



# Clear Priority, Solid Savings

Foothills County surpassed its goal, achieving a 15% annual GHG reduction by clearly prioritizing energy conservation measures. The subsequent implementation is saving \$84,000 per year.

## THE CHALLENGE

Foothills County has a wide range of facilities, ranging across office buildings, a recreation centre, an airport, fire stations, water treatment plants and public works facilities. With the goal to reduce greenhouse gas emissions across the full portfolio, knowing where to focus energy management efforts was a tough challenge, further complicated by COVID-19 and a zero-budget allocation for energy management.

## THE SOLUTION

The Municipal Energy Manager ranked all facilities from highest to lowest energy consumption and greenhouse gas emissions. Prioritizing the top energy consumers, he benchmarked and conducted detailed energy audits of these specific facilities. The audits produced a long list of potential Energy Conservation Measures (ECMs) that were categorized as no-cost, low-cost, mid-cost or capital-intensive.

Every no-cost ECM was promptly completed, effectively creating budget space. All other ECMs were assessed by Council according to their estimated payback periods. Projects at the Scott Seaman Sports Rink, the county's largest energy consumer, were supported by Action Centre grants and similar funding and other government grants were secured to complete ECMs in other facilities.

## FOOTHILLS COUNTY

**Foothills County** encompasses a diverse rural landscape in southern Alberta with a rapidly growing population.

The county neighbours the City of Calgary and surrounds Okotoks, High River, Turner Valley, Black Diamond, Longview and the Eden Valley Indian Reserve.

It is home to historic attractions including the Bar U Ranch, Okotoks Erratic (Big Rock) and the Leighton Art Centre.



Photo credit: Tinker & Rove

GOAL	PROJECTS	SUCCESS		
<b>5%</b> ↓	<b>63</b> ⚙️	<b>387t</b> ↓	<b>15%</b> ↓	<b>\$84,350</b> 💰
greenhouse gas emissions reduction below 2019 levels	energy conservation measures	greenhouse gas emissions annual reduction	greenhouse gas emissions reduction below 2019 levels	annual energy cost savings

## MEET THE MUNICIPAL ENERGY MANAGER



### Adeniyi Adeaga, Municipal Energy Manager

*Adeniyi Adeaga, P.Eng. worked as an engineer in the Alberta oil and gas industry for over five years before venturing into Energy Management. He holds a degree in chemical engineering, a masters degree in petroleum engineering, and a masters degree in Systems & Engineering Management.*

*Adeniyi is Municipal Energy Manager for Foothills County, a position began in 2020 and retained following the end of his term in the Municipal Energy Manager program.*



### LESSONS LEARNED

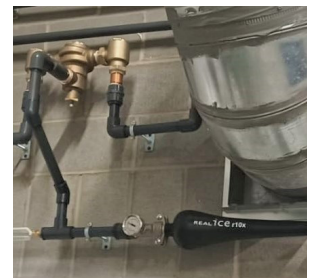
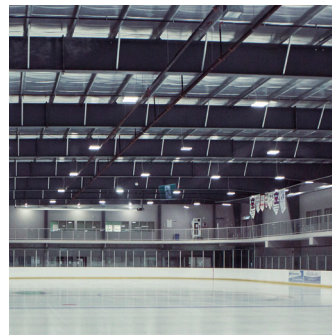
The energy manager is required to drive changes in staff behavior. Therefore, to be successful, the change *driver* requires adequate **change management knowledge and skills**. It is normal and expected that some staff will initially resist or be unsupportive of the greenhouse gas emissions reduction initiatives. Appropriate engagement and change management skills will help get major stakeholders on-board.

In every organization, significant greenhouse gas emissions reductions can be achieved **through behavioral change alone** (which means no or low cost).

**Direct and open lines of communication** between the energy manager and the organization's top executives is invaluable. Fully tapping the resources offered by the **CLEAResult MEM coach** proved crucial.

### KEY ACTIONS IMPLEMENTED

- Installation of Building Automation System: central control facilitates energy-saving efficiencies.
- Plug-load equipment shutdown: no-cost measure saves energy during the hockey off-season.
- Lighting retrofit: LEDs produce higher quality light and last longer, reducing maintenance costs.
- Reducing flood water temperature with REALice: saves energy when resurfacing the ice rink.
- Hockey ice plant heat recovery: reduces cost of space heating and domestic hot water.
- Smart thermostats: occupancy sensors reduce energy costs when buildings are unoccupied.
- Variable frequency drives (VFDs): running motors as-needed reduces costs for energy and parts.



### THE MUNICIPAL ENERGY MANAGER PROGRAM

The Municipal Energy Manager Program provides funding for Alberta municipalities to hire an energy manager. Participating municipalities receive up to \$80,000 in salary to hire a professional to develop energy management plans, improve building performance, and produce noticeable energy savings.

The program was designed and delivered by the Municipal Climate Change Action Centre, a partnership of:

