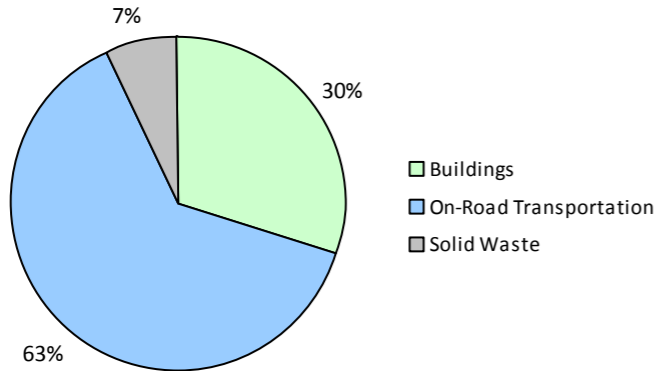


Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

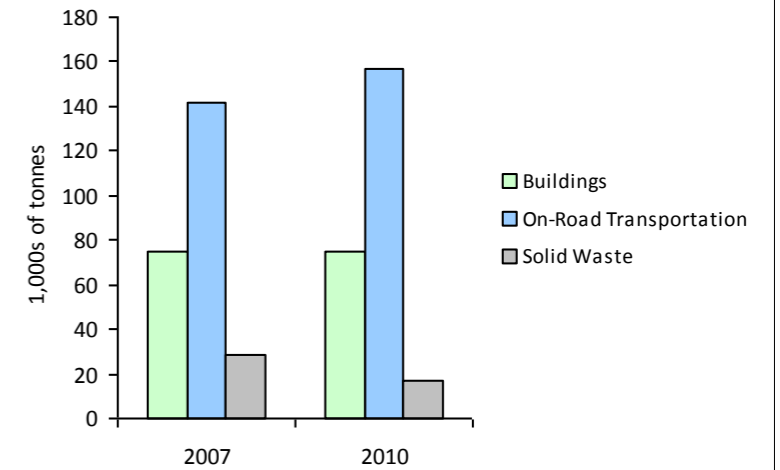
2010 GHG Emissions Sources (Total for this Community)



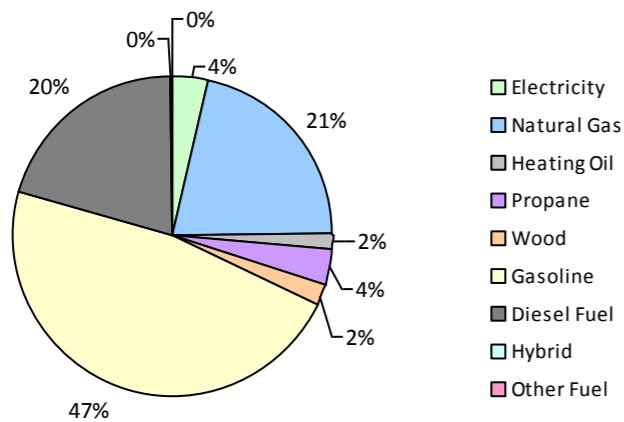
2010 GHG Emissions Sources (Total for BC)



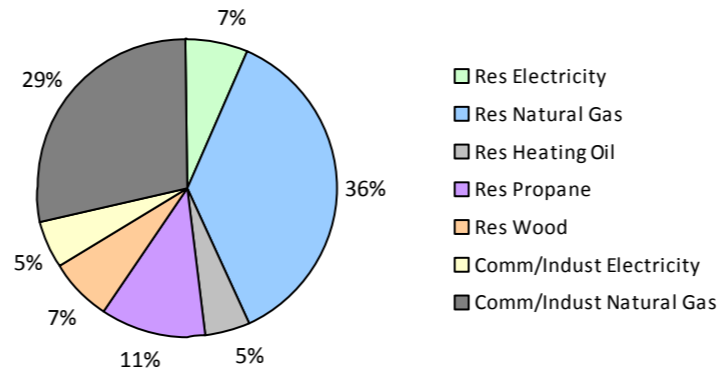
GHG Emissions Comparisons for this Community



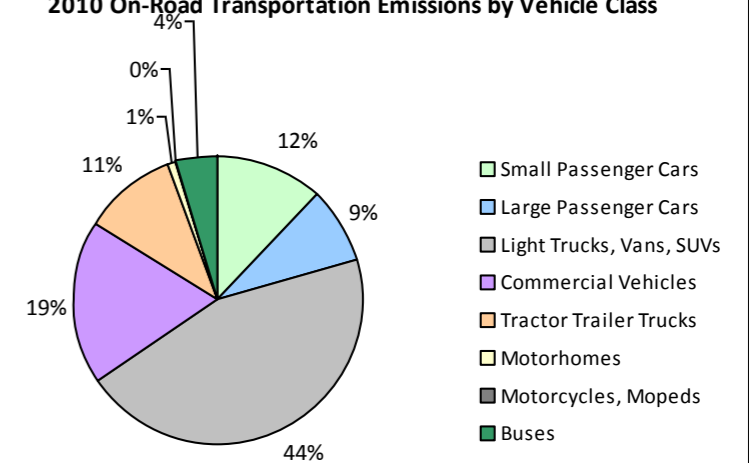
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



Kitimat-Stikine Regional District 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			29,800	95	7	11	13,479 L	24,000	471	30
	Gasoline	4,515	7,627,356 L	18,000	266,957	18,074	4,681	8,255,712 L	19,000	288,950	18,500
	Diesel Fuel	170	312,934 L	27,200	11,985	855	160	287,883 L	26,500	11,026	764
	Other Fuel								14,000	33	3
Large Passenger Cars	Hybrid			30,100	380	25	47	89,325 L	31,700	3,126	199
	Gasoline	2,645	6,286,621 L	21,200	220,031	14,855	2,474	5,924,020 L	21,300	207,340	13,266
	Diesel Fuel	22	25,797 L	12,700	988	69	27	26,835 L	10,700	1,028	71
	Other Fuel			20,100	161	9			25,600	113	8
Light Trucks, Vans, SUVs	Hybrid			20,900	271	19	16	36,603 L	26,200	1,281	83
	Gasoline	9,488	26,095,897 L	18,700	913,357	62,347	10,259	29,799,195 L	19,900	1,042,972	67,507
	Diesel Fuel	342	871,839 L	14,600	33,391	2,375	262	733,097 L	16,600	28,078	1,940
	Other Fuel	39	86,216 L	12,600	2,180	132	24	44,826 L	10,800	1,134	68
Commercial Vehicles	Hybrid								21,800	90	6
	Gasoline	1,171	3,699,140 L	18,400	129,470	8,695	1,241	3,977,205 L	18,900	139,201	8,900
	Diesel Fuel	1,358	5,433,456 L	22,200	208,102	14,621	1,641	7,715,319 L	26,600	295,497	20,144
	Other Fuel	19	39,832 L	10,800	1,008	61	10	18,073 L	10,200	457	27
Tractor Trailer Trucks	Gasoline			45,000	1,644	111					
	Diesel Fuel	256	5,615,046 L	48,300	215,057	15,111	285	6,382,882 L	49,800	244,464	16,665
	Other Fuel			26,900	306	18			9,000	53	3
Motorhomes	Gasoline	94	262,399 L	19,600	9,184	612	114	318,888 L	19,500	11,161	710
	Diesel Fuel	75	265,421 L	19,400	10,167	715	77	275,782 L	19,600	10,562	720
	Other Fuel			21,900	324	21			21,400	327	20
Motorcycles, Mopeds	Gasoline	261	58,207 L	4,900	2,038	137	350	94,115 L	6,000	3,294	209
Buses	Gasoline	65	206,204 L	18,700	7,217	485	64	187,968 L	18,800	6,579	421
	Diesel Fuel	155	758,642 L	20,800	29,056	2,041	357	2,517,599 L	35,700	96,425	6,573
	Other Fuel			12,600	398	24			11,400	240	14
Totals		20,675	57,645,007 L	19,271	2,063,767	141,419	22,100	57,645,007 L	20,737	2,393,902	156,851

Kitimat-Stikine Regional District 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	262,192 GJ	262,192	5,312	N/A	244,422 GJ	244,422	4,952
	Heating Oil	N/A	55,261 GJ	55,261	3,895	N/A	51,515 GJ	51,515	3,523
	Propane	N/A	150,605 GJ	150,605	9,188	N/A	140,398 GJ	140,398	8,566
	Natural Gas	7,787	622,671 GJ	622,671	31,233	7,787	533,635 GJ	533,635	26,767
	Electricity	16,819	217,582,626 kWh	783,297	5,440	16,881	210,240,253 kWh	756,864	5,256
Commercial/Small-Medium Industrial	Natural Gas	921	316,116 GJ	316,116	15,856	921	431,085 GJ	431,085	21,623
	Electricity	2,928	152,299,061 kWh	548,276	3,808	2,937	156,016,765 kWh	561,660	3,901
Totals		28,455		2,738,418	74,732	28,526		2,719,579	74,588

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Community Solid Waste	Solid Waste	0	17,735 t	N/A	28,819	0	21,278 t	N/A	17,197
Totals		0			28,819	0			17,197

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Large Industrial	Natural Gas	7	3,748,717 GJ	3,748,717	188,036	6	883,088 GJ	883,088	44,296
	Electricity	2		0	0	1		0	0
Totals		9		3,748,717	188,036	7		883,088	44,296

Agriculture		2007				2010			
		Connections	Consumption	Energy (GJ)	CO2e (t)	Connections	Consumption	Energy (GJ)	CO2e (t)
Enteric Fermentation	Methane	2,918	132 t	0	2,772				
Totals		2,918			2,772	0			

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Land-use Change - Deforestation	2007				2010			
	Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Agriculture Deforestation	55	0 ha	0	25,363				
Settlement Deforestation	11	0 ha	0	5,402				
Totals	66			30,765	0			

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 38,320)			2010 (Population: 39,642)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	746	51	139,407 L	4,968	318
Gasoline	44,235,824 L	1,549,898	105,316	48,557,103 L	1,699,497	109,513
Diesel Fuel	13,283,135 L	508,746	35,787	17,939,397 L	687,080	46,877
Other Fuel	126,048 L	4,377	265	62,899 L	2,357	143
Wood	262,192 GJ	262,192	5,312	244,422 GJ	244,422	4,952
Heating Oil	55,261 GJ	55,261	3,895	51,515 GJ	51,515	3,523
Propane	150,605 GJ	150,605	9,188	140,398 GJ	140,398	8,566
Natural Gas	938,787 GJ	938,787	47,089	964,720 GJ	964,720	48,390
Electricity	369,881,687 kWh	1,331,573	9,248	366,257,018 kWh	1,318,524	9,157
Solid Waste	17,735 t	0	28,819	21,278 t	0	17,197
Grand Totals		4,802,185	244,970		5,113,481	248,636

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	10,300	41	10,690	73	10,530	73
Semi-Detached House	795	3	830	6	930	6
Row House	730	3	775	5	740	5
Apartment, Duplex	325	1	270	2	355	2
Apartment, 5 storeys or higher	0	0	120	1	5	0
Apartment, under 5 storeys	1,325	5	1,000	7	1,025	7
Other Single Attached House	90	0	40	0	45	0
Movable Dwelling	1,055	4	890	6	740	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	13,730	75	13,040	79	11,780	76
Car, Truck, Van as Passenger	1,605	9	1,235	7	1,455	9
Public Transit	250	1	180	1	200	1
Walked	2,150	12	1,600	10	1,700	11
Bicycle	320	2	160	1	205	1
Motorcycle	20	0	10	0	20	0
Taxicab	40	0	50	0	15	0
Other Method	270	1	235	1	225	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	1,689,041	16
Local Parks	587	0
Agricultural Land Reserve	66,350	1
Other land use	8,847,934	83
Total Parks and Protected Area	1,689,628	16
Total Land Area	10,603,912	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	1,689,041	16
Local Parks	587	0
Agricultural Land Reserve	66,350	1
Other land use	8,847,934	83
Total Parks and Protected Area	1,689,628	16
Total Land Area	10,603,912	100

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

Kitimat-Stikine Regional District
2010 Community Energy and Emissions Inventory
Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

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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

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,