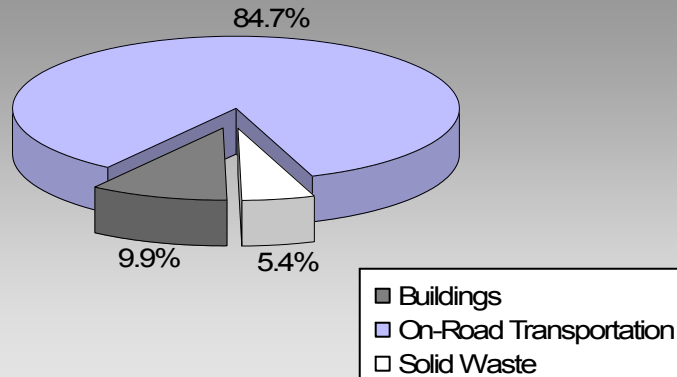


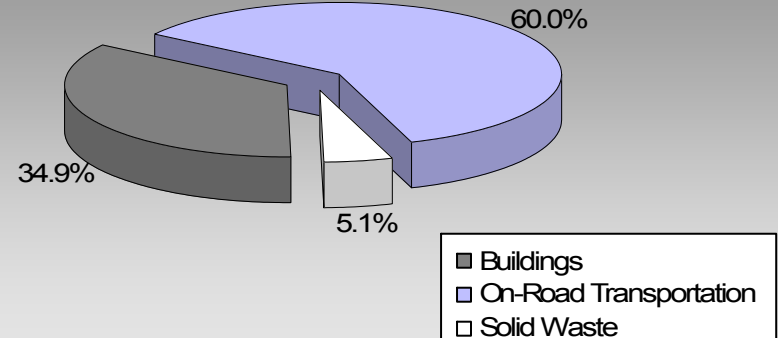
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

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

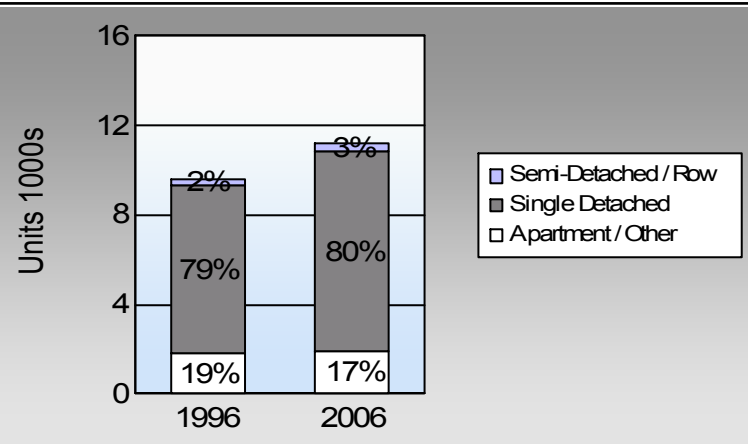
**Thompson-Nicola Regional District Unincorporated Areas  
2007 GHG Emissions Sources**



**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
	81.7%	83.6%
	8.8%	7.8%
	0.4%	0.4%
	6.3%	6.0%
	0.9%	0.7%

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

#### Residential Density

This data is only available for municipalities.  
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.

## Sectors

<b>On Road Transportation</b>		<u>Vehicles</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Average-VKT(km)</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	3,051	4,364,021	Litres	13,468	152,741	10,490
	Diesel Fuel	171	174,500	Litres	14,149	6,683	476
	Other Fuel	< 10	2,181	Litres	10,153	84	3
<b>Small Passenger Cars</b>						<b>159,508</b>	<b>10,969</b>
Large Passenger Cars	Gasoline	1,958	4,716,028	Litres	18,949	165,061	11,286
	Diesel Fuel	58	145,171	Litres	19,054	5,560	396
	Other Fuel	< 10	18,129	Litres	15,839	694	28
<b>Large Passenger Cars</b>						<b>171,315</b>	<b>11,710</b>
Light Trucks, Vans, SUVs	Gasoline	6,574	20,035,921	Litres	19,932	701,257	48,208
	Diesel Fuel	1,344	3,277,441	Litres	19,982	125,526	8,953
	Other Fuel	92	237,799	Litres	13,449	9,108	364
<b>Light Trucks, Vans, SUVs</b>						<b>835,891</b>	<b>57,525</b>
Commercial Vehicles	Gasoline	106	442,551	Litres	14,616	15,489	1,034
	Diesel Fuel	306	1,398,439	Litres	21,803	53,560	3,763
	Other Fuel	< 10	50,115	Litres	11,848	1,919	77
<b>Commercial Vehicles</b>						<b>70,968</b>	<b>4,874</b>
Tractor Trailer Trucks	Gasoline	16	105,813	Litres	17,367	3,703	248
	Diesel Fuel	587	20,677,543	Litres	87,692	791,950	55,642
	Other Fuel	0	0	Litres	0	-	-
<b>Tractor Trailer Trucks</b>						<b>795,653</b>	<b>55,890</b>
Motorhomes	Gasoline	162	202,796	Litres	2,873	7,098	474
	Diesel Fuel	38	36,765	Litres	4,281	1,408	99
	Other Fuel	< 10	6,368	Litres	2,189	244	10
<b>Motorhomes</b>						<b>8,750</b>	<b>583</b>
Motorcycles, Mopeds	Gasoline	188	94,414	Litres	5,332	3,304	221
<b>Motorcycles, Mopeds</b>						<b>3,304</b>	<b>221</b>
Bus	Gasoline	15	116,471	Litres	22,911	4,076	274
	Diesel Fuel	38	657,150	Litres	24,870	25,169	1,768
	Other Fuel	0	0	Litres	0	-	-
<b>Bus</b>						<b>29,245</b>	<b>2,042</b>

<b>On Road Transportation Totals</b>	Gasoline:	1,052,729	72,235
	Diesel:	1,009,856	71,097
	Other Fuel:	12,049	482
	<b>All Fuels:</b>	<b>2,074,634</b>	<b>143,814</b>

<b>Buildings</b>	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Residential	Electricity	11,549	155,698,887	Kilowatt Hours	560,516	3,840
	Natural Gas	2,567		GigaJoules	-	-
	Heating Oil		55,334	GigaJoules	55,334	3,900
	Propane		97,515	GigaJoules	97,515	5,949
	Wood		487,693	GigaJoules	487,693	180
<b>Residential</b>					<b>1,201,058</b>	<b>13,869</b>
Commercial/Small-Medium Industrial	Electricity	2,473	118,427,013	Kilowatt Hours	426,337	2,922
	Natural Gas	368		GigaJoules	-	-
<b>Commercial/Small-Medium Industrial</b>					<b>426,337</b>	<b>2,922</b>
<b>Buildings Totals</b>	Electricity:				986,853	6,762
	Natural Gas:				-	-
	Propane:				97,515	5,949
	Wood:				487,693	180
	Heating Oil:				55,334	3,900
<b>Buildings:</b>					<b>1,627,395</b>	<b>16,791</b>

<b>Solid Waste</b>	Mass (t)	CO2e (t)
Community Solid Waste	26,185	9,109

<b>Grand Total</b>	CONSUMPTION		ENERGY (GJ)	CO2e (t)
<b>Diesel Fuel</b>	26,367,009	L	1,009,856	71,097
<b>Electricity</b>	274,125,900	kWh	986,853	6,762
<b>Gasoline</b>	30,078,015	L	1,052,729	72,235
<b>Heating Oil</b>	55,334	GJ	55,334	3,900
<b>Natural Gas</b>		GJ	0	0
<b>Other Fuel</b>	314,592	L	12,049	482
<b>Propane</b>	97,515	GJ	97,515	5,949
<b>Solid Waste</b>	26,185	T	0	9,109
<b>Wood</b>	487,693	GJ	487,693	180
<b>Total of Transportation / Buildings / Solid Waste:</b>			<b>3,702,029 GJ</b>	<b>169,714 tonnes</b>

### Memo Items

<b>Buildings</b>	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	8	104,838,904	Kilowatt Hours	377,420	2,586
	Natural Gas	3	withheld	GigaJoules	-	-
<b>Large Industrial</b>					<b>377,420</b>	<b>2,586</b>

## 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](mailto: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	7,500	20	8,330	80	8,905	80
Semi-Detached House	85	0	95	1	135	1
Row House	95	0	150	1	190	2
Apartment, Duplex	65	0	80	1	155	1
Apartment, 5 storeys or higher	5	0	5	0	10	0
Apartment, under 5 storeys	180	0	205	2	175	2
Other Single Attached House	15	0	45	0	40	0
Movable Dwelling	1,595	4	1,545	15	1,570	14

### 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	7,365	82	7,845	80	9,015	84
Car, Truck, Van as Passenger	795	9	875	9	835	8
Public Transit	40	0	25	0	40	0
Walked	570	6	795	8	650	6
Bicycle	80	1	85	1	70	1
Motorcycle	0	0	20	0	10	0
Taxicab	5	0	0	0	5	0
Other Method	160	2	180	2	155	1

### 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

This data is currently unavailable in the CEEI 2007 Reports.

### 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	789,856.7	18.0
Local Parks	57.3	0.0
Agricultural Land Reserve	554,527.8	12.6
Other land use	3,042,770.9	69.4
Total Land Area	4,387,212.7	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](mailto:CEEIRPT@gov.bc.ca) (see survey on CEEI website).

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### 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

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### Buildings

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

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### Solid Waste (and Water)

Waste Diversion	Tonnes of waste diverted
Avoided Waste Emissions	Tonnes of CO <sub>2</sub> e of avoided future emissions due to reduced waste since 2007
Water Use	Per capita residential water use

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### Land-Use Change

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

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### 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)

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## 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](mailto: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, where you do note inaccuracies, please contact us.