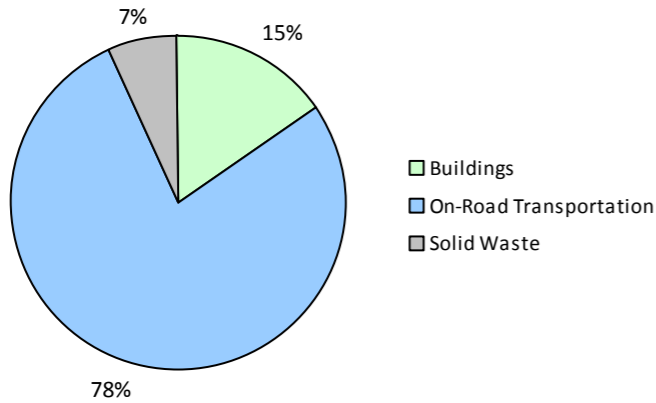


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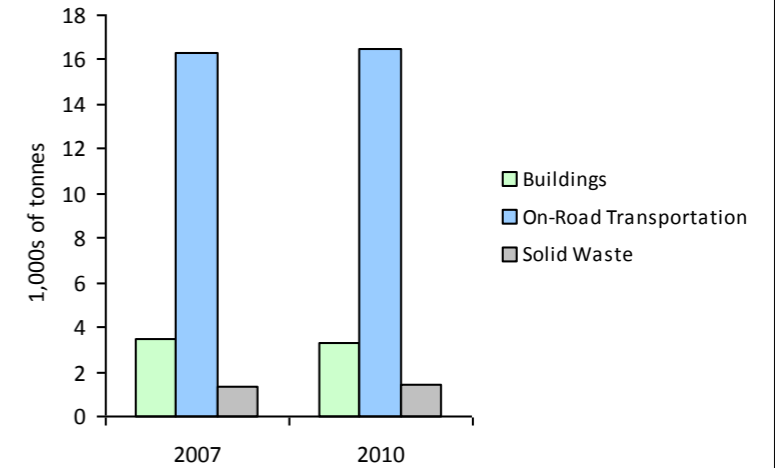
2010 GHG Emissions Sources (Total for this Community)



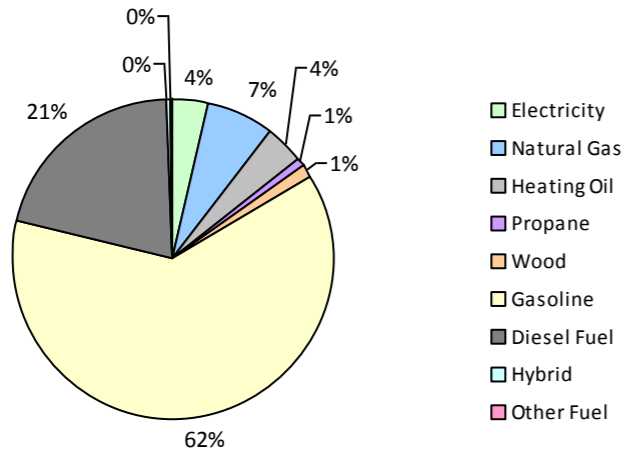
2010 GHG Emissions Sources (Total for BC)



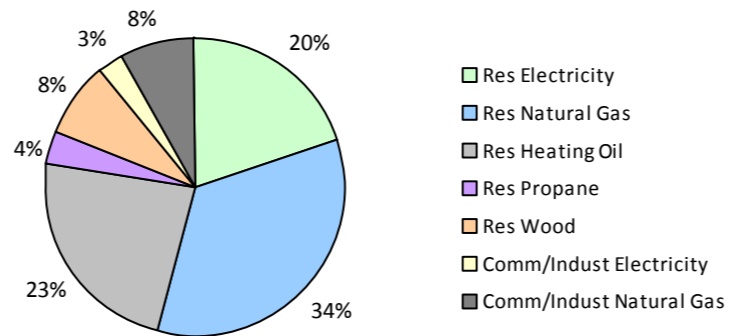
GHG Emissions Comparisons for this Community



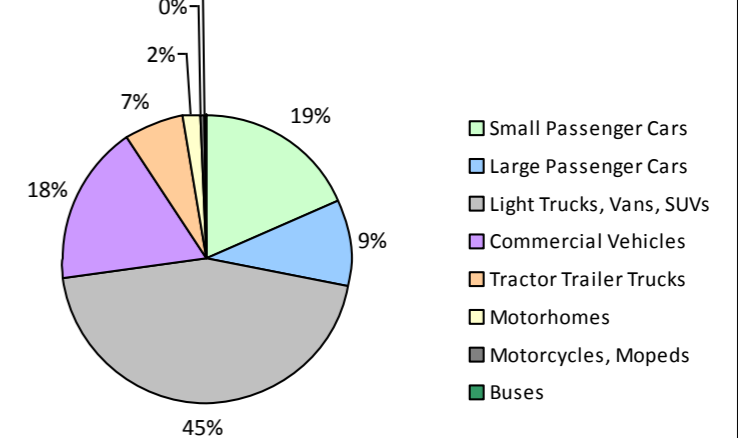
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Lantzville 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			25,900	125	9			25,200	213	14
	Gasoline	826	1,261,000 L	16,300	44,135	3,000	834	1,285,078 L	16,400	44,977	2,887
	Diesel Fuel	43	79,665 L	27,600	3,051	217	39	70,803 L	26,900	2,711	187
Large Passenger Cars	Hybrid			24,500	78	5			27,600	365	24
	Gasoline	448	790,627 L	15,500	27,672	1,881	391	677,434 L	15,200	23,710	1,523
	Diesel Fuel			17,900	243	17			23,800	232	15
	Other Fuel			10,100	34	3					
Light Trucks, Vans, SUVs	Hybrid								31,500	336	20
	Gasoline	1,123	2,776,197 L	17,500	97,167	6,650	1,236	3,056,338 L	17,600	106,972	6,936
	Diesel Fuel	77	174,747 L	13,000	6,693	476	52	142,704 L	16,900	5,466	378
	Other Fuel			12,300	478	28			11,400	251	15
Commercial Vehicles	Gasoline	96	282,175 L	17,400	9,876	664	105	321,672 L	18,200	11,258	719
	Diesel Fuel	179	716,015 L	21,500	27,424	1,927	220	864,802 L	21,200	33,122	2,258
	Other Fuel			13,000	194	12			12,100	120	8
Tractor Trailer Trucks	Diesel Fuel	27	358,121 L	31,500	13,716	963	31	423,603 L	32,900	16,225	1,106
Motorhomes	Gasoline	41	94,818 L	16,100	3,319	221	33	78,818 L	16,600	2,759	175
	Diesel Fuel	19	57,501 L	16,300	2,202	154	18	54,624 L	16,200	2,092	143
	Other Fuel			16,600	123	6			17,400	65	5
Motorcycles, Mopeds	Gasoline	68	18,288 L	6,000	641	43	70	19,538 L	6,300	684	43
Buses	Gasoline			18,100	411	27			17,900	736	47
	Diesel Fuel			19,200	194	14			21,000	215	14
	Other Fuel			15,500	81	4					
Totals		2,947	6,609,154 L	16,965	237,857	16,321	3,029	6,609,154 L	17,226	252,509	16,517

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	13,955 GJ	13,955	283	N/A	13,509 GJ	13,509	274
	Heating Oil	N/A	11,634 GJ	11,634	820	N/A	11,262 GJ	11,262	770
	Propane	N/A	2,004 GJ	2,004	122	N/A	1,940 GJ	1,940	118
	Natural Gas	350	23,570 GJ	23,570	1,182	382	21,852 GJ	21,852	1,096
	Electricity	1,520	28,297,028 kWh	101,869	707	1,530	26,557,424 kWh	95,607	664
Commercial/Small-Medium Industrial	Natural Gas	41	6,115 GJ	6,115	307	17	5,285 GJ	5,285	265
	Electricity	118	3,749,236 kWh	13,497	94	130	3,631,861 kWh	13,075	91
Totals		2,029		172,644	3,515	2,059		162,530	3,278

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	1,951 t	N/A	1,331	0	1,550 t	N/A	1,420
Totals		0			1,331	0			1,420

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 3,722)			2010 (Population: 3,689)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	203	14	0 L	914	58
Gasoline	5,223,105 L	183,221	12,486	5,438,878 L	191,096	12,330
Diesel Fuel	1,386,049 L	53,523	3,768	1,556,536 L	60,063	4,101
Other Fuel	0 L	910	53	0 L	436	28
Wood	13,955 GJ	13,955	283	13,509 GJ	13,509	274
Heating Oil	11,634 GJ	11,634	820	11,262 GJ	11,262	770
Propane	2,004 GJ	2,004	122	1,940 GJ	1,940	118
Natural Gas	29,685 GJ	29,685	1,489	27,137 GJ	27,137	1,361
Electricity	32,046,264 kWh	115,366	801	30,189,285 kWh	108,682	755
Solid Waste	1,951 t	0	1,331	1,550 t	0	1,420
Grand Totals		410,501	21,167		415,039	21,215

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					1,335	95
Semi-Detached House					10	1
Row House					0	0
Apartment, Duplex					45	3
Apartment, 5 storeys or higher					0	0
Apartment, under 5 storeys					10	1
Other Single Attached House					5	0
Movable Dwelling					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	0	0	0	0	1,405	87
Car, Truck, Van as Passenger	0	0	0	0	120	7
Public Transit	0	0	0	0	15	1
Walked	0	0	0	0	40	2
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	0	0	20	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	0	0
Local Parks	0	0
Agricultural Land Reserve	141	5
Other land use	2,657	95
Total Parks and Protected Area	0	0
Total Land Area	2,798	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	0	0
Agricultural Land Reserve	141	5
Other land use	2,657	95
Total Parks and Protected Area	0	0
Total Land Area	2,798	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	345	26
5 to 9.9 km	350	27
25 km or more	95	7
15 to 24.9 km	170	13
10 to 14.9 km	355	27

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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 CCEIRPT@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,