



# gReeNEwAL™

## program

### Eligible Commercial Energy Efficiency and Conservation Projects

ENERGY EFFICIENCY MEASURES			
Category	Measure	Minimum Efficiency/Certification Requirements	Local & Federal Rebates & Incentives*
Commissioning/ Monitoring	Energy Use Monitoring	Recommend pairing with at least one funded improvement. 12 months minimum of data from before the improvement, for on-going comparison during the loan lifetime. Data may be tracked in Energy Star Portfolio Manager in addition to program database.	Governor's Energy Office (GEO)
	Sub-metering	Recommend pairing with other funded improvements. Allows individual tenants to monitor energy use and pay only for what they use.	
Energy Management	Energy Management Systems	Computer-based Building Automation System with preventative maintenance program or contract. Third-party verification required.	Xcel Energy
	Automated Controls	Occupancy and CO2 sensors, lighting and day lighting controls, and automatic shading devices. See Lighting, Ventilation.	Xcel Energy
	Manufacturing Process Efficiency	Custom evaluation of performance proposal. Third-party verification required.	Xcel Energy
Walls and Roof	Wall Insulation	Fill cavity to capacity and/or add minimum R-5 rigid insulation to interior or exterior walls.	GEO Xcel Energy
	Roof Insulation	Fill cavity to capacity or minimum R-38 total, and/or add minimum R-13 batt to lower side or R-10 rigid insulation to upper side (or combination totaling minimum R-15).	GEO Xcel Energy
	Cool Roofs	Energy Star-qualified or white TPO and metal roofs, maintaining reflectance of at least 50% after 3 years, with 10-year material and labor warranty.	Xcel Energy
	Air Sealing	Air sealing with expanding compound and mastic shall prioritize joints/seams, trims where accessible, windows/doors, mechanical and electrical penetrations, weather-stripping. Third party verification required.	GEO

<b>Windows and Doors</b>	Insulating Windows	Assembly U max 0.45 metal/0.35 non-metal; SHGC max 0.46 (passive solar applications custom evaluation for higher SHGC's). Metal windows must include thermal break. Window replacement must be accompanied by air sealing around windows at a minimum.	Xcel Energy
	Storefront Systems	Assembly U max 0.35; SHGC max 0.35 (passive solar applications custom evaluation for higher SHGC's). Metal windows must include thermal break. Window replacement must be accompanied by air sealing around windows at a minimum.	Xcel Energy
	Insulating Doors	Assembly U max 0.5 opaque/0.7 metal; Door replacement must be accompanied by air sealing around doors at a minimum.	Xcel Energy
	Loading Dock Curtains	Custom fitted and permanent.	
	Low-E Films and Permanent Automated Blinds	Custom evaluation of performance proposal. 10-year manufacturer warranty on film, removal, and replacement.	Xcel Energy
<b>Combined Heating and Air-Conditioning</b>	Gas/Electric Package Units	Minimum 14 SEER. Must contain automatic economizer capable of introducing 100% outside air when appropriate for cooling. Maintenance schedule required. Programmable thermostat required. Back up systems not eligible.	Xcel Energy
<b>Cooling, Heat Pumps, Ventilation</b>	Data Center Zone Cooling	Time-of-Day programmable air handler control required.	
	Rooftop AC Units	13 SEER (0-65 kBtuh); 11 EER (65-135 kBtuh); 10.8 EER (135-340 kBtuh). Programmable thermostat required. Backup systems not eligible.	Xcel Energy
	Condensing Units	Combine with HVAC system to reach qualifying (S)EER for that equipment.	Xcel Energy
	Central Split Systems	13.0 EER/7.7 HSPF (0-65 kBtuh); 10.6 EER/3.2 COP (65-135 kBtuh); 10/1 EER/3.1 COP (135+ kBtuh). Programmable thermostat required. Resistance electric heat may not be primary heat source in cold weather. Back up systems not eligible.	Xcel Energy
	Central Air Source Single Package System	14 SEER/12 EER. Programmable thermostat required. Resistance electric heat may not be the primary heat source in cold weather. Backup systems not eligible.	Xcel Energy
	Economizers	Cooling capacity > 54 kBtuh	Xcel Energy
	Evaporative Coolers	Minimum 14 EER. Programmable thermostat required.	Xcel Energy
	Evaporative Condensers	Combine with HVAC system to reach qualifying (S)EER for that equipment.	Xcel Energy
	Demand-Controlled Ventilation	Carbon dioxide sensors required. Third party verification of installation and programming required.	
<b>Boiler and Furnace</b>	Boiler System Tune-ups	Programmable thermostat installation required. Includes steam trap replacements.	Xcel Energy Atmos
	Non-Condensing Hot-Water Boilers	Minimum 85% efficient. Programmable thermostat required.	GEO Xcel Energy Atmos
	Condensing Hot-Water Boilers	Minimum 92% efficient. Programmable thermostat required.	GEO Xcel Energy Atmos
	Modular Burner Controls	Third party verification of installation and programming required.	Xcel Energy Atmos

	O2 Trim Controls, Outdoor Air Reset Controls, Stack Dampers	Third party verification of installation and programming required.	Xcel Energy Atmos
	High-Efficiency Natural Gas Furnaces	80% AFUE minimum (0-225 kBth – SP); 90% AFUE minimum (0-225 split). Programmable thermostat required.	GEO Xcel Energy Atmos
<b>Energy Recovery, Redistribution, HVAC Insulation</b>	Air Destratifiers	Custom evaluation of performance proposal	
	Radiant Heating and Cooling	Non-electric only. Boiler must meet program qualifications. Programmable thermostat required.	
	Waste Heat Redistribution	Custom evaluation of performance proposal	
	Energy (Heat)-Recovery Ventilation (ERV/HRV)	Minimum SRE – 60%; no more than 500 cfm; no resistance heating.	Xcel Energy Atmos
	VAV Boxes	Upgrade constant air volume.	Xcel Energy
	Pipe Insulation	In exterior, unconditioned or semi-conditioned space: R-8 or maximum possible as explained in bid.	
	Duct Sealing	In exterior, unconditioned or semi-conditioned space: R-6 or maximum possible as explained in bid.	GEO Xcel Energy
<b>Water Heaters</b>	Efficient Gas Water Heaters	over 75 kBtuh; 90% Et	GEO Xcel Energy Atmos
	Efficient Electric Water Heaters	Under 12kW and greater than 20 gallon EF> 0.99-0.0012xVolume	Xcel Energy
	Tankless Water Heaters	0.81 EF or 81% Et	GEO Xcel Energy Atmos
<b>Lighting</b>	Incandescent, T-12 Fixture Upgrade to T-5, T-8	High efficiency ballasts with low ballast factor (<= 0.85) required for T-series fixtures	Xcel Energy
	Electronic Ballasts	High-efficiency ballasts with low ballast factor (<= 0.85) required.	Xcel Energy
	Hardwired LED Lighting	Hard-wired; no Edison base (screw-in)	Xcel Energy
	LED Exit Signs	Replace incandescent or fluorescent.	Xcel Energy
	Ceramic Metal Halide	Replace incandescent, halogen, mercury vapor, high-pressure sodium.	Xcel Energy
	Pulse-start Metal Halide	Replace incandescent, halogen, mercury vapor, high-pressure sodium.	Xcel Energy
	Delamping and Reswitching	Delamping must permanently remove lamps, ballasts and sockets from fixture. Adding reflectors for remaining lamps is encouraged. Reswitching must make it possible to turn on fewer lights at a time, or just one area of a room at a time. Recommended target maximum lighting power density 0.9W/sq.ft.	Xcel Energy (delamping only)
	Day Lighting	Replacement insulating skylights (max U 0.69/SHGC 0.39) or new specular solar tubes, to max 3% of roof area. Must include controls to turn off lighting when adequately day lit.	
	Automatic Controls	Occupancy sensors for unoccupied rooms, not to be used with CFL's. Dimming controls for lights near walls with window-wall ratio of 25% or more: dim fixture within 12' of N/S window wall or within 8' of skylight range.	Xcel Energy
Parking Lot Lighting	Parking lot lighting maximum intensity <= 250W pulse-start metal halide at 25' or equivalent.	Xcel Energy	

	Exterior Lighting	Façade and signage lighting max 0.2W/sq. ft. Photocell or astronomical time switch required on all exterior lighting, except where preempted by code.	Xcel Energy
<b>Motors and Drives</b>	Variable-Frequency Drives / Adjustable-Speed Drives	For fans and pumps, to replace old or constant-speed drives. Must meet NEMA Premium Efficiency Standards.	Xcel Energy
	Efficient Motors	Must meet NEMA Premium Efficiency Standards.	Xcel Energy
	Elevators	Custom evaluation of performance proposal.	Xcel Energy
	Compressed Air	Performance test required to identify leaks. Test and repairs eligible provided that min. 50% of leaks found are repaired.	Xcel Energy
<b>Refrigeration and Food Service</b>	Refrigeration Recommissioning	Built-in equipment only.	Xcel Energy
	Refrigeration Component Repair, Upgrade and Replacement	Built-in equipment only; replacement only except for energy upgrades. Product coolers; evaporative coolers; anti-sweat heater controls; ECM evaporative fan motor for walk-in cooler; reach-in cooler or freezer; motion sensors for lighting in walk-ins; outside economizer for walk-in coolers; walk-in cooler curtains.	Xcel Energy

\*Rebates may or may not be available. Check with your utility providers or the GEO for current availability, rebate requirements and other information.