

MULTIFAMILY INCENTIVE WORKBOOK

A FAMILY OF ENERGY-SAVING SOLUTIONS

Make room for energy efficiency

Energy Trust of Oregon knows energy-efficient solutions may contribute to increased tenant comfort, shorter vacancy periods and reduced operating and maintenance costs. But more importantly, they make good business sense. According to ENERGY STAR®, reducing energy use in multifamily buildings can enhance asset value, increase net operating income and raise occupancy rates.

Energy Trust can help you capture these benefits and earn cash incentives for energy-efficient equipment and systems with our market solutions for multifamily properties of less than 70,000 square feet. Whether you're planning a new multifamily property or considering a major renovation, it provides a simple way to pinpoint the best energy solutions for your project.

Energy Trust outreach managers can offer input and feedback as you make energy-related decisions and assist you in completing this workbook. If you have questions or need help getting started, contact the outreach manager listed here.

Name

Email

Phone number

HOW TO USE THIS WORKBOOK

What is the multifamily incentive package?

This package offers an all-in-one, step-by-step process for designing and selecting energy-efficient equipment and systems that qualify for cash incentives. To help you save as much energy as possible and maximize your incentive benefit, we have grouped the equipment and practices to align with three efficiency tiers. To participate, you must satisfy the base requirements for the "Good" tier (refer to the table below for further detail). You may then select additional elective equipment and systems to qualify for the increased incentives available in the "Better" and "Best" tiers.

	REQUIREMENT	INCENTIVE
BEST	"Good" requirements + 5 or more additional electives	\$0.40/sq ft
BETTER	"Good" requirements + 3 to 4 additional electives	\$0.30/sq ft
GOOD	+ 80% high-performance lighting fixtures in all living units + 15% reduction in lighting power density in common areas below current code requirements + Install low-flow fixtures on kitchen sink (1.5 GPM), bathroom sink (0.5 GPM) and shower (1.75 GPM) + Install ENERGY STAR refrigerators and clothes washers	\$0.20/sq ft

STEP 1 Complete **Lighting** and provide necessary supporting documentation. *(Required)*

STEP 2 Complete **Fixtures and Appliances** and provide necessary supporting documentation. *(Required)*

STEP 3 Review **Electives**, choose all that apply, complete necessary information and provide supporting documentation.

Project name

HVAC fuel type (required)

DHW fuel type (required)

Number of floors

Square footage* (required)

Please note: This offering is available to multifamily buildings that are less than 70,000 square feet.

If the building is equal to or greater than 70,000 square feet, please see the "Large Multifamily Incentive Application."

*Please include only living units and conditioned common areas.

STEP 1: LIGHTING

Efficiency requirements

All projects must achieve a maximum lighting power density, LPD, of 0.49 watts per square foot in common areas, excluding parking structures. This represents a 15 percent reduction in LPD beyond what is required in the whole-building lighting power allowance for multifamily buildings in the 2014 Oregon Energy Efficiency Special Code, OEESC (see [Table 505.5.2\(a\) of the 2014 OEESC](#) for further detail). If you use space-by-space lighting power allowances, you must demonstrate an overall LPD reduction of 15 percent (see [Table 505.5.2\(b\) of the 2014 OEESC](#) for further detail).

Project information

Please fill in the table below to indicate the LPD target you have selected.

Common Area Square Footage	Total Allowed Watts	Total Proposed Watts	% Better Than Code	Supporting Documentation
				<ul style="list-style-type: none"> Lighting plans and schedules ComCheck documentation Invoice(s)*
80% or more of installed lighting fixtures in all living units are high performance.**		Lighting Fixture Make/Models		
Yes <input type="checkbox"/> No <input type="checkbox"/>				

*If invoices are not available, program can conduct a site visit as equipment verification.

**High performance translates to the following fixtures: ENERGY STAR certified, DesignLights Consortium, DLC, rated, 4 pin or GU24 CFL, linear fluorescent with Consortium for Energy Efficiency, CEE, listed lamps and ballast. Other products may qualify. Please contact program for eligibility.

STEP 2: FIXTURES AND APPLIANCES

To qualify for incentives, you must install the fixtures and appliances specified below.

Meets Requirement	Measure	Requirements	Additional Information	Installed Quantity	Supporting Documentation
<input type="checkbox"/>	Low-flow kitchen sink fixtures	Kitchen aerators must be rated at 1.5 GPM or less	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*
<input type="checkbox"/>	Low-flow bathroom sink fixtures	Bath aerators must be rated at 0.5 GPM or less	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*
<input type="checkbox"/>	Low-flow shower fixtures	Showerheads/wands must be rated at 1.75 GPM or less	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*
<input type="checkbox"/>	ENERGY STAR refrigerator in all living units	ENERGY STAR certified	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*
<input type="checkbox"/>	<ul style="list-style-type: none"> Clothes washers installed in living units: Residential ENERGY STAR and/or <ul style="list-style-type: none"> Clothes washers installed in central laundry area: Commercial ENERGY STAR 	ENERGY STAR certified	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*
			Make: Model:		

*If invoices are not available, program can conduct a site visit as equipment verification.

STEP 3: ELECTIVES

Installing additional energy-efficient equipment and systems can increase your energy savings and help your project qualify for higher incentives. The following tables present elective options for multifamily projects. If you install three or four electives you will earn the "Better" incentive. To qualify for "Best," you must install five or more electives. Indicate the electives you plan to install in the tables below and provide the corresponding installation details.

EXTERIOR LIGHTING

Section 505.6.2 of the 2014 OEESC sets limits on the amount of lighting allowed for your site. The total lighting power allowance for all exterior building applications is the sum of the base site allowance plus the individual allowances for all areas that are to be illuminated. You can lower your site's energy use and receive incentives by reducing the amount of installed exterior lighting. To qualify as an elective, the site's exterior lighting must calculate to be at least 10 percent more efficient than code and meet Energy Trust's cost-effectiveness criteria.

Check to Select	Total Allowed Watts	Total Proposed Watts	% Better Than Code	Supporting Documentation
<input type="checkbox"/>				<ul style="list-style-type: none"> Lighting plans and schedule ComCheck documentation Invoice(s)*

BI-LEVEL LIGHTING IN CORRIDORS

Corridors are good candidates for bi-level lighting due to periods of low to no occupancy. It is common for these spaces to have lights on all day, regardless of the lighting need. Bi-level fixture controls present an opportunity to save energy by dimming light levels when areas are unoccupied. Bi-level lighting controls can also turn off perimeter light fixtures for much of the day in areas that receive sufficient daylight to meet lighting needs.

Check to Select	Square Footage of Corridors	Requirement	Number of Sensors	Supporting Documentation
<input type="checkbox"/>		50% reduction of lighting output when corridors are unoccupied		<ul style="list-style-type: none"> Lighting plans and schedule Sensor/controller cutsheet Invoice(s)*

25% LIGHTING POWER REDUCTION IN COMMON AREAS**

Check to Select	Common Area Square Footage	Total Allowed Watts	Total Proposed Watts	% Better Than Code	Supporting Documentation
<input type="checkbox"/>					<ul style="list-style-type: none"> Lighting plans and schedule ComCheck documentation Invoice(s)*

*If invoices are not available, program can conduct a site visit as equipment verification.

**LPD less than or equal to 0.44 watts per square foot

BATHROOM FANS

ENERGY STAR fans (one elective credit) are designed to provide better efficiency and comfort with less noise. They typically feature high-performance motors and improved blade design, which can result in better performance and longer life. Installing adequate ventilation may also help control moisture and improve indoor air quality.

High-performance bathroom fans (two elective credits) are designed to reach an even greater level of performance and energy savings. Qualified high-performance fans typically feature quiet operation, outstanding durability and superior ventilation with fan efficiency greater than 10 CFM/watt.

Check to Select	Measure	Requirements	Additional Information	Installed Quantity	Supporting Documentation
<input type="checkbox"/>	ENERGY STAR bathroom fan (ventilation fan)	ENERGY STAR certified	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*
	or				
<input type="checkbox"/>	High-performance bathroom fan (ventilation fan)	>10 CFM/watt	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*

DOMESTIC HOT WATER

Efficient water heating systems can enhance energy savings while contributing to a healthy environment. Using these products can help you save money on your utility bills and protects the environment by saving energy. Please select only one of the options below.

Check to Select	Measure	Requirements	Additional Information	Installed Quantity	Supporting Documentation
<input type="checkbox"/>	Condensing tank water heater (commercially rated, central unit)	91% thermal efficiency or energy factor, EF	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*
<input type="checkbox"/>	Tankless/instantaneous water heater ≥ 200 kBtuh	<ul style="list-style-type: none"> 94% thermal efficiency Electronic ignition Condensing only Must be a commercially rated unit 	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Invoice(s)*

*If invoices are not available, program can conduct a site visit as equipment verification.

PREMIUM ELECTIVES (THREE ELECTIVE CREDITS)

Check to Select	Measure	Requirements	Additional Information	Installed Quantity	Supporting Documentation
<input type="checkbox"/>	Air barrier (electric heat only)	<ul style="list-style-type: none"> Seal building envelope joints, seams, penetrations, openings and other junctions to limit infiltration Air barrier materials must have an air permeability no more than 0.004 CFM/ft² under a differential pressure of 0.3" in water Refer to Section 502.4.1.2.1 of the 2014 OEESC for more information 	Air barrier material:	N/A	<ul style="list-style-type: none"> Photos of air barrier being installed (before walls/building are closed) Architectural drawings and sections illustrating the details of the air barrier Air barrier project specifications from construction documents
<input type="checkbox"/>	Energy recovery ventilator (electric heat only)	<ul style="list-style-type: none"> Apparent sensible heat recovery effectiveness of at least 65% Fan efficiency of at least 1.2 CFM/watt Must provide energy recovery to all living units 	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Mechanical schedule and/or mechanical plans Invoice(s)*
<input type="checkbox"/>	High-efficiency packaged terminal heat pump, PTHP (electric heat only)	Equipment must be 20% more efficient than minimum required efficiency in Table 503.2.3(3) of the 2014 OEESC	Make: Model:		<ul style="list-style-type: none"> Equipment cut sheets Mechanical schedule and/or mechanical plans Invoice(s)*

*If invoices are not available, program can conduct a site visit as equipment verification.

SPECIAL MEASURES (FORM 520SM)

Each measure counts for one credit.

ADDITIONAL SPECIAL MEASURES

Special measures refer to design features that are not defined in this workbook, but may qualify for incentives. Energy Trust will assess these on a case-by-case basis. Each measure is worth one elective credit and the savings must be equivalent to other electives.

Check to Select	Measure Description	Supporting Documentation
<input type="checkbox"/>		<ul style="list-style-type: none"> Pertinent schedules/contract drawings Completed form 520SM Calculation Incremental cost Invoice(s)*
<input type="checkbox"/>		
<input type="checkbox"/>		

*If invoices are not available, program can conduct a site visit as equipment verification.

CLEAResult

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Energy Trust of Oregon is an independent nonprofit organization dedicated to helping utility customers benefit from saving energy and tapping renewable resources. Our services, cash incentives and energy solutions have helped participating customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas save on energy costs. Our work helps keep energy costs as low as possible, creates jobs and builds a sustainable energy future. **v2016.1**