

Burns Lake Community Energy Plan

The Village of Burns Lake took one step towards climate protection by creating a community energy plan. The plan became a leap forward towards ongoing climate action.

The Village embarked on a complete community wide assessment of energy consumption in 2007 after receiving grants from The [Fraser Basin Council](#), paired with an Infrastructure Planning Grant from the [Ministry of Community and Rural Development](#).

What is a CEP?



Burns Lake inside staff are holding a bag of coal which represents the average daily CO2 equivalent GHG emissions of a single family. Their 'prize' after the Climate Action Bootcamp.

A community energy plan (CEP) is a long-term plan that evaluates a community's existing energy use and supply. This is similar to a [Situational Analysis](#). The goal is to reduce energy consumption, improve efficiency, and increase renewable energy supply. It encompasses land use and transportation planning, site planning and building design, infrastructure, and renewable energy supply.

The Assessment

Burns Lake Staff and Council worked closely with [One Sky](#), the consultant from Smithers that Burns Lake hired to complete the CEP in project initiation, development and implementation.

The Community Energy Plan concluded that 60% of emissions and energy consumption in Burns Lake comes from transportation, likely due to the passing traffic on Highway 16. Commercial buildings, in comparison to residential, consume almost twice the energy and produce three times more GHG emissions. The assessment covered tangible actions Village council could implement to decrease energy consumption.

Results



Burns Lake outside staff

Once the CEP was complete, staff undertook a more detailed energy audit of all municipally owned buildings. The Village completed a thorough building audit on two municipally owned buildings: museum and the legacy complex.

They found out that in 2007, Burns Lake spent over \$100,000 on energy. This financial reality further solidified Council's resolve to reduce energy consumption and to look at more efficient ways to provide heat to their buildings.

Using a grant from [Towns for Tomorrow](#) major retrofits were done to the buildings including upgrading the furnace with an air source heat pump, with electric back up. An insulation retrofit was also completed. The two major building retrofits will be done by February 2010. The arena retrofits will be complete by 2013.

Once completed, they anticipate a \$1200 annual energy savings with the retrofits on the museum building, which provides a payback of 11.5 years. Yet, when they consider only the 1/3 funding the municipality provided, the payback is only 3.8 yrs. They will be able to compare their actual costs before and after the major building retrofits were done in 2010. The Village continues to implement policies with energy savings in mind with an anti-idling policy and a clause indication green purchasing in their purchasing policy.

The CEP acted as a launching pad, or a catalyst, for more ambitious projects, such as the developing Energy Working Group where various stakeholders came together to discuss implementing district heating.

Key Players

Two key leading players in taking climate action are CAO Tim Palmer and Director of Corporate Services Natasha Letchford.

Letchford is the key person on monitoring Village energy consumption and managing the retrofits of municipal buildings, as well as the emerging energy working group.

Other departments are coming on board. The Director of Recreation Services is taking a lead role on bringing the 1970s-era arena up to standard and not only increasing the energy efficiency, but the safety as well.

The financial department is also increasingly involved as they help out with the GHG data collection as part of their weekly accounts payable run, which only adds an extra five minutes to their task.

Engagement

Burns Lake is dedicated to a fully transparent public participation process at the local government level. Therefore, ongoing communication with the community about the process the Village is a consistent goal.

There was engagement at the community level through a written survey completed during the CEP.

Currently, there is a large sign outside the building stating the energy efficiency initiatives taking place and the expected savings. The Village office is developing "Climate Action Corner" in a local publication.

Staff engagement was an integral part of the [Climate Action Bootcamp](#), held Nov 24 and 25 2009. The Bootcamp helps local BC governments develop and lead a climate change action strategy. Burns Lake hosted the event attended by staff and elected officials.

"Having both elected officials and staff in the same room, helped bring everyone to be 'on the same page'. Said Natasha Letchford, "We will continue to work together as we try and reduce our emissions and improve our community. It was inspiring to see people planning actions as simple as a carpool to work to discussing complex and visionary' systems." This is only the start. The Village hopes to continue retrofitting the remaining buildings over the next few years, potentially linking them to a district heating system.

Challenges

One of the major challenges is capacity. With a small staff of eight inside workers, the energy efficiency initiatives were falling to the corner of the desk. However, with the support of the CAO and Council, and some redistribution of workload, Burns Lake was able to continue our sustainability initiatives.

Another common challenge has been funding. Burns Lake continues to apply for grants to help mitigate the costs. One of the goals of staff is to show council not only the environmental benefits of reducing energy consumption, but the economic benefits as well. They are currently working on a vehicle replacement plan that will be both environmentally and fiscally responsible. Other Working Group initiatives integrate dual goals of job creation and utilization of existing timber supply.

Contact:

Natasha Letchford, BA (Hons), Director of Corporate Services

Phone: (250) 692-7587

nletchford@burnslake.ca

www.burnslake.ca