

# Eligible C-PACE Improvements for Pennsylvania

The following non-exhaustive list of Energy Conservation Measures (ECM) and Renewable Energy Improvements is intended as a reference list for Pennsylvania C-PACE applicants and can change at any time. If not included on this list or the Pennsylvania Public Utility Commissions Technical Resource Manual, the Program Administrator will review the proposed ECM(s) and accept them on a case-by-case basis.

# **Energy Saving measures**

- High efficiency lighting and/ or lighting sensors and controls.
- Heating ventilation air conditioning (HVAC) upgrades
- New automated building, lighting and HVAC controls
- Variable speed drives (VSDs) on motors fans and pumps

• Variable frequency drives, energy recovery ventilators (ERV), heat recovery ventilators (HRV), demand control devices, including energy storage systems

- High efficiency chillers
- High efficiency boilers and furnaces
- High efficiency heat pumps (suitable for use in a cold climate zone)
- High efficiency hot water heating systems
- Geothermal energy/ geoexchange
- Combustion and burner upgrades

• Fuel switching resulting in an overall reduction in the number of BTUs required to achieve a given end use

• Heat recovery and steam traps

• Building enclosure/envelope improvements, including insulation, air sealing, window retrofit, and window replacement

- Building automation (energy management) systems
- New automated process controls
- Heat recovery from process air and water
- Cogeneration used for peak shaving
- Process equipment upgrades



## **Renewable Energy Production**

- Solar photovoltaic power and solar thermal
- Wind Power
- Fuel Cell
- Methane Gas from landfills or anaerobic digestion
- Low emission advanced control technologies:
- Sustainable Biomass Facility used for heating and/or generation

### Water Saving Measures

• Adding aerators to faucets or installation of new faucets in kitchens and bathrooms

• Commercial kitchens can save water through the replacement of pre-rinse valves, dishwashers, and icemakers.

• Laundry equipment in commercial properties; laundromats can save significant amounts of water with upgraded equipment.

• Condensate water reuse for cooling towers, for steam boilers, irrigation, evaporative coolers, industrial laundry, decorative water features, water cooled equipment, and air conditioners.

• Industrial water consumption from car washes, film and x-ray processing, and high-tech manufacturing can be reduced through the installation of equipment involved in each specific process/facility.

- Replacement of Toilets with low-flow toilets and/or waterless urinals
- Installation of new faucets that have reduced waterflow
- Replacement of pre-rinse valves, dishwashers, and icemakers in commercial kitchens

• Condensate water reuse for cooling towers, for steam boilers, irrigation, evaporative coolers, industrial laundry, decorative water features, water cooled equipment and air-conditioners.

- Implementing processes or equipment, that demonstrates water savings of 25% or more including:
- Hot water recirculation systems using circulating pumps; demand-initiated hot water systems
- Cooling tower conductivity controllers
- Filter upgrades; Deionization
- Recycled water sources

### **Other Eligible Measures**

- Indoor Air Quality
- Resiliency

Source: pennsylvaniacpace.org/document-portal/pa-c-pace-program-guidelines/