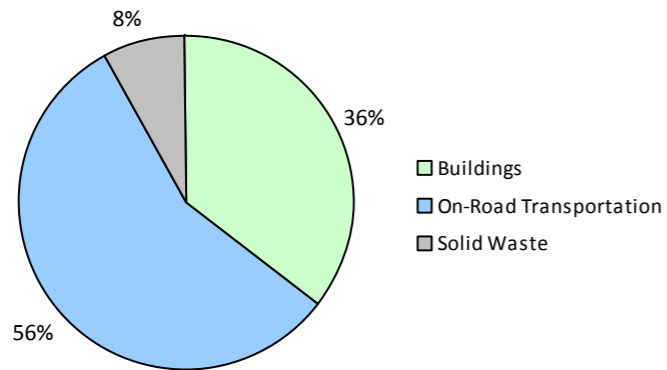


*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

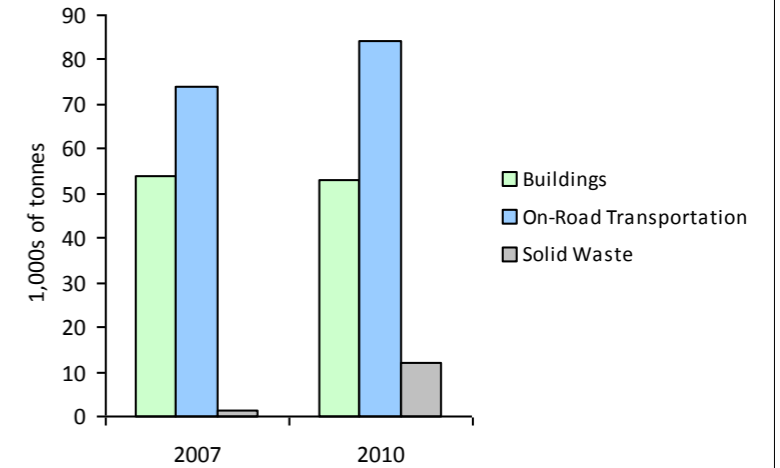
**2010 GHG Emissions Sources (Total for this Community)**



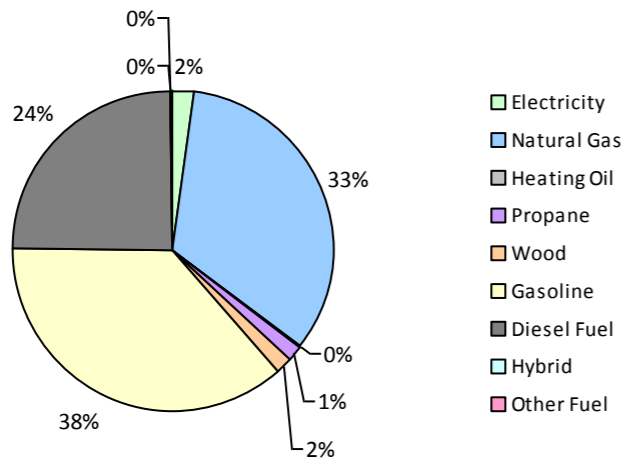
**2010 GHG Emissions Sources (Total for BC)**



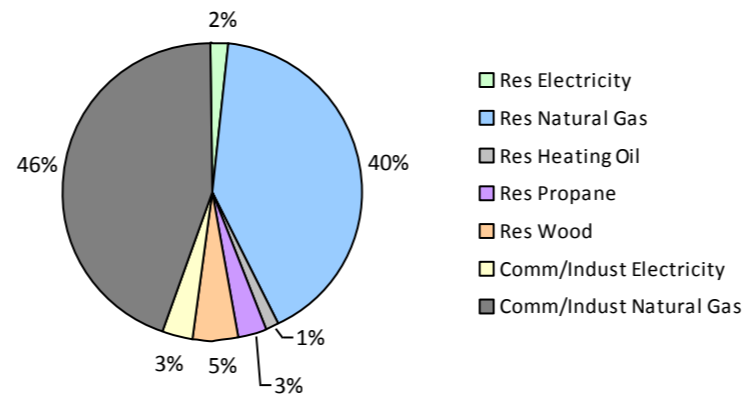
**GHG Emissions Comparisons for this Community**



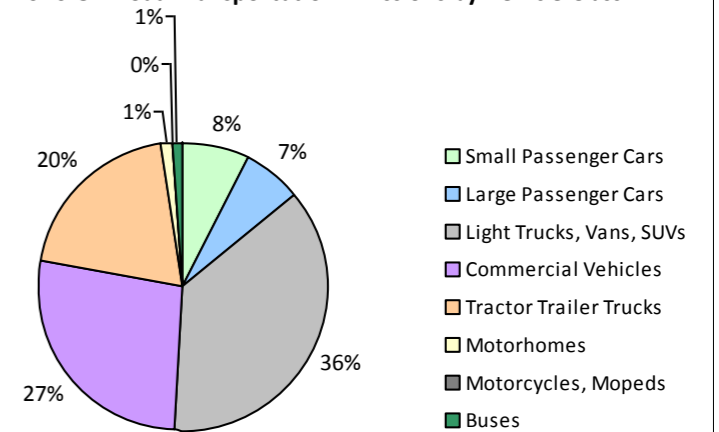
**2010 Total Emissions by Fuel Type**



**2010 Building Emissions by Subsector**



**2010 On-Road Transportation Emissions by Vehicle Class**



## Dawson Creek City 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)	CO2e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Hybrid							28,700	45	4	
	Gasoline	1,535	2,790,937 L	19,100	97,682	6,605	1,488	2,750,385 L	19,500	96,264	6,165
	Diesel Fuel	39	71,526 L	26,800	2,739	194	47	93,862 L	28,500	3,595	248
	Other Fuel							14,600	30	0	
Large Passenger Cars	Hybrid			33,300	187	14	11	19,623 L	30,400	686	43
	Gasoline	1,176	2,645,597 L	19,600	92,595	6,272	1,073	2,466,268 L	20,000	86,320	5,530
	Diesel Fuel			12,400	328	23		9,200	245	17	
	Other Fuel			11,400	156	10					
Light Trucks, Vans, SUVs	Hybrid			27,600	230	14		28,300	514	32	
	Gasoline	3,612	10,957,038 L	20,000	383,496	26,153	4,056	13,183,954 L	21,700	461,439	29,843
	Diesel Fuel	131	329,929 L	14,000	12,637	897	100	304,776 L	17,800	11,673	806
	Other Fuel	57	127,394 L	12,900	3,224	196	34	67,061 L	11,600	1,697	103
Commercial Vehicles	Hybrid							37,100	307	19	
	Gasoline	881	3,142,121 L	21,000	109,975	7,388	1,010	3,691,331 L	21,700	129,197	8,260
	Diesel Fuel	823	3,798,194 L	25,500	145,471	10,221	983	5,528,523 L	31,500	211,742	14,435
	Other Fuel	25	61,932 L	12,800	1,567	95	17	41,682 L	12,800	1,055	64
Tractor Trailer Trucks	Gasoline			10,700	297	20		13,300	238	15	
	Diesel Fuel	302	5,203,460 L	40,300	199,292	14,002	298	6,522,525 L	50,600	249,813	17,030
	Other Fuel			11,000	77	4					
Motorhomes	Gasoline	58	170,025 L	20,200	5,951	397	61	179,359 L	20,300	6,276	399
	Diesel Fuel	49	192,771 L	20,200	7,383	518	46	179,503 L	19,800	6,874	469
	Other Fuel			20,100	411	25		19,000	294	18	
Motorcycles, Mopeds	Gasoline	111	27,123 L	5,200	950	63	132	37,729 L	6,100	1,320	84
Buses	Gasoline	19	76,820 L	19,900	2,689	182	25	80,845 L	19,900	2,829	181
	Diesel Fuel	29	199,283 L	22,900	7,632	537	38	243,211 L	23,200	9,316	635
	Other Fuel			13,100	572	35		13,500	291	18	
<b>Totals</b>		<b>8,847</b>	<b>29,794,150 L</b>	<b>20,796</b>	<b>1,075,541</b>	<b>73,865</b>	<b>9,419</b>	<b>29,794,150 L</b>	<b>22,810</b>	<b>1,282,060</b>	<b>84,418</b>

## Dawson Creek City 2010 Community Energy and Emissions Inventory

### *Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Residential	Wood	N/A	132,986 GJ	132,986	2,694	N/A	123,973 GJ	123,973	2,512
	Heating Oil	N/A	10,593 GJ	10,593	747	N/A	9,875 GJ	9,875	675
	Propane	N/A	28,750 GJ	28,750	1,754	N/A	26,802 GJ	26,802	1,635
	Natural Gas	4,108	440,778 GJ	440,778	22,109	4,108	429,327 GJ	429,327	21,535
	Electricity	5,002	40,140,046 kWh	144,504	1,004	5,336	42,944,697 kWh	154,601	1,074
Commercial/Small-Medium Industrial	Natural Gas	703	479,803 GJ	479,803	24,067	703	477,438 GJ	477,438	23,948
	Electricity	901	64,793,613 kWh	233,257	1,620	1,002	73,251,398 kWh	263,705	1,831
<b>Totals</b>		<b>10,714</b>		<b>1,470,671</b>	<b>53,995</b>	<b>11,149</b>		<b>1,485,721</b>	<b>53,210</b>

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	7,697 t	N/A	1,486	0	32,111 t	N/A	11,878
<b>Totals</b>		<b>0</b>			<b>1,486</b>	<b>0</b>			<b>11,878</b>

### Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	2		0	0	5	26,941 GJ	26,941	1,351
	Electricity	1		0	0	3		0	0
<b>Totals</b>		<b>3</b>			<b>0</b>	<b>8</b>		<b>26,941</b>	<b>1,351</b>

## Dawson Creek City 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: 11,289)			2010 (Population: 11,860)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Hybrid	0 L	417	28	19,623 L	1,552	98
Gasoline	19,809,661 L	693,635	47,080	22,389,871 L	783,883	50,477
Diesel Fuel	9,795,163 L	375,482	26,392	12,872,400 L	493,258	33,640
Other Fuel	189,326 L	6,007	365	108,743 L	3,367	203
Wood	132,986 GJ	132,986	2,694	123,973 GJ	123,973	2,512
Heating Oil	10,593 GJ	10,593	747	9,875 GJ	9,875	675
Propane	28,750 GJ	28,750	1,754	26,802 GJ	26,802	1,635
Natural Gas	920,581 GJ	920,581	46,176	906,765 GJ	906,765	45,483
Electricity	104,933,659 kWh	377,761	2,624	116,196,095 kWh	418,306	2,905
Solid Waste	7,697 t	0	1,486	32,111 t	0	11,878
<b>Grand Totals</b>		<b>2,546,212</b>	<b>129,346</b>		<b>2,767,781</b>	<b>149,506</b>

*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	3,045	41	3,085	70	3,045	65
Semi-Detached House	135	2	175	4	190	4
Row House	230	3	235	5	275	6
Apartment, Duplex	50	1	5	0	35	1
Apartment, 5 storeys or higher	10	0	0	0	0	0
Apartment, under 5 storeys	735	10	765	17	875	19
Other Single Attached House	10	0	5	0	10	0
Movable Dwelling	120	2	130	3	225	5

**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	3,800	76	3,790	78	4,380	78
Car, Truck, Van as Passenger	535	11	430	9	580	10
Public Transit	65	1	65	1	30	1
Walked	450	9	470	10	450	8
Bicycle	90	2	50	1	65	1
Motorcycle	0	0	0	0	25	0
Taxicab	30	1	25	1	15	0
Other Method	55	1	30	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	108	4
Agricultural Land Reserve	473	19
Other land use	1,897	77
Total Parks and Protected Area	108	4
Total Land Area	2,477	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	108	4
Agricultural Land Reserve	473	19
Other land use	1,897	77
Total Parks and Protected Area	108	4
Total Land Area	2,477	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	3,960	85
5 to 9.9 km	110	2
25 km or more	595	13
15 to 24.9 km	0	0
10 to 14.9 km	0	0

**Dawson Creek City**  
**2010 Community Energy and Emissions Inventory**  
*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

This page  
intentionally left  
blank

**Dawson Creek City**  
**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](mailto: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](mailto: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,