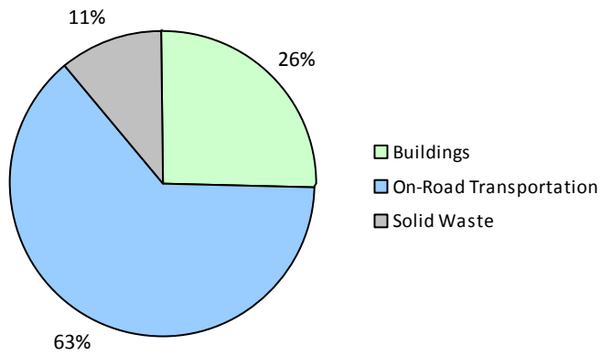
Fruitvale Village

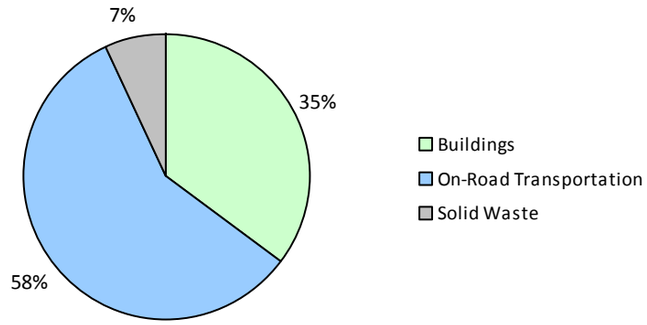
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

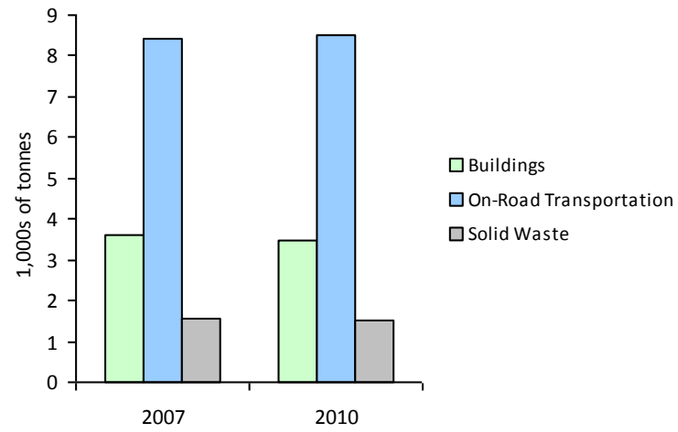
2010 GHG Emissions Sources (Total for this Community)



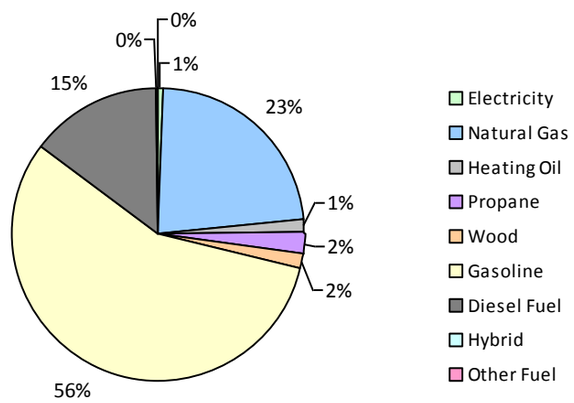
2010 GHG Emissions Sources (Total for BC)



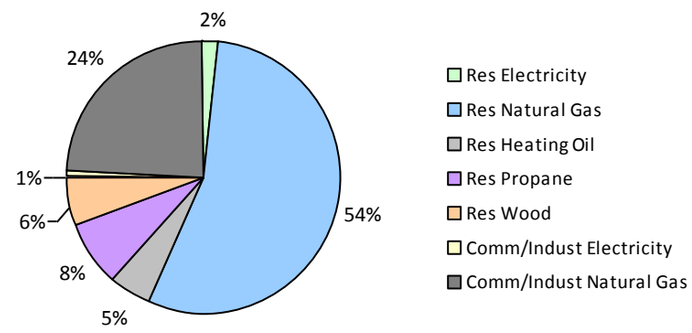
GHG Emissions Comparisons for this Community



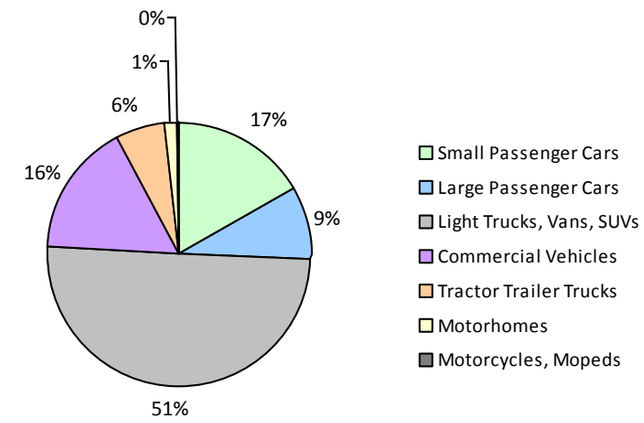
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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Core Items

On-Road Transportation		2007					2010				
		Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Gasoline	392	705,325 L	19,200	24,686	1,653	375	622,642 L	17,700	21,792	1,386
	Diesel Fuel			25,200	602	43	11	19,701 L	25,900	755	52
Large Passenger Cars	Hybrid								20,900	87	5
	Gasoline	222	452,839 L	18,600	15,850	1,062	192	333,097 L	15,700	11,659	742
Light Trucks, Vans, SUVs	Hybrid								17,200	48	4
	Gasoline	539	1,624,234 L	20,900	56,848	3,854	632	1,831,576 L	20,000	64,105	4,133
	Diesel Fuel	31	63,082 L	11,700	2,415	172	23	53,825 L	14,000	2,061	142
	Other Fuel			10,300	175	10			10,500	85	5
Commercial Vehicles	Gasoline	49	168,472 L	20,300	5,896	397	59	181,540 L	18,300	6,354	406
	Diesel Fuel	67	238,301 L	20,300	9,127	642	100	374,976 L	21,400	14,361	979
	Other Fuel			11,100	165	11			7,700	71	6
Tractor Trailer Trucks	Diesel Fuel			48,800	6,203	436	11	200,362 L	42,500	7,674	523
Motorhomes	Gasoline			19,900	825	55			19,100	885	56
	Diesel Fuel			16,500	685	48			16,100	794	55
Motorcycles, Mopeds	Gasoline	33	9,091 L	6,000	318	22	38	11,834 L	6,700	413	27
Buses	Gasoline			11,100	66	3					
Totals		**1,333**	**3,261,344 L**	**19,382**	**123,861**	**8,408**	**1,441**	**3,261,344 L**	**18,626**	**131,144**	**8,521**

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	10,196 GJ	10,196	207	N/A	9,814 GJ	9,814	199
	Heating Oil	N/A	2,625 GJ	2,625	185	N/A	2,527 GJ	2,527	173
	Propane	N/A	4,621 GJ	4,621	282	N/A	4,448 GJ	4,448	271
	Natural Gas	535	40,159 GJ	40,159	2,014	538	37,501 GJ	37,501	1,881
	Electricity	991	10,897,723 kWh	39,232	65	901	10,765,742 kWh	38,757	65
Commercial/Small-Medium Industrial	Natural Gas	60	16,315 GJ	16,315	818	59	16,906 GJ	16,906	848
	Electricity	105	4,280,634 kWh	15,410	26	95	4,501,683 kWh	16,206	27
Totals		**1,691**		**128,558**	**3,597**	**1,593**		**126,159**	**3,464**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	929 t	N/A	1,547	0	923 t	N/A	1,503
Totals		**0**			**1,547**	**0**			**1,503**

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 2,010)			2010 (Population: 2,012)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	0		0 L	135	9
Gasoline	2,959,961 L	104,489	7,046	2,980,689 L	105,208	6,750
Diesel Fuel	301,383 L	19,032	1,341	648,864 L	25,645	1,751
Other Fuel	0 L	340	21	0 L	156	11
Wood	10,196 GJ	10,196	207	9,814 GJ	9,814	199
Heating Oil	2,625 GJ	2,625	185	2,527 GJ	2,527	173
Propane	4,621 GJ	4,621	282	4,448 GJ	4,448	271
Natural Gas	56,474 GJ	56,474	2,832	54,407 GJ	54,407	2,729
Electricity	15,178,357 kWh	54,642	91	15,267,425 kWh	54,963	92
Solid Waste	929 t	0	1,547	923 t	0	1,503
Grand Totals		**252,419**	**13,552**		**257,303**	**13,488**

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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	620	44	590	77	610	77
Semi-Detached House	20	1	45	6	45	6
Row House	0	0	40	5	5	1
Apartment, Duplex	0	0	5	1	10	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	120	9	70	9	105	13
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	15	1	15	2	20	3

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	780	89	745	84	690	85
Car, Truck,Van as Passenger	65	7	65	7	55	7
Public Transit	20	2	25	3	20	2
Walked	15	2	45	5	35	4
Bicycle	0	0	0	0	10	1
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	0	0	10	1	0	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	15	6
Agricultural Land Reserve	0	0
Other land use	258	94
Total Parks and Protected Area	15	6
Total Land Area	273	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	15	6
Agricultural Land Reserve	0	0
Other land use	258	94
Total Parks and Protected Area	15	6
Total Land Area	273	100

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

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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