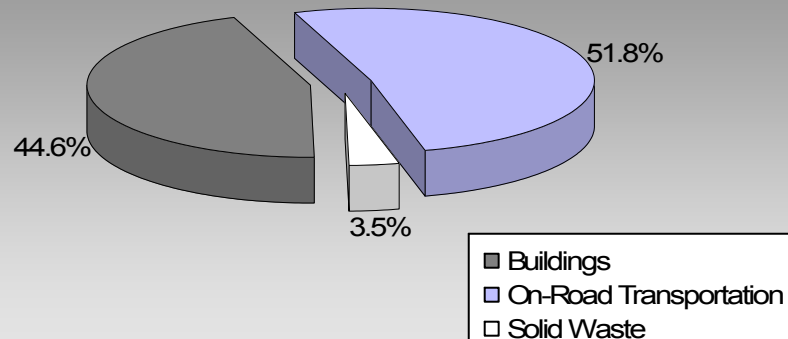


North Vancouver District Municipality Updated 2007 Community Energy and Emissions Inventory

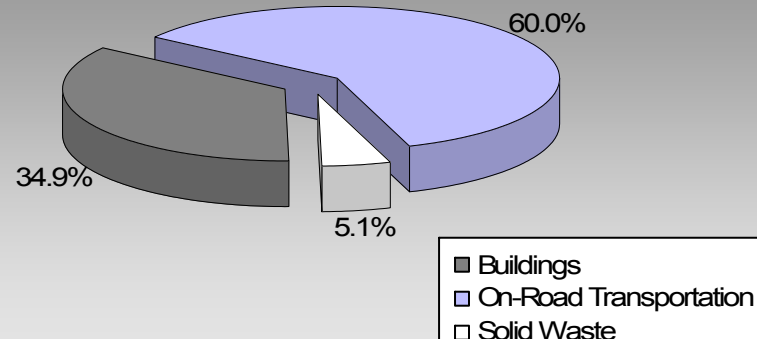
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

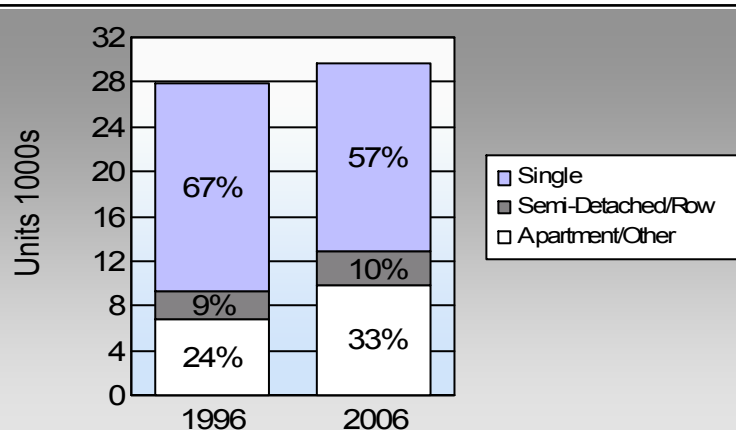
**North Vancouver District Municipality
2007 GHG Emissions Sources**



**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

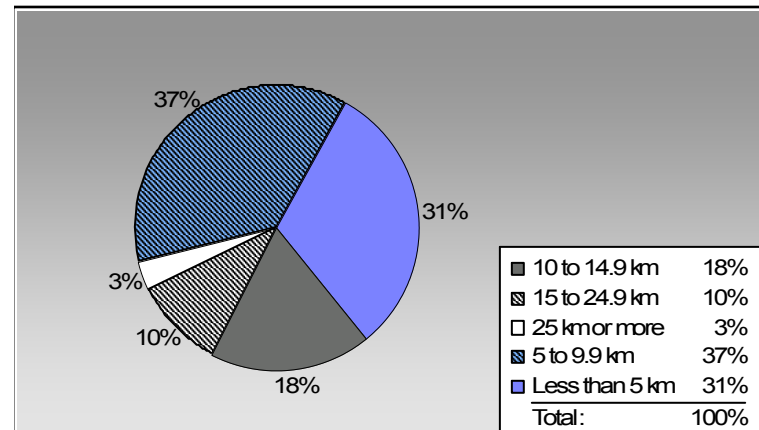
	1996	2006
	77.3%	77.4%
	6.5%	6.6%
	10.9%	10.0%
	3.4%	3.6%
	1.3%	1.4%

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

Residential Density

North Vancouver District Municipality: 9 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.

North Vancouver District Municipality

Updated 2007 Community Energy and Emissions Inventory

Sectors

On Road Transportation		Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	19,198	24,932,380	Litres	13,347	872,633	59,191
	Diesel Fuel	460	461,020	Litres	13,606	17,657	1,259
	Other Fuel	<10	2,029	Litres	9,340	78	3
Small Passenger Cars						890,368	60,453
Large Passenger Cars	Gasoline	9,771	16,817,537	Litres	14,829	588,614	39,756
	Diesel Fuel	156	256,300	Litres	13,096	9,816	699
	Other Fuel	14	28,059	Litres	11,536	1,075	43
Large Passenger Cars						599,505	40,498
Light Trucks, Vans, SUVs	Gasoline	18,362	35,080,681	Litres	13,615	1,227,824	83,634
	Diesel Fuel	555	1,189,229	Litres	16,558	45,547	3,249
	Other Fuel	47	93,558	Litres	10,520	3,583	143
Light Trucks, Vans, SUVs						1,276,954	87,026
Commercial Vehicles	Gasoline	46	180,710	Litres	14,439	6,325	422
	Diesel Fuel	231	1,090,959	Litres	21,668	41,784	2,936
	Other Fuel	<10	20,351	Litres	11,899	779	31
Commercial Vehicles						48,888	3,389
Tractor Trailer Trucks	Gasoline	<10	15,416	Litres	22,941	540	36
	Diesel Fuel	226	7,647,235	Litres	90,343	292,889	20,578
	Other Fuel	<10	7,001	Litres	10,418	268	11
Tractor Trailer Trucks						293,697	20,625
Motorhomes	Gasoline	314	17,856	Litres	2,715	625	42
	Diesel Fuel	29	1,481	Litres	5,171	57	4
	Other Fuel	<10	138	Litres		5	-
Motorhomes						687	46
Motorcycles, Mopeds	Gasoline	771	301,867	Litres	5,626	10,565	705
Motorcycles, Mopeds						10,565	705
Bus	Gasoline	29	248,131	Litres	26,296	8,685	583
	Diesel Fuel	<10	63,094	Litres	21,845	2,416	170
	Other Fuel	<10	2,926	Litres		112	4
Bus						11,213	757

North Vancouver District Municipality

Updated 2007 Community Energy and Emissions Inventory

On Road Transportation Totals	Gasoline:	2,715,811	184,369
	Diesel:	410,166	28,895
	Other Fuel:	5,900	235
	All Fuels:	3,131,877	213,499

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	27,006	309,609,391	Kilowatt Hour	1,114,593	7,637
	Natural Gas	22,111	2,692,355	GigaJoules	2,692,355	137,310
	Residential				3,806,948	144,947
Commercial/Small-Medium Industrial	Electricity	2,571	201,255,989	Kilowatt Hour	724,521	4,964
	Natural Gas	1,303	665,753	GigaJoules	665,753	33,953
	Commercial/Small-Medium Industrial				1,390,274	38,917
			Electricity:		1,839,114	12,601
			Natural Gas:		3,358,108	171,263
			Propane:			
			Wood:			
			Heating Oil:			
Buildings Totals			Buildings:		5,197,222	183,864

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	39,973	14,545

North Vancouver District Municipality

Updated 2007 Community Energy and Emissions Inventory

Grand Total		CONSUMPTION	ENERGY (GJ)	CO2e (t)
	Diesel Fuel	10,709,318 L	410,166	28,895
	Electricity	510,865,380 kWh	1,839,114	12,601
	Gasoline	77,594,578 L	2,715,811	184,369
	Natural Gas	3,358,108 GJ	3,358,108	171,263
	Other Fuel	154,062 L	5,900	235
	Solid Waste	39,973 T	0	14,545
Total of Transportation / Buildings / Solid Waste:			8,329,099 GJ	411,908 tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	4	withheld	Kilowatt Hour	-	-
	Natural Gas	26	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. 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	18,575	67	18,455	63	16,915	57
Semi-Detached House	480	2	415	1	475	2
Row House	2,115	8	2,275	8	2,495	8
Apartment, Duplex	2,110	8	3,200	11	4,645	16
Apartment, 5 storeys or higher	1,755	6	1,680	6	1,705	6
Apartment, under 5 storeys	2,830	10	3,035	10	3,485	12
Other Single Attached House	25	0	15	0	25	0
Movable Dwelling	15	0	10	0	5	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	30,060	77	30,270	79	29,245	77
Car, Truck, Van as Passenger	2,530	7	2,425	6	2,490	7
Public Transit	4,215	11	3,170	8	3,765	10
Walked	1,305	3	1,470	4	1,360	4
Bicycle	505	1	655	2	540	1
Motorcycle	65	0	50	0	150	0
Taxicab	10	0	20	0	10	0
Other Method	175	0	225	1	245	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	86,725.0
Net Land Area (ha) *	9,738.3
Residential Density (people per net ha)	8.9

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	10,460	31
5 to 9.9 km	12,430	37
10 to 14.9 km	6,195	18
15 to 24.9 km	3,380	10
25 km or more	1,115	3

North Vancouver District Municipality

Updated 2007 Community Energy and Emissions Inventory

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	2,442.8	14.9
Local Parks	2,687.8	16.4
Agricultural Land Reserve	0.0	0.0
Other land use	11,239.1	68.7
Total Land Area	16,369.8	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	Average energy use per person per square metre of floor space
Energy Intensity	
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.