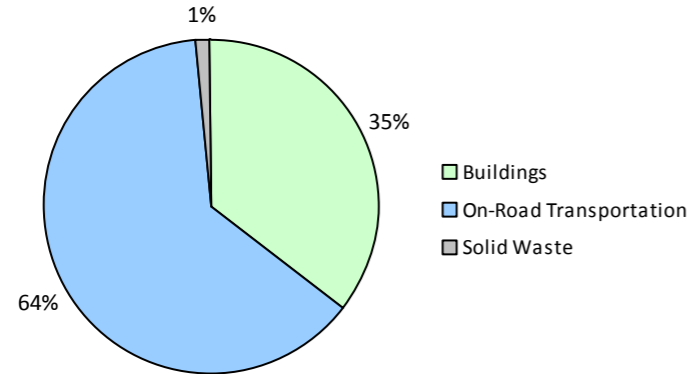


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

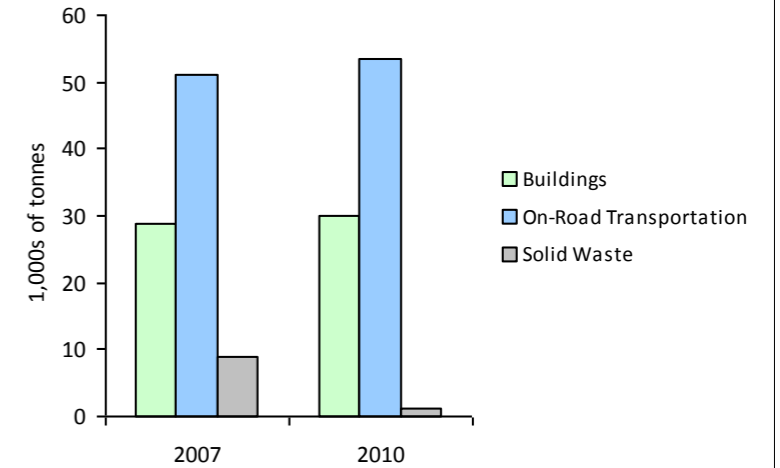
2010 GHG Emissions Sources (Total for this Community)



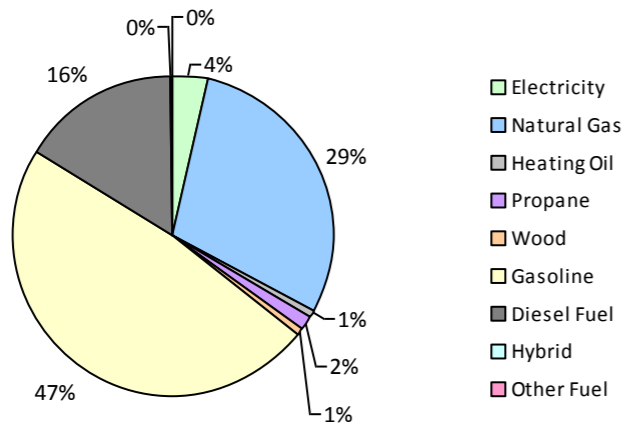
2010 GHG Emissions Sources (Total for BC)



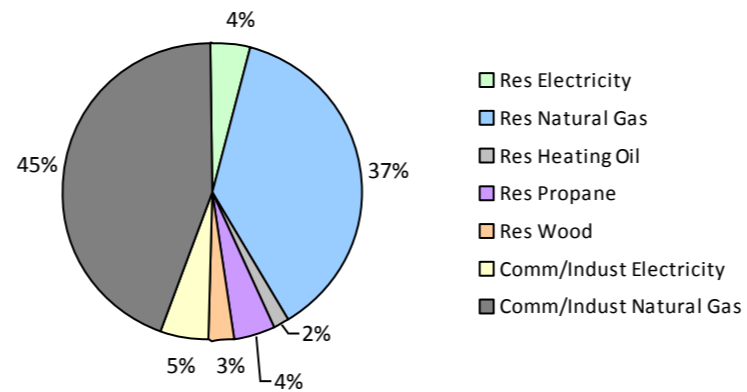
GHG Emissions Comparisons for this Community



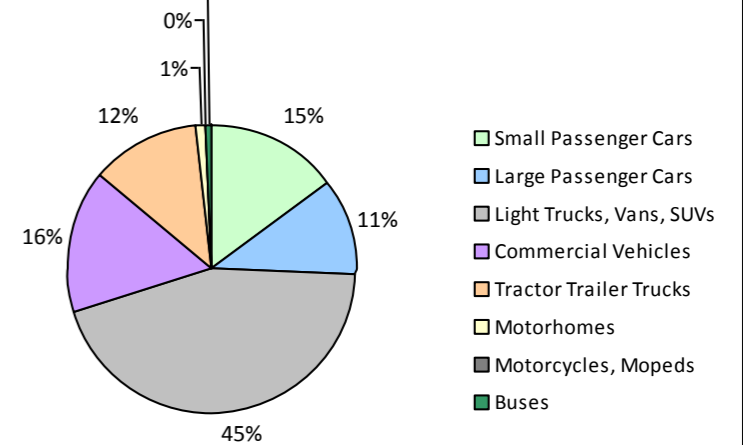
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Terrace 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							25,500	269	18	
	Gasoline	1,765	3,042,591 L	18,400	106,491	7,207	1,881	3,463,540 L	19,800	121,225	7,757
	Diesel Fuel	54	100,630 L	27,500	3,854	275	56	100,898 L	26,500	3,864	268
Large Passenger Cars	Hybrid			31,500	114	8	24	49,687 L	33,700	1,740	110
	Gasoline	1,096	2,835,917 L	23,200	99,256	6,688	950	2,460,983 L	23,200	86,134	5,506
	Diesel Fuel			11,900	222	15			11,900	251	17
	Other Fuel			29,100	129	8			25,500	113	8
Light Trucks, Vans, SUVs	Hybrid			23,800	184	12			30,100	625	40
	Gasoline	3,148	8,975,387 L	19,400	314,138	21,433	3,389	10,161,657 L	20,600	355,658	23,015
	Diesel Fuel	90	248,386 L	15,800	9,513	677	68	204,426 L	17,900	7,829	541
	Other Fuel	14	31,379 L	12,600	795	48			10,300	312	19
Commercial Vehicles	Gasoline	441	1,506,948 L	20,000	52,744	3,545	431	1,409,118 L	19,300	49,319	3,153
	Diesel Fuel	394	1,656,966 L	23,500	63,462	4,459	432	2,097,142 L	27,500	80,321	5,476
	Other Fuel			10,200	268	17			12,400	182	11
Tractor Trailer Trucks	Diesel Fuel	77	2,118,029 L	60,000	81,120	5,699	87	2,486,736 L	62,400	95,243	6,493
	Other Fuel			43,500	245	14					
Motorhomes	Gasoline	43	118,578 L	19,300	4,150	276	50	136,405 L	19,200	4,774	303
	Diesel Fuel	27	97,755 L	19,600	3,744	263	29	103,881 L	19,900	3,978	271
Motorcycles, Mopeds	Gasoline	86	19,665 L	5,100	688	46	114	30,105 L	5,900	1,053	67
Buses	Gasoline	19	69,065 L	22,100	2,417	163	22	70,392 L	22,800	2,463	157
	Diesel Fuel			17,400	1,319	94			24,400	1,328	91
	Other Fuel			13,900	216	14			11,900	66	4
Totals		7,254	20,821,296 L	20,261	745,069	50,961	7,533	20,821,296 L	21,365	816,747	53,325

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Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	39,658 GJ	39,658	803	N/A	36,970 GJ	36,970	749
	Heating Oil	N/A	8,367 GJ	8,367	590	N/A	7,800 GJ	7,800	533
	Propane	N/A	22,822 GJ	22,822	1,392	N/A	21,275 GJ	21,275	1,298
	Natural Gas	3,121	253,855 GJ	253,855	12,733	3,121	220,272 GJ	220,272	11,049
	Electricity	4,581	53,273,739 kWh	191,785	1,332	4,688	52,624,308 kWh	189,447	1,316
Commercial/Small-Medium Industrial	Natural Gas	552	206,407 GJ	206,407	10,353	552	266,371 GJ	266,371	13,361
	Electricity	962	62,647,181 kWh	225,530	1,566	919	64,630,704 kWh	232,670	1,616
Totals		9,216		948,424	28,769	9,280		974,805	29,922

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	5,256 t	N/A	8,897	0	6,403 t	N/A	1,212
Totals		0			8,897	0			1,212

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	3	102,810 GJ	102,810	5,157	3	16,567 GJ	16,567	831
	Electricity	1		0	0				
Totals		4		102,810	5,157	3		16,567	831

Terrace City 2010 Community Energy and Emissions Inventory

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Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 11,357)			2010 (Population: 11,931)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	298	20	49,687 L	2,634	168
Gasoline	16,568,151 L	579,884	39,358	17,732,200 L	620,626	39,958
Diesel Fuel	4,221,766 L	163,234	11,482	4,993,083 L	192,814	13,157
Other Fuel	31,379 L	1,653	101	0 L	673	42
Wood	39,658 GJ	39,658	803	36,970 GJ	36,970	749
Heating Oil	8,367 GJ	8,367	590	7,800 GJ	7,800	533
Propane	22,822 GJ	22,822	1,392	21,275 GJ	21,275	1,298
Natural Gas	460,262 GJ	460,262	23,086	486,643 GJ	486,643	24,410
Electricity	115,920,920 kWh	417,315	2,898	117,255,012 kWh	422,117	2,932
Solid Waste	5,256 t	0	8,897	6,403 t	0	1,212
Grand Totals		1,693,493	88,627		1,791,552	84,459

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	2,680	38	2,910	67	2,795	65
Semi-Detached House	195	3	195	4	215	5
Row House	280	4	255	6	280	6
Apartment, Duplex	235	3	210	5	260	6
Apartment, 5 storeys or higher	0	0	115	3	0	0
Apartment, under 5 storeys	720	10	470	11	570	13
Other Single Attached House	20	0	25	1	30	1
Movable Dwelling	210	3	190	4	175	4

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	4,375	76	4,225	81	3,765	74
Car, Truck, Van as Passenger	505	9	415	8	525	10
Public Transit	30	1	10	0	60	1
Walked	720	12	460	9	580	11
Bicycle	115	2	55	1	95	2
Motorcycle	0	0	0	0	0	0
Taxicab	10	0	10	0	0	0
Other Method	25	0	60	1	40	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	94	2
Agricultural Land Reserve	209	5
Other land use	3,897	93
Total Parks and Protected Area	94	2
Total Land Area	4,199	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	94	2
Agricultural Land Reserve	209	5
Other land use	3,897	93
Total Parks and Protected Area	94	2
Total Land Area	4,199	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	3,800	86
5 to 9.9 km	140	3
25 km or more	420	9
15 to 24.9 km	15	0
10 to 14.9 km	50	1

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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,