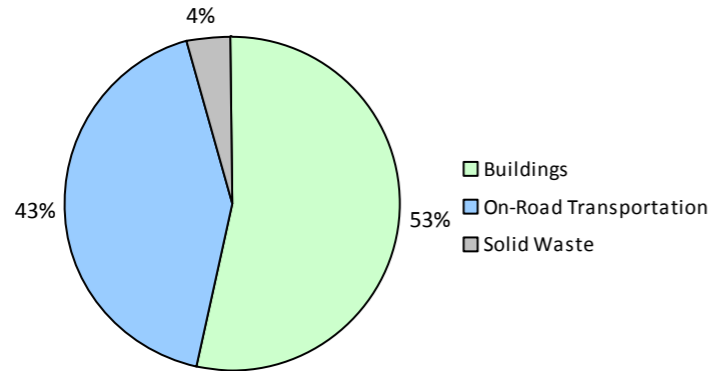


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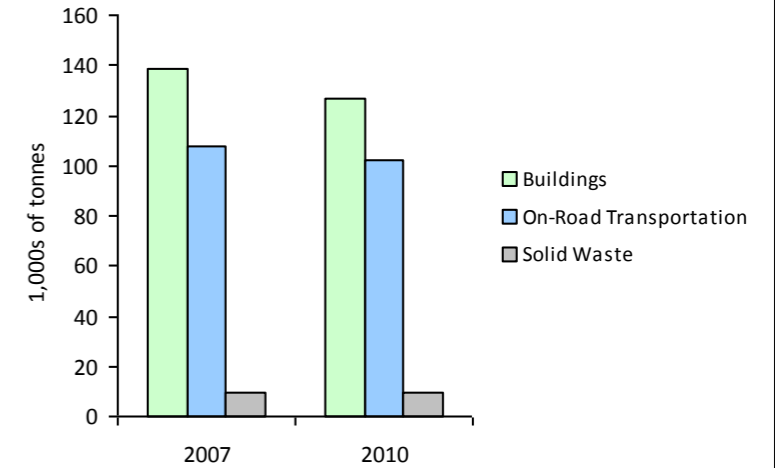
**2010 GHG Emissions Sources (Total for this Community)**



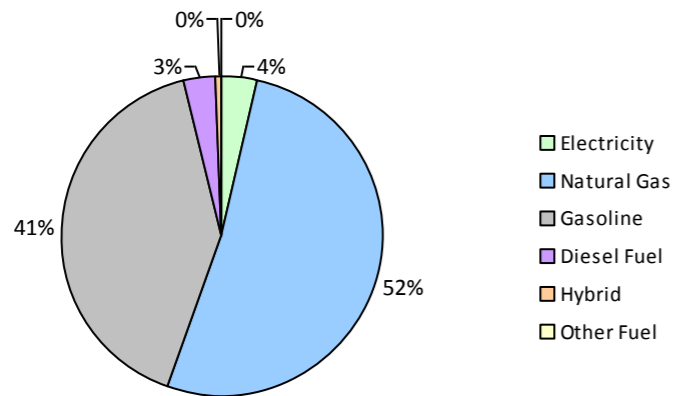
**2010 GHG Emissions Sources (Total for BC)**



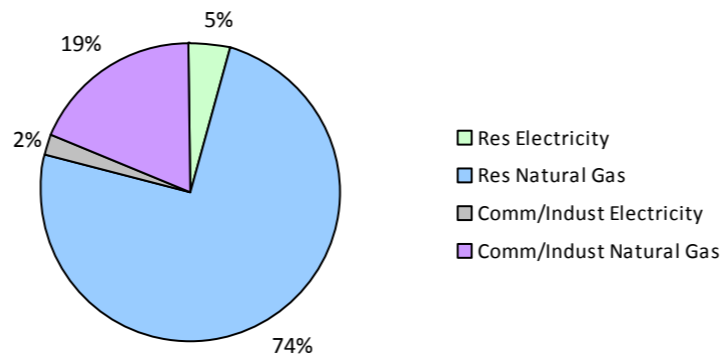
**GHG Emissions Comparisons for this Community**



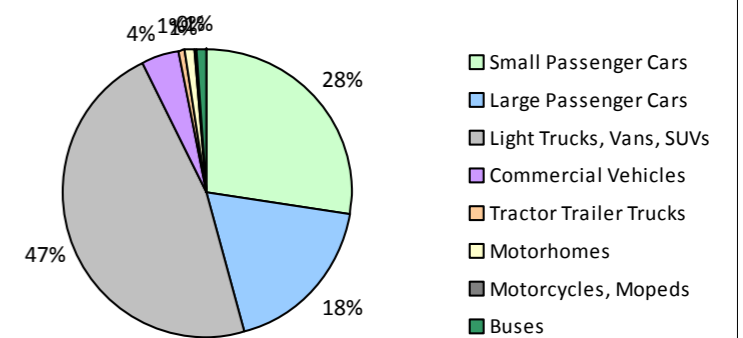
**2010 Total Emissions by Fuel Type**



**2010 Building Emissions by Subsector**



**2010 On-Road Transportation Emissions by Vehicle Class**



## West Vancouver District Municipality 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	25	15,988 L	13,700	559	37	34	24,918 L	14,300	871	55
	Gasoline	10,224	12,693,853 L	13,000	444,285	30,010	9,963	12,201,742 L	12,800	427,060	27,322
	Diesel Fuel	250	261,029 L	15,700	9,998	713	251	272,164 L	15,900	10,423	722
	Other Fuel							13,300		210	12
Large Passenger Cars	Hybrid	94	74,793 L	15,300	2,618	175	175	143,728 L	14,500	5,030	319
	Gasoline	6,628	9,487,394 L	12,600	332,059	22,393	5,904	8,103,405 L	12,000	283,620	18,138
	Diesel Fuel	90	111,440 L	13,000	4,268	303	94	126,521 L	14,300	4,846	336
	Other Fuel			8,300	28	0					
Light Trucks, Vans, SUVs	Hybrid	88	112,049 L	16,100	3,922	265	200	269,062 L	15,900	9,417	607
	Gasoline	9,246	19,196,383 L	15,000	671,874	45,645	10,006	19,909,074 L	14,600	696,817	44,984
	Diesel Fuel	130	321,958 L	15,400	12,331	878	328	889,935 L	20,200	34,084	2,359
	Other Fuel	18	37,861 L	12,900	957	58	12	21,328 L	11,400	539	33
Commercial Vehicles	Hybrid							26,700		221	14
	Gasoline	246	651,345 L	15,900	22,797	1,532	263	702,115 L	16,100	24,575	1,571
	Diesel Fuel	250	910,128 L	18,400	34,857	2,448	278	1,005,688 L	18,500	38,518	2,626
	Other Fuel			13,300	549	33		10,000		229	15
Tractor Trailer Trucks	Gasoline			16,500	516	36		14,600		460	29
	Diesel Fuel	41	336,336 L	20,200	12,882	905	34	252,852 L	18,700	9,685	659
Motorhomes	Gasoline	141	325,277 L	16,600	11,384	761	121	278,625 L	16,500	9,752	620
	Diesel Fuel	32	98,041 L	16,500	3,755	264	33	104,829 L	16,300	4,015	274
	Other Fuel							10,700		40	2
Motorcycles, Mopeds	Gasoline	400	102,636 L	5,800	3,592	240	430	124,730 L	6,500	4,366	276
Buses	Gasoline	14	65,375 L	30,200	2,289	153	23	112,354 L	31,800	3,932	253
	Diesel Fuel	48	356,589 L	26,600	13,657	960	59	371,669 L	42,200	14,235	970
<b>Totals</b>		<b>27,965</b>	<b>45,158,475 L</b>	<b>13,655</b>	<b>1,589,177</b>	<b>107,809</b>	<b>28,208</b>	<b>45,158,475 L</b>	<b>13,518</b>	<b>1,582,945</b>	<b>102,196</b>

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Natural Gas	12,293	2,091,100 GJ	2,091,100	104,890	12,314	1,875,502 GJ	1,875,502	94,075
	Electricity	17,387	235,271,315 kWh	846,976	5,882	17,436	233,617,127 kWh	841,021	5,841
Commercial/Small-Medium Industrial	Natural Gas	526	499,615 GJ	499,615	25,061	524	474,675 GJ	474,675	23,810
	Electricity	1,518	110,945,051 kWh	399,402	2,774	1,622	111,719,680 kWh	402,191	2,793
<b>Totals</b>		<b>31,724</b>		<b>3,837,093</b>	<b>138,607</b>	<b>31,896</b>		<b>3,593,389</b>	<b>126,519</b>

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	27,055 t	N/A	9,218	0	20,859 t	N/A	9,894
<b>Totals</b>		<b>0</b>			<b>9,218</b>	<b>0</b>			<b>9,894</b>

**Memo Items**

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	19	248,306 GJ	248,306	12,455	18	228,658 GJ	228,658	11,469
<b>Totals</b>		<b>19</b>		<b>248,306</b>	<b>12,455</b>	<b>18</b>		<b>228,658</b>	<b>11,469</b>

**Totals for Transportation, Buildings and Solid Waste**

Fuel Type	2007 (Population: 42,973)			2010 (Population: 44,058)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	202,830 L	7,099	477	437,708 L	15,539	995
Gasoline	42,522,263 L	1,488,796	100,770	41,432,045 L	1,450,582	93,193
Diesel Fuel	2,395,521 L	91,748	6,471	3,023,658 L	115,806	7,946
Other Fuel	37,861 L	1,534	91	21,328 L	1,018	62
Natural Gas	2,590,715 GJ	2,590,715	129,951	2,350,177 GJ	2,350,177	117,885
Electricity	346,216,366 kWh	1,246,378	8,656	345,336,807 kWh	1,243,212	8,634
Solid Waste	27,055 t	0	9,218	20,859 t	0	9,894
<b>Grand Totals</b>		<b>5,426,270</b>	<b>255,634</b>		<b>5,176,334</b>	<b>238,609</b>

**West Vancouver District Municipality**  
**2010 Community Energy and Emissions Inventory**

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**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	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

**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	12,520	79	12,170	80	11,565	75
Car, Truck, Van as Passenger	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

**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	1,834	20
Local Parks	311	3
Agricultural Land Reserve	0	0
Other land use	6,846	76
Total Parks and Protected Area	2,145	24
Total Land Area	8,991	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	1,834	20
Local Parks	311	3
Agricultural Land Reserve	0	0
Other land use	6,846	76
Total Parks and Protected Area	2,145	24
Total Land Area	8,991	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	3,310	24
5 to 9.9 km	5,125	37
25 km or more	765	6
15 to 24.9 km	1,905	14
10 to 14.9 km	2,815	20

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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](mailto: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](mailto: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,