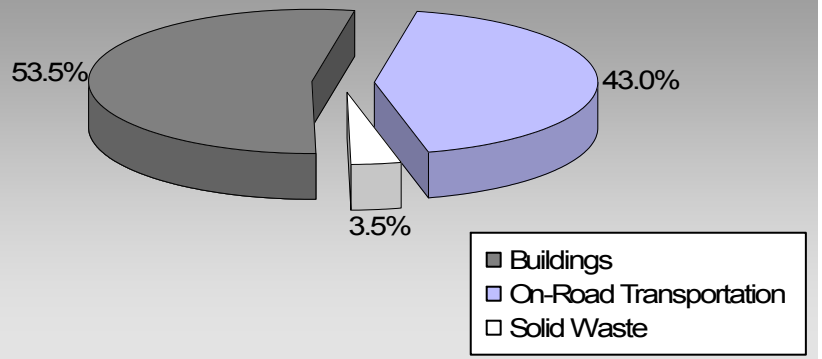
West Vancouver District Municipality
Updated 2007 Community Energy and Emissions Inventory

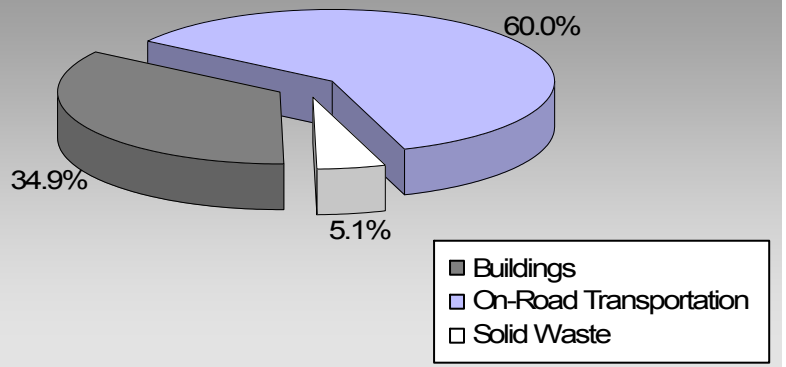
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

West Vancouver District Municipality
2007 GHG Emissions Sources

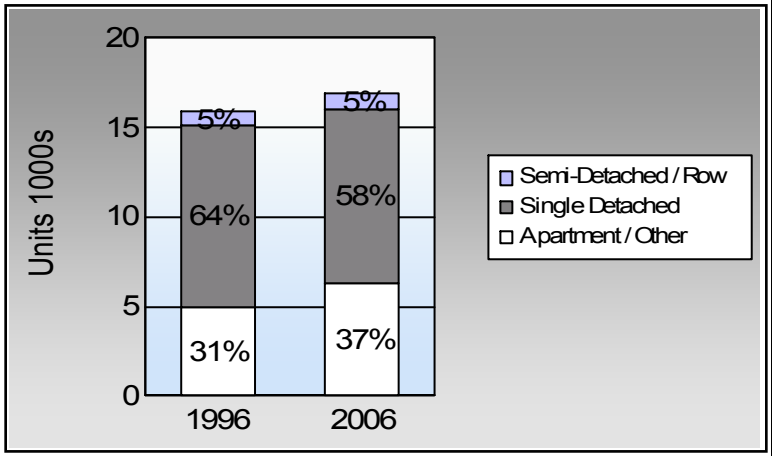


Total for BC Communities



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
	79.1%	75.3%
	5.3%	6.8%
	8.6%	9.4%
	4.5%	5.4%
	1.2%	1.5%

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

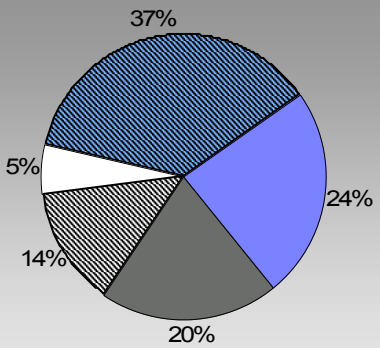
Residential Density

West Vancouver District Municipality: 7.4 people per net ha

BC municipal average: 7.4 people per net ha

Are we living closer to where we work?

Commute Distance



10 to 14.9 km	20%
15 to 24.9 km	14%
25 km or more	5%
5 to 9.9 km	37%
Less than 5 km	24%
Total:	100%

In BC, 41% of people lived within 5km of their work in 2006.

For more information and to provide feedback on your Community Energy and Emissions Inventory (CEEI) Report see back page.

Sectors

On Road Transportation		Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	10,710	13,684,794	Litres	13,178	478,968	32,395
	Diesel Fuel	262	260,393	Litres	13,289	9,973	711
	Other Fuel	< 10	1,260	Litres	10,677	48	2
				Small Passenger Cars		**488,989**	**33,108**
Large Passenger Cars	Gasoline	6,729	11,390,240	Litres	14,669	398,658	26,922
	Diesel Fuel	135	196,291	Litres	12,721	7,518	535
	Other Fuel	< 10	9,209	Litres	10,354	353	14
				Large Passenger Cars		**406,529**	**27,471**
Light Trucks, Vans, SUVs	Gasoline	9,506	18,262,035	Litres	13,757	639,171	43,472
	Diesel Fuel	199	431,869	Litres	16,575	16,541	1,180
	Other Fuel	15	27,976	Litres	10,876	1,071	43
				Light Trucks, Vans, SUVs		**656,783**	**44,695**
Commercial Vehicles	Gasoline	24	99,583	Litres	14,586	3,485	233
	Diesel Fuel	70	343,397	Litres	21,648	13,152	924
	Other Fuel	< 10	20,151	Litres	12,750	772	31
				Commercial Vehicles		**17,409**	**1,188**
Tractor Trailer Trucks	Gasoline	< 10	34,653	Litres	19,553	1,213	81
	Diesel Fuel	34	818,365	Litres	68,246	31,343	2,202
				Tractor Trailer Trucks		**32,556**	**2,283**
Motorhomes	Gasoline	122	126,093	Litres	3,329	4,413	295
	Diesel Fuel	< 10	10,798	Litres	4,501	414	29
	Other Fuel	< 10	2,265	Litres	3,639	87	3
				Motorhomes		**4,914**	**327**
Motorcycles, Mopeds	Gasoline	378	165,761	Litres	5,933	5,802	387
				Motorcycles, Mopeds		**5,802**	**387**
Bus	Gasoline	11	101,950	Litres	23,352	3,568	240
	Diesel Fuel	45	1,314,608	Litres	52,914	50,349	3,538
				Bus		**53,917**	**3,778**

West Vancouver District Municipality
Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	1,535,278	104,025
	Diesel:	129,290	9,119
	Other Fuel:	2,331	93
On Road Transportation Totals	**All Fuels:**	**1,666,899**	**113,237**

Buildings

	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	17,387	235,271,315	Kilowatt Hours	846,976	5,803
	Natural Gas	12,293	2,091,100	GigaJoules	2,091,100	106,646
			Residential		**2,938,076**	**112,449**
Commercial/Small-Medium Industrial	Electricity	1,518	110,945,051	Kilowatt Hours	399,402	2,737
	Natural Gas	526	499,615	GigaJoules	499,615	25,480
			Commercial/Small-Medium Industrial		**899,017**	**28,217**

	Electricity:	1,246,378	8,540
	Natural Gas:	2,590,715	132,126
	Propane:		
	Wood:		
	Heating Oil:		
Buildings Totals	**Buildings:**	**3,837,093**	**140,666**

Solid Waste

	Mass (t)	CO2e (t)
Community Solid Waste	25,333	9,218

Grand Total		CONSUMPTION		ENERGY (GJ)	CO2e (t)
	Diesel Fuel	3,375,721	L	129,290	9,119
	Electricity	346,216,366	kWh	1,246,378	8,540
	Gasoline	43,865,109	L	1,535,278	104,025
	Natural Gas	2,590,715	GJ	2,590,715	132,126
	Other Fuel	60,861	L	2,331	93
	Solid Waste	25,333	T	0	9,218
Total of Transportation / Buildings / Solid Waste:				**5,503,992** GJ	**263,121** tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
	Natural Gas	19	248,306	GigaJoules	248,306	12,664
				Large Industrial	**248,306**	**12,664**

West Vancouver District Municipality
Updated 2007 Community Energy and Emissions Inventory

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	10,105	39	10,290	63	9,725	58
Semi-Detached House	360	1	380	2	480	3
Row House	415	2	390	2	330	2
Apartment, Duplex	530	2	590	4	1,420	8
Apartment, 5 storeys or higher	3,390	13	3,345	20	3,445	20
Apartment, under 5 storeys	1,065	4	1,325	8	1,430	8
Other Single Attached House	0	0	20	0	5	0
Movable Dwelling	0	0	5	0	5	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	43,307.0
Net Land Area (ha) *	5,893.3
Residential Density (people per net ha)	7.4

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	12,520	79	12,170	80	11,565	75
Car, Truck,Van as Passenge	840	5	815	5	1,040	7
Public Transit	1,360	9	1,300	8	1,445	9
Walked	710	4	760	5	830	5
Bicycle	185	1	145	1	235	2
Motorcycle	0	0	0	0	55	0
Taxicab	10	0	0	0	15	0
Other Method	210	1	115	1	165	1

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	3,310	24
5 to 9.9 km	5,125	37
10 to 14.9 km	2,815	20
15 to 24.9 km	1,905	14
25 km or more	765	6

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	1,833.7	20.4
Local Parks	311.4	3.5
Agricultural Land Reserve	0.0	0.0
Other land use	6,846.2	76.1
Total Land Area	8,991.3	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_2e 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.

++

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