

SMALL RETAIL INCENTIVE WORKBOOK

BIG SAVINGS FOR SMALL BUSINESSES

RETAIL SPACES INCLUDE

- Gift shops
- Drug stores
- Pet Stores
- Retail Clothing
- Retail Core and Shell
- Others

Reduce operating costs with energy-saving solutions

Incorporating energy-efficient design strategies and equipment into retail buildings is one of the best ways to decrease energy use and increase profitability. It can also reduce your vulnerability to energy price fluctuations, boost sales by creating a more comfortable shopping experience, and demonstrate your commitment to environmental responsibility.

Whether you're planning to build a new store or kicking off a major renovation, Energy Trust of Oregon's Market Solutions package for individual retail spaces less than 70,000 square feet provides a simple way to identify the best energy solutions for your store.

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 small retail incentive package?

Energy Trust’s small retail incentive package is an all-in-one step-by-step process for designing and selecting energy-efficient systems and equipment that qualify for cash incentives. To maximize your energy savings and incentive benefits, we have grouped the equipment to align with three efficiency tiers. To participate, you must satisfy the base requirements for the “Good,” “Better” or “Best” tier. You may then select additional elective equipment and systems to qualify for increased incentives.

	REQUIREMENT	INCENTIVE
GOOD	+ Code-compliant packaged single zone (PSZ) or split system heat pump, or AC unit with gas heat + 15% reduction in lighting power density (LPD) + One or more non-lighting electives	\$0.20/sq. ft.
BETTER	+ High-efficiency PSZ or split system heat pump, or AC unit with gas heat, with economizers and demand controlled ventilation, (DCV) + 15% reduction in LPD	\$0.30/sq. ft.
BEST	“Better” requirements + variable frequency drive (VFD) on supply fan	\$0.50/sq. ft.

ELECTIVES

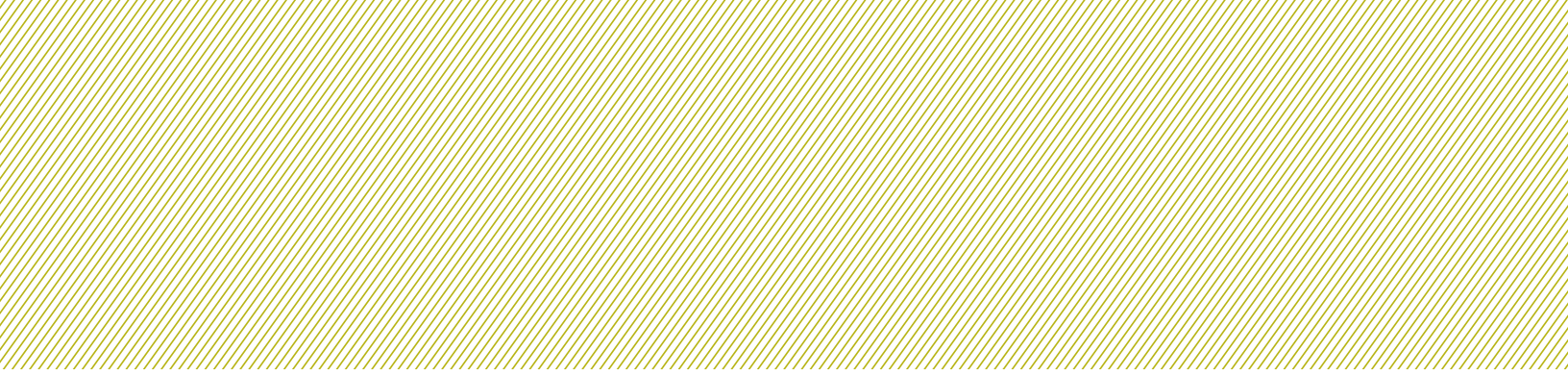
See Step 3 for incentives associated with each option.

- High-performance windows
- Condensing furnace
- Demand controlled ventilation (for “Good” tier only)
- Standard equipment (commercial dishwashers, refrigeration equipment, others as applicable)
- Special Measures

HIGHER-EFFICIENCY INTERIOR LIGHTING (25 percent or more total lighting power reduction)*

	INCENTIVE
Total 25% LPD reduction	\$0.10/sq. ft.
Total 35% LPD reduction	\$0.20/sq. ft.
Total 45% LPD reduction	\$0.30/sq. ft.
Total 55% LPD reduction	\$0.40/sq. ft.

*Additional LPD reduction incentives cannot be combined.



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

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

STEP 3 Review **Electives**, choose all that apply, complete necessary information and provide supporting documentation. (1-2 non-lighting electives required for "Good" tier.)

Project Name

HVAC Fuel Type
(required)

Square Footage
(required)

**Domestic Hot Water
(DHW) Fuel Type**

STEP 1: INTERIOR LIGHTING

Efficiency requirements

All projects must meet a lighting power density, LPD, of no greater than 1.12 watts per square foot. This represents a 15 percent reduction in LPD beyond what is required in the whole-building lighting power allowance in the 2014 Oregon Energy Efficiency Specialty Code, OEESC. See [Table 505.5.2\(a\) of the 2014 OEESC](#) for further detail. If compliance is shown by using the 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).

For LPD reductions over the required 15 percent, you may be eligible for additional incentives: a total 25 percent reduction is worth \$0.10 per square foot, a total 35 percent reduction is worth \$0.20 per square foot, a total 45 percent reduction is worth \$0.30 per square foot, and a total 55 percent reduction is worth \$0.40 per square foot.

Project information

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

Square Footage	Total Allowed Watts	Total Proposed Watts	% Better than Code	Supporting Documentation
				<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.

STEP 2: HVAC

Selecting your HVAC system

Selecting an HVAC system and properly sizing the equipment is fundamental to ensuring optimal building performance. Each of our three HVAC options corresponds to the tiered incentives presented on Page 2.

The most common HVAC system types for retail are air conditioning units with gas heating or heat pumps. Please note that all HVAC units that are 4.5 tons total cooling capacity or greater require supply air economizers. Select your system from the table below and complete the project information tables in **HVAC Section 1**. For “Better” and “Best” tier projects, complete the additional information tables in **HVAC Section 2** and **HVAC Section 3** (“Best” tier only).

Check Box	Tier	HVAC Requirement	Documentation
<input type="checkbox"/>	Good	New or existing code-compliant HVAC unit (PSZ or split system heat pump) or AC unit with gas heat	See HVAC Sections 1
<input type="checkbox"/>	Better	High-efficiency HVAC system (PSZ or split system heat pump) or AC unit with gas heat, with functional economizers and DCV on all units	See HVAC Sections 1 & 2
<input type="checkbox"/>	Best	High-efficiency HVAC system (PSZ or split system heat pump) or AC unit with gas heat, with functional economizers and DCV on all units AND VFD on supply fans	See HVAC Sections 1, 2, & 3

HVAC Section 1: HVAC System Information (required for all projects)

You are required to complete a project information table for your HVAC system in this section, regardless of your tier.

PROJECT INFORMATION (GAS)

If installing AC units with gas heating, please enter your project information in the table below (general efficiency requirements are listed below this table for your reference).

Quantity	AC Unit Size	AC Unit Efficiency		AC Make/Model	Furnace Information		Furnace Make/Model
		Heating	Cooling		Size	Efficiency	

GENERAL EFFICIENCY REQUIREMENTS (GAS)

Size	Code-Compliant Cooling Efficiency	Better/Best Cooling Efficiency	Gas Furnace % Efficiency
<65,000 Btu/h	13.0 SEER (split system) 14.0 SEER (PSZ)	15.0 SEER (split system or PSZ)	80% thermal efficiency
≥65,000 Btu/h and <135,000 Btu/h	11.0 EER/12.6 IEER	12.0 EER/13.8 IEER	
≥135,000 and <240,000 Btu/h	10.8 EER/12.2 IEER	12.0 EER/13.0 IEER	

REQUIRED HVAC SYSTEM DOCUMENTATION

- Mechanical schedules and/or cut sheets showing the AC equipment model number, size and cooling efficiency
- Mechanical schedules and/or cut sheets indicating furnace size and efficiency
- Invoices showing purchase date and quantity of equipment listed above (if invoices are not available, program can conduct a site visit as equipment verification)

PROJECT INFORMATION (ELECTRIC)

If installing electric heat pumps, please enter your project information in the table below (general efficiency requirements are listed below this table for your reference).

Quantity	HP Size (tons)	HP Efficiencies		HP Make/Model
		HSPF/COP	SEER/EER	

GENERAL EFFICIENCY REQUIREMENTS (ELECTRIC)

Heat Pump Size	Code-Compliant Cooling Efficiency	Code-Compliant Heating Efficiency	Better/Best Cooling Efficiency	Better/Best Heating Efficiency
<65,000 Btu/h	14.0 SEER	8.2 HSPF (split system) 8.0 HSPF (PSZ)	15.0 SEER/ 12.5 EER (split system) 12.0 EER (PSZ)	8.5 HSPF (split system) 8.0 HSPF (PSZ)
≥65,000 Btu/h and <135,000 Btu/h	11.0 EER/12.0 IEER	3.3 COP (47°F db)	11.3 EER/12.2 IEER	3.4 COP (47°F db)
≥135,000 and <240,000 Btu/h	10.6 EER/11.6 IEER	3.2 COP (47°F db)	10.9 EER/11.6 IEER	3.2 COP (47°F db)

HVAC Section 2: Economizer and Demand Controlled Ventilation Requirements (“Better” and “Best” tiers)

To achieve the “Better” and “Best” incentive tiers, you must install a high-efficiency HVAC system with functional economizers and DCV on all units. Complete the table below and submit all required documentation.

PROJECT INFORMATION: ECONOMIZERS AND DEMAND CONTROLLED VENTILATION				
Quantity	AC Unit Size	Economizer Factory Installed?	Economizer Changeover Set Point/Dry-Bulb Limit	DCV CO ₂ Sensors within Spaces?

HVAC Section 3: Variable Frequency Drive Requirements (“Best” tier)

To achieve the “Best” incentive tier, you must also install variable frequency drives (VFDs) on all supply fans. Two-speed motors or VFD and controls on supply fans are required by code (see [OEESC 503.2.10.3.2](#) for further detail) for all units greater than or equal to 9 tons that serve single zones. Complete the table below and submit all required documentation.

PROJECT INFORMATION: VARIABLE FREQUENCY DRIVES			
Quantity	AC Unit Size	Size of Supply Fan Motor (hp)	Installed VFD

REQUIRED ECONOMIZER AND DCV DOCUMENTATION

- Economizer and temperature sensor cut sheets
- Email from owner/contractor to verify that economizers were correctly installed
- Drawings/floor plans that show proper CO₂ sensor location
- Ventilation schedule
- Invoices that include purchase date and quantity of equipment listed in the product information table (if invoices are not available, program can conduct a site visit as equipment verification)

REQUIRED VFD DOCUMENTATION

- Equipment cut sheets and invoices that include the VFD installed on supply fan motors
- Narrative describing how fan speed will be controlled (e.g., static pressure and temperature)

STEP 3: ELECTIVES

Installing additional energy-efficient equipment and systems can increase your energy savings and qualify your project for higher incentives. The following tables present elective options for small retail projects. To qualify for the “Good” incentive tier, you must install one or two electives. In the “Good” tier, each elective after the initial two non-lighting electives may earn your project additional incentives (the elective(s) with the highest incentive dollar value will earn the additional incentive in this case).

If you qualify for the “Better” or “Best” tier, each installed elective may earn your project additional incentives. Indicate the electives you plan to install in the tables below.

Electives Section 1: HVAC and Windows

Each elective in the tables below may earn your project additional incentives. The following electives are worth \$0.10 per square foot, unless stated otherwise. Please select any electives you plan to install and provide the corresponding details in the tables below.

HVAC					
Check to Select	Measure	Additional Information	Installed Quantity	Requirements	Supporting Documentation
<input type="checkbox"/>	Demand controlled ventilation (only eligible for “Good” tier)		# of sensors:	<ul style="list-style-type: none"> The ventilation must be throttled below a CO₂ concentration of 800 ppm within the space (maximum of 950 ppm allowable) The CO₂ sensors must be installed within the spaces, such as sales floor areas, and not in return air ducts 	<ul style="list-style-type: none"> Drawings/floor plans that show proper CO₂ sensor location Ventilation schedule Invoice(s) that include purchase date and quantity of equipment listed above*
<input type="checkbox"/>	High-efficiency condensing gas furnace	Make: Model:		91% efficient gas furnace	<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.

HIGH-PERFORMANCE WINDOWS

Check to Select	Measure	Performance of Installed Windows	Requirements	Supporting Documentation
<input type="checkbox"/>	High-performance windows	U-Value: SHGC:	<ul style="list-style-type: none"> U-Value ≤ 0.30 SHGC ≤ 0.37 	<ul style="list-style-type: none"> Window cut sheets Architectural drawings/specifications detailing glazing requirements Invoice(s)*

Electives Section 2: Standard Equipment and Systems

Each standard equipment and system option in the table below may earn your project additional incentives. In the small retail incentive package, incentives are calculated by adding a 15 percent bonus to the standard incentive associated with each option. Please contact your Outreach Manager to confirm incentive amounts for your project. Select any electives you plan to install and provide the corresponding details in the tables below.

REFRIGERATION EQUIPMENT

Check to Select	Equipment Option	Incentive (Standard Incentive Amount + 15% Bonus)	No. of Units	Requirements	Supporting Documentation
Floating Head Pressure Control (FHPC) on single compressors					
<input type="checkbox"/>	Low temp, single	\$115/hp		Single compressor of 1 HP motor or larger; must replace fixed value with adjustable head pressure control, field adjusted to pressure of 70°F sat temp or lower	<ul style="list-style-type: none"> Refrigeration schedule Invoice(s)* Site visit
<input type="checkbox"/>	Medium temp, single				
<input type="checkbox"/>	Low temp, remote	\$69/hp		Must install balanced-port valve or electric expansion valve sized to meet 70°F condensing temp OR device to supplement refrigerant feed to each evaporator on condenser	
<input type="checkbox"/>	Medium temp, remote				
Anti-sweat heater controls for reach-in display cases					
<input type="checkbox"/>	Medium temp (1°F-35°F)	\$34.50/linear ft	Linear ft:	Utilize humidity, dew point or condensation sensor	<ul style="list-style-type: none"> Refrigeration schedule Invoice(s)*
<input type="checkbox"/>	Low temp ($\leq 0^\circ\text{F}$)	\$46/linear ft	Linear ft:		

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

ENERGY STAR COMMERCIAL DISHWASHERS

Commercial dishwashers that have earned an ENERGY STAR® rating have been determined by the US Environmental Protection Agency to be on average 40 percent more energy and water efficient than standard models. By selecting and installing one of the ENERGY STAR-certified commercial dishwashers listed below, you can help your business reduce consumption and keep costs down.

DISHWASHERS						
Check to Select	Equipment Option	Product Information	Incentive (Standard Incentive Amount + 15% Bonus)	No. of Units	Requirements	Required Documentation
<input type="checkbox"/>	Commercial dishwasher, undercounter, (high temp, electric DHW only)	Make: Model:	\$690		ENERGY STAR	<ul style="list-style-type: none"> Invoices Product cut sheet (confirm temp)
<input type="checkbox"/>	Commercial dishwasher, undercounter (low temp)	Make: Model:	\$224.25			
<input type="checkbox"/>	Commercial dishwasher, single tank door/upright (low temp)	Make: Model:	\$632.50			
<input type="checkbox"/>	Commercial dishwasher, single tank door/upright (high temp)	Make: Model:	\$948.75			
<input type="checkbox"/>	Commercial dishwasher, single tank conveyor (low or high temp)	Make: Model:	\$1,035			
<input type="checkbox"/>	Commercial dishwasher, multi tank conveyor (low or high temp)	Make: Model:	\$920			
<input type="checkbox"/>	Commercial dishwasher, Pot Pan and Utensil (high temp)	Make: Model:	\$402.50			

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

ADDITIONAL STANDARD EQUIPMENT (FORM 520S)

Check to Select	Measure Description (from 520S)	Requirements	No. of Units	Standard Incentive (from 520S)	Estimated Incentive (Standard Incentive Amount +15% Bonus)	Required Documentation
<input type="checkbox"/>		See Form 520S for individual measure requirements				<ul style="list-style-type: none"> • Invoices • Cutsheets
<input type="checkbox"/>		See Form 520S for individual measure requirements				
<input type="checkbox"/>		See Form 520S for individual measure requirements				

*Please note: Some Standard Equipment may not be eligible for bonus incentive.

Electives Section 3: Special Measures (Form 520SM)

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. Special measures are calculated at the rate of \$0.17/kWh or \$0.92/therm.

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

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