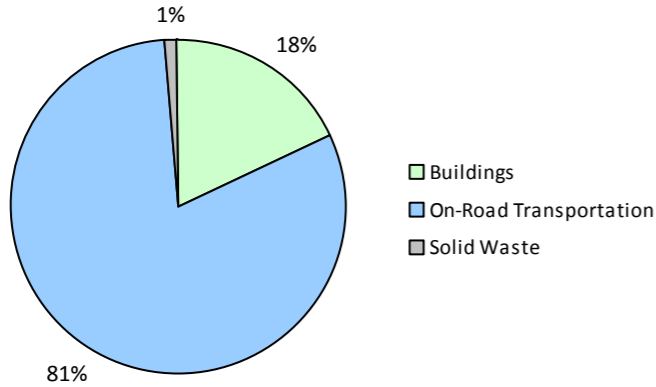


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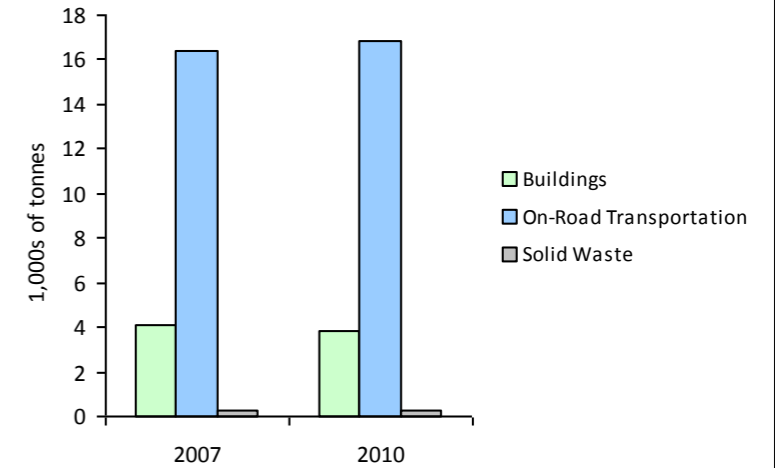
2010 GHG Emissions Sources (Total for this Community)



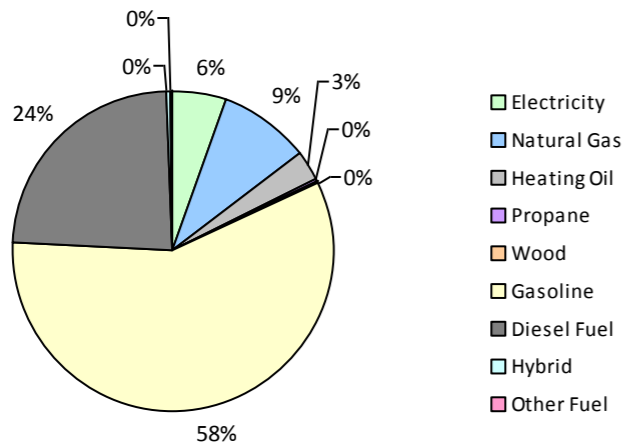
2010 GHG Emissions Sources (Total for BC)



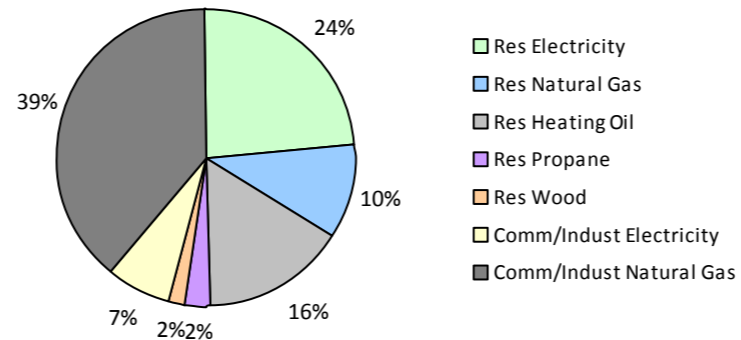
GHG Emissions Comparisons for this Community



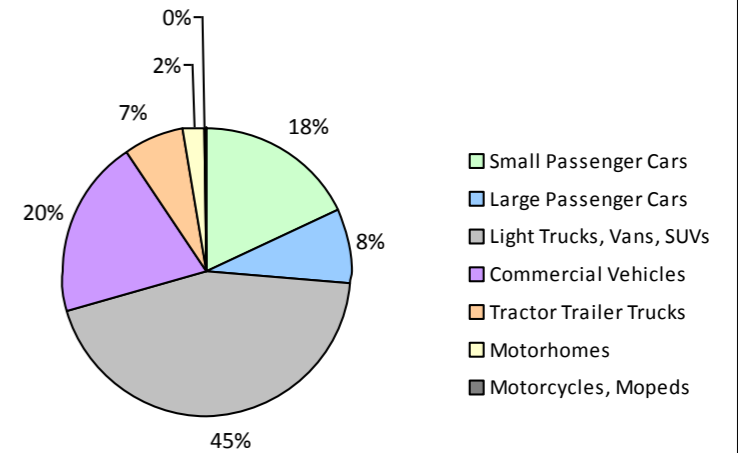
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Metchosin 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			14,000	23	1			13,900	101	7
	Gasoline	1,117	1,213,548 L	11,400	42,474	2,902	1,159	1,262,458 L	11,500	44,185	2,846
	Diesel Fuel	72	68,438 L	14,500	2,621	188	84	74,487 L	13,400	2,854	197
	Other Fuel								6,400	16	0
Large Passenger Cars	Hybrid			16,600	203	14	26	19,897 L	14,300	696	44
	Gasoline	501	693,262 L	12,100	24,265	1,652	447	590,215 L	11,600	20,658	1,330
	Diesel Fuel	11	10,589 L	10,000	405	29	14	14,929 L	11,700	573	40
	Other Fuel			4,700	16	0					
Light Trucks, Vans, SUVs	Hybrid			17,000	141	9	10	11,043 L	13,600	387	24
	Gasoline	1,470	2,668,347 L	13,000	93,391	6,410	1,652	2,982,126 L	12,900	104,374	6,781
	Diesel Fuel	119	235,321 L	11,400	9,013	641	104	234,715 L	13,300	8,990	621
	Other Fuel	17	27,335 L	9,700	692	43	11	17,281 L	9,500	438	26
Commercial Vehicles	Gasoline	134	277,461 L	12,400	9,711	651	144	290,356 L	12,100	10,163	649
	Diesel Fuel	215	716,146 L	17,700	27,428	1,928	275	1,034,086 L	20,000	39,606	2,700
	Other Fuel			12,200	447	27			10,400	290	17
Tractor Trailer Trucks	Gasoline			12,000	352	24			10,900	320	20
	Diesel Fuel	41	583,583 L	33,900	22,351	1,570	38	443,288 L	28,900	16,978	1,157
Motorhomes	Gasoline	28	63,914 L	16,400	2,236	149	32	74,852 L	16,900	2,620	167
	Diesel Fuel	18	52,694 L	16,500	2,018	141	25	73,843 L	16,300	2,828	193
Motorcycles, Mopeds	Gasoline	100	22,711 L	5,300	795	53	119	29,474 L	5,800	1,031	65
Totals		3,843	6,633,349 L	12,679	238,582	16,432	4,140	6,633,349 L	12,823	257,108	16,884

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	3,457 GJ	3,457	70	N/A	3,346 GJ	3,346	68
	Heating Oil	N/A	9,003 GJ	9,003	635	N/A	8,715 GJ	8,715	596
	Propane	N/A	1,553 GJ	1,553	95	N/A	1,504 GJ	1,504	92
	Natural Gas	100	7,691 GJ	7,691	386	111	7,629 GJ	7,629	383
	Electricity	1,886	37,825,368 kWh	136,171	946	1,897	36,321,234 kWh	130,756	908
Commercial/Small-Medium Industrial	Natural Gas	39	34,582 GJ	34,582	1,735	35	29,969 GJ	29,969	1,503
	Electricity	152	10,556,731 kWh	38,004	264	188	10,814,362 kWh	38,932	270
Totals		2,177		230,461	4,131	2,231		220,851	3,820

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	444 t	N/A	297	0	263 t	N/A	233
Totals		0			297	0			233

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 5,060)			2010 (Population: 5,308)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	367	24	30,940 L	1,184	75
Gasoline	4,939,243 L	173,224	11,841	5,229,481 L	183,351	11,858
Diesel Fuel	1,666,771 L	63,836	4,497	1,875,348 L	71,829	4,908
Other Fuel	27,335 L	1,155	70	17,281 L	744	43
Wood	3,457 GJ	3,457	70	3,346 GJ	3,346	68
Heating Oil	9,003 GJ	9,003	635	8,715 GJ	8,715	596
Propane	1,553 GJ	1,553	95	1,504 GJ	1,504	92
Natural Gas	42,273 GJ	42,273	2,121	37,598 GJ	37,598	1,886
Electricity	48,382,099 kWh	174,175	1,210	47,135,596 kWh	169,688	1,178
Solid Waste	444 t	0	297	263 t	0	233
Grand Totals		469,043	20,860		477,959	20,937

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	1,330	47	1,405	83	1,365	79
Semi-Detached House	65	2	25	1	45	3
Row House	0	0	10	1	0	0
Apartment, Duplex	80	3	145	9	245	14
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	10	0	25	1	35	2
Other Single Attached House	0	0	5	0	5	0
Movable Dwelling	40	1	75	4	35	2

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	1,680	84	1,785	86	1,950	86
Car, Truck, Van as Passenger	145	7	145	7	130	6
Public Transit	80	4	70	3	65	3
Walked	35	2	20	1	45	2
Bicycle	45	2	30	1	35	2
Motorcycle	10	1	0	0	30	1
Taxicab	0	0	0	0	0	0
Other Method	15	1	30	1	10	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	779	11
Agricultural Land Reserve	1,067	15
Other land use	5,166	74
Total Parks and Protected Area	779	11
Total Land Area	7,012	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	779	11
Agricultural Land Reserve	1,067	15
Other land use	5,166	74
Total Parks and Protected Area	779	11
Total Land Area	7,012	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	175	9
5 to 9.9 km	460	24
25 km or more	90	5
15 to 24.9 km	535	27
10 to 14.9 km	690	35

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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,