

## **CEC Simplified Retrofits List**

## How to apply for Simplified Retrofits

The Community Energy Conservation (CEC) program helps municipal facilities reduce energy use and greenhouse gas emissions (GHGs) by providing rebates to help identify and implement energy-saving projects. Through the CEC program, municipalities can receive rebates for retrofit projects that increase the efficiency of their energy systems while reducing energy costs and GHG emissions.

All retrofit projects through the CEC program require project savings details that the retrofit will achieve, such as the annual energy savings, annual energy cost savings, annual GHG emission savings, and lifetime GHG emission savings.

If a municipality does not have this information, there are two ways it can be collected to supplement a retrofit project application, by pursuing an energy audit through the CEC program, or by pursuing one of the Simplified Retrofits below as a fast-track option.

A municipality can apply for any Simplified Retrofits <u>without needing</u> an energy audit due to the predictability of the energy savings achieved by these types of projects. See all eligible project types in Table 1 below.

Table 1: Eligible Simplified Retrofits for the CEC program

Simplified Retrofit	Mandatory Inputs	Additional Inputs (if available)
Lighting and Lighting Controls	<ul> <li>To be submitted through the CEC Lighting Calculator:</li> <li>Project cost</li> <li>Price of electricity (\$/kWh)</li> <li>Baseline lighting equipment, fixture quantity, wattage, and lighting controls</li> <li>Lighting operating hours per year</li> <li>Proposed lighting equipment, fixture quantity, wattage, and new lighting controls</li> </ul>	A photo of each existing light fixture type to confirm wattage
Pipe Insulation	<ul> <li>Length of uninsulated pipe (ft)</li> <li>Length of uninsulated joins (ft)</li> <li>Pipe material and size (nominal pipe size)</li> <li>Type of proposed insulation and thickness</li> </ul>	Operating temperature
Weatherstripping and Door Sweeps	<ul> <li>Number of doors</li> <li>Length of weatherstripping and door sweeps per door (ft)</li> </ul>	• N/A
Pool Pump Replacements (<20 Horsepower)	<ul> <li>Operating hours per year</li> <li>Existing pump horsepower (found on pump nameplate)</li> </ul>	• N/A
Pool Covers	<ul> <li>Location of pool – Indoors or outdoors</li> <li>Size of pool (ft²)</li> <li>Confirm if the cover is new or replaces an existing cover</li> </ul>	• N/A
Pool Pump Variable Frequency Drives (<50 Horsepower)	Operating hours per year     Photo of pump nameplate showing horsepower	• N/A
HVAC Pump Variable Speed Drives	<ul> <li>Operating hours per year</li> <li>Photo of pump nameplate showing horsepower</li> <li>Pump application (hot water or chilled water)</li> </ul>	• N/A



Simplified Retrofit	Mandatory Inputs	Additional Inputs (if available)
HVAC Supply and Return Fan Variable Speed Drives	<ul><li>Operating hours per year</li><li>Photo of fan nameplate showing horsepower</li></ul>	<ul><li>Existing fan control type</li><li>Proposed fan control type</li></ul>
Domestic Hot Water - Storage Tank Upgrade	<ul> <li>New equipment specification sheet and efficiency</li> <li>Photo(s) of existing hot water tank nameplate and setpoint temperature (in °C or °F)</li> <li>Number of hot water tanks</li> <li>Operating days per year and number of occupants</li> </ul>	<ul> <li>Incoming (City) water temp</li> <li>Estimated average annual hot water use (in gallons or litres)</li> </ul>
Domestic Hot Water - Tankless	<ul> <li>New equipment specification sheet and efficiency</li> <li>Photo(s) of existing hot water tank nameplate and setpoint temperature (in °C or °F)</li> <li>Number of hot water tanks</li> <li>Operating days per year and number of occupants</li> </ul>	<ul> <li>Incoming (City) water temp</li> <li>Estimated average annual hot water use (in gallons or litres)</li> </ul>
Space Heating Boilers (<2.5 Million BTUH total building capacity)	<ul> <li>New equipment specification sheet and efficiency</li> <li>Photo of boiler nameplate showing input capacity in BTUH</li> </ul>	<ul> <li>Existing equipment efficiency (%)</li> <li>Load factor (%)</li> <li>Equivalent Full Load Heating hours (EFLH)</li> </ul>
Space Heating Furnaces (<2.5 Million BTUH total building capacity)	<ul> <li>New equipment specification sheet and efficiency</li> <li>Photo of furnace nameplate showing input capacity in BTUH</li> </ul>	<ul> <li>Existing equipment efficiency (%)</li> <li>Load factor (%)</li> <li>Equivalent Full Load Heating hours (EFLH)</li> </ul>
Smart Thermostats	<ul> <li>New equipment specification sheet</li> <li>Percent of heating provided by natural gas, if applicable</li> <li>Photo of furnace nameplate showing input heating capacity in BTUH, if applicable</li> <li>Photo of air conditioner nameplate showing input cooling capacity in tons or BTUH, if applicable</li> </ul>	<ul> <li>Equivalent Full Load Heating hours (EFLH) and Equivalent Full Load Cooling hours (EFLC)</li> <li>Annual Fuel Utilization Efficiency for gas heating, or Heating Seasonal Performance Factor for electric heating</li> <li>Seasonal Energy Efficiency Ratio for cooling, if applicable</li> </ul>
Ice Rink Flood Water De-aerators (REALice)	<ul> <li>Photo(s) of existing hot water tank nameplate and setpoint temperature (in °C or °F)</li> <li>New resurfacing temperature after installation of the de-aerator</li> <li>Number of operating days per year and ice resurfacings per day</li> <li>Volume of water per resurfacing (in litres or gallons)</li> <li>Number of ice surfaces and area of each (ft²)</li> </ul>	<ul> <li>Incoming (City) water temp</li> <li>Baseline chiller plant efficiency</li> <li>Brine % by volume</li> <li>Chiller plant load factor</li> </ul>
HVAC Notched V Belts	Photo of existing equipment nameplate showing horsepower	Annual operating hours
Infrared Heaters	<ul> <li>Photo of heater nameplate showing input capacity in BTUH</li> <li>Operating hours per year</li> </ul>	Radiation Sizing Factor



Simplified Retrofit	Mandatory Inputs	Additional Inputs (if available)
Hydronic Heating Additive	<ul> <li>Photo of boiler nameplate showing input capacity in BTUH</li> <li>Brand and type of hydronic heating additive</li> </ul>	Equivalent Full Load Heating Hours (EFLH) of the boiler
Reuseable Arena or Curling Rink Liners	<ul> <li>Ice plant compressor capacity (in kW) for arena and/or curling rink, as applicable</li> <li>Ice season duration (days per year)</li> </ul>	Equipment logs showing ice plant operating hours per year
Low Emissivity Ceilings	<ul> <li>Ice plant compressor capacity (in kW) for arena and/or curling rink, as applicable</li> <li>Ice season duration (days per year)</li> <li>Confirmation if the low-e ceiling is for an arena, curling rink, or both</li> </ul>	Equipment logs showing ice plant operating hours per year
Low Flow Faucet Aerators	<ul> <li>Photo of existing hot water tank nameplate</li> <li>Confirmation of hot water heater type (tank, tankless, or condensing tank)</li> <li>Number of faucets</li> <li>Confirmation that water is heated with natural gas</li> </ul>	Hot water tank efficiency (if not available from nameplate)

## **Get Started**

Our team can provide the necessary energy and GHG saving information needed to supplement an application for the retrofit project types listed above. Follow these steps to apply:

- 1. Submit an Expression of Interest. A CEC program team member will contact you to discuss the project.
- 2. Collect the mandatory input information and any additional inputs as seen above. Collect photos of the nameplate data from existing equipment and any other supporting documentation as required.
- 3. Submit the items listed in Step 2 to your designated CEC program team member along with a signed application form, equipment and installation cost quotes, utility data, and equipment specification sheets. See Section 4: How to Participate and Step 3: Submit a CEC project application within the CEC Guidebook for more details.
- 4. The CEC program team will provide the energy and GHG savings information back to you along with an approval decision for the project.

After Step 3, MCCAC will provide you with estimates on the annual energy savings, costs savings, GHG emission savings, and lifetime GHG emission savings for your Simplified Measure project. Lighting Projects must use the Lighting Calculator and can proceed directly to a full application package. If approved, MCCAC will issue a Funding Agreement for signing. After signing, the project can proceed to installation and completion.

## **CONTACT US**

Questions about the CEC program may be directed to:
Municipal Climate Change Action Centre
300-8616 51 Avenue
Edmonton, AB T6E 6E6
780.433.4431
contact@mccac.ca