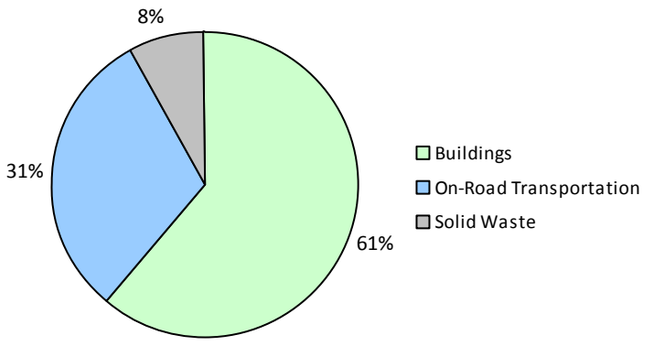
Stikine Regional District

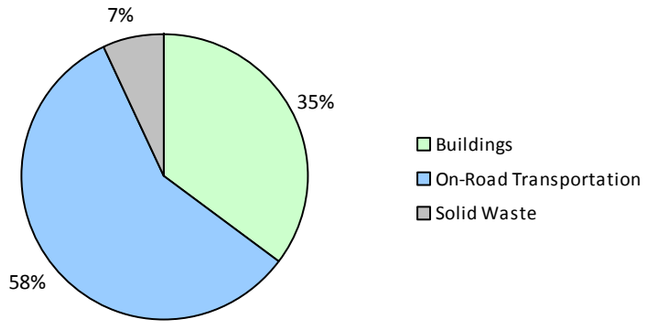
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

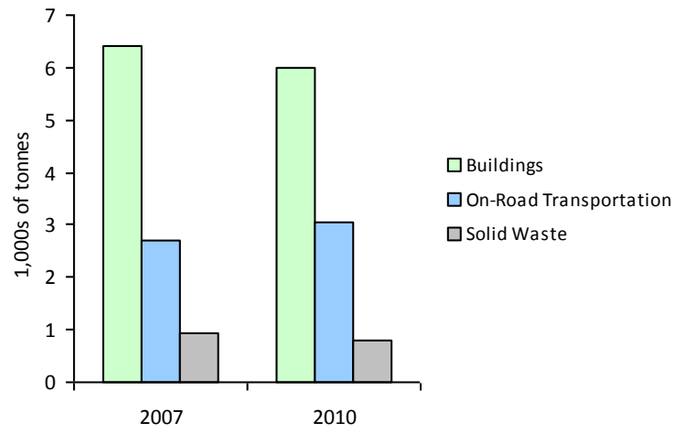
2010 GHG Emissions Sources (Total for this Community)



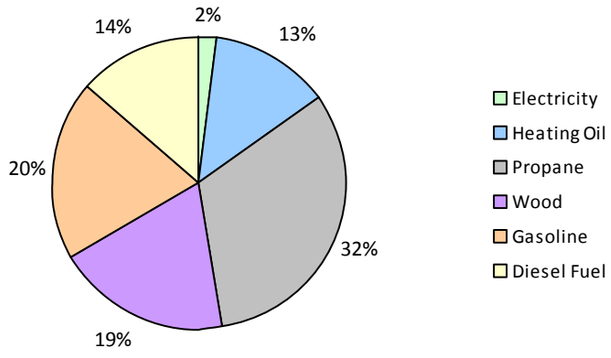
2010 GHG Emissions Sources (Total for BC)



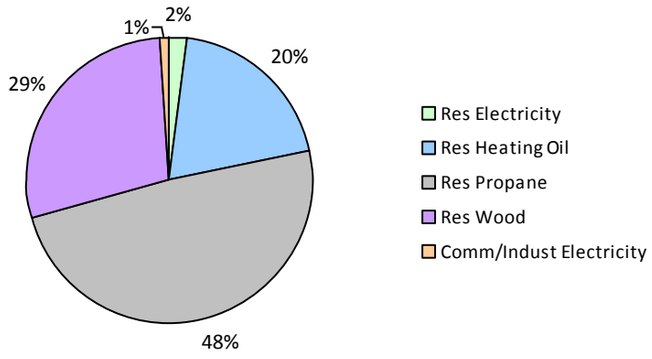
GHG Emissions Comparisons for this Community



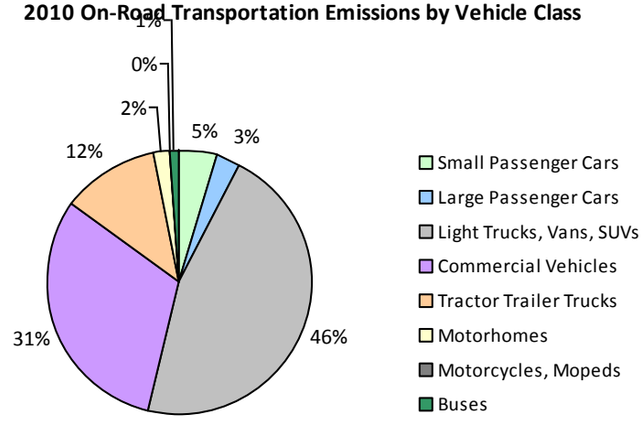
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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Core Items

On-Road Transportation		2007					2010				
		Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Gasoline	49	67,096 L	14,700	2,348	161	42	56,196 L	14,700	1,967	127
	Diesel Fuel			14,800	142	11			18,400	288	20
Large Passenger Cars	Gasoline	23	41,424 L	15,600	1,450	99	20	40,867 L	17,900	1,430	93
	Diesel Fuel			10,200	43	3					
Light Trucks, Vans, SUVs	Gasoline	219	521,987 L	15,600	18,269	1,257	225	561,551 L	16,600	19,654	1,278
	Diesel Fuel	28	57,963 L	11,500	2,220	159	19	42,537 L	12,600	1,630	112
Commercial Vehicles	Gasoline	29	71,841 L	14,200	2,514	169	42	111,703 L	16,300	3,909	250
	Diesel Fuel	50	187,676 L	19,900	7,188	506	59	269,085 L	25,000	10,306	702
Tractor Trailer Trucks	Diesel Fuel			26,700	3,806	268	16	140,746 L	22,600	5,390	368
Motorhomes	Gasoline			17,400	260	18			18,400	522	33
	Diesel Fuel			16,100	325	24			16,600	327	22
Motorcycles, Mopeds	Gasoline			5,700	29	2			6,400	68	4
Buses	Gasoline			22,700	278	19			22,800	407	26
	Diesel Fuel								10,900	96	7
Totals		**398**	**947,987 L**	**15,639**	**38,872**	**2,696**	**423**	**947,987 L**	**17,662**	**45,994**	**3,042**

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	90,465 GJ	90,465	1,833	N/A	84,334 GJ	84,334	1,709
	Heating Oil	N/A	18,885 GJ	18,885	1,331	N/A	17,605 GJ	17,605	1,204
	Propane	N/A	51,050 GJ	51,050	3,115	N/A	47,590 GJ	47,590	2,903
	Electricity	504	4,465,630 kWh	16,076	99	504	4,513,658 kWh	16,249	113
Commercial/Small-Medium Industrial	Electricity	119	1,942,824 kWh	6,994	45	130	2,471,906 kWh	8,899	62
Totals		**623**		**183,470**	**6,423**	**634**		**174,677**	**5,991**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	548 t	N/A	928	0	292 t	N/A	798
Totals		**0**			**928**	**0**			**798**

Stikine Regional District

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Memo Items

Land-use Change - Deforestation		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Settlement	Deforestation	70	0 ha	0	31,239				
Totals		**70**			**31,239**	**0**			

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 1,152)			2010 (Population: 614)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Gasoline	702,348 L	25,148	1,725	770,317 L	27,957	1,811
Diesel Fuel	245,639 L	13,724	971	452,368 L	18,037	1,231
Wood	90,465 GJ	90,465	1,833	84,334 GJ	84,334	1,709
Heating Oil	18,885 GJ	18,885	1,331	17,605 GJ	17,605	1,204
Propane	51,050 GJ	51,050	3,115	47,590 GJ	47,590	2,903
Electricity	6,408,454 kWh	23,070	144	6,985,564 kWh	25,148	175
Solid Waste	548 t	0	928	292 t	0	798
Grand Totals		**222,342**	**10,047**		**220,671**	**9,831**

Stikine Regional District

2010 Community Energy and Emissions Inventory

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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	525	49	515	91	445	91
Semi-Detached House	15	1	15	3	25	5
Row House	10	1	10	2	10	2
Apartment, Duplex	0	0	0	0	0	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	0	0	5	1	5	1
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	0	0	20	4	5	1

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	335	54	380	72	300	58
Car, Truck,Van as Passenger	65	11	25	5	35	7
Public Transit	0	0	0	0	10	2
Walked	170	28	100	19	125	24
Bicycle	25	4	10	2	10	2
Motorcycle	0	0	0	0	10	2
Taxicab	0	0	0	0	0	0
Other Method	20	3	10	2	30	6

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	2,530,694	21
Local Parks	12,970	0
Agricultural Land Reserve	0	0
Other land use	9,664,923	79
Total Parks and Protected Area	2,543,664	21
Total Land Area	12,208,587	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	2,530,694	21
Local Parks	12,970	0
Agricultural Land Reserve	0	0
Other land use	9,664,923	79
Total Parks and Protected Area	2,543,664	21
Total Land Area	12,208,587	100

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

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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

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