Commercial Prescriptive Technical Sheet

General Information

Program Offer

Washington Gas offers incentives to help commercial, industrial, government, institutional and nonprofit customers offset the up-front costs for energy-efficient improvements. The Commercial Prescriptive Technical Sheet covers eligibility requirements and incentives for the purchase and installation of energy-efficient measures such as boilers, water heaters, furnaces, programmable thermostats and commercial kitchen equipment in existing buildings and in new construction projects.

All projects require preapproval. No existing equipment being replaced may be removed or altered and no amount of proposed equipment applied for may be purchased and/or installed prior to the issuance of a program preapproval notification.

Service Providers must register with the program prior to submitting incentive applications. To register, submit an online Service Provider application and wait for approval. Installation contractors must also register online.

Participants

These incentives are available to customers who meet the following eligibility requirements:

- Are a nonresidential (i.e., commercial, industrial, governmental, institutional or nonprofit) Washington Gas customer within the Virginia service territory on rate schedules 2, 2A, 3 or 3A—defined as Commercial and Industrial customers using less than 30,000 therms/month
- Have an existing facility or are a new construction or major renovation project

Small business incentives are available to eligible customers.

Eligible Measures

All installed measures must be new and meet all designated requirements. Used equipment or measures not meeting program and/or technical requirements are not eligible for incentives. Existing measures must be removed and may not be reinstalled within the Washington Gas service territory or anywhere in the state of Virginia. Please contact the program for more information.

Terms and Conditions

Click here to review the Program Terms and Conditions. Customer-signed Terms and Conditions must be submitted with the application in order to receive preapproval.

Instructions

How To Apply

1. Verify that your project meets eligibility requirements as outlined in this Technical Sheet. Contact us with any questions about eligibility at **1-833-286-0860**.
2. Complete and submit your application online through the Application Center. The following information and supporting documentation are required:
   - Washington Gas account number (Enter 0000000000 if the facility has not established a Washington Gas account number yet. Prior to payment being issued, you must submit an updated Washington Gas account number.)
   - Customer-signed Terms and Conditions
   - Manufacturer specification sheets
3. The Program reviews submitted documentation and may request additional documentation if necessary. A pre-installation site inspection may be required as part of the preapproval process.

4. The Program emails preapproval to the customer and Service Provider. Upon receipt of preapproval, the customer may begin project installation. The preapproval offer is valid for six months for Existing Business projects and 12 months for New Business Construction projects.
5. Submit written notification to Washington Gas immediately if there are any changes to the scope of work, as this may require additional preapproval.
6. Once the installation of all proposed measures are complete and the Washington Gas customer is satisfied with the measures and installation, the customer must sign the program preapproval letter. The customer-signed preapproval letter must be uploaded to the Application Center along with the final detailed invoice(s). The invoice must indicate the date of purchase, project location address, full model numbers of equipment installed at the project site and installed equipment quantity. Equipment serial numbers must also be entered into the application.
7. The Program performs a final review and may require a post-installation inspection to verify compliance with program rules, accuracy of project documentation and measure operation.
8. The Program distributes the incentive check to the payee following final approval processing. The incentive check should be received within six to eight weeks.

Reference

AFUE – Annual Fuel Utilization Efficiency is a measure of how efficiently a furnace can utilize its fuel.

MBH – 1,000 Btu per hour.

PSIG – Pounds per square inch gauge is measured by a gauge or other pressure measurement device.

TE – Thermal efficiency is a measure of the boiler output versus the input at steady state conditions.

UEF – Uniform Energy Factor is a measure based on the amount of hot water produced per unit of fuel consumed in a typical day.

Measures and Incentives

Commercial Water and Space Heating Eligibility Requirements

Furnace: This measure relates to the installation of a high-efficiency gas furnace with an electronically commutated fan motor in the place of a standard efficiency gas furnace.

Infrared Heater: This measure applies to natural gas-fired low-intensity infrared heaters with an electric ignition that use nonconditioned air for combustion. New equipment must replace an existing natural gas heater.

Storage Water Heater: This measure involves installing a new high-efficiency gas water heater in place of a new standard efficiency gas water heater.

Tankless Water Heater: This measure involves installing a new high-efficiency gas water heater in place of a new standard efficiency gas water heater.

Hybrid Water Heater: This measure is for the purchase and installation of a new high-efficiency commercial hybrid tankless water heater.

Volumetric Water Heater: This measure involves upgrading from the minimum code to a high-efficiency, large tank-style water heater that stores and heats a substantial amount of water for commercial applications with a high, steady hot water demand, such as hotels, hospitals and restaurants.

Smart Thermostat: This measure involves the replacement of a manually operated or conventional programmable thermostat with a new programmable thermostat that is accessible through Wi-Fi. The thermostat must be installed on a single zone system with natural gas heating. The thermostat must replace a manual-only temperature control thermostat with one that has the capability to adjust temperature setpoints according to a schedule without manual intervention. This measure is limited to small businesses, including small office, retail/strip mall, restaurants, small manufacturing, religious facilities and convenience stores.

Hotel Room Controls: This measure involves installation of a control system in a hotel or motel during times when the rooms are unoccupied. The savings from this measure are derived from managing the temperature settings in guest rooms and regulating the HVAC system according to different occupancy scenarios. The savings are calculated per controlled guest room, not per sensor in multi-room suites.

Outdoor Air Reset: This measure is for the purchase and installation of boiler reset controls for a nonresidential boiler that does not currently have such controls. Reset controls save energy by reducing the hot water supply temperature as a function of outdoor air temperature (OAT). As the site heating load decreases (higher OAT), the temperature to which the boiler must heat the supply of hot water decreases. This measure may not be implemented in conjunction with or on boilers that already have modulating burner controls.

Multifamily Central Domestic Hot Water (DHW) Plants: This measure is for the purchase and installation of multifamily central DHW plants with thermal efficiency greater than or equal to 88%. This measure is applicable to any combination of boilers and storage tanks, provided the thermal efficiency of the boiler(s) is greater than 88%. This measure is not applicable to plants providing other than solely DHW.

Controls for Central Domestic Hot Water (CDHW): This measure is for the purchase and installation of demand control recirculation pumps, which reduce inefficiency by combining control via temperature and demand inputs, whereby the controller will not activate the recirculation pump unless (a) the recirculation loop return water has dropped below a prescribed temperature (e.g., 100°F), and (b) demand is sensed as water flow through the CDHW system. Three types of controls technologies qualify:

- Timer-Based: allows the user to program a schedule to perform recirculation during specific windows throughout the day
- Aquastat-Controlled: calls for recirculation when water temperature in the system falls below a preprogrammed setpoint
- On-Demand: senses demand as water flows through the CDHW system (most adequate on small CDHW systems)

Commercial Water and Space Heating Measures

Measure/Product	Input Rating	Efficiency	Incentive	Application Center Equipment Guide	
				Product Type	Category
Large Furnace	≥ 225 and ≤ 500 MBH	≥ 95% AFUE	$2.75/MBH	Standard Equipment	Commercial Space Heating
Small Furnace	< 225 MBH	≥ 95% AFUE	$2.25/MBH		
Infrared Heater	≤ 500 MBH	N/A	$3.00/MBH		
Smart Thermostat	N/A	ENERGY STAR® Certified	$100/Unit		
Hotel Room Controls	N/A	N/A	$100/Guest Room		
Outdoor Air Reset	≤ 1,000 MBH	New Outdoor Air Reset	$0.50/MBH		
Large Storage Water Heater	> 75 MBH	≥ 94% TE	$1.00/MBH		Commercial Water Heating
Small Storage Water Heater	≤ 75 MBH	≥ 0.66 UEF	$3.00/MBH		
Large Tankless Water Heater	> 200 MBH	≥ 86% TE	$2.00/MBH		
Small Tankless Water Heater	≤ 200 MBH	≥ 0.82 UEF	$2.00/MBH		
Hybrid Water Heater	< 400 MBH	≥ 94% TE	$2.00/MBH		
Volumetric Water Heater	≤ 1,000 MBH	≥ 86% TE	$0.45/MBH		
Multifamily CDHW Plants	≥ 300 and ≤ 3,000 MBH	≥ 88% TE	$4.00/MBH		
Controls for CDHW	N/A	Kit for Gas-Fired CDHW System	$750		

APPLICATION EXAMPLES

Proposed Equipment: Infrared Heater, 100 MBH
Applicable Measure: Infrared Heater
Incentive: $300

Proposed Equipment: Furnace, 250 MBH, 96% TE
Applicable Measure: Large Furnace Tier 2
Incentive: $687.50

Commercial Food Service Eligibility Requirements

Combination Oven: This measure applies to gas combination ovens with a minimum efficiency of 56% in convection mode and 41% in steam mode.

Convection Oven: This measure applies to gas convection ovens with a minimum efficiency of 46%.

Rack Oven: This measure applies to new natural gas-fired high-efficiency rack ovens—double ovens installed in a commercial kitchen. To qualify for this measure, the installed equipment must have a baking efficiency ≥ 50%.

Conveyor Oven: This measure describes a time of sale or new construction installation of a high-efficiency gas-fired conveyor oven. Conveyor ovens are used in the large-scale production of various food service operations and are used extensively for pizza production.

Commercial Fryer: This measure applies to both standard-size fryers and large vat fryers with a minimum efficiency of 50%.

Gas Griddle: This measure applies to gas griddles with a minimum efficiency of 38%.

Gas Steam Cooker: This measure applies to gas steam cookers with a minimum efficiency of 38%.

Pre-Rinse Spray Valve: This measure applies to spray rinse valves that use a spray of water to remove food waste from dishes prior to cleaning in a dishwasher. The installed equipment must be a pre-rinse spray valve with a flow rate of 1.1 gallons per minute and with a cleanability performance of 26 seconds per plate or less. The water used by the spray rinse valve must be heated with natural gas.

Kitchen Demand Ventilation Controls: This measure is for the purchase and installation of commercial kitchen demand ventilation controls using sensors to increase or decrease ventilation rates. To qualify, the efficient system will be capable of at least 50% reduction from the maximum design speed. User controls shall provide a visual indication of a fault in the same room as the unit when the system is bypassed or disabled. Ventilation will be reduced by variable speed drives which are controlled by optical cooking sensors, infrared cooking sensors, temperature-based sensors and/or direct appliance communication. Optical sensors shall be placed in the hood, infrared sensors shall be directed at cooking equipment, and temperature sensors shall be positioned in the hood or duct.

Commercial Dishwasher: The measure involves the installation of ENERGY STAR qualified, high-efficiency stationary and conveyor-type commercial dishwashers used in commercial kitchen establishments that use non-disposable dishes, glassware and utensils. Commercial dishwashers can clean and sanitize a large quantity of kitchenware in a short amount of time by utilizing hot water, soap, rinse chemicals and significant amounts of energy. ENERGY STAR qualified models use less water and have lower idling rates than non-ENERGY STAR rated models.

Commercial Food Service Measures

Measure/Product	Efficiency	Incentive	Application Center Equipment Guide	
			Product Type	Category
Combination Oven	ENERGY STAR Certified	$2,200/Unit	Standard Equipment	Commercial Food Service
Convection Oven	ENERGY STAR Certified	$600/Unit		
Rack Oven – Single	ENERGY STAR Certified	$2,000/Unit		
Rack Oven – Double	ENERGY STAR Certified	$3,500/Unit		
Conveyor Oven	ENERGY STAR Certified	$1,500/Unit		
Commercial Fryer	ENERGY STAR Certified	$900/Unit		
Gas Griddle – Single	ENERGY STAR Certified	$600/Unit		
Gas Griddle – Double	ENERGY STAR Certified	$900/Unit		
Gas Steam Cooker ≤ 6 pans	ENERGY STAR Certified	$500/Unit		
Steam Cooker > 6 pans	ENERGY STAR Certified	$800/Unit		
Pre-Rinse Spray Valve	EPA WaterSense Certified	$30/Unit		
Kitchen Demand Ventilation Controls	≤ 7.5 HP	$200/HP		
Commercial Dishwasher	ENERGY STAR, Building Must Use Gas Water Heating	$600/Unit		

Commercial Boiler Eligibility Requirements

Boiler: This measure relates to the installation of a high-efficiency gas hot water boiler in the place of a standard efficiency gas boiler.

High Pressure Steam Trap: This measure is for the repair or replacement of high pressure faulty steam traps that are allowing excess steam to escape and thereby increasing steam generation. The measure is applicable to industrial applications with a minimum medium steam pressure of ≥ 75 PSIG at the steam trap. To qualify for an incentive, the existing steam trap must be leaking.

Medium Pressure Steam Trap: This measure is for the repair or replacement of medium pressure faulty steam traps that are allowing excess steam to escape and thereby increasing steam generation. The measure is applicable to industrial applications with a minimum medium steam pressure of 15–75 PSIG at the steam trap. To qualify for an incentive, the existing steam trap must be leaking.

Linkageless Boiler Controls for Space Heating: This measure is for the purchase and installation of a nonresidential boiler providing space heating with single point positioning combustion control. To qualify, the boiler burner must have a linkageless control system, allowing the combustion air damper position to be adjusted and set for optimal efficiency at several firing rates throughout the burner's firing range. This requires the fuel valve and combustion air damper to each be powered by a separate actuator. An alternative to the combustion air damper is a variable speed drive on the combustion air fan.

Cut Out Control: This measure is for the purchase and installation of boiler lockout controls for a nonresidential boiler that does not currently have such controls. Lockout controls achieve energy savings by shutting down (locking out) the boiler entirely when the OAT is high enough to ensure that there is no heating load. For the purposes of this measure, the lockout temperature should be set no higher than 55°F.

Commercial Boiler Measures

Measure/Product	Capacity	Efficiency	Incentive	Application Center Equipment Guide	
				Product Type	Category
Small Boiler Tier 1	< 300 MBH	≥ 90% AFUE	$2.50/MBH	Standard Equipment	Commercial Boilers
Small Boiler Tier 2	< 300 MBH	≥ 92% AFUE	$3.00/MBH		
Large Boiler	≥ 300 and ≤ 5,000 MBH	≥ 94% TE	$5.00/MBH		
High Pressure Steam Trap	N/A	≥ 75 PSIG, Tested	$400/Unit		
Medium Pressure Steam Trap	N/A	≥ 15 PSIG and < 75 PSIG, Tested	$250/Unit		
Linkageless Boiler Controls for Space Heating	N/A	New Linkageless Control System for Boiler Burner	$2.50/MBH		
Boiler Cut Out Control	≤ 2,500 MBH	N/A	$0.35/MBH		

APPLICATION EXAMPLES

Proposed Equipment: Boiler, 200 MBH, 90% AFUE
Applicable Measure: Small Boiler Tier 1
Incentive: $500

Proposed Equipment: Steam Trap 80 PSIG
Applicable Measure: High Pressure Steam Trap
Incentive: $400

Other Measure Eligibility Requirements

Gas Modulating Valve: This measure is for the purchase and installation of a two-stage modulating gas valve retrofit kit on a standard 30–250 pound capacity commercial nonmodulating gas dryer.

Residential Gas Dryer Installed in a Commercial Facility: This measure is for the purchase and installation of a new residential gas clothes dryer meeting ENERGY STAR certification requirements in a commercially metered facility, such as a multifamily property.

Ozone Laundry: This measure is for the purchase and installation of a new ozone laundry system added to a new or existing commercial washing machine using hot water heated by natural gas. The ozone laundry system must transfer ozone into the water through venturi injection or bubble diffusion. For laundromats, the ozone laundry system must be connected to both the hot and cold water inlets of the clothes washing machine. This incentive only applies to the following facilities with on-premise laundry operations: laundromats, hotels/motels, fitness and recreational sports centers, healthcare (excluding hospitals), and assisted living facilities.

Pipe Wrap: This measure is for the purchase and installation of pipe wrap insulation for a length of bare pipe. Indoor piping must be wrapped with insulation at least 1" thick, and outdoor piping must be wrapped with insulation at least 2" thick and include an all-weather protective jacket. Minimum qualifying pipe diameter is 1". Insulation must be continuous and contiguous over fittings that directly connect to straight pipe, including elbows and tees.

Water Heater Wrap: This measure is for the purchase and installation of tank insulation for an uninsulated, heated material storage tank. Indoor tanks must have insulation at least 1" thick, and outdoor tanks must have insulation at least 2" thick and include an all-weather protective jacket.

Gas-Fired Pool Heater: This measure is for the purchase and installation of a high-efficiency gas-fired pool heater.

Other Measures

Measure/Product	Capacity	Efficiency	Incentive	Application Center Equipment Guide	
				Product Type	Category
Gas Modulating Valve	N/A	N/A	$500/Unit	Standard Equipment	Other Equipment
Residential Gas Dryer	N/A	ENERGY STAR	$75/Unit		
Ozone Laundry	N/A	New Ozone Laundry System	$15/LB		
HW Pipe Wrap (1–2" thick)	≥ 1" of Insulation for Indoor Pipes; ≥ 2" of Insulation for Outdoor Pipes	N/A	$2/Foot		
HW Pipe Wrap (2–4" thick)	≥ 1" of Insulation for Indoor Pipes; ≥ 2" of Insulation for Outdoor Pipes	N/A	$3/Foot		
Water Heater Wrap	≥ 1" of Insulation for Indoor Tanks; ≥ 2" of Insulation for Outdoor Tanks	N/A	$45		
Gas-Fired Pool Heater	N/A	≥ 84% TE	$2,000/Unit		