CITY OF YELLOWKNIFE

Our Yellowknife

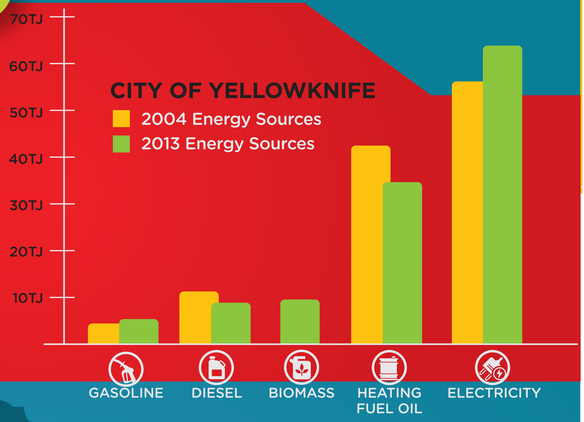
15 Years of **Community Energy Planning**

WHAT IS COMMUNITY ENERGY PLANNING?

Community Energy Planning (CEP) is a collaborative approach used to plan for sustainable sources of energy for our community.

WHERE WE ARE...

Projects implemented since 2008 are now saving the City more than $528,000 per year.



2012

As of 2013, the City's Greenhouse Gas (GHG) emissions have reduced by **24%** since 2004. This is equal to 2,900 fewer barrels of oil burned this year.

MILESTONE 5

FEDERATION OF CANADIAN MUNICIPALITIES RECOGNIZES THE CITY'S COMPLETION OF THE COMMUNITY ENERGY PLANNING CYCLE

HOW WE GOT HERE...

1998 City of Yellowknife Joins the Partners for Climate Protection Program

2004

MILESTONE 1

CREATION OF A GREENHOUSE GAS (GHG) INVENTORY

90.4% of Yellowknife's energy was coming from non-renewable fossil fuels.
Yellowknifers were producing **76% more** Greenhouses Gases than the average Canadian.

2005

MILESTONE 2

EMISSION REDUCTION TARGETS SET FOR 2014

- ☑ **6%** of our community GHG emissions
- ☑ **20%** of City GHG emissions

2006

MILESTONE 3

ADOPTION OF THE COMMUNITY ENERGY PLAN

2006

MILESTONE 4

IMPLEMENTING THE PLAN 2006 TO PRESENT

22% is the average return on investment in CEP projects since 1998.

2008 A 740kW **Pellet Boiler is installed for our Pool, Community Arena and Curling Rink.** En route to saving its **Millionth litre** of oil in 2014! The equivalent to removing 120 cars from the road.

2008 The City begins studying the potential for **geothermal energy.**

2008 **Hybrid Electric Vehicles** are tested in the City's fleet.

2008 The City adopted **energy efficiency standards** for new residential and commercial buildings.

2009 **Two Pellet Boilers** are installed in sewer lift stations.

2009 The City installs **LED streetlights** which used **50% less** electricity than the old lights.

2009 **R30 rigid foam insulation** added to the Public Works garage roof.

2009 **Smart Plugs** are installed for City Vehicles' block heaters. They require 65% less power.

2009 Energy inventory is updated: Yellowknifers **reduced** their Greenhouse gas emissions by **6%.** The City reduced its emissions by **37%**

2010 A complete changeover to **LED streetlights** begins. 25% of Yelowknife streetlights are now LED.

2010 A 300kW wood **pellet boiler** is installed at the Baling Facility.

2010 A **waste heat recovery system** is installed at the Multiplex.

2010 The City's **computer network servers** are cooled with exterior air eliminating the need to run air

2011 More **recovered heat** from Multiplex piped to the Fieldhouse.

2011 **LED lighting** is trialed on the exterior of facilities.

2011 A geothermal energy evaluation of **Con Mine** gave negative results; a revised plan for a district heating system using wood energy fails a borrowing referendum.

2012 The **Multiplex Ice Pads** are switched to T5 Fluorescents!

2012 The Pool **Air Handling Unit** is upgraded to include heat recovery!

2013 **Remote monitoring** capabilities are implemented for pellet boilers and

2013 **CEP** studies support the construction of large wood pellet boilers at Pumphouse #1 and seven City buildings near the Multiplex.

2013 **Light levels** at City Hall were too high so we reduced our consumption and improved effiency.

2013 **$150,000 in funding** received for construction of a large pellet boiler at Pumphouse #1.

The City's energy expenses reached more than $4.8 million in 2012, an increase of 117% since 2004.

In 2009, Yellowknife residents and businesses spent more than$165 million dollars on energy.

MUCH REMAINS TO BE DONE!

YouTube

WWW.YELLOWKNIFE.CA | YELLOWKNIFE CITY HALL | 4807 52ND STREET | BOX 580 | YELLOWKNIFE, NT | X1A 2N4 | (867) 920-5600