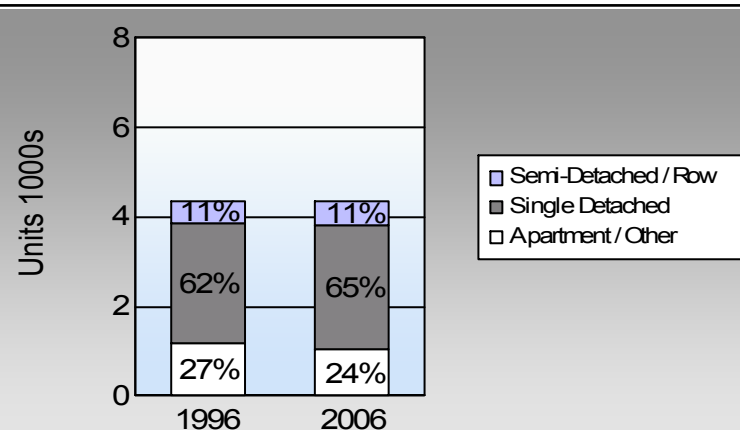
**Terrace City
2007 GHG Emissions Sources**



**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
	75.7%	74.3%
	8.7%	10.4%
	0.5%	1.2%
	12.5%	11.5%
	2.0%	1.9%

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

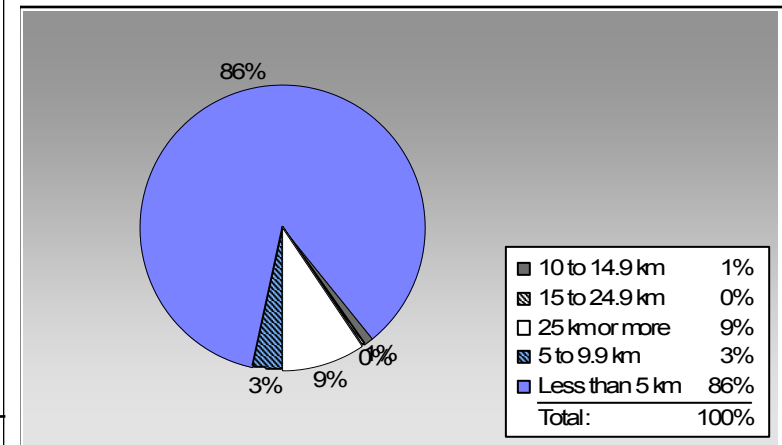
Residential Density

Terrace City: 3.4 people per net ha

BC municipal average: 7.4 people per net ha

Are we living closer to where we work?

Commute Distance



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	1,700	2,360,682	Litres	13,730	82,624	5,620
	Diesel Fuel	53	56,002	Litres	14,787	2,145	153
Small Passenger Cars						84,769	5,773
Large Passenger Cars	Gasoline	1,275	3,285,977	Litres	21,339	115,009	7,767
	Diesel Fuel	23	58,587	Litres	21,058	2,244	160
	Other Fuel	< 10	14,758	Litres	19,255	565	23
Large Passenger Cars						117,818	7,950
Light Trucks, Vans, SUVs	Gasoline	3,352	10,523,570	Litres	20,680	368,325	25,166
	Diesel Fuel	340	918,266	Litres	21,249	35,170	2,509
	Other Fuel	28	81,055	Litres	14,686	3,104	124
Light Trucks, Vans, SUVs						406,599	27,799
Commercial Vehicles	Gasoline	41	208,875	Litres	17,858	7,311	490
	Diesel Fuel	92	437,724	Litres	21,900	16,765	1,178
	Other Fuel	< 10	10,056	Litres	11,356	385	15
Commercial Vehicles						24,461	1,683
Tractor Trailer Trucks	Gasoline	< 10	2,380	Litres	7,085	83	5
	Diesel Fuel	122	3,133,680	Litres	71,262	120,020	8,433
Tractor Trailer Trucks						120,103	8,438
Motorhomes	Gasoline	45	65,206	Litres	2,869	2,282	152
	Diesel Fuel	< 10	5,834	Litres	3,113	223	16
	Other Fuel	< 10	1,246	Litres		48	2
Motorhomes						2,553	170
Motorcycles, Mopeds	Gasoline	51	34,809	Litres	5,199	1,218	81
Motorcycles, Mopeds						1,218	81
Bus	Gasoline	< 10	58,823	Litres	19,428	2,059	138
	Diesel Fuel	< 10	57,357	Litres	27,085	2,197	154
Bus						4,256	292

Terrace City

Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	578,911	39,419
	Diesel:	178,764	12,603
	Other Fuel:	4,102	164
On Road Transportation Totals	All Fuels:	761,777	52,186

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	4,581	53,273,739	Kilowatt Hours	191,785	1,314
	Natural Gas	3,363	252,275	GigaJoules	252,275	12,866
	Heating Oil		4,628	GigaJoules	4,628	326
	Propane		12,624	GigaJoules	12,624	770
	Wood		34,159	GigaJoules	34,159	13
Residential					495,471	15,289
Commercial/Small-Medium Industrial	Electricity	962	62,647,181	Kilowatt Hours	225,530	1,545
	Natural Gas	566	235,776	GigaJoules	235,776	12,025
Commercial/Small-Medium Industrial					461,306	13,570
					Electricity:	2,859
					Natural Gas:	24,891
					Propane:	770
					Wood:	13
					Heating Oil:	326
Buildings Totals	Buildings:				956,777	28,859

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	5,669	9,427

Terrace City

Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION		ENERGY (GJ)	CO2e (t)
Diesel Fuel	4,667,450	L	178,764	12,603
Electricity	115,920,920	kWh	417,315	2,859
Gasoline	16,540,322	L	578,911	39,419
Heating Oil	4,628	GJ	4,628	326
Natural Gas	488,051	GJ	488,051	24,891
Other Fuel	107,115	L	4,102	164
Propane	12,624	GJ	12,624	770
Solid Waste	5,669	T	0	9,427
Wood	34,159	GJ	34,159	13
Total of Transportation / Buildings / Solid Waste:			1,718,554 GJ	90,472 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-
	Natural Gas	3	98,535	GigaJoules	98,535	5,025
Large Industrial					98,535	5,025

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	2,680	38	2,910	67	2,795	65
Semi-Detached House	195	3	195	4	215	5
Row House	280	4	255	6	280	6
Apartment, Duplex	235	3	210	5	260	6
Apartment, 5 storeys or higher	0	0	115	3	0	0
Apartment, under 5 storeys	720	10	470	11	570	13
Other Single Attached House	20	0	25	1	30	1
Movable Dwelling	210	3	190	4	175	4

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	4,375	76	4,225	81	3,765	74
Car, Truck, Van as Passenger	505	9	415	8	525	10
Public Transit	30	1	10	0	60	1
Walked	720	12	460	9	580	11
Bicycle	115	2	55	1	95	2
Motorcycle	0	0	0	0	0	0
Taxicab	10	0	10	0	0	0
Other Method	25	0	60	1	40	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	11,675.0
Net Land Area (ha) *	3,450.1
Residential Density (people per net ha)	3.4

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	%
Less than 5 km	3,800	86
5 to 9.9 km	140	3
10 to 14.9 km	50	1
15 to 24.9 km	15	0
25 km or more	420	9

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	93.8	2.2
Agricultural Land Reserve	208.8	5.0
Other land use	3,896.8	92.8
Total Land Area	4,199.4	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.