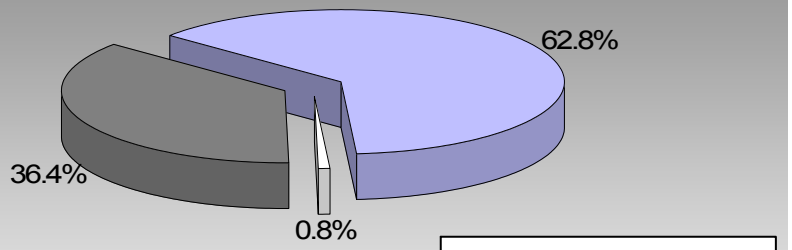
Dawson Creek City
Updated 2007 Community Energy and Emissions Inventory

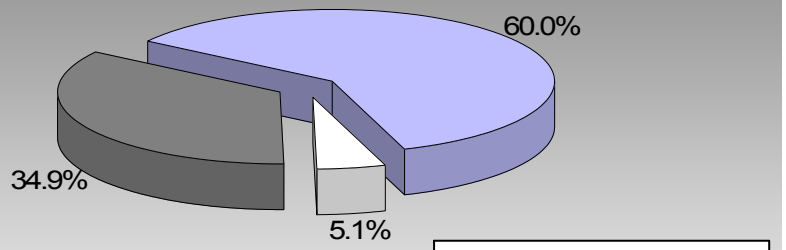
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

Where are the majority of our community's emissions coming from?

Dawson Creek City
2007 GHG Emissions Sources

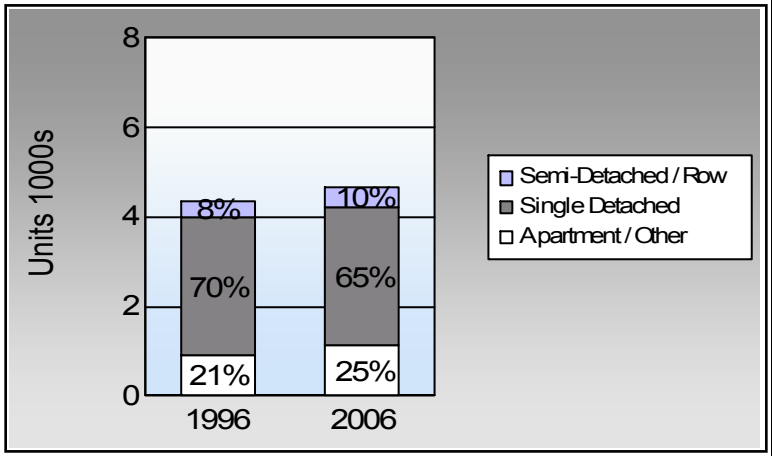


Total for BC Communities



Are we living more compactly?

Housing Type



In BC, single family detached housing made up 49% of housing in 2006.

Are we driving less?

Commute To Work

	1996	2006
	75.6%	78.4%
	10.7%	10.4%
	1.3%	0.5%
	9.0%	8.1%
	1.8%	1.2%

In BC, 10% of people took transit, 7% walked, and 2% cycled to work in 2006.

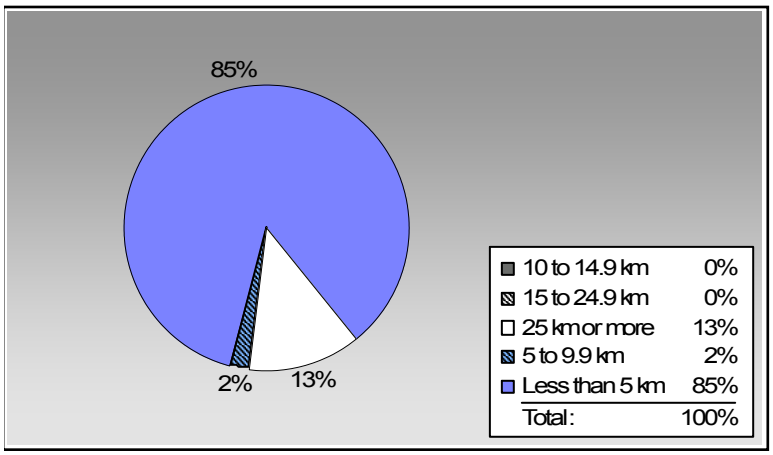
Residential Density

Dawson Creek City: 6.2 people per net ha

BC municipal average: 7.4 people per net ha

Are we living closer to where we work?

Commute Distance



In BC, 41% of people lived within 5km of their work in 2006.

For more information and to provide feedback on your Community Energy and Emissions Inventory (CEEI) Report see back page.

Sectors

On Road Transportation		Vehicles	Consumption	Measurement	Average-VKT(km)	Energy (GJ)	CO2e (t)
Small Passenger Cars	Gasoline	1,585	2,423,852	Litres	14,529	84,835	5,773
	Diesel Fuel	40	46,935	Litres	15,718	1,798	128
	Other Fuel	< 10	671	Litres		26	1
				Small Passenger Cars		**86,659**	**5,902**
Large Passenger Cars	Gasoline	1,274	3,233,618	Litres	19,709	113,177	7,681
	Diesel Fuel	37	98,218	Litres	19,947	3,762	268
	Other Fuel	< 10	7,980	Litres	16,304	306	12
				Large Passenger Cars		**117,245**	**7,961**
Light Trucks, Vans, SUVs	Gasoline	4,486	15,046,066	Litres	20,689	526,612	35,940
	Diesel Fuel	640	1,888,517	Litres	22,665	72,330	5,160
	Other Fuel	46	132,515	Litres	14,167	5,075	203
				Light Trucks, Vans, SUVs		**604,017**	**41,303**
Commercial Vehicles	Gasoline	73	318,782	Litres	13,824	11,157	745
	Diesel Fuel	185	914,156	Litres	22,292	35,012	2,460
	Other Fuel	13	45,250	Litres	11,356	1,733	69
				Commercial Vehicles		**47,902**	**3,274**
Tractor Trailer Trucks	Gasoline	< 10	35,263	Litres	8,793	1,234	82
	Diesel Fuel	381	9,749,061	Litres	68,483	373,389	26,234
	Other Fuel	< 10	12,506	Litres	10,708	479	19
				Tractor Trailer Trucks		**375,102**	**26,335**
Motorhomes	Gasoline	73	124,640	Litres	2,833	4,362	291
	Diesel Fuel	< 10	8,085	Litres	4,302	310	22
	Other Fuel	< 10	4,984	Litres	2,189	191	8
				Motorhomes		**4,863**	**321**
Motorcycles, Mopeds	Gasoline	54	48,261	Litres	5,538	1,689	113
				Motorcycles, Mopeds		**1,689**	**113**
Bus	Gasoline	< 10	64,373	Litres	15,902	2,253	151
	Diesel Fuel	20	189,253	Litres	21,182	7,248	509
	Other Fuel	20	124,357	Litres	15,902	4,763	191
				Bus		**14,264**	**851**

	Gasoline:	745,319	50,776
	Diesel:	493,849	34,781
	Other Fuel:	12,573	503
On Road Transportation Totals	**All Fuels:**	**1,251,741**	**86,060**

Buildings

	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	5,002	40,140,046	Kilowatt Hours	144,504	990
	Natural Gas	3,883	431,251	GigaJoules	431,251	21,993
	Heating Oil		12,920	GigaJoules	12,920	911
	Propane		35,067	GigaJoules	35,067	2,139
	Wood		95,915	GigaJoules	95,915	35
			Residential		**719,657**	**26,068**
Commercial/Small-Medium Industrial	Electricity	901	64,793,613	Kilowatt Hours	233,257	1,598
	Natural Gas	625	435,265	GigaJoules	435,265	22,199
			Commercial/Small-Medium Industrial		**668,522**	**23,797**

	Electricity:	377,761	2,588
	Natural Gas:	866,516	44,192
	Propane:	35,067	2,139
	Wood:	95,915	35
	Heating Oil:	12,920	911
Buildings Totals	**Buildings:**	**1,388,179**	**49,865**

Solid Waste

		Mass (t)	CO2e (t)
	Community Solid Waste	7,697	1,043

Grand Total		CONSUMPTION		ENERGY (GJ)	CO2e (t)
	Diesel Fuel	12,894,225	L	493,849	34,781
	Electricity	104,933,659	kWh	377,761	2,588
	Gasoline	21,294,855	L	745,319	50,776
	Heating Oil	12,920	GJ	12,920	911
	Natural Gas	866,516	GJ	866,516	44,192
	Other Fuel	328,263	L	12,573	503
	Propane	35,067	GJ	35,067	2,139
	Solid Waste	7,697	T	0	1,043
	Wood	95,915	GJ	95,915	35
Total of Transportation / Buildings / Solid Waste:				**2,639,920** GJ	**136,968** tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	1	withheld	Kilowatt Hours	-	-
				Large Industrial	**-**	**-**

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Supporting Indicators

Below you will find supporting indicators for which data is provided. These are the first five supporting indicators for which data is provided as a part of the updated 2007 CEEI. Columns with all zeros indicate data unavailable in these CEEI reports. Thirteen additional supporting indicators are under consideration for future reports (see next page). Local government feedback is requested on all supporting indicators. Please take the time to complete the short CEEI Survey at http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html or contact us directly at CEEIRPT@gov.bc.ca

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

Residential Density

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

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
Population	11,514.0
Net Land Area (ha) *	1,847.9
Residential Density (people per net ha)	6.2

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	
	People	%	People	%	People	%
Car, Truck, Van as Driver	3,800	76	3,790	78	4,380	78
Car, Truck,Van as Passenge	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

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	
	People	%
Less than 5 km	3,960	85
5 to 9.9 km	110	2
10 to 14.9 km	0	0
15 to 24.9 km	0	0
25 km or more	595	13

Parks and Protected Greenspace

* Total is net of Indian Reserves

** The quantity of parkland may be underestimated

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Area (ha)	%
National Parks	0.0	0.0
Provincial Parks / Protected Areas	0.0	0.0
Local Parks	107.7	4.3
Agricultural Land Reserve	472.6	19.1
Other land use	1,897.2	76.6
Total Land Area	2,477.5	100.0

Supporting Indicators Under Consideration

The following supporting indicators are under consideration for inclusion in future CEEI reports. The 2007 CEEI reports provide these 'placeholder' indicators to give indication of data that may be provided in the future by the Province on an ongoing basis to assist in monitoring actions to reduce GHG emissions and energy consumption. Please submit feedback to CEEIRPT@gov.bc.ca (see survey on CEEI website).

On-Road Transportation (and Land Use)

Proximity to Transit	Persons, dwelling units (du) and employment within 400m of a quality transit stop/line
Proximity to Services	Persons and dwelling units (du) within 400m of services (e.g. grocery store, school, other retail etc.)
Transit Ridership	Annual per capita transit ridership

Buildings

Residential; Public Building Energy Intensity	Average energy use per person per square metre of floor space
Floor Space	Average residential dwelling unit size

Solid Waste (and Water)

Waste Diversion	Tonnes of waste diverted
Avoided Waste Emissions	Tonnes of CO2e of avoided future emissions due to reduced waste since 2007
Water Use	Per capita residential water use

Land-Use Change

Impervious Surface Cover	% change in impervious surface cover
Tree Canopy Cover	% change in tree canopy cover

Community and Renewable Energy Supply

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)

This is your local government's Updated 2007 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 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, and fulfill Milestone One requirements for those local government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program.

A first in North America!
CEEI is a first in North America and a first step for BC communities. The 2007 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 and medium from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items', and the first of a suite of 'supporting indicators'. 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.

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For More Information:

- The full list of all BC local government Updated 2007 CEEI Reports, CEEI Data Summary Report, Technical Methods and Guidance Document, and additional information on the Secondary 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, particularly now with the new Indicators. Please take the time to complete the short CEEI Survey at <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html> or contact us directly at CEEIRPT@gov.bc.ca