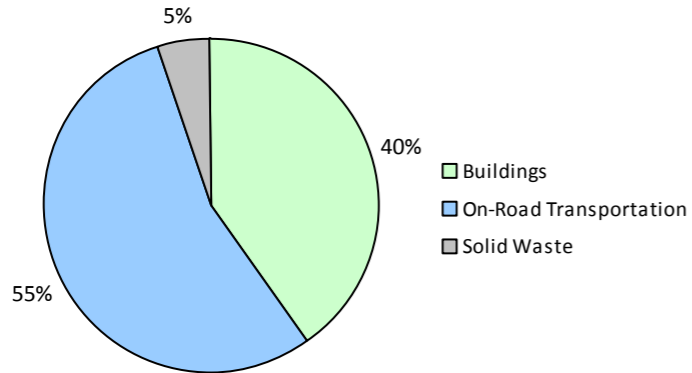


### Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

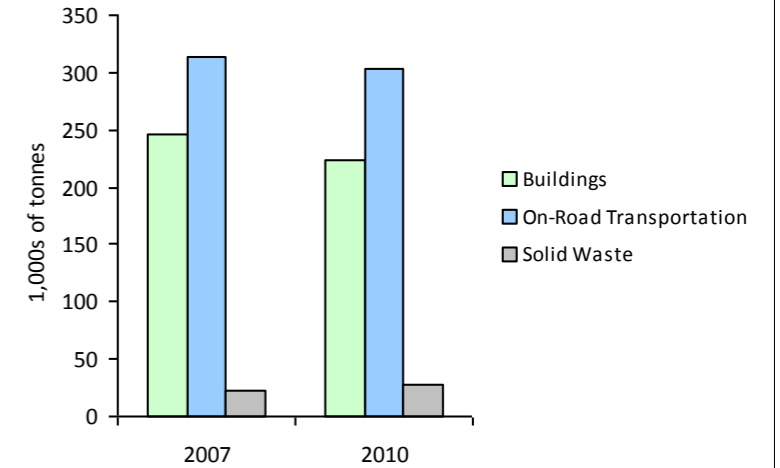
2010 GHG Emissions Sources (Total for this Community)



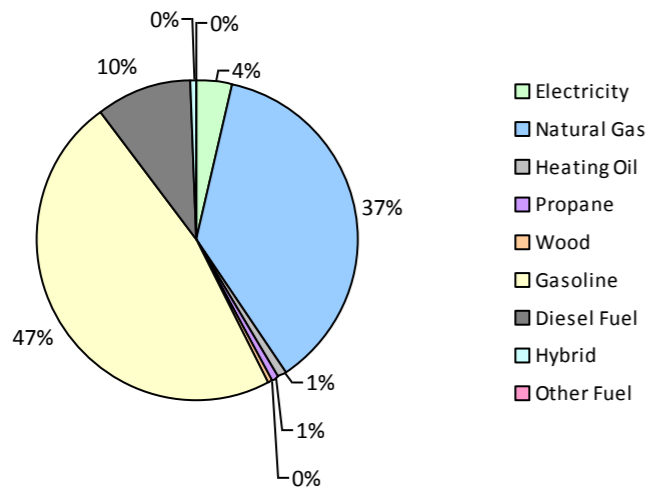
2010 GHG Emissions Sources (Total for BC)



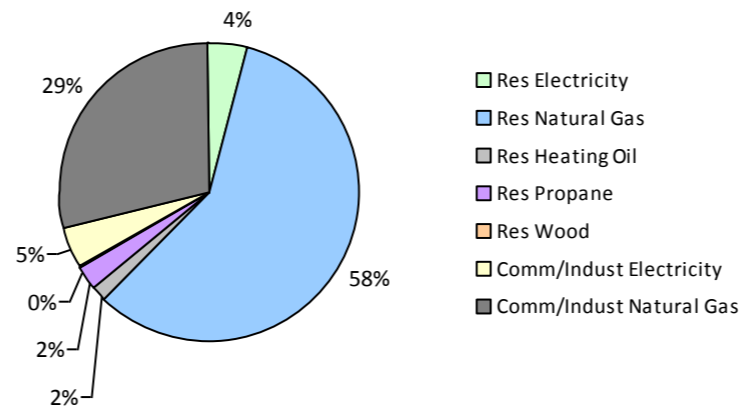
GHG Emissions Comparisons for this Community



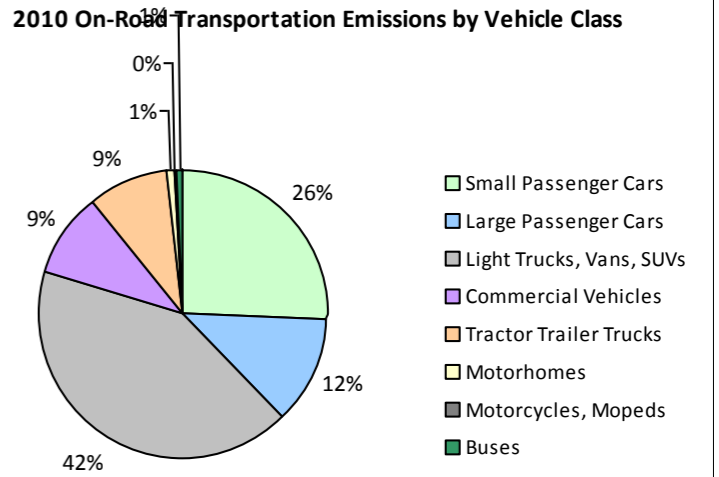
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



## Coquitlam City 2010 Community Energy and Emissions Inventory

*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

### 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	14	10,113 L	15,500	354	23	61	49,391 L	15,300	1,729	110
	Gasoline	26,364	34,822,380 L	13,900	1,218,784	82,417	26,379	34,162,924 L	13,600	1,195,702	76,516
	Diesel Fuel	394	452,930 L	17,200	17,347	1,236	397	448,648 L	16,600	17,183	1,190
	Other Fuel							14,500	99	6	
Large Passenger Cars	Hybrid	76	102,684 L	25,000	3,593	240	295	581,810 L	34,300	20,364	1,296
	Gasoline	10,984	16,720,159 L	13,300	585,206	39,520	10,620	15,815,158 L	13,100	553,531	35,400
	Diesel Fuel	83	103,557 L	13,200	3,966	282	92	115,762 L	13,600	4,433	307
	Other Fuel	43	576,487 L	77,300	14,586	882	11	78,002 L	42,000	1,974	119
Light Trucks, Vans, SUVs	Hybrid	41	54,385 L	16,900	1,903	128	127	182,299 L	16,800	6,381	411
	Gasoline	23,966	50,862,989 L	15,300	1,780,204	121,164	26,576	54,681,481 L	14,900	1,913,852	123,640
	Diesel Fuel	330	828,171 L	15,000	31,719	2,257	359	984,940 L	18,200	37,723	2,610
	Other Fuel	100	195,964 L	11,800	4,959	301	60	109,408 L	11,100	2,769	168
Commercial Vehicles	Hybrid							19,400	246	15	
	Gasoline	1,642	4,564,807 L	16,800	159,769	10,729	1,742	4,771,697 L	16,500	167,010	10,677
	Diesel Fuel	1,616	6,041,746 L	18,800	231,399	16,257	1,842	6,714,992 L	18,700	257,184	17,532
	Other Fuel	74	155,686 L	11,500	3,939	239	48	92,169 L	10,600	2,332	142
Tractor Trailer Trucks	Gasoline			23,900	2,192	147	11	82,732 L	26,200	2,896	186
	Diesel Fuel	870	12,415,149 L	35,800	475,500	33,409	824	10,794,031 L	33,200	413,411	28,183
Motorhomes	Gasoline	287	701,967 L	17,500	24,569	1,644	295	724,606 L	17,700	25,361	1,616
	Diesel Fuel	129	405,564 L	17,000	15,533	1,091	122	397,695 L	16,800	15,231	1,038
	Other Fuel			17,300	535	33		17,700	339	21	
Motorcycles, Mopeds	Gasoline	847	208,053 L	5,500	7,282	486	1,018	286,393 L	6,300	10,024	635
Buses	Gasoline	54	253,948 L	29,400	8,888	596	58	258,795 L	28,500	9,058	579
	Diesel Fuel	36	281,804 L	29,400	10,793	759	52	358,279 L	28,700	13,722	935
	Other Fuel			17,400	794	48		17,100	351	21	
<b>Totals</b>		<b>67,950</b>	<b>129,758,543 L</b>	<b>14,773</b>	<b>4,603,814</b>	<b>313,888</b>	<b>70,989</b>	<b>129,758,543 L</b>	<b>14,519</b>	<b>4,672,905</b>	<b>303,353</b>

## Coquitlam City 2010 Community Energy and Emissions Inventory

### Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	37,544 GJ	37,544	761	N/A	34,973 GJ	34,973	709
	Heating Oil	N/A	63,064 GJ	63,064	4,445	N/A	58,745 GJ	58,745	4,018
	Propane	N/A	93,388 GJ	93,388	5,698	N/A	86,992 GJ	86,992	5,307
	Natural Gas	26,830	2,902,435 GJ	2,902,435	145,586	27,348	2,560,376 GJ	2,560,376	128,428
	Electricity	40,778	390,315,331 kWh	1,405,134	9,758	43,377	394,324,776 kWh	1,419,568	9,858
Commercial/Small-Medium Industrial	Natural Gas	2,002	1,389,906 GJ	1,389,906	69,718	1,942	1,300,206 GJ	1,300,206	65,218
	Electricity	3,635	408,184,578 kWh	1,469,463	10,205	3,842	404,265,660 kWh	1,455,355	10,107
<b>Totals</b>		<b>73,245</b>		<b>7,360,934</b>	<b>246,171</b>	<b>76,509</b>		<b>6,916,215</b>	<b>223,645</b>

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	76,979 t	N/A	23,316	0	57,775 t	N/A	27,404
<b>Totals</b>		<b>0</b>			<b>23,316</b>	<b>0</b>			<b>27,404</b>

### Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	40	706,242 GJ	706,242	35,425	35	531,031 GJ	531,031	26,637
	Electricity	1		0	0				
<b>Totals</b>		<b>41</b>		<b>706,242</b>	<b>35,425</b>	<b>35</b>		<b>531,031</b>	<b>26,637</b>

## Coquitlam City 2010 Community Energy and Emissions Inventory

*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

### Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 120,249)			2010 (Population: 126,594)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	167,182 L	5,850	391	813,500 L	28,720	1,832
Gasoline	108,134,303 L	3,786,894	256,703	110,783,786 L	3,877,434	249,249
Diesel Fuel	20,528,921 L	786,257	55,291	19,814,347 L	758,887	51,795
Other Fuel	928,137 L	24,813	1,503	279,579 L	7,864	477
Wood	37,544 GJ	37,544	761	34,973 GJ	34,973	709
Heating Oil	63,064 GJ	63,064	4,445	58,745 GJ	58,745	4,018
Propane	93,388 GJ	93,388	5,698	86,992 GJ	86,992	5,307
Natural Gas	4,292,341 GJ	4,292,341	215,304	3,860,582 GJ	3,860,582	193,646
Electricity	798,499,909 kWh	2,874,597	19,963	798,590,436 kWh	2,874,923	19,965
Solid Waste	76,979 t	0	23,316	57,775 t	0	27,404
<b>Grand Totals</b>		<b>11,964,748</b>	<b>583,375</b>		<b>11,589,120</b>	<b>554,402</b>

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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	19,920	36	20,685	51	19,225	47
Semi-Detached House	975	2	1,310	3	1,205	3
Row House	2,500	4	3,065	8	3,155	8
Apartment, Duplex	2,280	4	3,540	9	5,295	13
Apartment, 5 storeys or higher	1,355	2	1,650	4	1,810	4
Apartment, under 5 storeys	8,255	15	9,540	24	10,150	25
Other Single Attached House	55	0	35	0	20	0
Movable Dwelling	390	1	395	1	380	1

**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	37,985	80	41,120	80	40,275	74
Car, Truck, Van as Passenger	3,170	7	4,020	8	3,955	7
Public Transit	4,460	9	4,165	8	7,565	14
Walked	1,455	3	1,675	3	2,035	4
Bicycle	325	1	315	1	310	1
Motorcycle	60	0	55	0	145	0
Taxicab	20	0	50	0	35	0
Other Method	280	1	225	0	265	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	3,119	24
Local Parks	1,693	13
Agricultural Land Reserve	824	6
Other land use	7,351	57
Total Parks and Protected Area	4,581	35
Total Land Area	12,986	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	3,119	24
Local Parks	1,693	13
Agricultural Land Reserve	824	6
Other land use	7,351	57
Total Parks and Protected Area	4,581	35
Total Land Area	12,986	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	13,620	28
5 to 9.9 km	9,380	20
25 km or more	2,870	6
15 to 24.9 km	15,130	32
10 to 14.9 km	6,855	14

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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,