CleanVision Energy Efficiency

# 2023 prescriptive electric measures

#### LIGHTING

**Lighting specifications** Interior LED lighting, 1 to 3-shift and 24/7 operation LED recessed down light fixture

\* Exterior LED lighting retrofit

#### Controls/daylighting

- Interior central lighting control Interior switching controls for multilevel lighting
- X Interior daylight sensor controls
- X Interior stairwell lighting controls
- Exterior HID lighting, bi-level control with override
- Exterior multi-step dimming timer controls
  Tubular skylights (light tubes)
- Sector LED lighting bi-level controls
- Sarage LED lighting bi-level controls
- & Garage LED lighting bi-level controls with photocell
- Interior combined occupancy and daylight sensor Interior occupancy sensors

#### **Refrigeration lighting**

- ☆ LED refrigerated case door lighting
- X Occupancy sensors for LED refrigerated case lighting
- X Refrigerated savings due to lighting wattage reduction

#### New construction lighting **Networked lighting controls**

- Interior LED lighting 1 to 3-shift (tier 1 only) Structure DLC-listed NLC system (tier 2 only)

#### **HVAC**

#### Air conditioning systems and heat pumps

- Studies and split air conditioning systems X Air source heat pumps
- Closed loop water source heat pumps Packaged terminal AC and heat pump (PTAC/PTHC)
- Scound-loop heat pumps

#### **HVAC** controls

- ☆ Hotel guestroom energy management control Web-based energy management system (EMS) Chilled water reset 5° or 10° (air and water-cooled chillers)
- ☆ HVAC occupancy sensors Chiller plant optimization Optimum start DDS/MZS to VAV

# **Other HVAC**

# Economizer

- 🛠 Cool roof
- **%** High performance glazing in windows Window film
- X EC motors on small commercial furnaces replacing non-EC motors Efficient chilled water pump
- Efficient hot water pump
- X Variable frequency drives HVAC fans/pumps
- ≮ High-volume, low-speed fans
- X Original double hung windows with low U storm

# **Chillers**

#### HVAC tune-ups

Refrigerant charging correction on RTU AC DX condenser coil cleaning Chiller tune-up

#### **PROCESS ELECTRIC**

#### **Compressed** air

- S Compressed air engineered nozzle
- X Compressed air pressure flow controller
- Compressed air audits with leak repair (VSD and non-VSD) X VSD air compressors (single and multiple systems)
- X VSD air compressor replacement Retrofit air compressor (multiple systems)
- 🛠 Two stage rotary screw air compressor
- ☆ Low pressure drop air filters
- X Air compressor outdoor air intake
- Stefficient compressed air dryers
- Refrigerated air drver replacing desiccant air drver X No-loss condensate drains
- ☆ Compressed air storage tank
- 🛠 Variable displacement air compressor
- ☆ Heated desiccant air dryers
- Solution States Selected States Selected States Selected States Selected States States Selected States Selected States St
- X Dew point sensor controls for dessicant dyers

#### Variable frequency drives for process

- X Variable frequency drives (VFD) for process pumps
- X VFD for fixed speed process pump control or process fans
- X VFD on computer room air conditioning (CRAC) supply fans

#### Miscellaneous process

- ℅ High efficiency pumps Industrial 3-phase high frequency battery chargers Electronically commutated plug fans for data centers Process cooling ventilation reduction (CFM)
- X Barrel wraps for injection molders and extruders Insulation for pellet dryer ducts Tank insulation
- Electric motors replacing pneumatic (air) motors High efficiency welders inverter style
- Air blowers replacing compressed air blow-off Electric tools replacing pneumatic (air) tools Cordless electric tools replacing pneumatic (air) tools Fiber laser cutter replacing CO2 laser cutter
- X Injection molding machines replacing hydraulic machines VSD plastic injection molding machines
- ✓ VFD on process cooling tower fans
  ✓ ENERGY STAR<sup>®</sup> UPS
- 🛠 CRAC air side, glycol, refrigerant economizer
- **CRAC** hot aisle cold aisle configuration
- ℅ High efficiency CRAC

#### **MISCELLANEOUS ELECTRIC**

#### Refrigeration

- X Evaporator controls w/demand defrost for walk-in coolers/freezers
- Stration condenser ECM motor for reach-in refrigerated display case ECM motor for walk-in freezer and cooler Evaporator fan motor control for walk-in cooler or freezer Walk-in cooler/freezer evaporator fan motor reduction
- X Vertical night covers Strip curtains on walk-in cooler and freezer doors Door gaskets on coolers and freezers Automatic door closers for refrigerated walk-in
- **%** Reach-in refrigerated display case door retrofit X Walk-in and case cooler permanent magnet synchronous motor
- Controls
- **Solution** Severage vending machine controllers Anti-sweat heater controls Floating head pressure controls

#### Sensors and controls

- X Intelligent multi-socket surge protector
- X PC network energy management controls

#### Miscellaneous electric

- S ENERGY STAR<sup>®</sup> high efficiency clothes washer (electric water heater)
- 🛠 Heat pump storage water heater
- S Electric tankless water heater
- ℅ High efficiency hand dryer
- ☆ Automatic speed doors
- 🛠 Laminar flow restrictor

#### Indoor agriculture

- LED grow lights
- LED grow lights (new construction)
- 🛠 HVAČ reduction due to LED lighting horticultural grow rooms
- Solution Control Co 🛠 Total ERV indoor ag



# 2023 prescriptive gas measures

#### **HVAC GAS**

#### **Boilers and furnaces**

- Soller modulating burner control Boiler water reset control
- X High efficiency gas furnace/unit heater
- X High efficiency space heating boiler
- Steam trap repair/replacement
- 🛠 Steam trap monitoring system space heating
- Linkageless boiler controls ☆ O₂ trim controls added to boilers with linkageless controls
- 🛠 Boiler stack economizer
- ★ HVAC boiler sequencing
- Other HVAC

# ☆ Infared heaters

- ☆ Destratification fans
- X Direct fired make-up air units
- Outside air ventilation reduction
- Sensible energy recovery ventilation
- Total energy recovery ventilation
- X Automatic high speed doors exterior doors
- DDS/MZS to VAV
- X Original double hung windows with low U storm Window reduction

#### **HVAC** controls

- Second controlled ventilation CO2 sensor-based
- HVAC occupancy sensor
- % Hotel guestroom energy management control (gas heat) Optimum start
- S DCV and HVAC occupancy sensor
- S Enhanced ventilation control

### **HOT WATER & LAUNDRY**

#### Hot water

- 🛠 Domestic hot water system
- 🛠 Gas tankless water heater
- ℅ High efficiency pool heater
- ☆ Low-flow sink aerator
- ☆ Low-flow showerhead ☆ Laminar flow restrictors
- Condenser heat recovery ☆ Laminar flow restrictor

#### Gas storage water heater

- ☆ Gas storage water heater (≤ 55 gallons)
  ☆ Gas storage water heater (> 55 gallons)

#### Laundry

- STAR\* clothes washer (gas water heater)
- ☆ Ozone laundry system

#### INSULATION

#### Insulation

- Pipe wrap steam boiler Pipe wrap - steam boiler condensate return Pipe wrap - hot water boiler Pipe wrap - domestic hot water Truck loading dock seals
- 🛠 Truck loading dock leveler ramp air pit seals
- Roof insulation (flat roofs and attic roofs) Wall insulation
- X Pool covers

### **Process** gas

#### Furnace tube inserts

- ☆ High efficiency process boiler (water or steam) Tank insulation
- 🛠 Air compressor exhaust heat recovery
- Process boiler stack economizer
- Modulated boiler control for process
- X Regenerative/recuperative thermal oxidizer
- Stoptimized snow and ice melt controls
- 🛠 Steam trap monitoring system process heat
- X Process boiler sequencing

#### MISCELLANEOUS GAS

**PROCESS GAS** 

#### **Miscellaneous** gas

#### X Vertical night covers

- **%** Refrigeration condenser waste heat recovery (domestic water heater)
- **K** Refrigeration condenser waste heat recovery (space heating) Reach-in refrigerated display case door retrofit

# TUNE-UPS

#### **Boiler tune-up** Boiler tune-up (space heating boilers only) Boiler tune-up (process boilers only) Domestic hot water boiler tune-up Process boiler tune-up (pool/spa)

#### Furnace/RTU tune-up

Forced air gas furnace or rooftop unit tune-up (space heating units) Process furnace/burner tune-up Process furnace/burner tune-up

# What if I'm installing equipment that isn't listed?

If your project involves measures not listed here, you should consider applying for custom incentives. Custom incentives are paid based on each project's first-year energy savings. All custom applications require a reservation prior to beginning your project.

# New construction and major renovation projects

If your project involves the construction of a new building or the repurposing of an existing structure, then you should apply for incentives with our new construction-major renovation application.

Incentives offered through this program are ideal for projects that either involve LEED certification or pre-determined measures. Look for the new construction icon in our catalog to identify qualifying measures.

To apply for incentives for new construction or major renovation projects, sign up at: mienergyrebates.com