Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Effective January 1, 2024, Energy Trust offers the following incentives for qualifying new natural gas and electric energy-saving equipment installed at a commercial, municipal or institutional facility in the State of Oregon:

• Incentives are subject to change. To apply, submit a complete Energy Trust incentive application with all required accompanying documentation by the deadline listed in the application form.

• Electric customers of Portland General Electric and Pacific Power can apply for incentives for qualifying electric equipment, and natural gas customers on eligible rate schedules of NW Natural, Cascade Natural Gas or Avista can apply for incentives for qualifying natural gas equipment.

Lodging and Foodservice Equipment

Equipment	Requi		Incentive	
Ductless Heat Pump (DHP)	Must have a minimum efficiency of 18 SEER or SEER2 and 10 HSPF or 9.5 HSPF2. Must be a single compressor system with up to two heads per dwelling unit. Eligible only for lodging. Only new installation or replacement applications qualify.			\$500 per ton of cooling capacity
Packaged Terminal Heat Pump (PTHP)	Must replace electric resistance heat or a packaged terminal air conditioner (PTAC) with existing electric resistance heating. Qualified models must be found on the PTHP list here: www.ahridirectory.org. Eligible only for lodging.			\$800 each
		Dryer Type	Participating Utility	
ENERGY STAR®		Electric	Gas or Electric	\$400 each
Commercial Water heating provided by a participating utility. Leased equipment must be new. A signed lease agreement and	Gas	Gas or Electric	\$350 each	
Common areas		Electric/ Gas	Electric Only	\$150 each
		Electric/ Gas	Gas only	\$100 each
Cap fired	Automatic conveyor with catalyst. Input rate must be below	Total conveyor belt width less that	an 20"	\$2,500 each
Gas-fired Automatic	80 kBtu/h or dual stage or modulating gas valve with a capability of throttling the input rate below 80 kBtu/h. Installed	Total conveyor belt width 20" to 2	26"	\$3,000 each
Conveyor Broiler	under a Type I Vent Hood.	Total conveyor belt width greater	than 26"	\$3,500 each
Two-stage Gas Valve on Clothes Dryers	Valves must be installed on commercial gas-fired dryers. Dryers must have 200 or fewer pounds of dry clothes capacity or 65 or fewer cubic feet of dryer drum volume. Valves can be installed on new or existing gas-fired dryers. Sites with on-premises laundry are eligible. Coin-operated laundromats are not eligible.			\$700 each

ENERGY STAR ratings: <u>https://www.energystar.gov/productfinder/product/certified-commercial-clothes-washers/results</u>





Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Lodging and Foodservice Equipment continued

Equipment		Requirements		Incentive
	Each ozone laundry system must be new and installed on either new or existing programmable commercial washing machine(s). Each ozone generator may serve one or more washers. All existing/new washers at a		Total laundry capacity is less than 75 lbs:	\$5,000 per system
			Total laundry capacity is between 75 and 125 lbs:	\$7,500 per system
Ozone Laundry Systems	laundry system. Partial conversions are not elig clothes washing must be provided by boilers, or	ible. Water heating for	Total laundry capacity is between 126 and 400 lbs:	\$15,000 per system
	heaters. Water heating must be provided by boliers, of ozone laundry system(s) must transfer ozone in	articipating utility. The	Total laundry capacity is between 401 and 600 lbs:	\$25,000 per system
	the venturi injection or bubble diffusion process		Total laundry capacity is greater than 600 lbs:	\$30,000 per system
Electric Combination Oven – 3-4 Pan Capacity	Must be active on ENERGY STAR certified proc	duct list (version 3.0)*.		\$500 each
Electric Combination Oven – 5-40 Pan Capacity	Must be active on ENERGY STAR certified product list (version 3.0)*			\$1,000 each
Double Rack Gas Oven	Must be active on <u>ENERGY STAR certified product list (version 3.0)*</u> . One removable double rack or two removable single racks to accommodate two full sheets per level, each pan at least 18" x 26" x 1".			\$2,000 each
Electric Convection Oven – Full-size	Must be active on ENERGY STAR certified product list (version 3.0)*. Accommodates standard full-size sheet pans measuring at least 18" x 26" x 1".			\$500 each
Electric Convection Oven – Half-size	Must be active on <u>ENERGY STAR certified proc</u> measuring at least 18" x 13" x 1".	<u>duct list (version 3.0)*</u> . Acco	mmodates half-size sheet pans	\$300 each
		Batch Self-contained Unit	(SCU) - 200-4,000 lbs. per day	\$180 each
	Must be active on	ist Batch Remote Condensing Unit (RCU) - 988-4,000 lbs. per day Continuous Remote Condensing Unit (RCU) - 800-4,000 lbs. per day		\$400 each
Commercial Ice Maker	ENERGY STAR certified product list (version 3.0)*.			\$400 each
		Batch Ice-Making Head (I	MH) - 1,500-4,000 lbs. per day	\$400 each
		Continuous Ice-Making H	ead (IMH) - 820-4,000 lbs. per day	\$400 each
Electric Hot Foot Cabinet – Half-size	Must be active on ENERGY STAR certified product list (version 2.0)**. Interior volume must be less than 13 cubic feet.		\$450 each	
Gas Steam Cooker	Cooking energy efficiency must be at least 43%. Idle Rate must be 2,770 BTU/hr or less			\$3,400 each
Electric Steam Cooker	Cooking energy efficiency must be at least 62%. Idle Rate must be 300W or less			\$2,500 each

** ENERGY STAR certified product list (version 3.0): https://www.energystar.gov/product/inder/product/certified-commercial-hot-food-holding-cabinets/results

** ENERGY STAR certified product list (version 2.0): <u>https://www.energystar.gov/producti/nder/product/certified-commercial-hot-food-holding-cabinets/results</u>

Page 2 of 15





Existing Buildings | Information Sheet | PI 120EB-OR

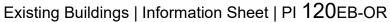
Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Lodging and Foodservice Equipment *continued*

Equipment	Requirements	Incentive	
Commercial Vent Hood with Demand	Motor speeds must be controlled by a programmable controller, with scheduling, occupancy sensing, and heat sensing capabilities. Variable speed control must be installed on both the make-up air unit motor and the hood exhaust motor. Both	Gas heat or electric heat	\$1,500 per controlled motor horsepower
Controlled Ventilation	motors must be functional. Make-up air must be tempered. Total controlled motor horsepower must be at least 1.0 hp and cannot exceed total existing horsepower of make-up air unit and exhaust fan motor.	Gas or other non-electric heat in electric only territory	\$900 per controlled motor horsepower
Dishwasher, Single Tank with Conveyor	Must be active on <u>ENERGY STAR certified product list (version 3.0)</u> *. Dishwasher can Site must receive electricity from a participating utility.	\$900 each	
Dishwasher, Multi-Tank with Conveyor	Must be active on <u>ENERGY STAR certified product list (version 3.0)</u> *. Dishwasher must receive electricity from a participating utility.	\$900 each	

* ENERGY STAR certified product list (version 3.0): https://www.energystar.gov/productfinder/product/certified-commercial-dishwashers/results



Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista. TRC is a Program Management Contractor for Energy Trust of Oregon.

Lodging and Foodservice Equipment continued

Equipment		Require	ments			Incentive	
Commercial Pool Cover	Pool must be heated. Pool must not have had a pre-existing cover within 6 months of pool cover installation. Covers installed at residential pools do not qualify. Eligible sites include commercial pools within lodging, fitness centers and municipal centers. Cover must be specifically designed for swimming pools, cover entire pool surface area and utilize a storage reel. Liquid evaporation suppressants, solar disks and mesh covers are ineligible. Pool heating fuel must be provided by participating utility.					a \$6.00 per sq ft of pool surface area	
	Must be a replacement, gas-fired pool heater. Heater must not have a continuously burning pilot light. Must have at most 400 kBtu/h capacity per						
	heater, not to exceed a total (or m combined. Must have at least 94% heaters, or at least 84% efficiency	thermal efficiency for cond	lensing	Non-condensin	g Heater, Not covered	\$1.00 per sq ft of area served by heater	
	receive gas from a participating ut qualify. Eligible pool covers includ	ipating utility. Covered and not covered pools both ers include solid track, bubble type, or foam type			ater, Covered	\$3.00 per sq ft of area served by heater	
	with storage reels. Pool must mee below.	t minimum area requiremer	nts as listed	Condensing He	ater, Not covered	\$5.00 per sq ft of area served by heater	
	The pool must meet the following	minimum area requirement	s:				
Commercial Swimming Pool		Heater Type	Covered Pool?	Indoor or Outdoor Pool	Minimum Required Pool Sq. Ft.		
Heater		O an dan sin n	N	Indoor	1,275		
		Condensing	No	Outdoor	700		
		Condensing	Yes	Indoor	2,150		
		Condensing	163	Outdoor	1,050		
		Non-condensing	No	Either	500		
		Non condensing	Voc	Indoor	850		
		Non-condensing	lensing Yes		500		





Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Grocery Equipment

Equipment	Requirement	s	Incentive
Anti-sweat Heater	Eligible heater controls must reduce sweat by sensing humidity, dew point, or condensation. Site must not have an existing	Low temperature case (below 0°F)	\$80 per linear ft of door
Controls (ASH)	refrigeration energy management system, including ASH controls. Site receives electricity from a participating utility.	Medium temperature case (between 1°F and 35°F)	\$60 per linear ft of door
	Must be installed in an existing, functional walk-in or reach-in	Walk-in case, from a SP	\$180 per motor replaced
	refrigeration case with electronically commutated motor (ECM) or permanent magnet synchronous motors (PMSM). Existing case motor must be either shaded pole (SP) or permanent split	Walk-in case, from a PSC	\$180 per motor replaced
Motors		Reach-in case, from a SP	\$150 per motor replaced
	capacitor (PSC) motor. Site receives electricity from a participating utility. New walk-in or reach-ins are ineligible.	Reach-in case, from a PSC	\$150 per motor replaced
		Gas building heat type. Site receives electricity from a participating utility. Medium or Low Case Temperature.	\$400 per linear ft of door
Doors on Open Freezers or Open Refrigerated Cases	Must add doors to existing functional open freezers or refrigerated cases. Self-contained refrigeration cases (integrated condensing units) are ineligible. Low temperature is at or below	Electric or non-participating gas building heat type. Site receives electricity from a participating utility. Medium or Low Case Temperature.	\$350 per linear ft of door
	0°F. Medium temperature is between 1°F and 35°F.	Gas building heat type. Site receives electricity from a non-participating utility. Medium or Low Case Temperature.	\$160 per linear ft of door



Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Grocery Equipment *continued*

Equipment	Requirements		Incentive
	Must be a new refrigerated display case with doors, additional cases are	Vertical cases - Coolers only	\$150 per linear ft of door
New Cooler Cases with Doors	added or existing cases are replaced. Doors must be transparent. Cases with solid doors do not qualify. Refurbished cases do not qualify. Can be	Horizontal cases - Coolers or Freezers	\$150 per linear ft of door
	installed at sites with electric or gas heat, or at sites with gas or other heat, with no participating gas provider.	Self-Contained Unit - Horizontal Freezer at site with gas heat, with no participating gas provider	\$150 per linear ft of door
Strip Curtains	Must be installed where no infiltration barriers exist in walk-in coolers or freezers. Display cases are ineligible. Must be contractor-installed. Eligible only for grocery stores and supermarkets, restaurants and warehouses. To qualify for a walk-in cooler, project site must be a	Walk-in cooler for grocery stores and warehouses	\$12.00 per sq ft
	grocery store or a warehouse. To qualify for a walk-in freezer, project site must be a grocery store or a restaurant. Low temperature is at or below 0°F. Medium temperature is between 1°F and 35°F.	Walk-in freezer for grocery stores and restaurants	\$12.00 per sq ft
ENERGY STAR Vertical Reach-in Refrigerator	L cooling compressor ("ase must have glass doors. Used or rebuilt cases do not guality" ("ases with remote retrigeration		
		Volume less than 15 cubic feet	\$40 each
ENERGY STAR Vertical Reach-in Freezer packaged and self-contained with a built-in c must have glass doors. Used or rebuilt cases remote refrigeration systems do not qualify Horizontal or chest-style freezers do not qual	Must meet <u>ENERGY STAR requirements (version 5.0)</u> *. Case must be packaged and self-contained with a built-in cooling compressor. Case must have glass doors. Used or rebuilt cases do not qualify. Cases with	Volume 15 - 29.9 cubic feet	\$80 each
	remote refrigeration systems do not qualify Horizontal or chest-style freezers do not qualify. Site must receive electric service from a participating utility.	Volume 30 - 49.9 cubic feet	\$190 each
		Volume At least 50 cubic feet	\$325 each

* ENERGY STAR qualifying models (version 5.0): https://www.energystar.gov/productfinder/product/certified-commercial-refrigerators-and-freezers/results





Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Grocery Equipment continued

Equipment	Requirements	3	Incentive
Floating Head Pressure Control	Adding a FSPC to a compressor rack control system. Existing	Air Cooled Condenser	\$60 per compressor hp
(FHPC), Compressor Rack	rack system must not have FHPC or FSPC.	Evaporatively Cooled Condenser	\$60 per compressor hp
Floating Suction Pressure Controls	Adding a FSPC to a compressor rack control system. Existing	Air Cooled Condenser	\$60 per compressor hp
(FSPC), Compressor Rack	rack system must not have FHPC or FSPC.	Evaporatively Cooled Condenser	\$60 per compressor hp
FHPC and FSPC,	Adding a FHPC and FSPC, concurrently, to a compressor rack control system. Existing rack system must not have FHPC or	Air Cooled Condenser	\$130 per compressor hp
Compressor Rack	FSPC. Cannot be combined with FSPC or FHPC Compressor Rack measures.	Evaporatively Cooled Condenser	\$130 per compressor hp
Condenser Fan Variable Frequency	Adding a single VFD to control an existing multi-fan condensing	Air Cooled Condenser	\$850 per fan motor hp
Drive (VFD), Compressor Rack	unit. Existing condenser multi-fan systems must not have VFD	Evaporatively Cooled Condenser	\$850 per fan motor hp
On-demand Overwrapper	Use either a mechanical or optical control system to detect product		\$350 each





Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Insulation

- Must be installed at a site heated by electricity or gas provided by participating utilities, or gas/other heat at a site with gas not provided by a participating utility.
- Must be installed in areas of the building envelope that separate conditioned space and unconditioned space. Insulation installed between conditioned spaces is
 ineligible.

Upgrade	Existing Condition	New Condition	Requirements	Incentive
Attic Insulation	R-9 or less	R-25	Insulate to at least R-25 efficiency rating or fill cavity. Damaged or missing insulation must be prequalified and documented by the installation contractor.	\$0.90 per sq ft
Roof Insulation	R-0	R-15	Insulate to at least R-15 efficiency rating or fill cavity below R-15. No existing insulation, unless existing is damaged or missing. Damaged or missing insulation must be prequalified and documented by the installation contractor.	\$2.85 per sq ft
Roof Insulation	R-0	R-30	Insulate to at least R-30 efficiency rating or fill cavity above R-15. Damaged or missing insulation must be prequalified and documented by the installation contractor.	\$2.85 per sq ft
Roof Insulation	R-5 or less	R30	Existing insulation is R-5 or less. Insulate to at least R-30 efficiency rating or fill cavity. Damaged or missing insulation must be prequalified and documented by the installation contractor.	\$1.00 per sq ft
Wall Insulation	R-6 or less	R-20	Insulate to at least R-20 efficiency rating or fill cavity. Damaged or missing insulation must be prequalified and documented by the installation contractor.	\$1.30 per sq ft



Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

Pipe Insulation

		Requirements				
	an appropriate level of the given environmer the insulation. This w (ASJ) or PVC in indoor	of protection for the ntal conditions to r ill commonly be A or applications an	e insulation under naintain the life of Il Service Jacketing d aluminum or	Piping serving domestic hot w	vater \$18.00 per linear foot	
stainless steel jacketing for outdoor projects Piping must be part of a system using natural gas provided by a participating utility. Water heaters or boilers providing hot water or steam to uninsulated pipes must be natural gas- fired.				Piping serving medium press steam (15-200 psig)	ure \$25.00 per linear foot	
No Insulation	No Insulation	Eluid	Pipe Diameter			
	T luiu	1.5 inches or less	Greater than 1.5 inches	Piping serving heating hot water	ater \$25.00 per linear foot	
	Domestic Hot Water	1.5 Inches				
	Heating Hot Water		2.0 Inches			
	Low Pressure					
		Medium Pressure 2.0 Inches 2.5		Piping serving low pressure steam (less than 15 psig)	\$25.00 per linear foot	
	No Insulation	an appropriate level of the given environmer the insulation. This w (ASJ) or PVC in indo stainless steel jacketi be part of a system u participating utility. W water or steam to uni fired. No Insulation Fluid Domestic Hot Water Heating Hot Water Heating Hot Water Low Pressure Medium Medium	an appropriate level of protection for the the given environmental conditions to restrict the insulation. This will commonly be A (ASJ) or PVC in indoor applications an stainless steel jacketing for outdoor probe part of a system using natural gas performed participating utility. Water heaters or bow water or steam to uninsulated pipes multired. No Insulation Fluid Pipe District No Insulation Fluid 1.5 inches or less Domestic Hot Water Heating Hot Low Pressure Low Pressure 1.5 Inches	be part of a system using natural gas provided by a participating utility. Water heaters or boilers providing hot water or steam to uninsulated pipes must be natural gas-fired. No Insulation Fluid Pipe Diameter Image: The system of the s	an appropriate level of protection for the insulation under the given environmental conditions to maintain the life of the insulation. This will commonly be All Service Jacketing (ASJ) or PVC in indoor applications and aluminum or stainless steel jacketing for outdoor projects Piping must be part of a system using natural gas provided by a participating utility. Water heaters or boilers providing hot water or steam to uninsulated pipes must be natural gas-fired. Piping serving domestic hot we provide the provided by a participating utility. Water heaters or boilers providing hot water or steam to uninsulated pipes must be natural gas-fired. Piping serving medium press steam (15-200 psig) No Insulation Fluid Pipe Diameter Piping serving heating hot water Domestic Hot User 1.5 inches 2.0 Inches Water 1.5 Inches 2.0 Inches Piping serving low pressure Medium 2.0 Inches Piping serving low pressure Piping serving low pressure	





Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

HVAC and Water Heating Equipment

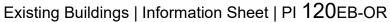
Equipment	Requirements		Incentive
New Rooftop Unit (RTU) with	All installed RTUs must be new units with Direct Expansion (DX) cooling and either gas furnace or heat pump heating. Must have cooling capacity less than 54 kBtu/h. Economizer must be factory-installed or contractor-installed at the same time as	Space heated by electric heat pump	\$30 per ton
Economizer	RTU. Site must receive electricity from a participating utility.	Space heated by gas furnace	\$30 per ton
New Rooftop Unit (RTU) with Demand	All installed RTUs must be new units with Direct Expansion (DX) cooling and either gas furnace or heat pump heating. Must serve spaces not required by code to have	Space heated by electric heat pump	\$29 per ton
Control Ventilation (DCV)	DCV. Economizer must factory-installed or contractor-installed at the same time as RTU, with DCV included*. Heating must be provided by a participating utility.	Space heated by gas furnace	\$29 per ton
New Rooftop Unit (RTU) with Variable Speed Supply Fan	All installed Rooftop Units (RTUs) must be new units with Direct Expansion (DX) cooling and heat pump heating. Gas furnace heating does not qualify. Must have cooling capacity less than 65 kBtu/h. Variable speed supply fan and economizer must be factory-installed or contractor-installed at the same time as RTU, with DCV included**. Site must receive electricity from a participating utility.	Space heated by electric heat pump	\$100 per ton
Infrared Radiant	Must be natural gas-fired, low intensity, non-condensing and positive pressure system. Indoor area use only, no greater than 20,000 square feet. Site must receive	Non-Modulating	\$1.25 per kBtu/h input
Heater	gas from a participating utility.	Modulating	\$2.25 per kBtu/h input
Advanced Rooftop	Business must meet minimum annual operating hours requirements. Existing system must have a nominal cooling capacity of at least 5 tons. Existing system must have a single speed supply fan or motor. Existing systems equipped with a	Electric or gas heat rooftop unit. Site must receive electricity from a participating utility and gas from a non- participating utility. Must have at least 2,500 operating hours.	\$200 per ton
Controls (ARC) - Lite Retrofit	variable frequency drive (VFD) do not qualify. Existing systems with economizers do not qualify. Installed equipment must have a VFD and controller for variable speed fan operation. Installed equipment controls must be listed on <u>BPA qualifying product</u> <u>list</u> ⁺ .	Electric or gas heat rooftop unit. Site must receive electricity and gas from a participating utility. Sites with electric heat must have at least 2,500 operating hours, sites with gas heat must have at least 3,500 operating hours.	\$200 per ton

* RTU cooling capacities of less than 54 kBtu/h may qualify for both the New RTU with Economizer and New RTU with DCV incentives

** RTU cooling capacities of less than 54 kBtu/h and which serve spaces not required by code to have DCV, may qualify for all of the following three incentives: New RTU with Economizer, New RTU with DCV and New RTU with Supply Fan VFD

+ BPA qualifying product list: <u>https://www.bpa.gov/-/media/Aep/energy-efficiency/document-library/advanced-rooftop-unit-control-qualified-products-list.pdf</u>





Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

HVAC and Water Heating Equipment *continued*

Equipment	Requirements		Incentive		
	Business has annual operating hours of at least 500 annual operating hours. Existing system must have a nominal cooling capacity of at least 5 tons. Existing system must have a single speed supply fan or motor. Existing systems equipped	Gas heat rooftop unit. Site received electricity from a non-participating utility and gas from a participating utility	\$300 per ton		
Advanced Rooftop Controls (ARC) - Full Retrofit	with a Variable Frequency Drive (VFD) or a CO ₂ sensor for Demand Control Ventilation (DCV) do not qualify. Existing systems with economizers do not qualify. Installed equipment must have a controller with digital, integrated economizer with either differential dry-bulb or differential enthalpy with fixed dry-	Electric or gas heat rooftop unit. Site received electricity from a participating utility and gas from a non-participating utility	\$300 per ton		
	bulb high-limit shutoff. Installed equipment must have a controller with DCV with proportional control based on CO ₂ sensor reading. Installed equipment controls listed on <u>BPA qualifying product list*</u> .	Electric or gas heat rooftop unit. Sites received electricity and gas from a participating utility	\$300 per ton		
Air-Cooled Variable Refrigerant Flow (VRF) Multi-Split Ductless Heat Pump	 Develoain must be supplied at a neutral space temperature. Must meet of exceed <u>zero offer nan-cooled with emeteroy</u> <u>levels**</u>. The Majority of indoor unit fans must be set to cycle rather than run continuously during occupied hours. Electric resistance heating should not be used for pre-heating ventilation air. 		\$1.00 per sq ft of area served by VRF		
	Standard DOAS: Minimum fan efficiency 40% or minimum fan efficiency index target 0.82				
	High Efficiency DOAS: Minimum fan efficiency 65% or minimum fan efficiency ind	ex target 1.55			
Steam Trap	Must replace or repair a failed, open existing steam trap. Must be installed on a gas-fired steam boiler system served by participating gas utility. All steam traps in the system must be tested for failure status prior to replacement or repair. All	Replaced steam trap	\$500 each		
systems must be no greater than 50 psig. For repaired traps, invoices for steam trap repair parts are required. For steam traps at a dry cleaning facility, see Service Shop & Warehouse equipment section.		Repaired steam trap	\$400 each		

* BPA qualifying product list: https://www.bpa.gov/-/media/Aep/energy-efficiency/document-library/advanced-rooftop-unit-control-gualified-products-list.pdf.

** 2016 CEE Tier 1 Air-Cooled VRF efficiency levels listed on pages 4-5 of "Appendix A: 2016 Through Commercial Unitary Air Conditioning and Heat Pumps Specification; Effective January 12,2013 through December 31,2018". https://www.energytrust.org/wp-content/uploads/2018/07/Appendix A_2016-18_CEE_ComACHP_UnitarySpec.pdf



Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista. TRC is a Program Management Contractor for Energy Trust of Oregon.

HVAC and Water Heating Equipment continued

Equipment	Requirements		Incentive
Commercial Condensing Tank Water Heater	Gas-condensing, storage-type water heater must have an integral tank volur capacity must be greater than 75 kBtu/h per water heater. Must have at leas efficiency. All building types eligible excluding offices less than 5,500 sq ft ar Additional storage-only tanks may be present. Site must have water heating where existing water heater is functional, and not at the end of its useful life,	\$3.50 per kBtu/h	
Commercial Condensing Tankless Water Heater under 200 kBtu/h input	Gas-condensing units must function as central source for domestic hot wate Factor (UEF) must be at least 0.94. Water heater input capacity must be less hot water storage tanks cannot be added. Approved models must be found h existing water heater is functional, and not at the end of its useful life, do not	\$140 each	
Commercial Condensing Tankless Water Heater/ Boiler at least 200 kBtu/h input	Gas-condensing domestic hot water (DHW) must not be used for space heating and must serve a central water heating system. Integral tank volume must be less than 10 gallons. Must have at least 94% thermal efficiency (TE). Water heater input capacity must be at least 200 kBtu/h per water heater. All building types eligible excluding offices less than 5,500 sq ft and commercial gyms without shower facilities. Approved models must be found here: <u>www.ahridirectory.org</u> .		
Gas-fired High Efficiency Condensing HVAC Boiler	Must have at least 94% efficiency, either Annual Fuel Utilization Efficiency (AFUE) or thermal efficiency. Must have at least 5-to-1 turndown ratio. Must not be a backup, redundant or lagging boiler. Must be used for HVAC purposes: boilers used for domestic hot water (DHW), pool heating, and "heat adders" that serve water-source heat pump systems do not qualify. Cannot be combined with the Modulating Boiler Burner measure.		
Modulating Boiler Burner	Must be installed on a natural gas-fired boiler used for hydronic heating (HV on-off burner. Must have at least 5-to-1 turndown ratio. Boilers used for proc heat do not qualify. Cannot be combined with the Gas-fired High Efficiency C	\$10.00 per kBtu/h of burner rated capacity	
Commercial Condensing Gas Furnace	Must be primary heating source for the space. Input capacity must be less than 225,000 Btu/h. Must have at least 95% Annual Fuel Utilization Efficiency (AFUE). Must have either multispeed or variable speed Electronically Communicated Motor (ECM) supply fan.	Sites with gas heating, gas and electricity provided by participating utilities Sites with gas heating, only gas provided by a participating utility	\$8.25 per kBtu/h input \$8.00 per kBtu/h input





Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

HVAC and Water Heating Equipment continued

Equipment	Requi	irements	Incentive
Hydronic Heating Circulator Pumps	Pump motor must be a single speed or variable speed Electronically Communicated Motor (ECM). Limited to in-line circulators with horizontal motors. Site must receive electricity from a participating utility. Applicable to multiple pump motors configured in parallel.	Single Speed ECM: more than 3/4 HP - 2.5 HP or less	\$200 per pump
		Single Speed ECM: more than 2.5 HP	\$300 per pump
		Variable Speed ECM: more than 1/2 HP - 2.5 HP or less	\$300 per pump
		Variable Speed ECM: more than 2.5 HP	\$750 per pump
Commercial Ductless Heat Pump - New or Replacement	May replace any existing heating equipment that is non-functional or near the end of its useful life (typically 15 years or older). In these cases, existing equipment may use any fuel (including but not limited to natural gas, electric, propane or biomass).Projects where existing equipment is functional, and not at the end of its useful life, do not qualify for an incentive. Eligible spaces are limited to office, retail, and restaurants; total conditioned space must be less than 10,000 square feet. Spaces previously not heated or newly added spaces in an existing building are eligible. Conditioned space served may be part of a larger building, but the space served must also be enclosed and not open to other conditioned spaces. Product efficiency ratings for equipment must be AHRI rated with SEER2 at least 20 and HSPF2 of at least 9.5.		\$300 per ton
Commercial Heat Pump Water Heater (HPWH)	Tank size must be between 40 to 120 gallons. HPWH meets minimum efficiency specifications outlined in the <u>NEEA</u> <u>Advanced Water Heater Specification Version 7.0*</u> , <u>NEEA</u> <u>gualified product list**</u> . Must be installed according to	Ducted HPWH	\$800 each
	manufacturer's recommendations. Must have a back-up resistance heating element. Water heating must be provided by a participating utility.	Non-ducted HPWH	\$800 each
Garage Exhaust Ventilation Controls	Installed in fully enclosed parking garage. Variable speed control installed on the parking garage exhaust fan(s) and contamination-sensing device (CO sensors with NO2	Spaces less than 30,000 sq. ft., and unconditioned	\$0.50 per CFM
	sensors) employed. Parking garage operating hours must be at least 140 hours per week.	Spaces at least 30,000 sq. ft. OR conditioned	\$0.10 per CFM
	Generator must be stationary and fixed. The heater must use forced circulation and be installed by manufacturer-certified installer. Site must receive electricity from a participating utility. For retrofit projects (upgrades), the heater must	End-of-life Replacement or New Applications 0 – 3.0 kW	\$400 per heater
Forced Circulation Generator Block Heater		End-of-life Replacement or New Applications 3.1 - 9.0 kW	\$1,400 per heater
		2.5-3.0 kW, retrofit (upgrading existing, functional) heater	\$400 per heater
	replace a thermosiphon block heater and must be at least 2.5 kilowatts (kW).	3.1-9.0 kW, retrofit (upgrading existing, functional) heater	\$1,400 per heater

* NEEA Advanced Water Heater Specification Version 7.0: https://neea.org/img/documents/Advanced-Water-Heating-Specification.pdf

** NEEA qualified product list https://neea.org/img/documents/residential-HPWH-qualified-products-list.pdf



Existing Buildings | Information Sheet | PI 120EB-OR

Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista. TRC is a Program Management Contractor for Energy Trust of Oregon.

HVAC and Water Heating Equipment continued

Equipment	Requirements		Incentive
	Variable Frequency Drive (VFD) must be installed on a commercial pump with nominal motor p (hp). Eligible applications include cooling (includes cooling tower), heating and pressure boost. out qualify. Irrigation applications do not qualify (see Irrigation Pump VFD measure).	ower up to 20 horsepower Replacements due to burn	
	Cooling and Heating applications only	0.50 to 0.75 hp	\$200 per installed VFD
		0.76 to 1.25 hp	\$250 per installed VFD
Commercial Pump		1.26 to 1.75 hp	\$300 per installed VFD
Variable Frequency	All eligible pump applications	1.76 to 2.5 hp	\$350 per installed VFD
Drive (VFD) - New		2.51 to 3.5 hp	\$400 per installed VFD
Pump		3.51 to 4.5 hp	\$500 per installed VFD
		4.51 to 6.0 hp	\$550 per installed VFD
	Heating, Pressure Boost and Cooling Tower applications only	6.01 to 8.0 hp	\$700 per installed VFD
		8.01 to 12.5 hp	\$800 per installed VFD
	Pressure Boost or Cooling Tower applications only	12.51 to 17.5 hp	\$950 per installed VFD
		17.51 to 22.5 hp	\$1,100 per installed VFD
	projects (upgrades) must not include an existing Variable Frequency Drive (VFD). Replacement pump motors are eligible as new construction.		\$1,000 per installed VED
	Retrofit Pump VFD (Upgrading existing, functional equipment)	2.0 to 4.9 hp	\$1,000 per installed VFD
		5.0 to 7.49 hp	\$2,000 per installed VFD
		7.5 to 9.9 hp	\$3,000 per installed VFD
		10.0 to 14.9 hp	\$3,500 per installed VFD
Irrigation Pump		15.0 to 19.9 hp	\$4,500 per installed VFD
Variable Frequency		20.0 to 24.9 hp	\$5,000 per installed VFD
Drive (VFD)		25.0 hp	\$6,000 per installed VFD
	New Construction Pump VFD	2.0 to 4.9 hp	\$750 per installed VFD
		5.0 to 7.49 hp	\$1,250 per installed VFD
		7.5 to 9.9 hp	\$1,750 per installed VFD
		10.0 to 14.9 hp	\$2,250 per installed VFD
		15.0 to 19.9 hp	\$2,750 per installed VFD
		20.0 to 24.9 hp	\$3,250 per installed VFD
		25.0 hp	\$3,750 per installed VFD
Server/Telecom Room – Mini-Split Air Conditioning	Cooling efficiency rated SEER 18 or SEER2 18 or greater. Cooling capacity no greater than 4.5 tons per unit (1 ton = 12 kBtu/h). Unit must serve a space exclusively used for servers, communications and other data equipment. Maximum of 2 units per space.	Server Closet Mini-Split Air Conditioner	\$250 per ton of cooling capacity
		Server Closet Mini-Split Heat Pump	\$250 per ton of cooling capacity

PI 120EB v2024.5 240715



Incentives for Oregon Customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

TRC is a Program Management Contractor for Energy Trust of Oregon.

HVAC and Water Heating Equipment *continued*

Equipment	Requirements	Incentive
Commercial Smart Thermostats	Each thermostat must control a single-zone HVAC system with dedicated supply fan. Lodging sites, spaces with 24/7 operation, and semi-conditioned spaces do not qualify. Multiple HVAC systems serving a large open space (retail, grocery, etc.) are eligible if each system has a dedicated controlling thermostat. A list of qualifying thermostats can be found at: https://www.bpa.gov/-/media/Aep/energy-efficiency/document-library/connected-thermostat-qualified-products-list.pdf. Self installed thermostats may be subject to a post-install verification review before payment. Confirm that all the following Installation requirements are met: If two or more HVAC systems serve the same open space, temperature setpoints, schedules and dead-bands must match. Temperature setback in heating mode must be at least 10°F below the occupied heating setpoint. Temperature setback in cooling mode must be at least 5°F above the occupied cooling setpoint. Fan schedule set to 'auto' mode during unoccupied hours. Manual setpoint override must be limited to two hours or less. Heat pump with backup resistance heat must enable lock-out with appropriate temperature set-points. If a site has existing heating systems with demand-controlled ventilation or advanced rooftop controls, thermostat installers must not disable these systems.	\$500 each at grocery sites
		\$400 each at non-grocery sites

Service Shop and Warehouse Equipment

Equipment	Requirements	Incentive
Inverter-Driven Welder	Replacing existing functioning transformer driven welders. Run time of at least 2,000 hours/year (including standby time). Maximum of 25 welders replaced or purchased per site (if 26 welders or more in a single project, please contact Energy Trust). Rated to at least 210 Amps and at least 40% duty cycle. Welders for residential/hobbyist use are not eligible.	\$2,400 each
Forklift Battery Charger	High-frequency charger must have a conversion efficiency of at least 89%. Maximum of 50 chargers replaced per site. Charger(s) must be 24V to 48V designed for a pallet jack or forklift battery. Each charger replaces at least one existing SCR or ferroresonant charger.	\$3,000 each
Steam Trap – Dry Cleaners	Must replace steam trap(s). Existing equipment may be operating or failed. Steam traps repairs are not eligible. Must be installed on a gas-fired steam boiler system served by participating gas utility. Dry cleaner systems must have 75 to 125 psig. Dry cleaner properties must provide details of last steam trap replacement and previous incentives received for steam trap replacement. For other commercial uses, see HVAC and Water Heating.	\$350 each

Solar – Must be installed by an Energy Trust Solar Trade Ally

Equipment	Requirements
Solar Electric	Visit www.energytrust.org/solar for details, or to discuss incentive opportunities with an Energy Trust Solar Trade Ally

Custom Incentives May Be Available

Energy-efficient equipment not listed may still be eligible for custom incentives. To learn more about these and other incentives, call the Existing Buildings Program at 1.877.510.2130, email <u>existingbuildings@energytrust.org</u> or visit our website at <u>https://www.energytrust.org/incentives/existing-buildings-custom-incentives/.</u>

