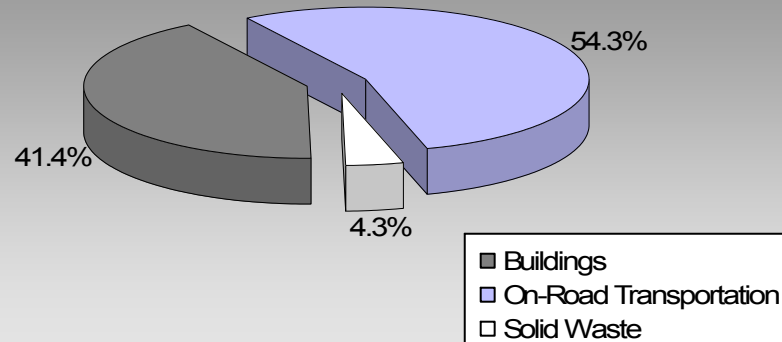


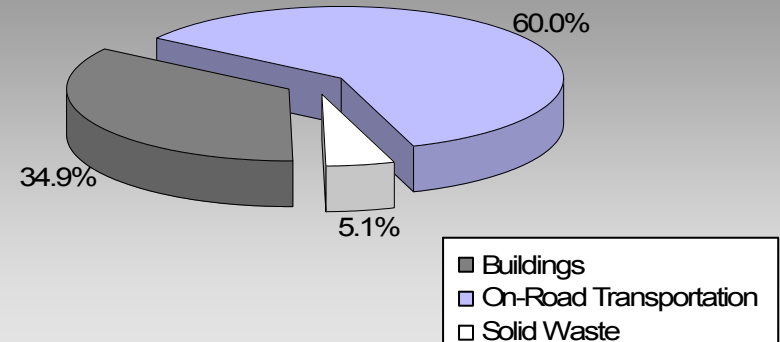
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

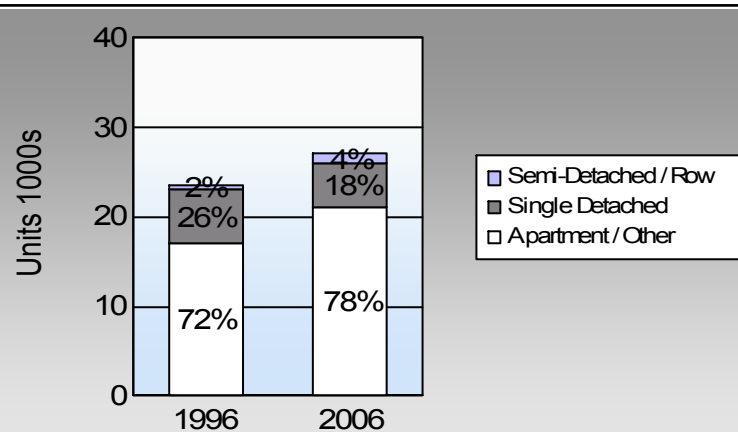
**New Westminster City
2007 GHG Emissions Sources**



**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
	65.5%	60.3%
	5.8%	4.9%
	20.0%	26.8%
	6.6%	6.1%
	0.9%	0.8%

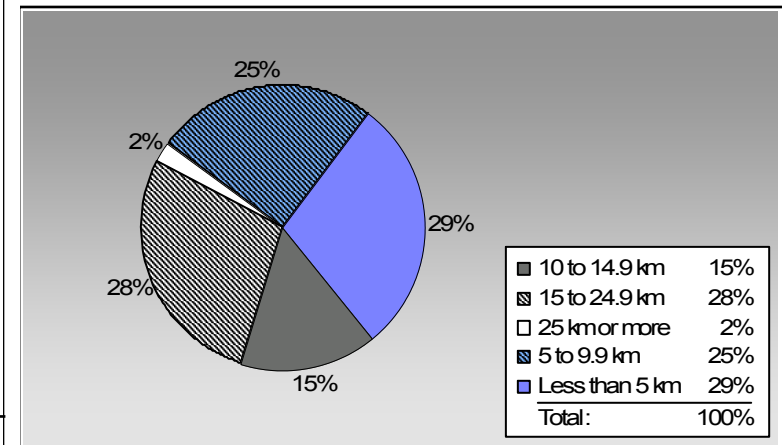
In BC, 10% of people took transit, 7% walked, and 2% cycled to work in 2006.

Residential Density

New Westminster City: 46.4 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	12,590	16,575,487	Litres	13,204	580,142	39,457
	Diesel Fuel	260	275,682	Litres	13,515	10,559	753
	Other Fuel	< 10	747	Litres		29	1
Small Passenger Cars						590,730	40,211
Large Passenger Cars	Gasoline	5,616	9,814,520	Litres	14,482	343,508	23,280
	Diesel Fuel	101	177,944	Litres	13,317	6,815	486
	Other Fuel	16	27,985	Litres	10,965	1,072	43
Large Passenger Cars						351,395	23,809
Light Trucks, Vans, SUVs	Gasoline	9,791	18,854,746	Litres	13,368	659,916	45,093
	Diesel Fuel	328	706,917	Litres	16,474	27,075	1,931
	Other Fuel	49	91,073	Litres	10,879	3,488	140
Light Trucks, Vans, SUVs						690,479	47,164
Commercial Vehicles	Gasoline	40	182,371	Litres	13,576	6,383	426
	Diesel Fuel	204	980,152	Litres	20,962	37,540	2,638
	Other Fuel	< 10	15,802	Litres	11,356	605	24
Commercial Vehicles						44,528	3,088
Tractor Trailer Trucks	Gasoline	< 10	11,384	Litres		398	27
	Diesel Fuel	410	14,545,702	Litres	93,887	557,100	39,142
	Other Fuel	< 10	2,976	Litres	7,085	114	5
Tractor Trailer Trucks						557,612	39,174
Motorhomes	Gasoline	146	145,214	Litres	2,996	5,083	340
	Diesel Fuel	12	15,671	Litres	5,597	600	42
	Other Fuel	< 10	1,108	Litres	2,189	42	2
Motorhomes						5,725	384
Motorcycles, Mopeds	Gasoline	459	179,583	Litres	5,363	6,285	419
Motorcycles, Mopeds						6,285	419
Bus	Gasoline	12	127,687	Litres	26,313	4,469	300
	Diesel Fuel	< 10	169,027	Litres	43,920	6,474	455
	Other Fuel	< 10	11,704	Litres	15,902	448	18
Bus						11,391	773

New Westminster City Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	1,606,184	109,342
	Diesel:	646,163	45,447
	Other Fuel:	5,798	233
On Road Transportation Totals	All Fuels:	2,258,145	155,022

Buildings	<u>Type</u>	<u>Connections</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>	
Residential	Electricity	27,152	182,356,848	Kilowatt Hours	656,484	4,499	
	Natural Gas	8,059	825,179	GigaJoules	825,179	42,084	
Residential					1,481,663	46,583	
Commercial/Small-Medium Industrial	Electricity	3,190	259,957,721	Kilowatt Hours	935,847	6,412	
	Natural Gas	1,342	1,282,407	GigaJoules	1,282,407	65,403	
Commercial/Small-Medium Industrial					2,218,254	71,815	
					Electricity:	1,592,331	10,911
					Natural Gas:	2,107,586	107,487
					Propane:		
					Wood:		
					Heating Oil:		
Buildings Totals	Buildings:				3,699,917	118,398	

Solid Waste	<u>Mass (t)</u>	<u>CO2e (t)</u>
Community Solid Waste	33,637	12,239

New Westminster City Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION	ENERGY (GJ)	CO2e (t)
Diesel Fuel	16,871,095 L	646,163	45,447
Electricity	442,314,569 kWh	1,592,331	10,911
Gasoline	45,890,992 L	1,606,184	109,342
Natural Gas	2,107,586 GJ	2,107,586	107,487
Other Fuel	151,395 L	5,798	233
Solid Waste	33,637 T	0	12,239
Total of Transportation / Buildings / Solid Waste:		5,958,062 GJ	285,659 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	5	withheld	Kilowatt Hours	-	-
	Natural Gas	33	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	6,020	20	6,170	24	4,945	18
Semi-Detached House	210	1	200	1	115	0
Row House	345	1	705	3	970	4
Apartment, Duplex	1,275	4	2,005	8	3,030	11
Apartment, 5 storeys or higher	6,255	21	6,405	25	6,970	26
Apartment, under 5 storeys	9,360	32	10,395	40	10,905	40
Other Single Attached House	35	0	115	0	55	0
Movable Dwelling	40	0	40	0	50	0

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	15,765	66	17,260	64	18,390	60
Car, Truck, Van as Passenger	1,400	6	1,530	6	1,485	5
Public Transit	4,815	20	5,395	20	8,155	27
Walked	1,595	7	1,995	7	1,870	6
Bicycle	205	1	275	1	250	1
Motorcycle	70	0	50	0	80	0
Taxicab	55	0	50	0	60	0
Other Method	155	1	210	1	200	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	65,016.0
Net Land Area (ha) *	1,399.9
Residential Density (people per net ha)	46.4

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	7,625	29
5 to 9.9 km	6,695	25
10 to 14.9 km	4,070	15
15 to 24.9 km	7,435	28
25 km or more	565	2

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	102.0	5.5
Agricultural Land Reserve	0.0	0.0
Other land use	1,753.8	94.5
Total Land Area	1,855.8	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.