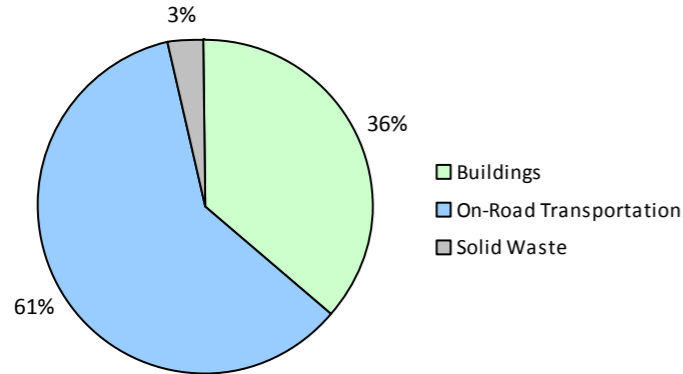
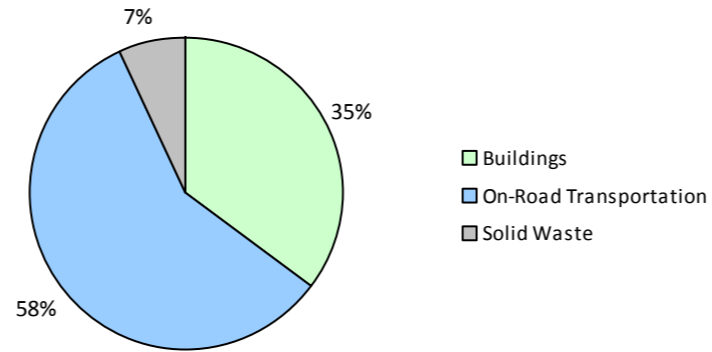


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

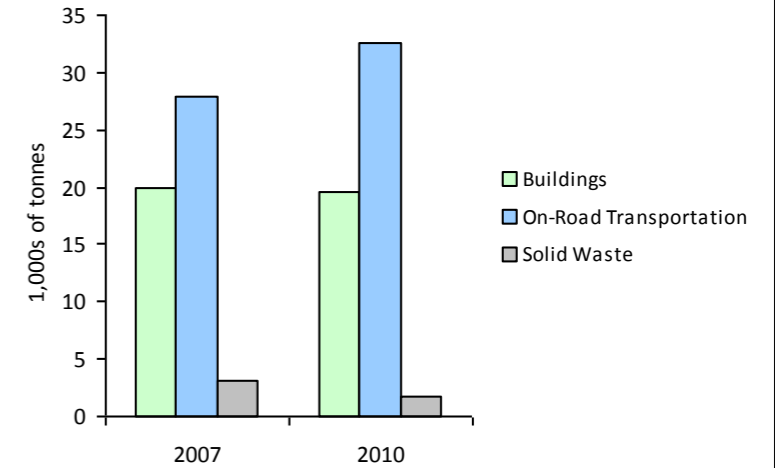
2010 GHG Emissions Sources (Total for this Community)



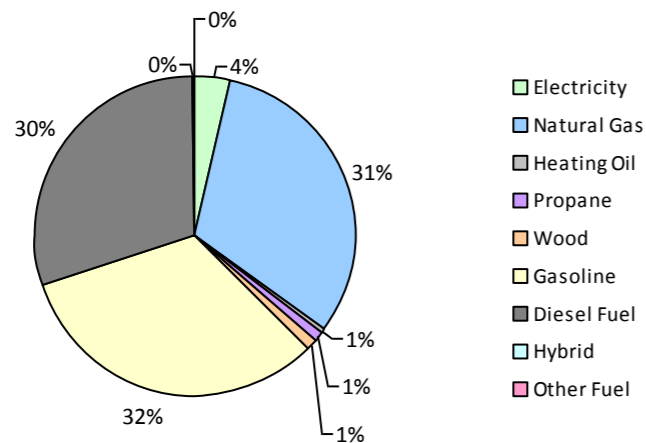
2010 GHG Emissions Sources (Total for BC)



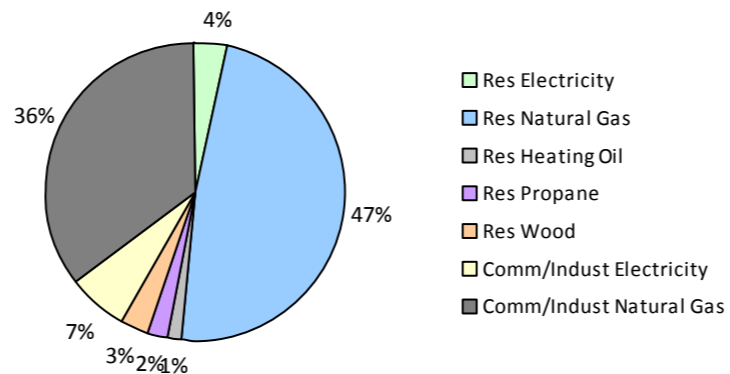
GHG Emissions Comparisons for this Community



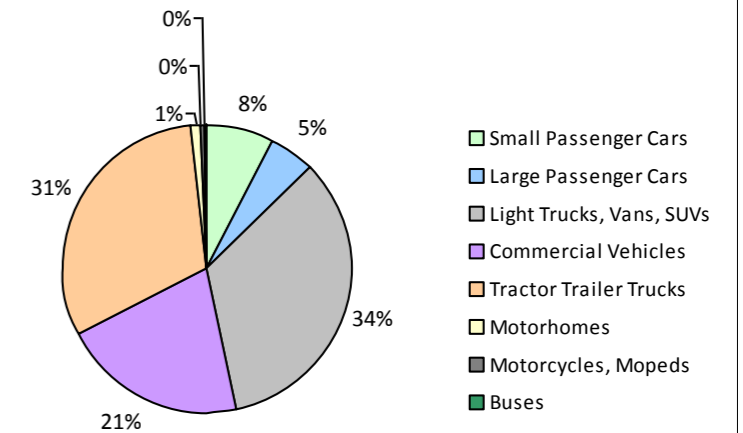
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Merritt 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)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Hybrid			28,100	47	4			22,500	207	14
	Gasoline	705	1,091,197 L	16,400	38,193	2,586	696	1,066,553 L	16,300	37,330	2,394
	Diesel Fuel	24	43,674 L	26,700	1,673	119	27	49,688 L	25,800	1,904	132
Large Passenger Cars	Hybrid			30,000	47	4			30,400	250	16
	Gasoline	419	795,108 L	16,700	27,829	1,887	381	708,992 L	16,500	24,815	1,591
	Diesel Fuel			14,100	366	26			10,700	273	20
	Other Fuel			15,600	50	4			11,300	38	2
Light Trucks, Vans, SUVs	Gasoline	1,477	4,042,744 L	18,700	141,497	9,665	1,613	4,677,267 L	20,000	163,705	10,598
	Diesel Fuel	79	200,285 L	14,200	7,671	544	55	153,435 L	16,100	5,876	405
	Other Fuel	27	59,783 L	14,200	1,512	92	14	26,363 L	11,000	667	40
Commercial Vehicles	Gasoline	188	639,976 L	20,300	22,400	1,504	230	828,579 L	21,600	29,000	1,854
	Diesel Fuel	296	1,323,266 L	24,800	50,681	3,561	370	1,835,299 L	27,800	70,292	4,792
	Other Fuel			15,000	608	37			12,700	353	21
Tractor Trailer Trucks	Diesel Fuel	224	2,787,262 L	28,900	106,752	7,501	242	3,853,352 L	36,000	147,583	10,061
Motorhomes	Gasoline	29	83,183 L	19,700	2,912	194	38	108,103 L	19,500	3,783	240
	Diesel Fuel	21	81,615 L	20,400	3,126	219	18	74,943 L	20,800	2,870	195
	Other Fuel			25,700	98	6			14,800	58	3
Motorcycles, Mopeds	Gasoline	49	10,878 L	4,800	381	26	72	20,723 L	6,200	725	46
Buses	Diesel Fuel							21,600	1,364	93	
Totals		3,538	11,158,971 L	18,991	405,843	27,979	3,756	11,158,971 L	20,542	491,093	32,517

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	30,920 GJ	30,920	626	N/A	29,762 GJ	29,762	603
	Heating Oil	N/A	4,181 GJ	4,181	295	N/A	4,025 GJ	4,025	275
	Propane	N/A	7,376 GJ	7,376	450	N/A	7,100 GJ	7,100	433
	Natural Gas	2,468	197,003 GJ	197,003	9,882	2,478	185,521 GJ	185,521	9,305
	Electricity	3,086	27,328,937 kWh	98,384	683	3,162	28,533,382 kWh	102,720	713
Commercial/Small-Medium Industrial	Natural Gas	348	135,219 GJ	135,219	6,783	339	139,520 GJ	139,520	6,998
	Electricity	644	51,262,689 kWh	184,546	1,282	661	51,884,478 kWh	186,784	1,297
Totals		6,546		657,629	20,001	6,640		655,432	19,624

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Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	7,889 t	N/A	3,063	0	6,047 t	N/A	1,781
Totals		0			3,063	0			1,781

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	6		0	0	4		0	0
	Electricity	2		0	0	2		0	0
Totals		8			0	6			0

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 7,393)			2010 (Population: 7,285)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	94	8	0 L	457	30
Gasoline	6,663,086 L	233,212	15,862	7,410,217 L	259,358	16,723
Diesel Fuel	4,436,102 L	170,269	11,970	5,966,717 L	230,162	15,698
Other Fuel	59,783 L	2,268	139	26,363 L	1,116	66
Wood	30,920 GJ	30,920	626	29,762 GJ	29,762	603
Heating Oil	4,181 GJ	4,181	295	4,025 GJ	4,025	275
Propane	7,376 GJ	7,376	450	7,100 GJ	7,100	433
Natural Gas	332,222 GJ	332,222	16,665	325,041 GJ	325,041	16,303
Electricity	78,591,626 kWh	282,930	1,965	80,417,860 kWh	289,504	2,010
Solid Waste	7,889 t	0	3,063	6,047 t	0	1,781
Grand Totals		1,063,472	51,043		1,146,525	53,922

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	1,685	38	1,760	63	1,745	62
Semi-Detached House	150	3	195	7	225	8
Row House	210	5	215	8	200	7
Apartment, Duplex	120	3	20	1	125	4
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	345	8	320	11	300	11
Other Single Attached House	30	1	10	0	25	1
Movable Dwelling	260	6	265	10	195	7

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	2,190	75	2,040	76	2,215	74
Car, Truck, Van as Passenger	235	8	155	6	285	10
Public Transit	10	0	0	0	0	0
Walked	390	13	410	15	330	11
Bicycle	80	3	65	2	135	5
Motorcycle	10	0	0	0	0	0
Taxicab	10	0	0	0	15	1
Other Method	10	0	20	1	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	16	1
Agricultural Land Reserve	791	32
Other land use	1,654	67
Total Parks and Protected Area	16	1
Total Land Area	2,462	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	16	1
Agricultural Land Reserve	791	32
Other land use	1,654	67
Total Parks and Protected Area	16	1
Total Land Area	2,462	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

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,