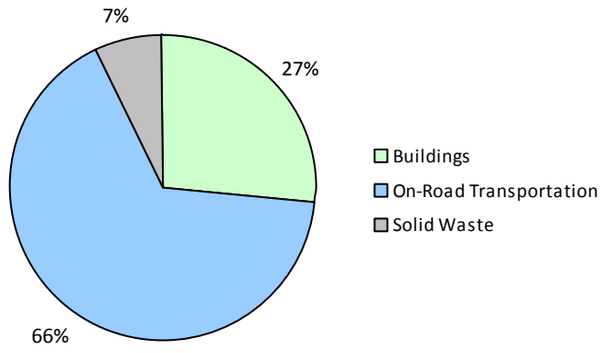
Osoyoos Town

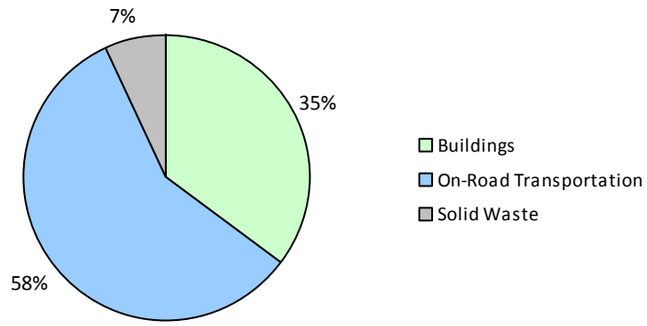
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

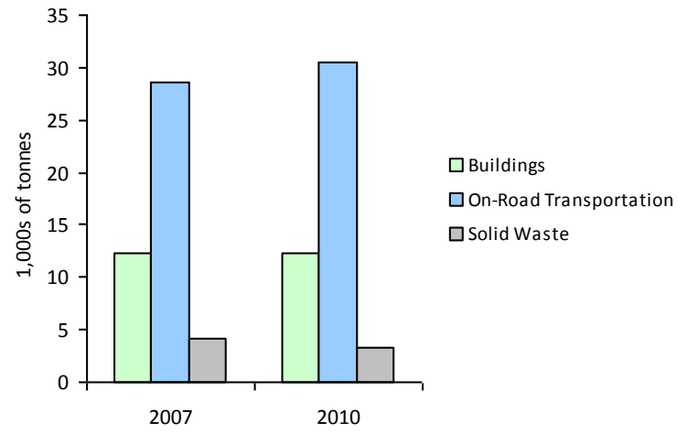
2010 GHG Emissions Sources (Total for this Community)



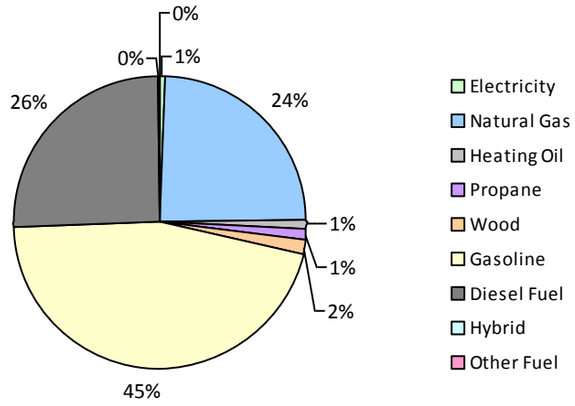
2010 GHG Emissions Sources (Total for BC)



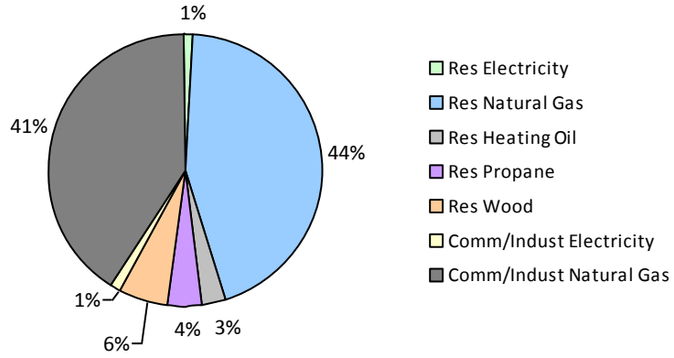
GHG Emissions Comparisons for this Community



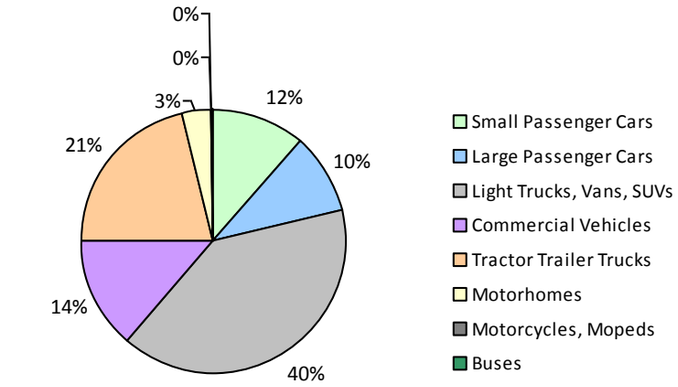
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Osoyoos Town

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)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Hybrid								20,800	74	4
	Gasoline	1,066	1,475,564 L	14,600	51,644	3,507	1,112	1,519,252 L	14,400	53,174	3,410
	Diesel Fuel	38	55,213 L	21,200	2,114	152	40	54,587 L	19,800	2,090	144
Large Passenger Cars	Hybrid			20,700	177	11	12	14,463 L	21,400	506	32
	Gasoline	828	1,418,581 L	15,100	49,651	3,369	780	1,289,351 L	14,500	45,128	2,899
	Diesel Fuel	14	20,923 L	14,800	800	58			13,100	280	20
	Other Fuel			14,200	47	2					
Light Trucks, Vans, SUVs	Hybrid								28,300	386	26
	Gasoline	1,861	4,691,525 L	17,700	164,204	11,231	2,026	5,000,555 L	17,400	175,019	11,347
	Diesel Fuel	121	308,265 L	14,800	11,807	840	90	254,646 L	16,800	9,754	673
	Other Fuel	13	28,055 L	12,800	709	43	10	19,039 L	11,200	482	29
Commercial Vehicles	Gasoline	144	445,008 L	18,400	15,576	1,046	167	526,011 L	18,700	18,409	1,178
	Diesel Fuel	218	935,788 L	23,700	35,841	2,518	257	1,192,762 L	25,600	45,682	3,113
	Other Fuel			12,400	413	25			9,400	224	13
Tractor Trailer Trucks	Diesel Fuel	69	1,728,901 L	60,300	66,216	4,652	90	2,450,259 L	67,400	93,846	6,396
Motorhomes	Gasoline	93	260,172 L	18,900	9,107	609	89	253,473 L	19,200	8,872	565
	Diesel Fuel	37	142,961 L	19,500	5,476	384	46	187,315 L	19,400	7,174	489
	Other Fuel			15,800	170	10					
Motorcycles, Mopeds	Gasoline	93	22,738 L	5,700	796	53	109	28,932 L	6,200	1,013	64
Buses	Gasoline			20,400	439	30			21,400	122	8
	Diesel Fuel			16,100	985	69			15,700	757	51
Totals		**4,595**	**11,533,694 L**	**17,184**	**416,172**	**28,609**	**4,828**	**11,533,694 L**	**17,459**	**462,992**	**30,461**

Osoyoos Town

2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	35,745 GJ	35,745	724	N/A	34,406 GJ	34,406	697
	Heating Oil	N/A	4,840 GJ	4,840	341	N/A	4,658 GJ	4,658	319
	Propane	N/A	8,547 GJ	8,547	521	N/A	8,227 GJ	8,227	502
	Natural Gas	2,103	118,224 GJ	118,224	5,930	2,103	106,304 GJ	106,304	5,332
	Electricity	3,909	30,677,264 kWh	110,438	184	3,407	30,224,855 kWh	108,809	181
Commercial/Small-Medium Industrial	Natural Gas	298	88,845 GJ	88,845	4,456	298	100,450 GJ	100,450	5,039
	Electricity	579	26,666,630 kWh	96,000	160	531	26,470,832 kWh	95,295	159
Totals		**6,889**		**462,639**	**12,316**	**6,339**		**458,149**	**12,229**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	4,937 t	N/A	4,153	0	5,788 t	N/A	3,275
Totals		**0**			**4,153**	**0**			**3,275**

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	1		0	0	1		0	0
Totals		**1**			**0**	**1**			**0**

Osoyoos Town

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: 4,927)			2010 (Population: 5,203)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	177	11	14,463 L	966	62
Gasoline	8,313,588 L	291,417	19,845	8,617,574 L	301,737	19,471
Diesel Fuel	3,192,051 L	123,239	8,673	4,139,569 L	159,583	10,886
Other Fuel	28,055 L	1,339	80	19,039 L	706	42
Wood	35,745 GJ	35,745	724	34,406 GJ	34,406	697
Heating Oil	4,840 GJ	4,840	341	4,658 GJ	4,658	319
Propane	8,547 GJ	8,547	521	8,227 GJ	8,227	502
Natural Gas	207,069 GJ	207,069	10,386	206,754 GJ	206,754	10,371
Electricity	57,343,894 kWh	206,438	344	56,695,687 kWh	204,104	340
Solid Waste	4,937 t	0	4,153	5,788 t	0	3,275
Grand Totals		**878,811**	**45,078**		**921,141**	**45,965**

Osoyoos Town

2010 Community Energy and Emissions Inventory

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	1,165	39	1,335	65	1,440	65
Semi-Detached House	45	1	40	2	70	3
Row House	185	6	100	5	125	6
Apartment, Duplex	60	2	60	3	65	3
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	300	10	365	18	470	21
Other Single Attached House	25	1	55	3	10	0
Movable Dwelling	75	2	100	5	45	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	820	72	945	76	1,215	80
Car, Truck,Van as Passenger	75	7	85	7	90	6
Public Transit	10	1	0	0	10	1
Walked	190	17	175	14	190	12
Bicycle	10	1	20	2	0	0
Motorcycle	0	0	10	1	10	1
Taxicab	0	0	0	0	0	0
Other Method	35	3	10	1	10	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	26	3
Agricultural Land Reserve	316	32
Other land use	654	66
Total Parks and Protected Area	26	3
Total Land Area	996	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	26	3
Agricultural Land Reserve	316	32
Other land use	654	66
Total Parks and Protected Area	26	3
Total Land Area	996	100

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

This page intentionally left blank

Osoyoos Town

2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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