

# Commercial & Industrial Energy Efficiency Retrofit - Food Service Equipment Worksheet



Please complete this worksheet for the energy-saving equipment you're installing. **To qualify, the project must meet the applicable specifications listed on both pages of this worksheet.** Your total incentive for each measure will be the quantity multiplied by the per unit incentive (Q x I = TI). When completed, attach this worksheet to your application form.

*Note: Projects with an estimated incentive of \$1,000 or greater must receive preapproval from Idaho Power prior to installing the equipment.*

**Project Name:** \_\_\_\_\_

Replacing	Installing	Quantity (Units)	Incentive (Per Unit)	Total Incentive
<b>Refrigeration</b>				
F1 No insulation present	Refrigeration line insulation	_____ linear foot	\$2.00	\$ _____
F2 No or damaged auto closer, low-temp	Auto-closer—walk-in	_____ door	\$125.00	\$ _____
F3 No or damaged auto closer, low-temp	Auto-closer—reach-in	_____ door	\$100.00	\$ _____
F4 No or damaged auto closer, med-temp	Auto-closer—walk-in	_____ door	\$100.00	\$ _____
F5 No or damaged auto closer, med-temp	Auto-closer—reach-in	_____ door	\$70.00	\$ _____
F6 Low/med temp case w/out controls	Anti-sweat heat (ASH) controls	_____ linear foot	\$40.00	\$ _____
F7 Low or med-temp walk-in or reach-in with no controls	Add evaporator fan controls	_____ fan	\$75.00	\$ _____
F8 Med- or low-temp walk-in	ECM/PSC evap fan motor	_____ motor	\$100.00	\$ _____
F9 Med- or low-temp reach-in	ECM/PSC fan motor	_____ motor	\$60.00	\$ _____
F10 Standard head pressure control	Floating head pressure controller	_____ hp	\$80.00	\$ _____
F11 Standard suction pressure control	Floating suction pressure controller	_____ hp	\$20.00	\$ _____
<b>Vending Machine Control</b>				
F12 Vending machine with no sensor	Non-cooled snack control	_____ machine	\$50.00	\$ _____
<b>Kitchen Equipment</b>				
F13 Standard undercounter dishwasher	ENERGY STAR® undercounter dishwasher	_____ unit	\$200.00	\$ _____
F14 Standard dishwasher (not undercounter)	ENERGY STAR commercial dishwasher	_____ unit	\$500.00	\$ _____
F15 Standard electric oven	ENERGY STAR electric combination oven (6–14 pans)	_____ unit	\$1,100.00	\$ _____
F16 Standard electric oven	ENERGY STAR electric combination oven (15–20 pans)	_____ unit	\$300.00	\$ _____
F17 Standard electric oven	ENERGY STAR electric convection oven	_____ unit	\$300.00	\$ _____
F18 Standard electric fryer	ENERGY STAR electric fryer	_____ unit	\$400.00	\$ _____
F19 Standard electric steamer, 3 pan or larger	ENERGY STAR electric steamer, 3 pan	_____ unit	\$ 80.00	\$ _____
F20 Standard electric steamer, 4 pan or larger	ENERGY STAR electric steamer, 4 pan	_____ unit	\$100.00	\$ _____
F21 Standard electric steamer, 5 pan or larger	ENERGY STAR electric steamer, 5 pan	_____ unit	\$150.00	\$ _____
F22 Standard electric steamer, 6 pan or larger	ENERGY STAR electric steamer, 6 pan	_____ unit	\$175.00	\$ _____
F23 Standard electric steamer, 10 pan or larger	ENERGY STAR electric steamer, 10 pan or larger	_____ unit	\$200.00	\$ _____
F24 Kitchen hood with constant speed ventilation motor	VSD/VFD installed on kitchen exhaust and/or makeup air fan	_____ hp	\$200.00	\$ _____

### Case/Walk-in Lighting

Incentives for eligible refrigeration case/walk-in lighting are available on the Lighting Tool.

**Food Service Total** \$

### Checklists for Submission

#### Pre-Approval Checklist

- Signed/Dated Non-Lighting Application
- Food Service Equipment Worksheet (*must be completely filled out*)
- Manufacturer Specification Sheets

#### Payment Checklist

- Signed/Dated Non-Lighting Application
- Food Service Equipment Worksheet (*must be completely filled out*)
- Invoices for Material & Labor

# Specifications for Food Service Equipment

## Line Insulation

Installation of line insulation applied to bare refrigeration suction lines of 2¼ inches or less on existing equipment can qualify for this incentive. Insulation must be flexible closed-cell nitrile rubber or equivalent. Low-temp lines must have 1-inch insulation thickness while med-temp lines need at least ¾-inch. Where exposed to outside weather, insulation must have manufacturer-approved metal jacketing or reflective outdoor sealant paint.

## Auto-Closers

Auto-closers are eligible when installed on medium or low temp walk-in or reach-in freezer/cooler doors not previously equipped with functioning auto-closers. Walk-in doors must have strip curtains in place. The auto-closer must firmly close the door when it is within one inch of full closure.

## Anti-Sweat Control

Anti-sweat heat controls installed on a commercial glass door cooler or refrigerator utilizing humidity or conductivity control. This incentive does not apply to special doors with low/no anti-sweat heat. Control must use “on demand” defrost controls that sense space humidity or glass moisture. Controls must cycle or turn off heat when no condensate is present.

## Evaporator Fans

Evaporator fan motors in existing reach-in and walk-in freezers and coolers can be retrofitted with high-efficiency motors and/or controllers. Existing equipment to be retrofitted is assumed to be operating continuously and at full speed prior to the retrofit.

The eligible equipment for high-efficiency evaporator fan motors is electronically commutated (ECM) or permanent split capacity (PSC) motors. Existing shaded pole (SP) motors can be retrofitted with either ECMs or PSCs. Existing PSC motors can only be retrofitted with ECMs. Eligible fan motor controls can either be 2-speed (hi/low) or cycle the fans (on/off). Controls must cut fan motor power by at least 75 percent during the compressor “off” cycle.

## Head/Suction Pressures

Refrigeration systems having compressors with motors rated 1 horsepower or larger are eligible. A head pressure control valve (flood-back control valve) must be installed to lower minimum condensing head pressure from fixed position (180 psig for R-22; 210 psig for R-404a) to a saturated pressure equivalent to 70°F or less. Either a balanced-port or electronic expansion valve that is sized to meet the load requirement at a 70 degree condensing temperature must be installed.

Alternatively, a device may be installed to supplement refrigeration feed to each evaporator attached to condenser that is reducing head pressure.

Incentive for both pressure controls are based on system compressor hp.

## Vending Machine Control

Non-refrigerated snack vending machine controller must be equipped with a passive infrared occupancy sensor, a duplex receptacle, and a power cord for connecting the device to 120V power. Qualified controllers power down the machine when the surrounding area is unoccupied.

## Kitchen Equipment

### Dishwashers

Undercounter and non undercounter type commercial dishwashers must replace existing like equipment that has reached the end of its useful life and be located in the following types of businesses: pizza (not take-and-bake), commercial cafeteria (e.g., hospital), full service restaurants, or fast food. New dishwasher must be [ENERGY STAR](#)<sup>®</sup> qualified, have electric water heating and be used for at least 12 hours per day. Units with either electric or gas booster heaters are eligible.

### Electric Combination Oven

New electric combination ovens may replace existing standard electric combination ovens. New oven must be [ENERGY STAR](#) qualified and replace an oven of same or greater pan size.

### Electric Convection Oven

New electric convection ovens may replace existing standard electric convection ovens. New oven must be [ENERGY STAR](#) qualified.

### Electric Fryer

New electric fryer may replace existing standard electric fryer. New fryer must be [ENERGY STAR](#) qualified.

### Electric Steamer

New electric steamer may replace existing standard electric steamer. New steamer must be [ENERGY STAR](#) qualified and replace a steamer of same or greater pan size

### Kitchen Hood Variable Speed Drive

This incentive is available for variable speed/frequency drives (VSD/VFD) installed on commercial kitchen hood makeup and/or exhaust motors. The hood’s control system must sense cooking conditions, which allows the system to automatically vary the rate of the exhaust and fan speed, accordingly. The VSD/VFD must be on a variably-loaded motor and must be installed in accordance with the Institute for Electrical and Electronics Engineers (IEEE) Standard 519 and Idaho Power’s Rule K, Customer’s Load and Operations Tariff.

**Manufacturer specification sheets for the equipment purchased must accompany the application.**