Regional District of Okanagan Similkameen

Community

CLIMATE ACTION PLAN

Executive Summary

Prepared by Stantec Consulting Ltd.
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South Okanagan – Similkameen

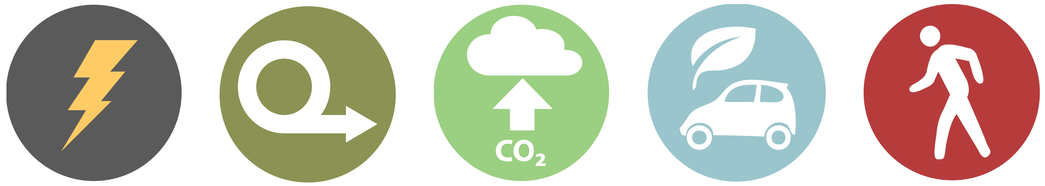
COMMUNITY CLIMATE ACTION PLANNING

ABOUT

- Coordinated initiative to develop Community Climate Action Plans (CAPs) for the region, participating municipalities and rural areas. This includes: the Regional District, Keremeos, Oliver, Osoyoos, Penticton and Princeton.[1]
- Community CAPs outline how to reduce energy consumption and greenhouse gas (GHG) emissions in our communities and rural areas.
- Community CAPs define key strategies, actions, targets, performance measures, as well as implementation considerations.
- Corporate Climate Action Plans were developed as part of this project to assist local governments in reducing energy and emissions from their operations.

PURPOSE

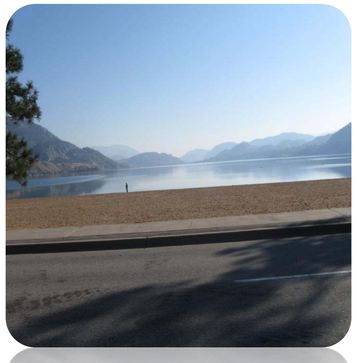
- To consolidate relevant community actions into one plan by identifying what has already been initiated, as well as suitable new actions.
- To set GHG emissions reduction targets.
- To define the responsibilities for implementing the actions.
- To give staff a mandate.
- To communicate the commitment to reducing energy and GHGs.



WHY ARE WE TAKING ACTION?

Recent legislation requires municipalities and regional districts to include community-wide GHG reduction targets in Official Community Plans and Regional Growth Strategies. In addition, local governments have voluntarily committed to "carbon neutral" operations beginning in 2012. The CAPs enable us to meet our legislative requirements and voluntary commitments, while also opening up our community to many benefits, such as:

- Reducing energy costs through energy efficiency and conservation;
- Reducing vulnerability to fluctuating energy markets through reduced reliance on fossil fuels;
- Minimizing climate impacts by mitigating GHG emissions;
- Creating local economic development opportunities by promoting a green economy (clean technology, renewable energy, green transportation, etc);
- Supporting existing policies that are aimed at community sustainability and livability. This includes building compact, complete communities, that have more efficient infrastructure, walkable neighbourhoods, and protect natural areas.



[1] Summerland is participating in the development of the regional plan only. They are creating a community plan in a separate process.

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WHERE ARE WE NOW?

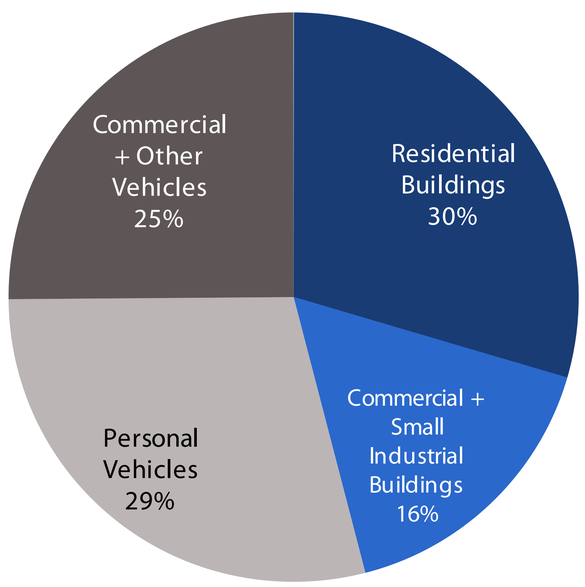
A baseline inventory helps us understand how much energy we use, where we use it, and how this contributes to GHG emissions in our community. Once we know that, we can make a plan to conserve energy and reduce GHG emissions.

2007 Baseline:

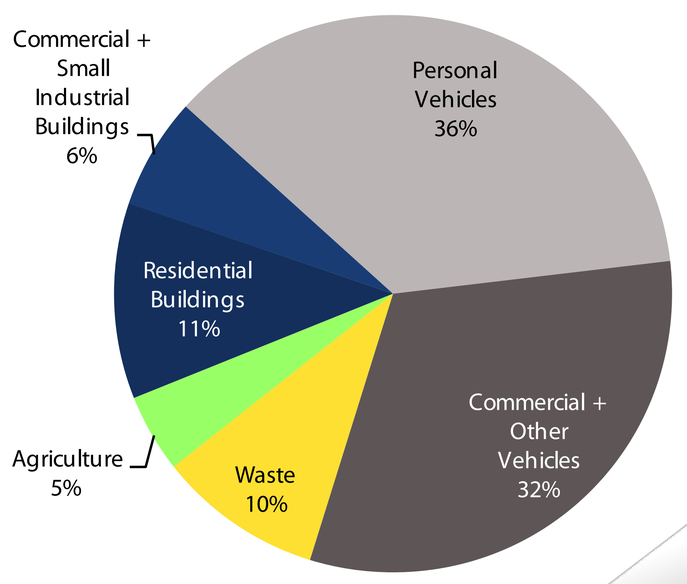
- **11.5 million Gigajoules (GJ)** of energy consumed
- **600,000 tonnes of CO_2e** or **GHGs** emitted
- **$230 million** spent on energy in the region or **$2,900** per person

- **Buildings:** We use energy and produce GHG emissions when we heat, cool and power our buildings using natural gas, propane, heating oil and electricity. Our community inventory includes all residential, commercial and small/medium industrial buildings.
- **Transportation:** We use a combination of gasoline, diesel and propane in our vehicles to get ourselves around (commuting, shopping, recreation) and to keep our businesses going. Our inventory includes only vehicles registered in our community.
- **Solid Waste:** Our waste goes to landfills where it decomposes and releases methane gas, a potent GHG.
- **Agriculture:** Emissions from agriculture result from methane gas that is released by animals as they digest their food and from the decomposition of manure.

WHERE DO WE USE OUR ENERGY?



THE SOURCE OF OUR GHG EMISSIONS



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WHERE ARE WE GOING?

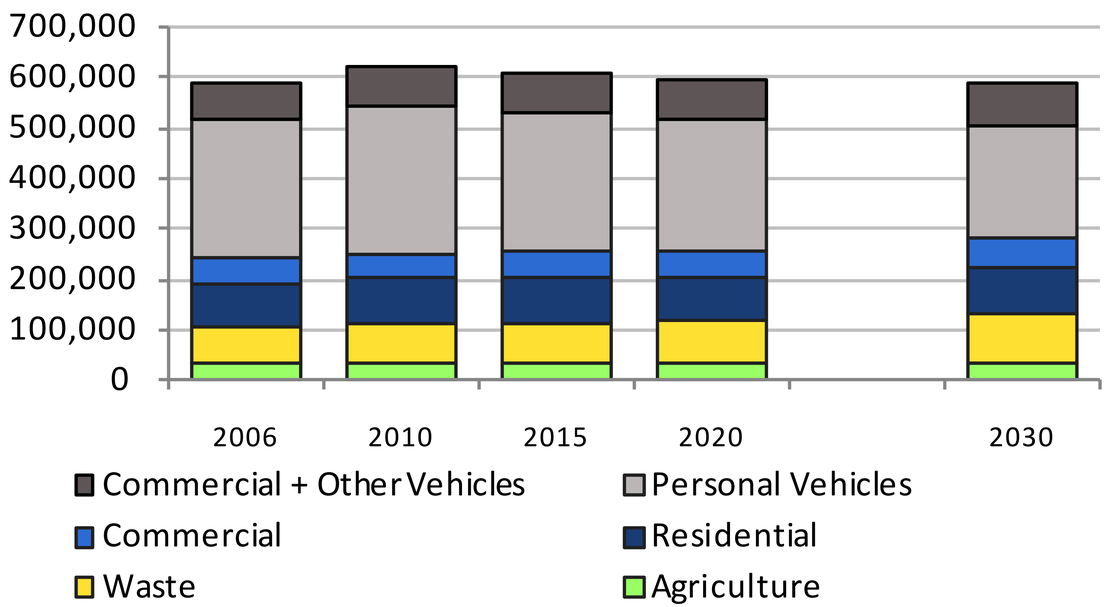
Our population is expected to grow from about **80,400** to **106,000** by 2030. The way our communities grow and develop is directly related to our building and transportation energy use and GHG emissions. As illustrated in the graph below, our GHG emissions are projected to decrease by **2%** over the next 20 years (from our current emissions), in a "Business-As-Usual" scenario.

What is a "Business-As-Usual" (BAU) Forecast?

A BAU forecast estimates what our community's GHG emissions will be if our population grows as projected and if we continue to live the way we currently do. The forecast takes into account expected efficiency improvements, such as:

- *Improvements to passenger vehicle fuel standards*
- *Energy efficient building codes*

BUSINESS AS USUAL FORECAST



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WHAT CAN WE DO?

The Regional District can support local governments by helping to coordinate the implementation of the various Community Climate Action Plans.

REGIONAL COORDINATION

- Explore opportunities for dedicated staff time to assist in coordination and implementation of Community Climate Action Plans.
- Establish a regional climate action website.

KEY ACTIONS

Build energy efficient buildings - Explore how the Regional District can support member municipalities and rural areas in:

- Promote existing education and incentive programs
- Post information and guidelines for energy efficient building practices on the municipal websites
- Explore offering 'Building Practices for Energy Savings' Info Sessions

Improve Energy efficiency of existing buildings - Explore how the Regional District can support member municipalities and rural areas in:

- Promoting existing education and incentive programs developing
- Post information and guidelines for energy efficient building practices on the regional website
- Explore offering 'Building Practices for Energy Savings' Info Sessions, in partnership with other organizations

KEY ACTIONS (cont.)

Build Energy Efficient Developments - Explore how the Regional District can support member municipalities and rural areas in:

- Promoting existing education and incentive programs developing
- Post information and guidelines for energy efficient building practices on the regional website
- Explore offering 'Building Practices for Energy Savings' Info Sessions, in partnership with other organizations

Improve Alternative Transportation
Develop an alternative transportation network plan and map that identifies necessary routes and connectivity challenges. A coordinated plan and map can be used to encourage residents to use non-vehicular means of travel

Reduce & Divert Waste From Landfills
Implement the various measures identified in the 2011 Solid Waste Management Plan (SWMP) to reduce and divert waste. These include a combination of education, incentive, policy and pricing mechanisms

Maximize Value From Agricultural Wastes

- Promote energy recovery from agricultural wastes
- Promote agricultural waste reuse and recycling
- Promote best practices in manure management in the agricultural community, including aerating, filtering and composting

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HOW MUCH CAN WE REDUCE?

GHG Emissions Reduction Potential:

A regional GHG target for the South Okanagan Similkameen was created by aggregating the GHG targets that each of the municipalities and electoral areas have in their Climate Action Plans, along with the anticipated GHG reductions from measures focused on reducing agricultural emissions.

DRAFT GHG REDUCTION TARGETS

	2007 GHG Baseline (tonnes)	2030 GHG Reduction Scenario (tonnes)	2030 TARGET % Reduction from 2007	2030 Per Capita TARGET % Reduction from 2007
Keremeos	16,922	12,197	30%	35%
Oliver	37,815	35,409	10%	35%
Osoyoos	44,440	42,656	5%	30%
Penticton	231,789	210,670	10%	35%
Princeton	31,314	24,164	30%	35%
Summerland	76,779	51,442	33%	50%
EA A	10,231	7,605	30%	35%
EA B	5,418	4,155	25%	30%
EA C	18,807	13,552	30%	35%
EA D	32,512	25,802	20%	35%
EA E	10,830	7,719	30%	35%
EA F	9,354	6,415	30%	35%
EA G	12,076	9,305	25%	30%
EA H	12,470	9,655	25%	30%
Agriculture (regional)	34,797	33,753	3%	
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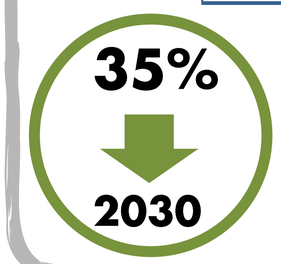

35% by 2030

- Reduce total GHG emissions 15% from 2007 levels by 2030, which is a 35% reduction per person