

Energy Efficiency Program Proposal

ThermWise® Business Rebates Program

Program Overview

Description

The ThermWise Business Rebate program is a comprehensive program that offers rebates to Questar Gas Company (Questar Gas or the Company) GS commercial customers. Rebates are available for purchasing and installing qualifying natural gas-efficiency measures in commercial units. Qualifying measures include those that target cost-effective natural gas savings including retrofits of existing systems and first time installations. Rebates will be paid directly to participating customers.

Program measures include high-efficiency space and water-heating applications, high-efficiency clothes washers, high-efficiency gas unit heaters, gas infrared heaters, boiler controls and tune-ups, food service equipment, building shell and weatherization measures.

The program is designed to leverage the marketing access and existing delivery channels of local businesses, wholesalers and retailers. Questar Gas will identify customer installation opportunities, marketing activities and assist customers with program requirements where applicable.

Program Design

Program Measures

Qualifying Customers

Commercial customers in Questar Gas' Utah service territory and billed on a GS rate schedule are eligible to participate in the ThermWise Business Rebates program.

Measure Eligibility

Table 1 lists the ThermWise Business Rebates program's energy-efficiency measures and the corresponding size and eligibility requirements for each.

Table 1. Business Energy Efficiency Measures

Measure	Size Category	Minimum Efficiency Requirements	
Gas Storage Water Heater 0.62 EF	≤ 75,000 Btu/hr input	≥ 0.62 EF	
ENERGY STAR Gas Storage Water Heater	≤ 75,000 Btu/hr input	ENERGY STAR Qualified	
Gas Storage Water Heater 82% TE	> 75,000 Btu/hr input	Thermal Efficiency ≥ 82%	
Tankless Gas Water Heater	< 200,000 Btu/hr input	≥ 0.82 EF	
	>200,000 Btu/hr input	Thermal Efficiency ≥ 82%	
Commercial Clothes Washer 2.6 MEF	Residential Clothes Washer Used in a Business	MEF > 2.6	
Commercial Clothes Washer	ENERGY STAR Commercial High Efficiency Clothes Washer (Coin- op/Laundromat)	MEF > 2.2 & WF < 4.5	
High Efficiency Pre-Rinse Spray Valve	N/A	≤ 1.6 GPM (retrofit only)	
Natural Gas Furnace 92% AFUE	N/A	≥ AFUE of 92%	
Natural Gas Furnace 95% AFUE	N/A	≥ AFUE of 95%	
Natural Gas Furnace 95% AFUE with ECM	N/A	≥ AFUE of 95% with ECM	
Natural Gas Furnace 98% AFUE with ECM	N/A	≥ AFUE of 98% with ECM	
Natural Gas Boiler (hot water) 85% AFUE	< 300,000 Btu/hr input	AFUE ≥ 85%	
Natural Gas Boiler (hot water) 90% TE	≥ 300,000 Btu/hr input	Thermal Efficiency ≥ 90%	
Natural Gas Boiler (steam) 85% AFUE	< 300,000 Btu/hr input	AFUE <u>></u> 85%	
Natural Gas Boiler (steam) 82% TE	≥ 300,000 Btu/hr input	Thermal Efficiency ≥ 82%	
Direct Contact Gas Water Heater	All	Thermal Efficiency ≥ 90%	
Gas Unit Heater (Non Condensing) 83% TE	N/A Thermal Efficiency 83% - 89%		
Gas Unit Heater (Condensing) 90% TE	N/A	Thermal Efficiency > 90%	
Gas Infrared Heating System	N/A	N/A Infrared Heating System no required by code (must replace existing natural gas non-infrared heating system or be installed as part of new construction project)	

Measure	Size Category	Minimum Efficiency Requirements	
Boiler Outside Air Reset Control	N/A	Boiler Outside Air Reset Control	
Gas Boiler Tune-up – Tier 1	N/A	Perform a qualifying tune-up that complies with the boiler tune-up program requirements (Only one tune- up rebate per boiler within a 2-year period)	
Gas Boiler Tune-up – Tier 2	< 1,500 kBtu	Perform a qualifying tune-up that complies with the boiler tune-up program requirements and yields an	
Gas Boiler Tune-up – Tier 3	≥ 1,500 kBtu	improvement in combustion efficiency (Only one tune-up rebate per boiler within a 2- year period)	
Gas Commercial Fryer	N/A	ENERGY STAR Qualified	
Gas Steam Cooker	N/A	ENERGY STAR Qualified	
Gas Convection Oven	N/A	ENERGY STAR Qualified	
Gas Combination Oven	N/A	40% Cooking Efficiency	
Gas Griddle	N/A	ENERGY STAR Qualified	
Windows (New Construction)	Site-Built Window	U-value of 0.30 or less (Glazing Only Rating)	
Windows (New Construction)	Pre-fabricated Window Assembly	U-value of 0.30 or less (Entire Window Assembly Rating)	
Windows (Retrofit)	Site-Built Window	U-value of 0.30 or less (Glazing Only Rating)	
Windows (Retrofit)	Pre-fabricated Window Assembly	U-value of 0.30 or less (Entire Window Assembly Rating)	
Roof Insulation (New Construction)	N/A	Incremental addition of R-5 or higher above code	
Roof Insulation (Retrofit)	N/A	Incremental addition of R-10	
Wall Insulation (New Construction)	N/A	Incremental addition of R-3.7 continuous insulation or higher above code	
Wall Insulation (Retrofit)	N/A	Incremental addition of R-10	
Condensing Gas Storage Water Heater	≤ 75,000 Btu/hr input	EF ≥ 0.90	
Hybrid Gas Storage Water Heater 90% TE	≥ 75,000 Btu/hr input	Thermal Efficiency of 90% or greater	

Program Rebates, Projected Participation and Savings

Table 2 lists the ThermWise® Business Rebate program's incentive levels, projected participation and natural gas savings for each energy-efficiency measure. Incentive levels are shown by either unit or per connected-equipment input shown in terms of kBtu to allow for a more customized offering per customer application.

Table 2. Business Energy Efficiency Incentives, Projected Participation and Savings

Measure	Incentive	Projected Participation	Total Projected Savings (annual Dth)
Gas Storage Water Heater Tier 1	\$50 per unit	1	2
Gas Storage Water Heater Tier 2	\$100 per unit	1	4
Gas Storage Water Heater Tier 3	\$2.00 per kBtu	16	461
Tankless Gas Water Heater (< 200 kBtu)	\$2.00 per kBtu	12	298
Tankless Gas Water Heater (≥ 200 kBtu)	\$2.00 per kBtu	4	703
Clothes Washer 2.6 MEF	\$50 per unit	13	23
Commercial Clothes Washer	\$75 per unit	1	3
High Efficiency Pre-Rinse Spray Valve	\$25 per unit	65	2,184
Natural Gas Furnace 92% AFUE	\$200 per unit	44	713
Natural Gas Furnace 95% AFUE	\$350 per unit	101	1,828
Natural Gas Furnace 95% AFUE with ECM	\$400 per unit	9	163
Natural Gas Furnace 98% AFUE with ECM	\$450 per unit	0	0
Natural Gas Boiler (hot water) 85% AFUE	\$2.00 per kBtu	8	1,559
Natural Gas Boiler (hot water) 90% TE	\$3.25 per kBtu	75	54,113
Natural Gas Boiler (steam) 85% AFUE	\$2.00 per kBtu	1	1
Natural Gas Boiler (steam) 82% TE	\$2.00 per kBtu	9	3,621
Direct Contact Gas Water Heater	\$1.10 per kBtu	4	247
Gas Unit Heater (Non Condensing) 83% TE	\$1.25 per kBtu	5	47
Gas Unit Heater (Condensing) 90% TE	\$6.00 per kBtu	21	905
Gas Infrared Heating System	\$5.00 per kBtu	437	29,806
Boiler Outside Air Reset Control	\$250 per unit	1	74
Boiler Tune-up – Tier 1	Up to \$100 per unit	20	196
Boiler Tune-up – Tier 2	Up to \$300 per unit	10	489
Boiler Tune-up – Tier 3	\$0.20 per kBtu	5	381
Gas Commercial Fryer	\$500 per vat	12	485
Gas Steam Cooker	\$1,000 per unit	1	35
Gas Convection Oven	\$500 per cavity	8	129
Gas Combination Oven	\$1,000 per unit	8	322
Gas Griddle	\$300 per unit	1	9
Windows (New Construction) – Site Built	\$0.28 per sq. ft.	1	1
Windows (New Construction) - Prefab	\$0.28 per sq. ft.	86	1
Windows (Retrofit) - Site Built	\$0.37 sq. ft.	33	13
Windows (Retrofit) - Prefab	\$0.37 sq. ft.	36	21
Roof Insulation (New Construction)	\$0.04 per sq. ft.	1	11
Roof Insulation (Retrofit)	\$0.16 sq. ft.	252	1,833
Wall Insulation (New Construction)	\$0.03 sq. ft.	4	14
Wall Insulation (Retrofit)	\$0.12 sq. ft.	4	5
Condensing Gas Storage Water Heater	\$350 per unit	12	110
Hybrid Gas Storage Water Heater 90% TE	\$350 per unit	1	10
TOTAL Business Program	N/A	1,323	100,820

Rebate Limitation

The following requirements apply to rebate application payments for the program:

- Customers may receive only one (1) boiler tune-up rebate per boiler for the period of two years.
- Measures which are required by code are not eligible for rebates through the Business Rebates Program. Customers may be required to document that their installation exceeds code requirements prior to receiving a rebate.
- Rebates for infrared heating systems must replace existing natural gas non-infrared heating systems or be installed as part of a new construction project.
- Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Skylights are not eligible to receive incentives. Site-built window systems must have a non-metal frame or include a thermal break within the frame to qualify for rebates.
- Rebates for retrofit installations of wall and roof insulation apply only to the first increment of R-10 insulation added to the wall or floor. Additional increments of R-10 beyond the first are not eligible to receive an incentive.
- Qualifying measures receiving rebates under the program may not receive equipment purchase and installation rebates under any other Questar Gas energy efficiency program.
- Business units must be located in Questar Gas' Utah service territory and be a Questar Gas commercial GS customer (i.e. meter set or account activated).
- Each rebate will be mailed to the mailing address listed on the Questar Gas customer account.
- Each rebate check will be made payable to the Questar Gas customer account name on record, not necessarily the name provided by the customer in the rebate application.

Implementation

This program is currently in the marketplace. Upon Commission approval, implementation activities will begin for the new program year in order to launch January 1, 2014.

Administration

The program administration represents the on-going delivery of the program. All internal systems, processes and procedures have been created and are in place. Some modifications may be required due to program changes for 2014.