

Easy Upgrades Lighting/Controls Worksheet



Effective January 5, 2009. Please complete this worksheet for your lighting fixtures, controls and other equipment retrofits. To qualify, the project must save energy and meet the applicable specifications stated on the back of this worksheet. Your total incentive for each measure will be the quantity multiplied by the per unit incentive ($Q \times I = TI$). When completed, attach this worksheet to your application form.

Easy Upgrades Application # EZ _____

Installing	Replacing ¹	Operating ² Hours/Year	Quantity (Units)	Incentive (Per Unit)	Total Incentive
T8 Fluorescents					
L1	1- or 2-lamp 4' T8 fixture	1- or 2-lamp 4' T12 fixture	_____ fixtures	\$14.00	\$_____
L2	3-lamp 4' T8 fixture	3-lamp 4' T12 fixture	_____ fixtures	\$24.00	\$_____
L3	4-lamp 4' T8 fixture	4-lamp 4' T12 fixture	_____ fixtures	\$32.00	\$_____
L4	1- or 2-lamp 8' T8 fixture	1- or 2-lamp 8' T12 fixture	_____ fixtures	\$26.00	\$_____
L5	1- or 2-lamp 8' T8 HO fixture	1- or 2-lamp 8' T12 HO fixture	_____ fixtures	\$46.00	\$_____
L6	4-lamp 4' T8 High Bay fixture	Fixture drawing 250 W or more	_____ fixtures	\$80.00	\$_____
L7	6-lamp 4' T8 High Bay fixture	Fixture drawing 400 W or more	_____ fixtures	\$120.00	\$_____
L8	8-lamp 4' T8 High Bay fixture	Fixture drawing 750 W or more	_____ fixtures	\$190.00	\$_____
L9	Low wattage T8 lamps	Standard wattage T8 lamps	_____ lamps	\$0.50	\$_____
T5 Fluorescents					
L10	1- or 2-lamp 4' T5 fixture	1- or 2-lamp 4' T12 fixture	_____ fixtures	\$14.00	\$_____
L11	3-lamp 4' T5 fixture	3-lamp 4' T12 fixture	_____ fixtures	\$24.00	\$_____
L12	4-lamp 4' T5 fixture	4-lamp 4' T12 fixture	_____ fixtures	\$30.00	\$_____
L13	2-lamp 4' T5 HO fixture	4-lamp 4' T12 fixture	_____ fixtures	\$28.00	\$_____
L14	3-lamp 4' T5 HO fixture	Fixture drawing 250 W or more	_____ fixtures	\$50.00	\$_____
L15	4-lamp 4' T5 HO fixture	Fixture drawing 400 W or more	_____ fixtures	\$90.00	\$_____
L16	6-lamp 4' T5 HO fixture	Fixture drawing 400 W or more	_____ fixtures	\$60.00	\$_____
Fluorescent Lamp/Fixture Delamping					
L17	Delamping fixtures	In a T12 fixture to T8 or T5 retrofit	_____ lamps	\$12.00	\$_____
Efficient Metal Halide (MH) Lighting					
L18	30–70 W efficient MH fixture	Fixture drawing at least 20 W more	_____ fixtures	\$18.00	\$_____
L19	70–150 W efficient MH fixture	Fixture drawing at least 25 W more	_____ fixtures	\$22.00	\$_____
L20	150–250 W efficient MH fixture	Fixture drawing at least 40 W more	_____ fixtures	\$26.00	\$_____
L21	250–360 W efficient MH fixture	Fixture drawing at least 80 W more	_____ fixtures	\$55.00	\$_____
L22	360–500 W efficient MH fixture	Fixture drawing at least 120 W more	_____ fixtures	\$75.00	\$_____
L23	500 W+ efficient MH fixture	Fixture drawing at least 200 W more	_____ fixtures	\$105.00	\$_____
Lighting Controls					
L24	Occupancy sensor, wall or ceiling	Manual light switch	_____ sensors	\$40.00	\$_____
L25	Photocell dimming control	No prior dimming control	_____ control	\$40.00	\$_____
L26	Central lighting control system	Manual switches or no control	_____ ft ² floor area	\$0.10	\$_____
L27	Auto-off time switch	Controlling 100 W or more	_____ switches	\$20.00	\$_____
L28	Time clock control	No prior control	_____ controls	\$20.00	\$_____
Compact Fluorescents (CFLs) or Light Emitting Diodes (LEDs)					
L29	Screw-in lamp (25 W or less)	Fixture drawing 40 W or more	_____ lamps	\$2.00	\$_____
L30	Larger wattage screw-in lamp	Fixture drawing 100 W or more	_____ lamps	\$4.00	\$_____
L31	CFL or LED hardwired fixture	Incandescent or other fixture	_____ fixtures	\$15.00	\$_____
Sign Lighting					
L32	LED or equivalent exit sign	Incandescent or Fluorescent exit sign	_____ exit sign	\$15.00	\$_____
L33	LED or equivalent sign lighting	Marquee/Sign lighting	_____ ft ² sign area	\$15.00	\$_____

Notes: 1) "Replacing" fixtures are shown as typical examples. Existing fixtures of equal or greater wattage are also eligible for the same incentive.
2) "Operating Hours" is an estimate of the annual On time for these lights.

Lighting Controls Total

\$

Specifications for Lighting/Controls Measures

Effective January 5, 2009

T8 Fluorescents

The incentive will be applied to the installed fixture count unless the initial (prior) fixture count is less. In that case, the incentive will be based on the prior fixture count.

In cases where the lighting system is being converted from 8-foot fixtures to 4-foot fixtures with the same number of lamps, the prior fixture count will be multiplied by 2 to determine the limiting fixture amount.

For high bay installations, the fixtures replaced can be incandescent, fluorescent or a high intensity discharge (HID) source such as mercury vapor or metal halide.

Fixtures installed must include lamps with a minimum color rendering index (CRI) of 80 and ballasts with a power factor of 90% or more, total harmonic distortion (THD) of 20% or less at full output, and an initial fixture efficacy of 80 lumens per watt (LPW).

The low wattage T8 lamp incentive applies where the nominal lamp wattage is 30 Watts or less. That amount can be added to a fixture retrofit incentive or applied to a T8 system relamping project. Manufacturer's specification sheets for those lamps must accompany the application.

T5 Fluorescents

The incentive will be applied to the installed fixture count unless the initial (prior) fixture count is less. In that case, the incentive will be based on the prior fixture count.

In cases where the lighting system is being converted from 8-foot fixtures to 4-foot fixtures, the prior fixture count will be multiplied by 2 to determine the limiting fixture amount.

For high bay installations, the fixtures replaced can be incandescent, fluorescent, or a high intensity discharge (HID) source such as mercury vapor or metal halide.

Fixtures installed must include lamps with a minimum color rendering index (CRI) of 80 and ballasts with a total harmonic discharge (THD) of 20% or less at full output.

Delamping

Delamping is the permanent removal of existing fluorescent lamps. Applicant is responsible for ensuring adequate light levels are maintained following delamping.

This measure is applicable when retrofitting from T12 to T8 or T5 fluorescents or simply delamping a T8 fixture where unused lamps, ballasts and lamp holders are permanently removed from the fixture. It is not available for delamping a T12 fixture or when high output (HO) or very high output (VHO) lamps are involved.

Where a lighting retrofit results in fewer fixtures, a delamping bonus can also apply based on the difference in the number of operational lamps in the prior system (after any earlier delamping) and the new system.

Metal Halide (MH) Lighting

Only building lighting upgrades qualify for incentives; street, area or parking lot lighting systems are not eligible. Efficient metal halide (MH) fixtures include pulse-start or ceramic MH that are replacing higher wattage standard MH, mercury vapor, incandescent or other fixtures. Pulse-start units shall consist of a pulse-start ballast with a matched MH lamp. Ceramic MH units qualify only when replacing larger wattage incandescent or halogen lighting. Documentation of prior lighting wattage must accompany the application.

Lighting Controls

Passive infrared and/or ultrasonic detectors are eligible. Wall box and wall- or ceiling-mounted sensors must be hardwired and control interior lighting fixtures. Installations with manual "On" overrides are not eligible. Photocells must be part of a daylighting system that offers dimming that is continuous or stepped at four or more levels.

Central lighting control systems are building-integrated, lighting-only, microprocessor-based, multi-station controls designed to manage central lighting systems. Incentives are based on the floor area affected by the control system.

Only time switches or time clocks controlling building lighting where no switch existed prior can qualify.

Installations of sensors and controls must comply with manufacturer's guidelines on coverage and maximum controlled watts. Manufacturer's specification sheets must accompany the application.

Compact Fluorescents

Incentives apply to screw-in compact fluorescent lamps (CFLs) and light emitting diodes (LEDs) or hardwired CFL or LED fixtures where a higher wattage lamp or fixture is being replaced.

All CFLs must be ENERGY STAR[®] rated and have an efficacy of at least 40 lumens per watt (LPW). Cold cathode or LED technologies are eligible when they can meet the same specifications. Manufacturer's specification sheets must accompany the application.

Any lamp or fixture receiving a retail buy-down through Idaho Power is not also eligible for this incentive.

Sign Lighting

High efficiency exit signs must replace existing incandescent or fluorescent exit signs. Exit signs that are UL or ETL listed and draw less than 5 watts are eligible.

Sign and marquee lighting must operate at least 10 hours per day. Incentives are based on sign face area.

Manufacturer's specification sheets for the exit signs or sign fixture must accompany the application.