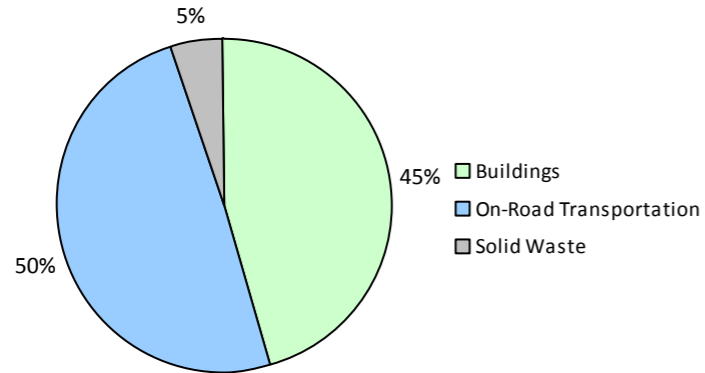
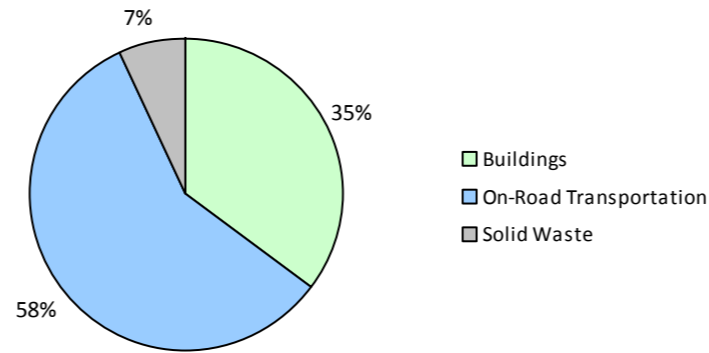


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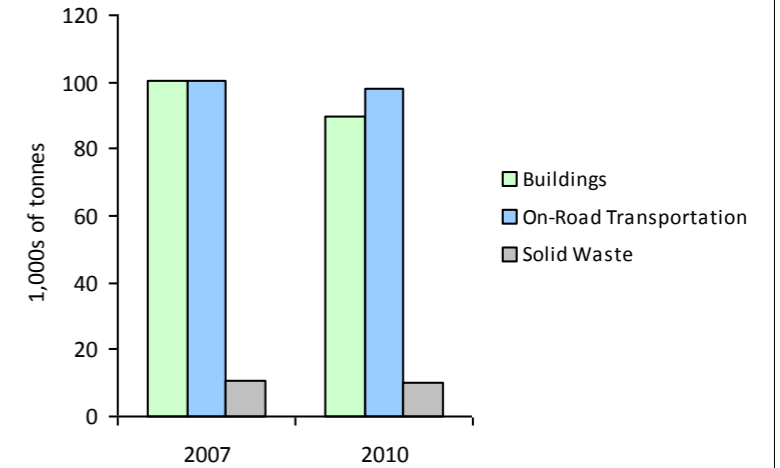
2010 GHG Emissions Sources (Total for this Community)



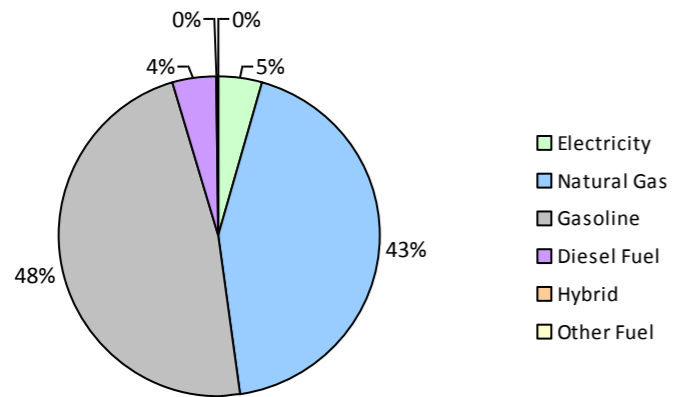
2010 GHG Emissions Sources (Total for BC)



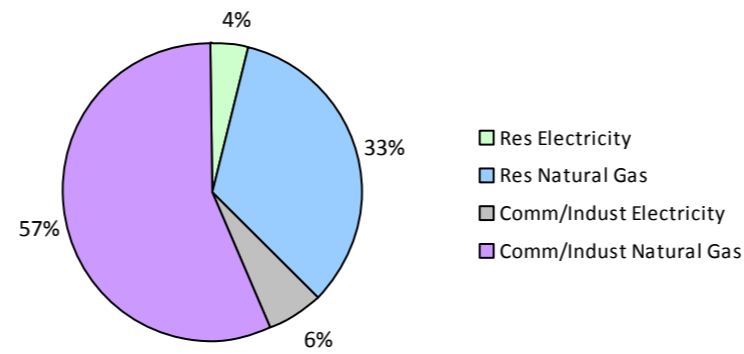
GHG Emissions Comparisons for this Community



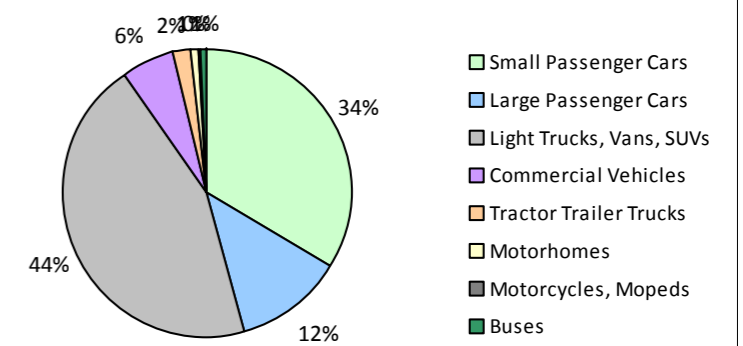
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



North Vancouver City 2010 Community Energy and Emissions Inventory

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Core Items

On-Road Transportation		2007					2010				
		Connections	Consumption	Avg VKT (km)	Energy (GJ)	CO2e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Hybrid			15,800	230	16	30	25,740 L	16,000	900	57
	Gasoline	11,353	14,508,555 L	13,400	507,799	34,416	11,394	14,369,400 L	13,200	502,930	32,224
	Diesel Fuel	238	265,358 L	16,700	10,163	724	241	266,010 L	16,300	10,189	705
	Other Fuel			8,700	24	0			14,700	79	4
Large Passenger Cars	Hybrid	33	27,172 L	15,700	950	64	98	88,273 L	15,800	3,089	196
	Gasoline	3,916	5,582,034 L	12,500	195,371	13,247	3,756	5,203,803 L	12,100	182,133	11,682
	Diesel Fuel	54	66,317 L	12,800	2,540	180	59	71,588 L	13,000	2,742	189
	Other Fuel			10,500	137	9			15,500	51	4
Light Trucks, Vans, SUVs	Hybrid	12	17,105 L	18,100	598	41	47	64,947 L	16,400	2,273	147
	Gasoline	8,286	17,419,865 L	15,100	609,695	41,569	9,145	18,686,295 L	14,800	654,020	42,295
	Diesel Fuel	137	323,117 L	14,000	12,376	880	151	382,027 L	16,900	14,631	1,011
	Other Fuel	33	62,758 L	11,500	1,589	96	26	46,734 L	11,000	1,182	71
Commercial Vehicles	Hybrid								20,500	170	11
	Gasoline	356	945,675 L	16,000	33,099	2,222	363	963,946 L	16,000	33,738	2,156
	Diesel Fuel	353	1,319,180 L	18,700	50,525	3,549	405	1,510,558 L	19,100	57,854	3,944
	Other Fuel	22	44,264 L	11,000	1,120	68	15	28,145 L	10,400	712	44
Tractor Trailer Trucks	Gasoline			16,100	317	21			18,000	160	10
	Diesel Fuel	56	555,870 L	24,500	21,290	1,496	59	648,239 L	27,600	24,828	1,692
Motorhomes	Gasoline	108	248,737 L	16,600	8,706	580	103	234,560 L	16,600	8,210	520
	Diesel Fuel	58	171,810 L	16,700	6,580	462	42	132,284 L	16,900	5,067	345
	Other Fuel			22,100	85	5			20,100	77	4
Motorcycles, Mopeds	Gasoline	427	103,958 L	5,400	3,638	242	509	142,854 L	6,300	5,000	318
Buses	Gasoline	21	92,970 L	28,300	3,253	218	30	131,951 L	27,700	4,618	296
	Diesel Fuel	24	204,320 L	34,600	7,826	550	12	85,575 L	30,700	3,278	222
	Other Fuel			18,800	192	12			16,200	84	4
Totals		25,487	41,959,065 L	13,901	1,478,103	100,667	26,485	41,959,065 L	13,732	1,518,015	98,151

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		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Natural Gas	6,961	671,989 GJ	671,989	33,707	7,031	594,141 GJ	594,141	29,802
	Electricity	21,207	155,943,489 kWh	561,396	3,899	22,566	154,515,027 kWh	556,254	3,863
Commercial/Small-Medium Industrial	Natural Gas	1,465	1,132,356 GJ	1,132,356	56,799	1,436	1,016,414 GJ	1,016,414	50,984
	Electricity	2,274	239,928,680 kWh	863,743	5,998	2,400	207,315,993 kWh	746,337	5,183
Totals		31,907		3,229,484	100,403	33,433		2,913,146	89,832

		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	26,476 t	N/A	10,777	0	21,027 t	N/A	9,974
Totals		0			10,777	0			9,974

Memo Items

		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	16	294,015 GJ	294,015	14,748	15	234,536 GJ	234,536	11,764
	Electricity	2		0	0	3		0	0
Totals		18		294,015	14,748	18		234,536	11,764

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 47,277)			2010 (Population: 50,725)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	44,277 L	1,778	121	178,960 L	6,432	411
Gasoline	38,901,794 L	1,361,878	92,515	39,732,809 L	1,390,809	89,501
Diesel Fuel	2,905,972 L	111,300	7,841	3,096,281 L	118,589	8,108
Other Fuel	107,022 L	3,147	190	74,879 L	2,185	131
Natural Gas	1,804,345 GJ	1,804,345	90,506	1,610,555 GJ	1,610,555	80,786
Electricity	395,872,169 kWh	1,425,139	9,897	361,831,020 kWh	1,302,591	9,046
Solid Waste	26,476 t	0	10,777	21,027 t	0	9,974
Grand Totals		4,707,587	211,847		4,431,161	197,957

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Supporting Indicators

No new supporting indicator data have been provided in the 2010 reports. Work is currently underway to produce a complete second round of data for the indicators below in the 2012 reports (available in 2014). In the interim, we are including the same supporting indicator data that was provided in the 2007 reports. Feedback is requested on all supporting indicators; please contact us directly at

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	40	18,455	63	16,915	57
Semi-Detached House	480	1	415	1	475	2
Row House	2,115	5	2,275	8	2,495	8
Apartment, Duplex	2,110	5	3,200	11	4,645	16
Apartment, 5 storeys or higher	1,755	4	1,680	6	1,705	6
Apartment, under 5 storeys	2,830	6	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	
	Units	%	Units	%	Units	%
Car, Truck, Van as Driver	30,060	77	30,270	79	14,720	62
Car, Truck, Van as Passenger	2,530	7	2,425	6	1,325	6
Public Transit	4,215	11	3,170	8	4,825	20
Walked	1,305	3	1,470	4	2,220	9
Bicycle	505	1	655	2	450	2
Motorcycle	65	0	50	0	55	0
Taxicab	10	0	20	0	45	0
Other Method	175	0	225	1	80	0

Parks and Protected Greenspace

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	0	0
Local Parks	128	11
Agricultural Land Reserve	0	0
Other land use	1,065	89
Total Parks and Protected Area	128	11
Total Land Area	1,193	100

* Total is net of Indian Reserves
 ** Quantity of parkland may be underestimated

Residential Density

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	
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	0	0
Local Parks	128	11
Agricultural Land Reserve	0	0
Other land use	1,065	89
Total Parks and Protected Area	128	11
Total Land Area	1,193	100

* Net of Crown land, parks, Indian Reserves, water features, airports, ALR, waste disposal site

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	
	Units	%
Less than 5 km	10,660	52
5 to 9.9 km	6,235	31
25 km or more	495	2
15 to 24.9 km	1,430	7
10 to 14.9 km	1,500	7

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Supporting Indicators Under Consideration

Work is currently underway to produce a complete second round of supporting indicators for the 2012 reports (available in 2014). These reports will new data for the five supporting indicators included in the 2007 and 2010 Reports:

- **Housing Type:** Private dwellings by structural type
- **Commute to Work:** Employed labour force - by mode of commute
- **Commute Distance**
- **Residential Density**
- **Parks and Protected Greenspace**

And in addition, the 2012 reports we are working to be able to include:

- **Proximity to Transit**
- **Building Energy Intensity**
- **Building Floor Space**
- **Waste Diversion**

We are continuing to work towards reporting on even more supporting indicators in the future including:

- **Proximity to Services** (e.g. destinations such as grocery store, school, other retail etc.)
- **Transit Ridership**
- **Water Use**
- **Impervious Surface Cover:** % change in impervious surface cover
- **Tree Canopy Cover:** % change in tree canopy cover
- **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)

Please give us feedback by contacting us directly at CEEIRPT@gov.bc.ca

Many local governments have been undertaking a significant amount of climate action in both the corporate and community-wide spheres, as demonstrated in both the public reports from the Climate Action Revenue Incentive Program (CARIP) <http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm>, and on the <http://toolkit.bc.ca> website. These two resources may be helpful to those who are interested in learning from other BC local governments. The toolkit also contains additional information and resources including decision-support/planning frameworks and tools for undertaking actions to reduce GHG emissions and energy consumption.

This is your local government's 2010 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 as well as supporting indicators 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, fulfill Milestone One requirements for those local government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program, as well as supporting local government efforts to monitor progress towards Regional Growth Strategy objectives.

A first in North America!

CEEI is a first in North America and a first step for BC communities. The 2010 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 from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items'. 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 2010 CEEI Reports, User Guide, Technical Methods and Guidance Document, and additional information on the Supporting 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, please take the time to 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,