

# Commercial & Industrial Energy Efficiency Retrofits - Other Commercial Worksheet



Please complete this worksheet for energy-saving measures you're installing. **To qualify, the project must meet the applicable specifications stated on both pages of this worksheet.** The total incentive for each measure is determined by the quantity multiplied by the per unit incentive ( $Q \times I = TI$ ). When completed, attach this worksheet to your application form.

*Note: Projects with an estimated incentive of \$1,500 or greater should receive pre-approval from Idaho Power prior to equipment installation.*

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

Replacing	Installing	Quantity (Units)	Incentive (Per Unit)	Total Incentive
<b>Office Equipment</b>				
P1 No central control	PC network power management installed on desktop units	_____ PC	\$10.00	\$ _____
P8 No existing load, motion, or timer-controlled power strip	Load-sensing, motion-sensing, or timer-controlled power strip	_____ strip	\$10.00	\$ _____
<b>Laundry Machines</b>				
P2 Standard washer, electric hot water	ENERGY STAR® qualified washer	_____ washer	\$125.00	\$ _____
<b>Stock Tank De-icer</b>				
O1 No existing thermostatically-controlled de-icer	Thermostatically-controlled stock tank de-icer	_____ unit	\$50.00	\$ _____
<b>Commercial Showerhead Using Electric Hot Water</b>				
P6 Showerhead using 2.2 gpm or greater	2.0 gpm or less installed in health club/fitness business	_____ unit	\$15.00	\$ _____
P7 Showerhead using 2.2 gpm or greater	2.0 gpm or less installed in commercial business (non health club/fitness)	_____ unit	\$9.00	\$ _____
<b>Engine Block Heater and Controls</b>				
P9 Thermosiphon electric resistance circulating block heater < 3 kW	Stationary pump-driven circulating block heater; must operate continuously < 3 kW	_____ unit	\$200.00	\$ _____
3 kW or greater	3 kW or greater	_____ unit	\$1,500.00	\$ _____
O2 Standard engine block heater without controls	Wall-mounted engine block heater control	_____ unit	\$50.00	\$ _____
O3 Standard engine block heater without controls	Engine-mounted engine block heater control	_____ unit	\$100.00	\$ _____
<b>High Volume Low Speed Fan</b>				
O4 Standard 48" high speed fan	High volume low speed fan	_____ fan	\$2,000.00	\$ _____
<b>Compressed Air Equipment</b>				
O5 Standard Filter	Low pressure drop filter	_____ hp	\$7.50	\$ _____
O6 Open tube with ball valve	No-loss condensate drain	_____ unit	\$300.00	\$ _____
O7 Standard air nozzle	Efficient compressed air nozzle ≤1/4"	_____ unit	\$30.00	\$ _____
O8 Standard air nozzle	Efficient compressed air nozzle >1/4"	_____ unit	\$60.00	\$ _____
O9 Standard air dryer	Cycling refrigerated compressed air dryer	_____ CFM	\$2.00	\$ _____
O10 No existing VFD	VFD on air compressor	_____ hp	\$150.00	\$ _____
<b>Motor Belts</b> (*Incentive capped at \$50/motor)				
O11 Type A solid V-belt drive	Type AX notched V-belt drive	_____ hp	\$5.00*	\$ _____
O12 Type B solid V-belt drive	Type BX notched V-belt drive	_____ hp	\$5.00*	\$ _____
O13 Standard fan belt	Synchronous belt	_____ hp	\$35.00	\$ _____
<b>Dairy VFD</b>				
V4 No Existing VFD	VFD on milking vacuum pump	_____ hp	\$250.00	\$ _____
<b>Total</b>				<b>\$</b> <span style="border: 1px solid black; padding: 5px;">_____</span>

Checklists for Submission	
<b>Pre-Approval Checklist</b> Signed/Dated Non-Lighting Application Other Commercial Worksheet (completely filled out) Manufacturer Specification Sheets Harmonic Mitigation Specification Sheets (if applicable)	<b>Payment Checklist</b> Signed/Dated Non-Lighting Application Other Commercial Worksheet (completely filled out) Invoices for Material & Labor

## Specifications for Other Commercial

### Office Equipment

#### PC Network Power Management

System controls must provide a network-level management interface for the control of power functions of networked PCs. This incentive applies to desktop units only. Qualifying products use time-regulated power schemes to switch PCs into low power states when users are away from their PCs during work hours, or turned off during non-work hours.

#### Smart Power Strips

This incentive applies to electric plug load applications in commercial offices, such as computers, printers, desk lamps, radios, and personal heaters. Smart power strips that are classified as load-sensing, motion-sensing, or timer-controlled are eligible.

#### Laundry Machines

New [residential](#) or [coin-operated commercial style](#) washing machines used in a qualifying facility can earn an incentive for ENERGY STAR® labeled models that are used in conjunction with electric water heating and electric dryers. Large commercial or industrial hard-mounted laundry machines are not eligible for this incentive.

#### Stock Tank De-Icer

New thermostatically-controlled de-icer replacing a functioning, non-thermostatically controlled de-icer. Floating units, submersible units, and units that fit into existing drain plugs are eligible.

#### Showerhead

New showerheads must use electric hot water and meet the efficiency rating indicated on this worksheet.

#### Engine Block Heater and Controls

##### Standby Generator Engine Block Heater

Qualifying standby generator engine block heater must be a stationary generation set. Unit must be installed by a certified installer. Training is free and found at <http://www.hotstart.com/en/home/products/hotflow/hotflow-technician-certification-training/>. Verification of existing equipment to be replaced will require pre-inspection or other methods as approved by Idaho Power. Proof of verification of new equipment installation is required (in addition to invoices). Post inspection or photos may suffice, as approved by Idaho Power.

##### Engine Block Heater Controls

An incentive is available for adding wall-mounted or engine-mounted controls where none existed previously. Eligible equipment automatically cycles the heater on and off based on need, instead of running continuously. Wall-mounted heater controls have a 2-hour delay when plugged in after vehicle use and only turns on when the outside air drops below a certain threshold. Engine-mounted controls cycle the heater based on the engine temperature.

#### Motor Belts

This incentive applies when replacing straight V-belt drives with notched V-belt drives in non-residential applications operating at least 2,616 hours per year. A notched V-belt uses the same sheaves as the standard V-belt. They reduce the bending force on the belt and will run cooler, and last longer, than a standard V-belt. The incentive is capped at \$50.00/motor for V-belts. Synchronous fan belts that operate at least 5,310 hours per year require the motor to be retrofitted, and once retrofitted, a notched or standard belt will no longer work.

### **High Volume Low Speed Fan**

An incentive is available for the installation of a high volume low speed fan (HVLS) for air circulation in spaces with high ceilings that replace standard 48" high speed fans operating to provide thermal comfort. HVLS fans provide greater air flow for the same amount of energy as compared to a standard fan. HVLS fans are programmed to operate only during business hours and only when needed for thermal comfort.

### **Compressed Air Equipment**

#### **Low Pressure Drop Filter**

The typical compressed air filter has a pressure drop that starts at 3 psi and ends at 5 psi. This incentive is for the installation of a low-pressure air filter with a pressure drop that starts at 1 psi and ends at 3 psi. The decrease in pressure drop means that the compressor will use less energy delivering the required compressed air psi.

#### **No-loss Condensate Drain**

Compressed air causes the system to build up condensate that needs to be drained occasionally. Typical drains use high pressure to exhaust the condensate out, but they also exhaust some compressed air. The no-loss condensate drain replaces an open tube with ball valve to limit the amount of air waste. The no-loss condensate drain monitors the amount of condensate present and then exhausts only the condensate without wasting any compressed air.

#### **Efficient Compressed Air Nozzle**

A compressed air nozzle is used to blow off parts or for drying. The high-efficiency air nozzle delivers the same performance as a standard air nozzle, while using less airflow.

#### **Cycling Refrigerated Compressed Air Dryer**

The air dryer in the compressed air cycle prevents excess condensate from forming in the compressed air supply lines, which can damage the system if not controlled. An incentive is provided for an efficient air dryer that cycles on and off based on the part load demand (versus the typical dryer that remains on the entire time).

#### **Air Compressor VFD**

An incentive is available for the installation of a VFD installed on the air compressor and programmed to allow the compressor to vary in speed based on load demand.

#### **Dairy Milking Vacuum Pump VFD**

Eligible equipment is a VFD installed on a dairy milking vacuum pump that has no VFD. Only primary pumps are eligible. Secondary or backup units are not eligible.

### **All VSD/VFD projects must meet the following criteria**

- Incentives apply to new equipment and new installations only. Replacement VSD/VFDs are not eligible.
- VSD/VFD 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.
- Throttling or bypass devices such as inlet vanes, dampers, three-way valves or throttling valves must be removed or permanently disabled to qualify for an incentive.
- Incentives are based on the drive horsepower or the motor horsepower that the drive controls, whichever is less. The motor must be a minimum of 5 horsepower, operate at minimum 2,000 hours per year, and be variably-loaded. The VSD/VFD installation must save energy on the equipment that it is installed on. Motors that are individually less than 5 hp are eligible provided they are controlled by a common VFD and the combined motor hp controlled per VFD is  $\geq 5$  hp.
- Manufacturer specification sheets for the VSD/VFD must accompany the Non-Lighting Application.
- Manufacturer specification sheets for harmonic mitigation, when required, must accompany the application.

**Note: Manufacturer's specification sheets for the equipment purchased must accompany the application.**