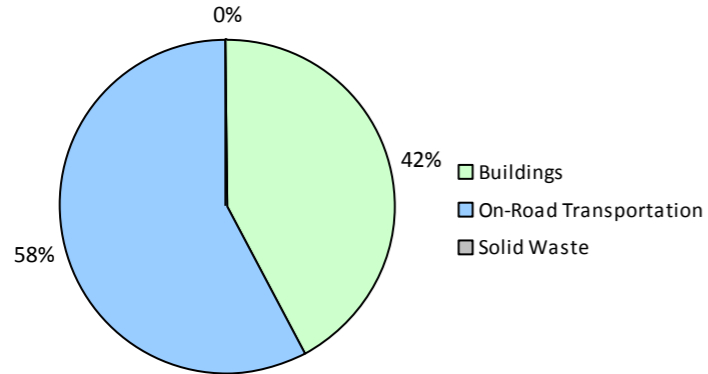
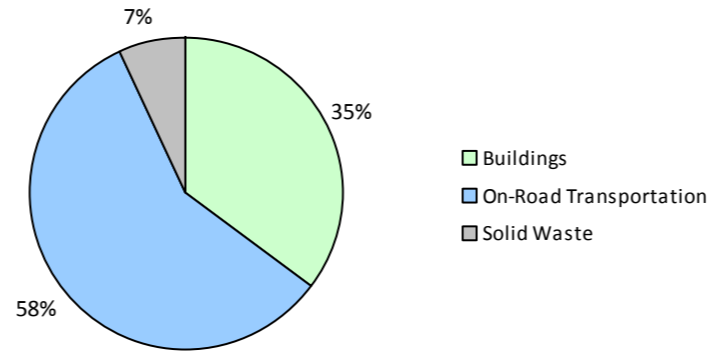


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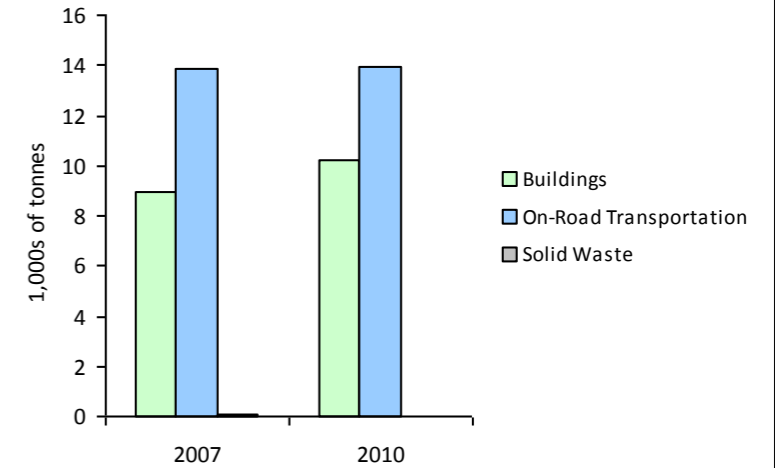
2010 GHG Emissions Sources (Total for this Community)



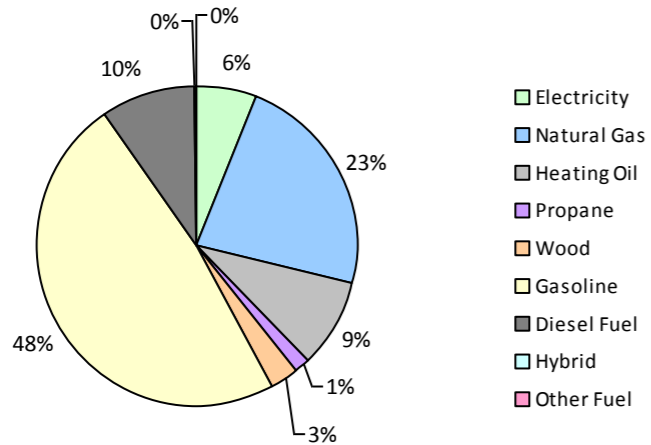
2010 GHG Emissions Sources (Total for BC)



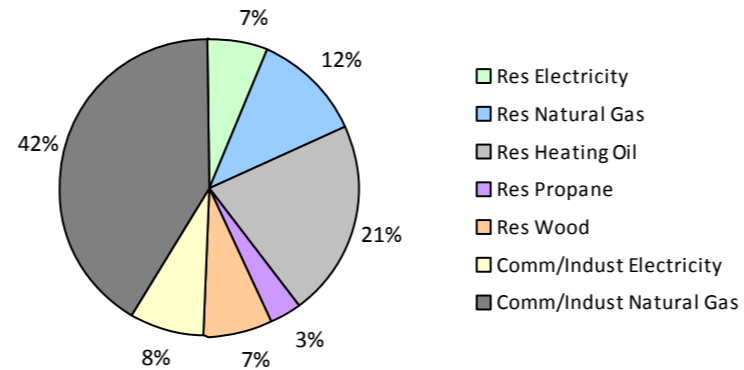
GHG Emissions Comparisons for this Community



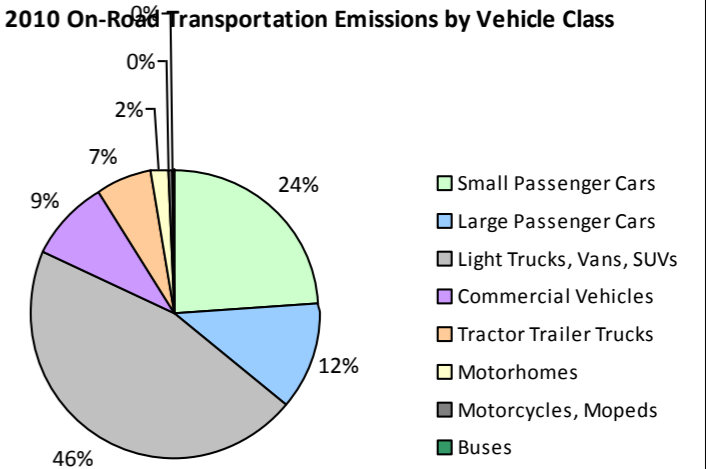
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Duncan 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)	CO2e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Hybrid			33,400	55	5			30,000	106	7
	Gasoline	978	1,341,689 L	14,600	46,959	3,202	1,017	1,442,811 L	15,200	50,498	3,248
	Diesel Fuel	33	49,283 L	22,200	1,887	135	27	38,675 L	21,300	1,481	102
Large Passenger Cars	Hybrid			14,600	53	4			22,700	307	19
	Gasoline	523	822,581 L	13,700	28,791	1,971	452	725,755 L	14,100	25,401	1,638
	Diesel Fuel			11,300	262	19			11,200	327	23
	Other Fuel			13,300	71	4			15,700	36	4
Light Trucks, Vans, SUVs	Hybrid			16,200	46	2			28,500	190	12
	Gasoline	1,012	2,382,007 L	16,500	83,370	5,720	1,089	2,706,970 L	17,500	94,745	6,149
	Diesel Fuel	55	111,673 L	11,600	4,277	304	37	91,108 L	14,600	3,490	242
	Other Fuel			10,100	174	11			10,100	130	8
Commercial Vehicles	Gasoline	61	183,337 L	17,800	6,417	430	57	159,503 L	16,800	5,583	356
	Diesel Fuel	78	262,471 L	17,900	10,053	707	87	342,584 L	21,500	13,120	894
	Other Fuel			10,400	205	13					
Tractor Trailer Trucks	Diesel Fuel	24	364,280 L	34,700	13,951	980	26	352,046 L	31,900	13,483	919
Motorhomes	Gasoline	33	74,992 L	16,400	2,625	175	27	63,421 L	16,500	2,220	140
	Diesel Fuel	13	40,827 L	17,000	1,564	109	17	49,511 L	16,200	1,897	129
	Other Fuel			22,000	78	5			10,100	40	3
Motorcycles, Mopeds	Gasoline	44	9,817 L	4,900	343	23	55	14,364 L	5,800	503	32
Buses	Gasoline			11,200	141	8			15,900	277	19
	Diesel Fuel			12,500	134	8			13,300	153	11
	Other Fuel								10,600	50	4
Totals		2,854	5,642,957 L	15,349	201,456	13,835	2,891	5,642,957 L	16,154	214,037	13,959

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	38,686 GJ	38,686	784	N/A	37,450 GJ	37,450	759
	Heating Oil	N/A	32,396 GJ	32,396	2,284	N/A	31,360 GJ	31,360	2,145
	Propane	N/A	5,603 GJ	5,603	342	N/A	5,423 GJ	5,423	331
	Natural Gas	367	19,326 GJ	19,326	970	504	24,473 GJ	24,473	1,227
	Electricity	2,535	28,034,741 kWh	100,925	701	2,625	27,145,925 kWh	97,725	679
Commercial/Small-Medium Industrial	Natural Gas	154	60,411 GJ	60,411	3,030	198	85,064 GJ	85,064	4,267
	Electricity	667	34,166,210 kWh	122,998	854	665	32,599,079 kWh	117,357	815
Totals		3,723		380,345	8,965	3,992		398,852	10,223

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	539 t	N/A	114	0	512 t	N/A	0
Totals		0			114	0			0

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 4,978)			2010 (Population: 4,987)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	154	11	0 L	603	38
Gasoline	4,814,423 L	168,646	11,529	5,112,824 L	179,227	11,582
Diesel Fuel	828,534 L	32,128	2,262	873,924 L	33,951	2,320
Other Fuel	0 L	528	33	0 L	256	19
Wood	38,686 GJ	38,686	784	37,450 GJ	37,450	759
Heating Oil	32,396 GJ	32,396	2,284	31,360 GJ	31,360	2,145
Propane	5,603 GJ	5,603	342	5,423 GJ	5,423	331
Natural Gas	79,737 GJ	79,737	4,000	109,537 GJ	109,537	5,494
Electricity	62,200,951 kWh	223,923	1,555	59,745,004 kWh	215,082	1,494
Solid Waste	539 t	0	114	512 t	0	0
Grand Totals		581,801	22,914		612,889	24,182

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	1,085	34	1,045	47	1,045	43
Semi-Detached House	100	3	55	2	85	4
Row House	110	3	155	7	150	6
Apartment, Duplex	25	1	25	1	35	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	820	25	910	41	1,070	44
Other Single Attached House	0	0	40	2	35	1
Movable Dwelling	0	0	5	0	0	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	1,010	69	1,065	72	1,160	66
Car, Truck, Van as Passenger	125	9	165	11	195	11
Public Transit	25	2	10	1	35	2
Walked	285	20	215	15	300	17
Bicycle	0	0	15	1	30	2
Motorcycle	0	0	0	0	10	1
Taxicab	0	0	0	0	10	1
Other Method	15	1	0	0	15	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	23	11
Agricultural Land Reserve	0	0
Other land use	185	89
Total Parks and Protected Area	23	11
Total Land Area	208	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	23	11
Agricultural Land Reserve	0	0
Other land use	185	89
Total Parks and Protected Area	23	11
Total Land Area	208	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	960	64
5 to 9.9 km	115	8
25 km or more	225	15
15 to 24.9 km	115	8
10 to 14.9 km	90	6

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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,