

NO-COST & LOW-COST ENERGY MANAGEMENT MEASURES



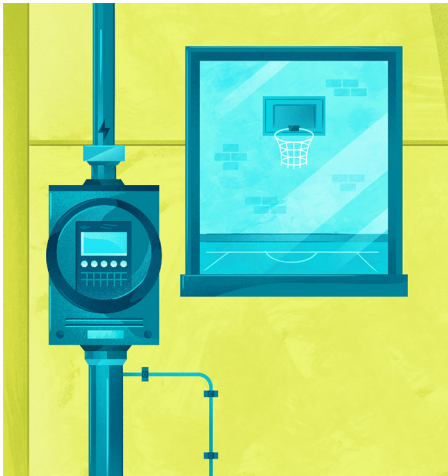
Take advantage of Energy Management Opportunities (EMO) that have been tried and tested in Alberta municipalities.

Energy-efficient practices and technologies can reduce energy consumption, lower costs, and lighten your municipality's environmental impact. And while some new technologies are major investments, many low-cost measures have big impacts.

Some measures cost nothing more than the effort it takes to re-configure systems or change the way things are done.

Help your municipality reduce its energy consumption at minimal cost.

Browse this list of low-cost and no-cost measures for ideas that can be adapted to meet your specific needs and goals. The list is neither comprehensive nor prescriptive.



ENERGY MANAGEMENT OPPORTUNITIES ➔ No Cost ➔ Low Cost

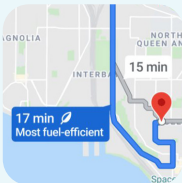
Lighting

- ➔ Use natural lighting as much as possible.
- ➔ Regularly clean light fixtures and bulbs to maximize their effectiveness.
- ➔ Replace incandescent bulbs with energy-efficient LED bulbs.
- ➔ Install occupancy sensors to automatically turn off lights when no one is in the room.



Transportation

- ➔ Encourage employees to carpool or use public transportation.
- ➔ Allow for remote work options to reduce the need for commuting.
- ➔ Offer incentives for employees who bike, walk, carpool, or use public transportation to work.
- ➔ Regularly maintain company vehicles to ensure they are running efficiently.
- ➔ Optimize routes to reduce mileage.
- ➔ Encourage the use of electric or hybrid vehicles when choosing vehicles from corporate vehicle inventory.
- ➔ Provide bike racks and shower facilities for employees who bike to work.



Waste Reduction

- ➔ Implement a recycling program to reduce waste.
- ➔ Encourage employees to use reusable dishes and utensils instead of disposable ones.
- ➔ Print double-sided to reduce paper usage.
- ➔ Donate old equipment and furniture instead of throwing it away.
- ➔ Offer vegetarian or vegan options in the cafeteria and catering events.
- ➔ Provide filtered water instead of bottled water.
- ➔ Organize a green bin program for collecting organic waste.
- ➔ Use recycled paper and toner cartridges.
- ➔ Purchase energy-efficient equipment.
- ➔ Use refillable pens and markers.
- ➔ Use reusable envelopes and folders.
- ➔ Provide reusable dishes and utensils in the cafeteria, kitchens and small events.
- ➔ Purchase food and beverages from local and sustainable sources.
- ➔ Create or use local compost instead of fertilizer for soil or grassy areas.



Water Heating

- ➔ Lower the temperature on the water heater to reduce energy consumption.
- ➔ Adjust domestic water heater set point to 60°C.
- ➔ Insulate the water heater and pipes to reduce heat loss.
- ➔ Use low-flow showerheads and faucets to reduce hot water consumption.
- ➔ Insulate brine headers for ice facilities.



Plans and Policies

- ➔ Sustainable procurement policy.
- ➔ Energy management policy.
- ➔ Anti idling policy.
- ➔ Fleet transition policy.
- ➔ Active transportation policy.
- ➔ Community energy plan.
- ➔ Climate resilience plan.
- ➔ Fleet electrification plan.



ENERGY MANAGEMENT OPPORTUNITIES ➡ No Cost ⬆ Low Cost

Appliances & Electronics


➡ Turn off computers and other equipment (i.e. monitors, desk lamps) when not in use.


➡ Enable sleep mode on computers and other electronics.

⬆ Use power strips to make it easy to turn off multiple electronics at once, or smart power strips that can be controlled by occupancy or "lead" load.

⬆ Replace old or inefficient appliances with Energy Star rated models.

⬆ Use smart timers on space heaters in the office and block heaters for vehicles.





HVAC

➡ Encourage employees to dress for the season to reduce the need for heating or cooling.

➡ Use fans to circulate air and reduce reliance on air conditioning.

➡ Regularly clean and maintain HVAC systems to ensure they are working efficiently.

⬆ Install programmable thermostats to reduce energy consumption during off-hours.

⬆ Replace space heaters with heated blankets.

⬆ Clean or replace air filters regularly to improve the efficiency of heating and cooling system.

⬆ Incorporate green roofs or living walls to improve insulation and air quality.

⬆ Use passive house building techniques to optimize the design of the building for ventilation and lighting.

⬆ Use trees to reduce solar heat gain.







Building Envelope


➡ Make sure all windows and doors are closed.


➡ Install air curtains in heavy traffic areas.

⬆ Seal air leaks and install weatherstripping around doors and windows.

⬆ Add insulation to attics, walls, and floors to improve energy efficiency.

⬆ Complete a thermographic examination to identify areas where heated or cooled air is escaping the building.





Employee Engagement

➡ Provide education and training on energy efficiency and sustainability.

➡ Encourage employees to suggest ideas for improving energy efficiency.

➡ Establish an employee-led sustainability committee to implement green initiatives.

➡ Encourage employees to use digital documents and digital signatures.

➡ For documents that need to be signed in ink, only print the relevant pages.

➡ Use eco-friendly cleaning products for cleaning.

⬆ Offer incentives or rewards for employees who demonstrate sustainable behaviors.







Water

➡ Fix leaks and drips in plumbing fixtures.


➡ Encourage employees to turn off faucets when not in use.


⬆ Install low-flow showerheads and faucets.

⬆ Use drought-resistant plants in landscaping.

⬆ Install low-flow toilets.



⬆ Install rain barrels to collect rainwater for irrigation.





Pair with these resources

Tool Lending Library

Measure it  **to manage it**  Borrow over 20 different energy management tools for free, including thermal imaging cameras, ultrasonic flow meters, leak detectors, and occupancy loggers.

With these free tools, you can conduct technical energy audits to inform your low-cost and no-cost energy management initiatives.

mccac.ca/tools

Alberta Climate Funding Guide

Browse current opportunities to fund renewable energy, transportation, green spaces and other projects.

mccac.ca/funding

We welcome your suggestions for additional energy management opportunities. Send your ideas to contact@mccac.ca.



Municipal Climate Change Action Centre

The Municipal Climate Change Action Centre provides funding, technical expertise, and education to municipalities and community organizations.

A partnership of:









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