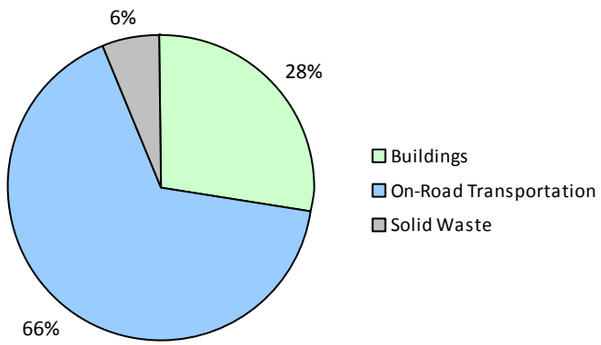
East Kootenay Regional District Unincorporated Areas

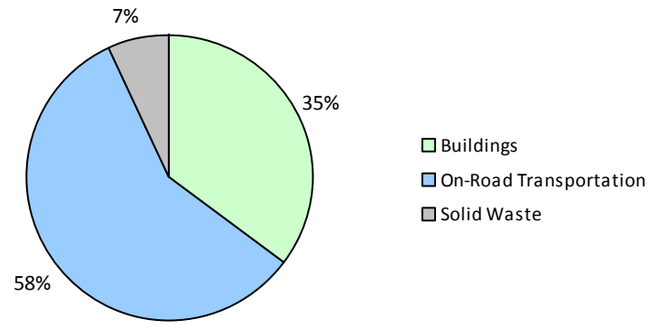
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

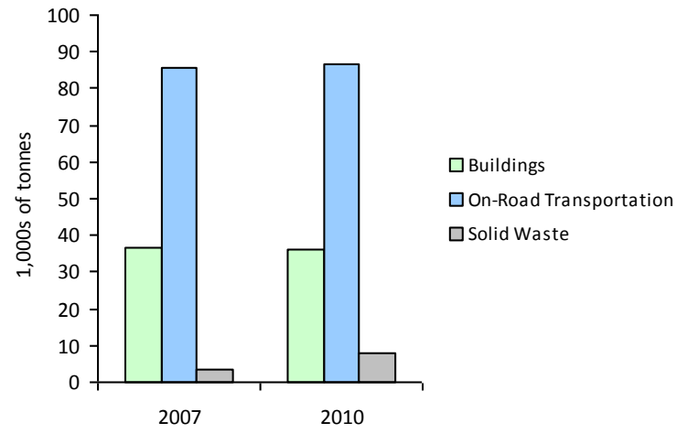
2010 GHG Emissions Sources (Total for this Community)



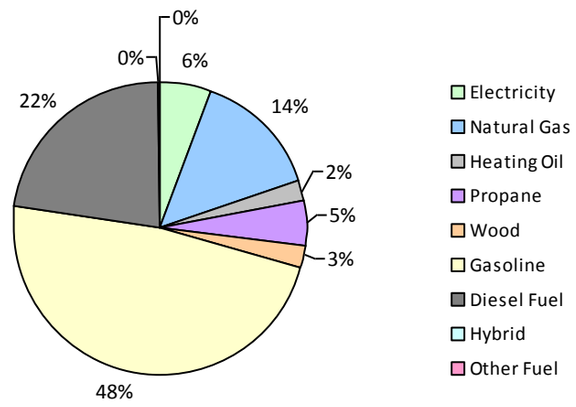
2010 GHG Emissions Sources (Total for BC)



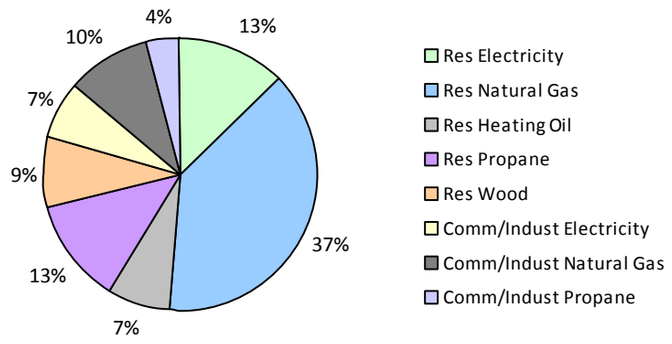
GHG Emissions Comparisons for this Community



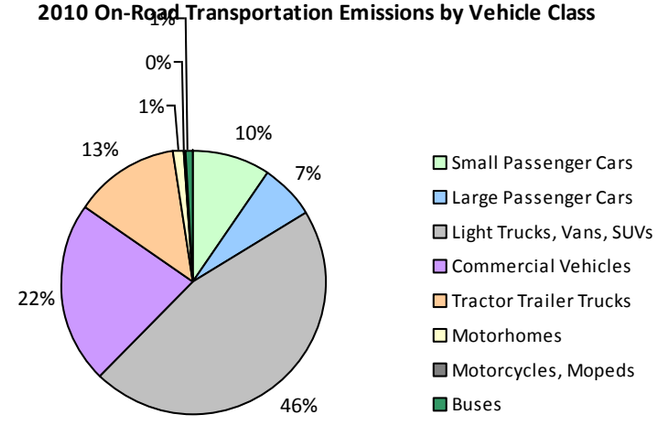
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



East Kootenay Regional District Unincorporated Areas

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)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Hybrid								21,100	153	9
	Gasoline	2,194	3,424,775 L	16,600	119,868	8,125	2,154	3,417,106 L	17,000	119,599	7,669
	Diesel Fuel	181	307,668 L	25,900	11,784	840	165	280,105 L	24,800	10,727	743
Large Passenger Cars	Hybrid			21,300	349	23	22	26,606 L	21,500	931	60
	Gasoline	1,557	2,694,410 L	15,300	94,305	6,396	1,465	2,546,362 L	15,500	89,121	5,718
	Diesel Fuel	26	36,705 L	14,600	1,406	101	26	34,793 L	14,400	1,334	92
Light Trucks, Vans, SUVs	Hybrid								24,900	503	33
	Gasoline	5,873	15,114,980 L	17,700	529,024	36,158	6,239	16,676,268 L	18,500	583,670	37,815
	Diesel Fuel	392	810,125 L	11,300	31,027	2,206	275	628,051 L	13,300	24,054	1,661
	Other Fuel	55	111,695 L	11,800	2,826	171	28	51,879 L	11,100	1,313	80
Commercial Vehicles	Gasoline	745	2,239,136 L	18,900	78,369	5,262	911	2,949,466 L	20,600	103,232	6,599
	Diesel Fuel	1,103	3,839,760 L	19,500	147,061	10,333	1,248	4,900,474 L	22,100	187,687	12,793
	Other Fuel	23	55,532 L	13,200	1,405	86	12	25,817 L	12,300	652	39
Tractor Trailer Trucks	Diesel Fuel	251	5,282,179 L	45,300	202,308	14,214	227	4,324,060 L	47,200	165,612	11,290
Motorhomes	Gasoline	68	188,895 L	19,400	6,610	442	78	225,413 L	19,500	7,888	499
	Diesel Fuel	63	191,381 L	16,700	7,330	514	57	180,587 L	16,700	6,917	472
	Other Fuel			19,000	135	9					
Motorcycles, Mopeds	Gasoline	217	46,260 L	4,800	1,619	107	246	67,077 L	6,000	2,348	149
Buses	Gasoline	39	111,998 L	19,500	3,920	264	36	110,166 L	20,600	3,855	247
	Diesel Fuel	36	190,570 L	19,800	7,300	512	38	215,213 L	21,100	8,243	563
Totals		**12,823**	**34,646,069 L**	**17,663**	**1,246,646**	**85,763**	**13,227**	**34,646,069 L**	**18,625**	**1,317,839**	**86,531**

East Kootenay Regional District Unincorporated Areas

2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	158,691 GJ	158,691	3,215	N/A	152,746 GJ	152,746	3,095
	Heating Oil	N/A	40,732 GJ	40,732	2,871	N/A	39,206 GJ	39,206	2,681
	Propane	164	77,751 GJ	77,751	4,744	181	74,914 GJ	74,914	4,571
	Natural Gas	3,260	273,270 GJ	273,270	13,708	3,270	273,881 GJ	273,881	13,738
	Electricity	14,495	179,739,326 kWh	647,061	4,495	15,461	190,666,749 kWh	686,400	4,766
Commercial/Small-Medium Industrial	Propane	30	35,641 GJ	35,641	2,174	32	23,877 GJ	23,877	1,457
	Natural Gas	141	62,136 GJ	62,136	3,117	144	70,859 GJ	70,859	3,555
	Electricity	2,100	91,738,601 kWh	330,259	2,292	2,194	98,643,517 kWh	355,116	2,467
Totals		**20,190**		**1,625,541**	**36,616**	**21,282**		**1,676,999**	**36,330**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	16,373 t	N/A	3,430	0	17,834 t	N/A	8,062
Totals		**0**			**3,430**	**0**			**8,062**

Memo Items

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Large Industrial	Natural Gas	4		0	0	4		0	0
	Electricity	5		0	0	3		0	0
Totals		**9**			**0**	**7**			**0**

East Kootenay Regional District Unincorporated Areas

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: 16,796)			2010 (Population: 18,151)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	349	23	26,606 L	1,587	102
Gasoline	23,820,454 L	833,715	56,754	25,991,858 L	909,713	58,696
Diesel Fuel	10,658,388 L	408,216	28,720	10,563,283 L	404,574	27,614
Other Fuel	167,227 L	4,366	266	77,696 L	1,965	119
Wood	158,691 GJ	158,691	3,215	152,746 GJ	152,746	3,095
Heating Oil	40,732 GJ	40,732	2,871	39,206 GJ	39,206	2,681
Propane	113,392 GJ	113,392	6,918	98,791 GJ	98,791	6,028
Natural Gas	335,406 GJ	335,406	16,825	344,740 GJ	344,740	17,293
Electricity	271,477,927 kWh	977,320	6,787	289,310,266 kWh	1,041,516	7,233
Solid Waste	16,373 t	0	3,430	17,834 t	0	8,062
Grand Totals		**2,872,187**	**125,809**		**2,994,838**	**130,923**

East Kootenay Regional District Unincorporated Areas

2010 Community Energy and Emissions Inventory

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	5,085	23	5,475	82	4,940	73
Semi-Detached House	30	0	80	1	105	2
Row House	40	0	35	1	50	1
Apartment, Duplex	65	0	80	1	80	1
Apartment, 5 storeys or higher	0	0	0	0	10	0
Apartment, under 5 storeys	80	0	75	1	80	1
Other Single Attached House	10	0	25	0	25	0
Movable Dwelling	940	4	930	14	1,450	22

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	5,700	82	6,380	85	6,780	85
Car, Truck,Van as Passenger	650	9	590	8	605	8
Public Transit	20	0	25	0	80	1
Walked	315	5	330	4	230	3
Bicycle	60	1	115	2	60	1
Motorcycle	10	0	10	0	25	0
Taxicab	0	0	0	0	10	0
Other Method	195	3	90	1	160	2

Parks and Protected Greenspace

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

	2009	
	Units	%
National Parks	133,891	5
Provincial Parks / Protected Areas	273,585	10
Local Parks	273	0
Agricultural Land Reserve	263,461	10
Other land use	2,002,674	75
Total Parks and Protected Area	407,748	15
Total Land Area	2,673,883	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	133,891	5
Provincial Parks / Protected Areas	273,585	10
Local Parks	273	0
Agricultural Land Reserve	263,461	10
Other land use	2,002,674	75
Total Parks and Protected Area	407,748	15
Total Land Area	2,673,883	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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