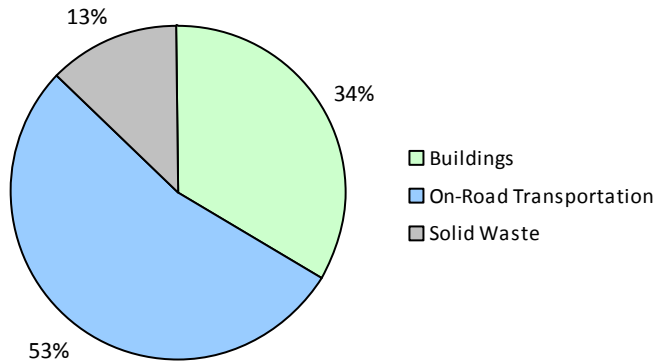
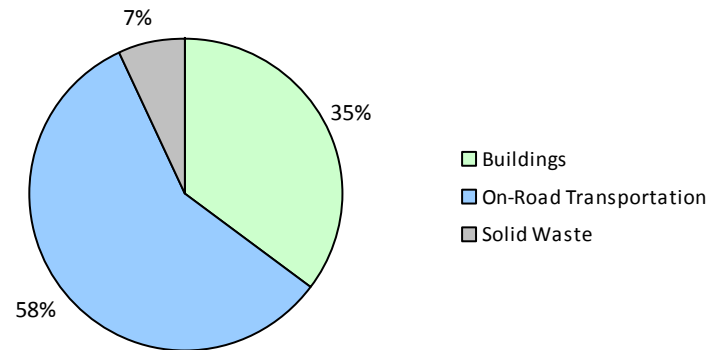


*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

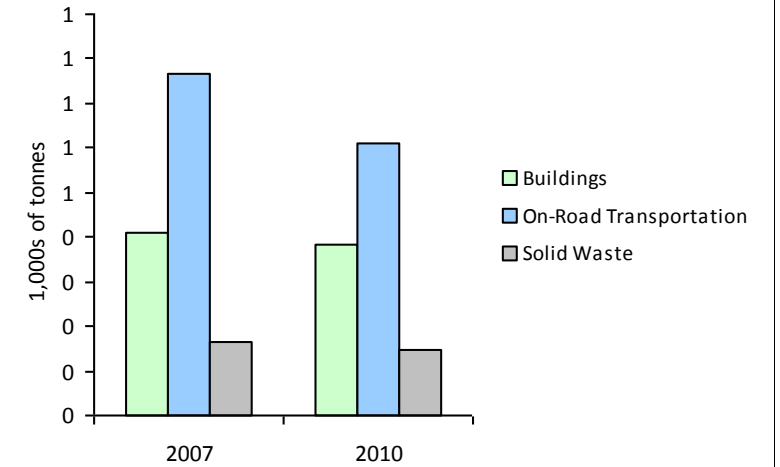
**2010 GHG Emissions Sources (Total for this Community)**



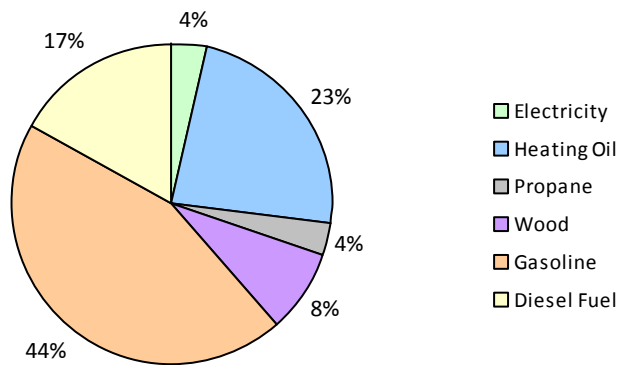
**2010 GHG Emissions Sources (Total for BC)**



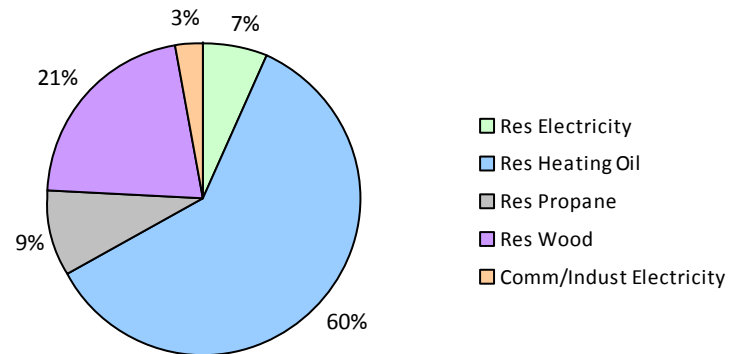
**GHG Emissions Comparisons for this Community**



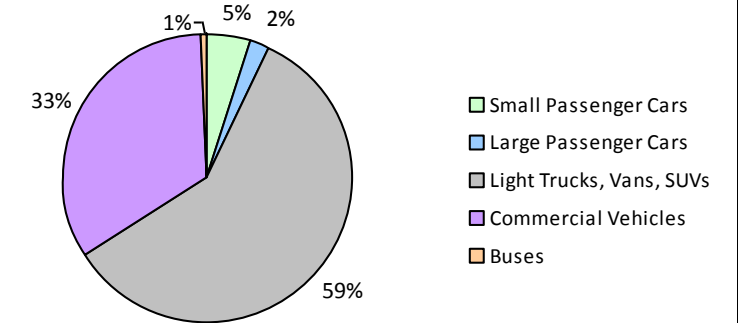
**2010 Total Emissions by Fuel Type**



**2010 Building Emissions by Subsector**



**2010 On-Road Transportation Emissions by Vehicle Class**



## Zeballos Village 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	Gasoline	12	14,297 L	12,700	501	34			13,000	391	25
	Diesel Fuel								25,700	68	5
Large Passenger Cars	Gasoline			12,600	407	29			10,000	205	14
Light Trucks, Vans, SUVs	Gasoline	67	152,960 L	16,000	5,353	366	62	146,905 L	16,700	5,142	334
	Diesel Fuel			10,700	360	26			14,100	359	25
Commercial Vehicles	Gasoline	10	31,062 L	18,300	1,087	74	10	29,601 L	17,600	1,037	67
	Diesel Fuel	18	60,990 L	19,000	2,336	165	15	53,021 L	20,100	2,031	138
Tractor Trailer Trucks	Diesel Fuel			27,300	888	62					
Motorhomes	Gasoline			10,500	51	3					
Buses	Gasoline			14,700	83	7			12,900	78	4
<b>Totals</b>		<b>107</b>	<b>259,309 L</b>	<b>16,350</b>	<b>11,066</b>	<b>766</b>	<b>87</b>	<b>259,309 L</b>	<b>17,390</b>	<b>9,311</b>	<b>612</b>

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	4,161 GJ	4,161	84	N/A	4,028 GJ	4,028	82
	Heating Oil	N/A	3,472 GJ	3,472	245	N/A	3,361 GJ	3,361	230
	Propane	N/A	598 GJ	598	36	N/A	579 GJ	579	35
	Electricity	97	1,258,386 kWh	4,530	31	93	1,051,541 kWh	3,786	26
Commercial/Small-Medium Industrial	Electricity	15	603,024 kWh	2,171	15	17	439,692 kWh	1,583	11
<b>Totals</b>		<b>112</b>		<b>14,932</b>	<b>411</b>	<b>110</b>		<b>13,337</b>	<b>384</b>

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	121 t	N/A	167	0	102 t	N/A	145
<b>Totals</b>		<b>0</b>			<b>167</b>	<b>0</b>			<b>145</b>

## Zeballos Village

### 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: 182)			2010 (Population: 166)		
	Consumption	Energy (GJ)	CO2e (t)	Consumption	Energy (GJ)	CO2e (t)
Gasoline	198,319 L	7,482	513	176,506 L	6,853	444
Diesel Fuel	60,990 L	3,584	253	53,021 L	2,458	168
Wood	4,161 GJ	4,161	84	4,028 GJ	4,028	82
Heating Oil	3,472 GJ	3,472	245	3,361 GJ	3,361	230
Propane	598 GJ	598	36	579 GJ	579	35
Electricity	1,861,410 kWh	6,701	46	1,491,233 kWh	5,369	37
Solid Waste	121 t	0	167	102 t	0	145
<b>Grand Totals</b>		<b>25,998</b>	<b>1,344</b>		<b>22,648</b>	<b>1,141</b>

### 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	60	38	95	90	55	61
Semi-Detached House	0	0	5	5	0	0
Row House	0	0	0	0	0	0
Apartment, Duplex	0	0	5	5	0	0
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	10	6	0	0	0	0
Other Single Attached House	0	0	0	0	0	0
Movable Dwelling	30	19	0	0	35	39

#### 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	65	54	20	21	60	57
Car, Truck, Van as Passenger	15	13	0	0	10	10
Public Transit	0	0	0	0	0	0
Walked	30	25	50	53	35	33
Bicycle	0	0	10	11	0	0
Motorcycle	0	0	0	0	0	0
Taxicab	0	0	0	0	0	0
Other Method	10	8	15	16	0	0

#### 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	0	0
Local Parks	1	1
Agricultural Land Reserve	0	0
Other land use	194	99
Total Parks and Protected Area	1	1
Total Land Area	196	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	0	0
Local Parks	1	1
Agricultural Land Reserve	0	0
Other land use	194	99
Total Parks and Protected Area	1	1
Total Land Area	196	100

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

**Zeballos Village**  
**2010 Community Energy and Emissions Inventory**  
*Monitoring and reporting on progress towards greenhouse gas emissions reduction targets*

This page  
intentionally left  
blank

**Zeballos Village**  
**2010 Community Energy and Emissions Inventory**  
*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](mailto: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](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,