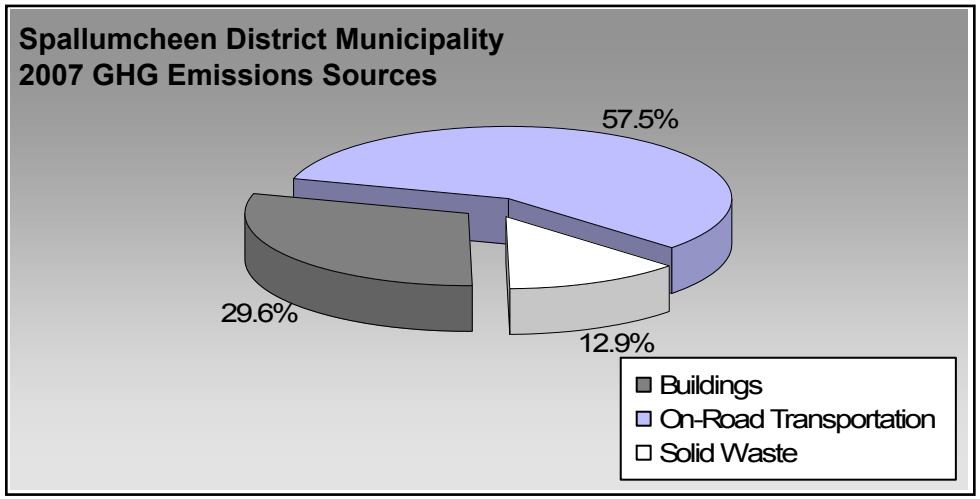
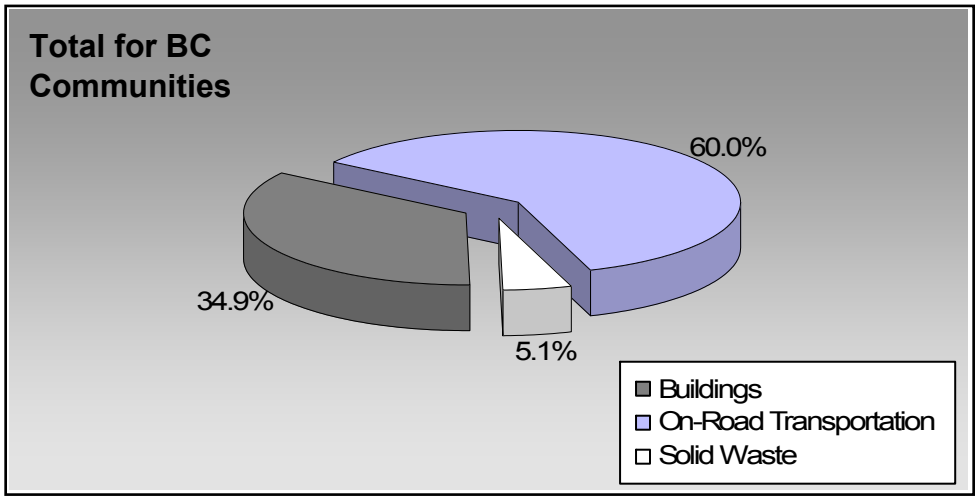
Spallumcheen District Municipality
Updated 2007 Community Energy and Emissions Inventory

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

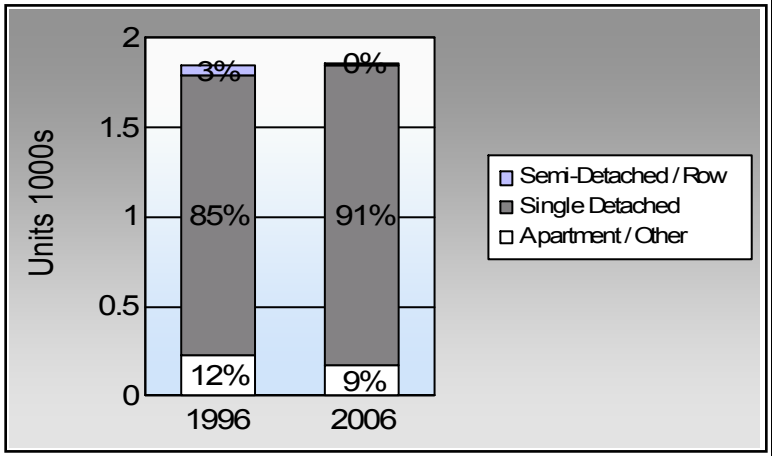
Where are the majority of our community's emissions coming from?





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
	84.3%	90.1%
	7.9%	5.8%
	0.0%	0.0%
	5.3%	3.1%
	0.5%	0.0%

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

Residential Density

Spallumcheen District Municipality: 0.6 people per net ha

BC municipal average: 7.4 people per net ha

Are we living closer to where we work?

Commute Distance

This data is currently unavailable in the CEEI 2007 Reports

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	731	1,039,841	Litres	13,541	36,394	2,474
	Diesel Fuel	54	57,421	Litres	13,932	2,199	157
				Small Passenger Cars		**38,593**	**2,631**
Large Passenger Cars	Gasoline	463	1,057,951	Litres	18,112	37,028	2,511
	Diesel Fuel	15	33,224	Litres	17,503	1,272	91
	Other Fuel	< 10	3,780	Litres	14,321	145	6
				Large Passenger Cars		**38,445**	**2,608**
Light Trucks, Vans, SUVs	Gasoline	1,258	3,862,962	Litres	20,070	135,204	9,228
	Diesel Fuel	244	658,962	Litres	20,931	25,238	1,800
	Other Fuel	< 10	24,301	Litres	13,085	931	37
				Light Trucks, Vans, SUVs		**161,373**	**11,065**
Commercial Vehicles	Gasoline	16	71,322	Litres	14,837	2,496	167
	Diesel Fuel	38	186,562	Litres	21,658	7,145	502
	Other Fuel	< 10	20,151	Litres	12,771	772	31
				Commercial Vehicles		**10,413**	**700**
Tractor Trailer Trucks	Gasoline	< 10	9,399	Litres	11,686	329	22
	Diesel Fuel	96	3,176,794	Litres	84,994	121,671	8,549
	Other Fuel	< 10	2,380	Litres	7,085	91	4
				Tractor Trailer Trucks		**122,091**	**8,575**
Motorhomes	Gasoline	30	37,751	Litres	2,793	1,321	88
	Diesel Fuel	< 10	10,179	Litres	5,572	390	27
	Other Fuel	< 10	1,384	Litres	2,189	53	2
				Motorhomes		**1,764**	**117**
Motorcycles, Mopeds	Gasoline	54	30,985	Litres	5,719	1,084	72
				Motorcycles, Mopeds		**1,084**	**72**
Bus	Gasoline	< 10	21,861	Litres	56,197	765	51
	Diesel Fuel	< 10	6,675	Litres		256	18
				Bus		**1,021**	**69**

	Gasoline:	214,621	14,613
	Diesel:	158,171	11,144
	Other Fuel:	1,992	80
On Road Transportation Totals	**All Fuels:**	**374,784**	**25,837**

Buildings

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	2,077	36,056,239	Kilowatt Hours	129,802	889
	Natural Gas	1,131	98,666	GigaJoules	98,666	5,032
			Residential		**228,468**	**5,921**
Commercial/Small-Medium Industrial	Electricity	247	28,067,511	Kilowatt Hours	101,043	692
	Natural Gas	129	131,318	GigaJoules	131,318	6,697
			Commercial/Small-Medium Industrial		**232,361**	**7,389**

	Electricity:	230,845	1,581
	Natural Gas:	229,984	11,729
	Propane:		
	Wood:		
	Heating Oil:		
Buildings Totals	**Buildings:**	**460,829**	**13,310**

Solid Waste

		Mass (t)	CO2e (t)
	Community Solid Waste	7,075	5,774

Grand Total		CONSUMPTION		ENERGY (GJ)	CO2e (t)
	Diesel Fuel	4,129,817	L	158,171	11,144
	Electricity	64,123,750	kWh	230,845	1,581
	Gasoline	6,132,072	L	214,621	14,613
	Natural Gas	229,984	GJ	229,984	11,729
	Other Fuel	51,996	L	1,992	80
	Solid Waste	7,075	T	0	5,774
Total of Transportation / Buildings / Solid Waste:				**835,613** GJ	**44,921** tonnes

Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	0	0	Kilowatt Hours	-	-
	Natural Gas	8	146,648	GigaJoules	146,648	7,479
				Large Industrial	**146,648**	**7,479**

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	1,565	46	1,705	92	1,680	91
Semi-Detached House	10	0	0	0	5	0
Row House	40	1	0	0	0	0
Apartment, Duplex	15	0	5	0	20	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	0	0	10	1	0	0
Other Single Attached House	0	0	5	0	5	0
Movable Dwelling	210	6	120	7	145	8

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	5,128.0
Net Land Area (ha) *	9,137.9
Residential Density (people per net ha)	0.6

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	1,765	84	1,710	85	1,720	90
Car, Truck,Van as Passenge	165	8	170	8	110	6
Public Transit	0	0	10	1	0	0
Walked	110	5	90	4	60	3
Bicycle	10	0	10	1	0	0
Motorcycle	0	0	10	1	0	0
Taxicab	10	0	0	0	0	0
Other Method	35	2	20	1	20	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	%

This data is currently unavailable in the CEEI 2007 Reports.

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	0.0	0.0
Agricultural Land Reserve	13,966.9	54.4
Other land use	11,710.3	45.6
Total Land Area	25,677.2	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