



## Commercial Eligible Improvements

The improvements listed below—subject to specified requirements where noted—are eligible for financing for qualified borrowers under the commercial financing program. This list is subject to change. Measures that are not included on this list may also qualify for financing if they are recommended through an energy assessment conducted by a certified professional. See the Michigan Saves list of authorized contractors to find a certified energy auditor near you if you are interested in receiving an energy assessment.

Measure	Minimum Efficiency Rating	Additional Requirements
Antisweat heater controls		
Beverage vending machine controls		Vending machine controls must have a passive infrared occupancy sensor
Boiler (space heating or hot water)	AFUE $\geq$ 85%	
Boiler (steam)	AFUE $\geq$ 82%	
Boiler controls		The only eligible boiler controls are oxygen trim, modulating burner, or water reset controls
Central air conditioning (package terminal and heat pump)	EER $\geq$ 12.5	
Central air conditioning (unitary, split system, and rooftop units)	EER 10.4 to 14.0	
Central lighting controls		Automated controls must have override capabilities
Chiller (air and water cooled)	Eligible for utility rebate	
Combined heat and power (micro CHP)		
Curtain doors		Curtain doors are used with walk-in refrigerators or freezers
Daylight sensor controls		
Demand control ventilation (DCV)		
Doors (exterior)	ENERGY STAR®	

Measure	Minimum Efficiency Rating	Additional Requirements
Drip irrigation nozzles		
ECM motors for refrigeration cases		
Economizer		
Efficient refrigerator condenser		
Electric vehicle charging station	Level 2	
Evaporator fan motor controls		
Exit signs (electroluminescent, T1 or LED)	5 watt or ENERGY STAR®	
Exterior lighting bilevel controls with override		
Floating head pressure controls		
Freezers	ENERGY STAR®	
Fryers	ENERGY STAR®	
Furnace (gas or propane)	AFUE ≥ 90%	
Geothermal system (water-to-air, closed loop)	EER ≥ 17.1, COP ≥ 3.6	
Green roofing (living roof)		
Griddles	ENERGY STAR®	
Heating, ventilation, and air conditioning energy management system		
High-intensity discharge conversion	LED or induction	
High-performance window glazing	SHGC < 0.39 and U-factor < 0.57	
Hot food-holding cabinets	ENERGY STAR®	
Ice machines	CEE Tier 2	
Infrared heaters		
Insulation		
Irrigation controls		
LED down lights and fixtures		
LED lamps		
Lighting occupancy sensors		
Lighting timers		
Low-flow flushing urinal	GPF < 0.5	
Low-flow public faucets	GPM < 0.5	

Measure	Minimum Efficiency Rating	Additional Requirements
Low-flow toilets	GPF < 1.28	
Metering faucets	GPM < 0.25	
Mini-split heat pump (ductless)	SEER ≥ 14.5, EER ≥ 12.0	
Occupancy sensors for LED refrigeration cases	35 LPW and 72 CRI	
Ovens (convection or conveyor)	ENERGY STAR®	
Portable room air cleaners		High-efficiency particulate air (HEPA) filters
Prerinse spray valves	GPM < 1.3	
Refrigeration case lighting	LED	
Refrigerators	ENERGY STAR®	
Roofing (asphalt, metal, or membrane)	ENERGY STAR® or comparable	
Solar photovoltaic (PV)		
Steam cookers	ENERGY STAR®	
Switching controls for multilevel lighting		
Thermostat (programmable or Wi-Fi enabled)		
Ultraviolet (UV) technology within HVAC systems		
Ultraviolet-C (UVC) lights (i.e., "blue" lights)		Stand-alone or hardwired fixtures
Vending machines	ENERGY STAR®	
Ventilation hoods (engineered commercial kitchen)		
Walk-in cooler/freezer ECM		
Water heater (electric heat pump)	EF ≥ 2.0	
Water heater (electric)	EF ≥ 0.93	
Water heater (gas condensing)	EF ≥ 0.80	
Water heater (gas storage)	EF ≥ 0.67	
Water heater (gas tankless)	EF ≥ 0.82	
Waterless urinal		
Whole-home battery storage		
Whole-home generator		
Wind turbine		
Window film	SHGC < 0.39 and U-factor < 0.72	

Measure	Minimum Efficiency Rating	Additional Requirements
Windows	ENERGY STAR®	

## Legend

**AFUE:** The annual fuel utilization efficiency is a thermal efficiency measure of space-heating furnaces and boilers. Furnaces are rated by the AFUE ratio, which is the percentage of heat produced for every dollar of fuel consumed. The higher the AFUE rating, the lower the fuel costs. Any furnace with an efficiency of 90 percent or higher is considered high efficiency and carries the ENERGY STAR® label.

**BTU:** The British thermal unit is a traditional unit of heat, which is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

**CEE:** The Consortium for Energy Efficiency creates product specifications for advanced levels of energy performance. A CEE tier-one label is the equivalent of the ENERGY STAR® label. Products with CEE tier-two, -three, or -four labels would represent products that achieve energy savings above and beyond the ENERGY STAR® label.

**COP:** The coefficient of performance of a heat pump, refrigerator, or air conditioning system is a ratio of useful heating or cooling provided to work required. Higher COPs equate to lower operating costs.

**EER:** The energy efficiency ratio is a metric used to measure how much cooling a system puts out for each unit of energy it consumes. EER is calculated by dividing an air conditioning unit's BTU rating by its wattage. The higher the EER rating, the more efficiently the air conditioner operates. Any air conditioning unit with an efficiency of 12 EER or higher is considered a high-efficiency unit and carries the ENERGY STAR® label.

**EF:** The energy factor indicates a water heater's overall energy efficiency based on the amount of hot water produced per unit of fuel consumed over a typical day. The higher the energy factor, the more efficient the water heater.

**ENERGY STAR®:** ENERGY STAR® is a government program that promotes energy-saving improvements by providing consumers with objective information about products. The ENERGY STAR® label indicates that a product uses less energy than other products in that category.

**GPF:** Gallons per flush is the measure of flow from a toilet. The lower the GPF of a toilet, the greater the savings of water.

**GPM:** Gallons per minute is the measure of flow from a showerhead or faucet. The lower the GPM of a faucet or showerhead, the greater the savings of water.

**Induction:** Induction lighting uses a high-frequency generator with a power coupler. The generator produces a radio frequency magnetic field to excite the gas fill. This differs from fluorescent lamps, which use internal electrodes.

**LED:** Light-emitting diodes are up to 80 percent more efficient than traditional lighting, such as fluorescent and incandescent lights. Of the energy in LEDs, 95 percent is converted into light and only 5 percent is wasted as heat.

**Level two:** Level-two charging refers to the voltage that the electric vehicle charger uses (240 volts). Level-two chargers come in a variety of amperages typically ranging from 16 amps to 40 amps. The two most common level-two chargers are 16 and 30 amps, which also may be referred to as 3.3 kilowatt (kW) and 7.2 kW, respectively. These two amperages are the most common because they match the onboard charger on many current electric vehicles.

**LPW:** Lumens per watt measures the efficacy of an LED bulb. Higher LPW values indicate more efficient LED bulbs.

**R-value:** An insulating material's resistance to conductive heat flow is measured or rated in terms of its thermal resistance or R-value. The higher the R-value, the greater the insulating effectiveness.

**SEER:** The seasonal energy efficiency ratio is a metric used to measure how much cooling a system puts out for each unit of energy it consumes. The higher the SEER rating, the more efficiently the air conditioner operates. Any air conditioning unit with an efficiency of 15 SEER or higher is considered a high-efficiency unit and carries the ENERGY STAR® label.

**SF:** The solar factor measures the percentage of heat that passes through a solar panel's glass. The higher the solar factor, the greater the solar gain for solar-thermal water heating units.

**SHGC:** The solar heat gain coefficient is the fraction of incident solar radiation admitted through a window, both directly transmitted and absorbed and subsequently released inward. SHGC is expressed as a number between zero and one. The lower a window's solar heat gain coefficient, the less solar heat it transmits.

**TE:** Thermal efficiency is an efficiency measure for space-heating boilers, in lieu of the AFUE rating, that exceed 300,000 BTUs per hour. TE is also used to measure the efficiency of gas-fired water heaters that exceed 75,000 BTUs per hour.

**U-factor:** The rate of heat loss is indicated in terms of the U-factor (U-value) of a window assembly. The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating properties.