
Energy Efficiency Program Proposal

ThermWise[®] Builder Rebates Program

Program Overview

Description

Questar Gas Company (Questar Gas) is proposing to continue the ThermWise® Builder Rebates program. The program will be delivered to the market and administered by Portland Energy Conservation Inc. (PECI). The program will be available to residential builders in the Questar Gas Utah service territory and include rebates for installing natural gas energy-efficiency measures in newly constructed single and multifamily residences receiving service on the GS rate schedule. Rebates under the program will be paid directly to the home builder or owner-builder (Builder) or as indicated on the application form for energy efficient construction or for installing specific energy-efficient natural gas measures, including high efficiency natural gas space heating and water heating appliances or solar assisted gas water heating systems.

The program is designed to leverage marketing and delivery directly to Utah home builders through a combination of Questar Gas staff and PECI Program staff. Development, implementation, training, support and administration will be provided by PECI in coordination with Questar Gas. Rebates will be available directly to Builders upon completion of program requirements.

Program Design

Program Measures

Qualifying Customers

Separately metered single or multifamily newly constructed residences, in Questar Gas' Utah service territory and billed on the GS rate schedule are eligible to participate in the ThermWise® Builder Rebates program.

List of Qualified Energy Efficiency Measures

Single Family (1-4 units)	
Measure	Specification
ThermWise® Builder option 1 (ENERGY STAR 2010 – current)	Meet or exceed ENERGY STAR v. 2.0, and include a 90 % or greater AFUE furnace or qualified space heating appliance, and an EF of .62 or greater water heater or qualified water heating appliance
ThermWise® Builder option 2 (ENERGY STAR 2011)	Meet or exceed ENERGY STAR v. 2.5 and include a 92% or greater AFUE furnace or qualified space heating appliance and an EF of .62 or greater water heater or qualified water heating appliance
ThermWise® Builder Option 3 (High performance home)	Meet or exceed ENERGY STAR v. 3.0 and include a 95% or greater AFUE furnace or qualified space heating appliance and an EF of .62 or greater water heater or qualified water heating appliance. Home must also meet or exceed 2006 IECC by 30%
High-Efficiency Gas Storage Water Heater (Tier 1)	Energy Factor (EF) 0.62 to 0.66
High-Efficiency Gas Storage Water Heater (Tier 2)	Energy Factor (EF) 0.67 or greater
High-Efficiency Condensing Gas Storage Water Heater	Energy Factor of 0.90 or greater
High-Efficiency Hybrid Gas Water Heater	Thermal Efficiency (TE) 90% or greater
Tankless Gas Water Heater (Tier 1)	Energy Factor (EF) 0.82-0.89
Tankless Gas Water Heater (Tier 2)	Energy Factor (EF) 0.90 or greater
High-Efficiency Gas Furnace (Tier 1)	Annual Fuel Utilization Efficiency (AFUE) Rating of 90.0 %-91.9%
High-Efficiency Gas Furnace (Tier 2)	Annual Fuel Utilization Efficiency (AFUE) Rating of 92 %-94.9%
High-Efficiency Gas Furnace (Tier 3)	Annual Fuel Utilization Efficiency (AFUE) Rating of 95% or greater
Residential Gas Boilers	AFUE of 95% or greater
Solar Assisted Gas Water Heating	Active system certified OG- 300 by S R C C
Direct Vent Gas Fireplace	AFUE 70% or higher, intermittent ignition ,

	thermostatically controlled and heat rated with a blower
Multifamily (5 or more units)	
Measure	Specification
ENERGY STAR Multifamily (2010 or earlier building permit)	ENERGY STAR v. 2.0 Certification
ENERGY STAR Multifamily (2011 building permit)	Meet or exceed ENERGY STAR v. 2.5 and include a 92% or greater AFUE furnace or qualified space heating appliance and an EF of .62 or greater water heater or qualified water heating appliance
High-Efficiency Gas Storage Water Heater (Tier 1)	Energy Factor (EF) 0.62 to 0.66
High-Efficiency Gas Storage Water Heater (Tier 2)	Energy Factor (EF) 0.67 or greater
High-Efficiency Condensing Gas Storage Water Heater	Energy Factor of 0.90 or greater
High-Efficiency Hybrid Gas Water Heater	Thermal Efficiency (TE) 90% or greater
Tankless Gas Water Heater (Tier 1)	Energy Factor (EF) 0.82-0.89 or greater
Tankless Gas Water Heater (Tier 2)	Energy Factor (EF) 0.90 or greater
High-Efficiency Gas Furnace (Tier 1)	Annual Fuel Utilization Efficiency (AFUE) Rating of 90.0 %-91.9%
High-Efficiency Gas Furnace (Tier 2)	Annual Fuel Utilization Efficiency (AFUE) Rating of 92 %-94.9%
High-Efficiency Gas Furnace (Tier 3)	Annual Fuel Utilization Efficiency (AFUE) Rating of 95% or greater
Residential Gas Boilers	AFUE of 95% or greater
Solar Assisted Gas Water Heating	Active system certified OG- 300 by S R C C
Direct Vent Gas Fireplace	AFUE 70% or higher, intermittent ignition, thermostatically controlled and heat rated with a blower

High-Efficiency Gas Storage Water Heater

Builders may receive a rebate for installing a high-efficiency gas storage water heater. To be eligible for Tier 1, the builder must purchase and install a model with an Energy Factor (EF) of 0.62 to 0.66. To be eligible for Tier 2, the builder must purchase and install a model with an Energy Factor (EF) of 0.67 or greater. Qualifying water heaters will have a minimum of 40 gallons in capacity.

High-Efficiency Condensing Gas Storage Water Heater

Builders may receive a rebate for installing a high-efficiency condensing gas storage water heater. To be eligible for a rebate, the builder must purchase and install a model with an Energy Factor (EF) of 0.90 or greater.

High-Efficiency Hybrid Gas Water Heater

Builders may receive a rebate for installing a high efficiency hybrid gas storage water heater. To be eligible for a rebate, the builder must purchase and install a qualified model with a Thermal Efficiency (TE) of 90% or greater.

Tankless Gas Water Heater

Builders may receive a rebate for installing a high-efficiency tankless gas water heater. To be eligible for Tier 1, the builder must purchase and install a model with an Energy Factor (EF) of 0.82 to 0.89. To be eligible for Tier 2, the builder must purchase and install a model with an Energy Factor (EF) of 0.90 or greater.

High-Efficiency Gas Furnace

Builders may receive a rebate for installing a high-efficiency gas furnace. To be eligible for Tier 1, the builder must purchase and install a model with an Annual Fuel Utilization Efficiency (AFUE) Rating of 90.0%-91.9%. To be eligible for Tier 2, the builder must purchase and install a model with an Annual Fuel Utilization Efficiency (AFUE) Rating of 92%-94.9%. To be eligible for Tier 3, the builders must purchase and install a model with an Annual Fuel Utilization Efficiency (AFUE) Rating of 95% or greater

High-Efficiency Gas Boiler

Builders may receive a rebate for installing a high-efficiency gas boiler with an AFUE rating of 95% or greater.

Solar Assisted Gas Water Heating

Builders may receive a rebate for installing solar assisted gas water heating system, certified OG-300 by the Solar Rating and Certification Corporation (SRCC).

Direct-Vent Natural Gas Fireplace

Builders may receive a rebate for installing a high-efficiency direct-vent thermostatically controlled heat rated natural gas fireplace with an AFUE of 70% or greater, an intermittent ignition, and a blower are also required.

ThermWise® Builder Option 1 (ENERGY STAR 2010 – current)

Builders can receive rebates for a single family dwelling unit that qualifies under the 2010 version of ENERGY STAR whole house certification (version 2) and includes a 90% or greater AFUE furnace or qualified space heating appliance, and an EF of .62 or greater water heater or qualified water heating appliance. Field verification and an ENERGY STAR compliance certificate will be required from the Builder before the ThermWise builder option 1 certification rebate will be paid.

ThermWise® Builder Option 2 (ENERGY STAR 2011)

Builders can receive rebates for building a dwelling unit that meets ENERGY STAR version 2.5 certification. Field verification and proof of ENERGY STAR certification will be required before rebates will be paid. Homes must include a 92% or greater AFUE furnace or qualified space heating appliance and an EF .62 or greater water heater or qualified water heating appliance.

ThermWise® Builder Option 3 (High Performance Home)

Builders can receive rebates for building a single family High Performance Home. To qualify a dwelling unit must meet or exceed ENERGY STAR v. 3.0 and include a 95% or greater AFUE furnace or qualified space heating appliance and a .62 or better water heater or qualified water heating appliance. The home must also meet or exceed 2006 IECC by 30%. Field verification, an ENERGY STAR certificate and documentation verifying the home has met the High Performance Home requirements will be required from the builder before the High Performance Home rebate will be paid.

ENERGY STAR Multifamily

Builders can receive rebates for building a multifamily property that meets ENERGY STAR certification. Field verification and proof of ENERGY STAR certification will be required before rebates will be paid. New construction projects with a building permit of 2010 or earlier will be required to meet ENERGY STAR 2.0 standards. These units will be eligible to receive ENERGY STAR whole home multifamily rebates and

additional rebates for qualified equipment that is installed. New construction projects with a building permit in 2011 will be required to meet ENERGY STAR 2.5 standards, including a 92% or greater AFUE furnace, and a 0.62 or better Energy Factor (EF) water heater.

Program Rebates

Builders will be paid the rebates listed below after all completed documentation for the measure is received by the program administrator. The rebate will be paid in the form of a check. Rebates will be sent to the Builder contact listed on the Rebate Application.

Single Family (1-4 units)		
Measure	Rebate	Incremental Customer Cost
ThermWise® Builder Option 1 (ENERGY STAR 2010 - current)	\$600	\$600
ThermWise® Builder option 2 (ENERGY STAR 2011)	\$700	\$1900
ThermWise® Builder option 3 (High performance home)	\$850	\$2250
High-Efficiency Gas Storage Water Heater - Tier 1	\$50	\$175
High-Efficiency Gas Storage Water Heater - Tier 2	\$100	\$400
High-Efficiency Gas Condensing Water Heater	\$350	\$1,150
High-Efficiency Hybrid Gas Water Heater	\$350	\$1,238
Tankless Gas Water Heater-Tier 1	\$300	\$750
Tankless Gas Water Heater-Tier 2	\$350	\$1,345
HighEfficiency Gas Furnace-AFUE 90.0%-91.9%	\$200	\$290
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%	\$300	\$300
High-Efficiency Gas Furnace-AFUE 95.0% or greater	\$350	\$350
Residential Gas Boilers (AFUE of 95% or greater)	\$600	\$1550
Solar Assisted Gas Water Heating (OG 300 by SRCC)	\$750	\$4500
Direct Vent Gas Fireplace	\$200	\$500
Multifamily (5 or more units)		
Measure	Rebate	Incremental Customer Cost
ENERGY STAR Multifamily (2010 or earlier building permit)	\$250	\$450
ENERGY STAR Multifamily (2011 building permit)	\$500	\$645
High-Efficiency Gas Storage Water Heater - Tier 1	\$50	\$100
High-Efficiency Gas Storage Water Heater - Tier 2	\$100	\$400
High-Efficiency Gas Condensing Water Heater	\$350	\$1,150
High-Efficiency Hybrid Gas Water Heater	\$350	\$1,238
Tankless Gas Water Heater-Tier 1	\$300	\$750
Tankless Gas Water Heater-Tier 2	\$350	\$1,345

HighEfficiency Gas Furnace-AFUE 90.0%-91.9%	\$200	\$290
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%	\$300	\$300
High-Efficiency Gas Furnace-AFUE 95.0% or greater	\$350	\$350
Residential Gas Boilers (AFUE of 95% or greater)	\$600	\$1550
Solar Assisted Gas Water Heating (OG 300 by SRCC)	\$750	\$6000
Direct Vent Gas Fireplace	\$200	\$500

Rebate Limitations

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

Rebates are limited to one energy-efficient Whole House Certification rebate per qualifying newly constructed, dwelling unit (as further described above under the Qualified Energy Efficiency Measures section) and will be tracked by Builder, premise number and address.

Builders are eligible to receive rebates for a maximum of two (2) qualifying measures per measure type in each newly constructed, dwelling unit. For our program mandatory space and water heating requirements now exist in the different energy efficient whole home certifications. If builders install additional qualifying measures in a dwelling unit they would be eligible to receive rebates for one (1) additional measure per type above the mandatory requirement. For example: an ENERGY STAR certified home has three (3) qualifying furnace units and two (2) qualifying water heaters. The participant would be eligible to receive the appropriate energy efficient whole home certification rebate and be eligible to receive additional rebates for one (1) qualifying furnace and one (1) qualifying water heater.

Builders are eligible to receive rebates for a maximum of two (2) qualifying measures per measure type in each newly constructed, dwelling unit. If they choose not to incorporate any of the energy efficient whole home measures. They then are eligible to receive up to two (2) stand-alone rebates for each qualifying measure type that is installed. For example a new home was constructed and was not ENERGY STAR certified but the builder had installed three (3) qualifying furnace units and two (2) qualifying water heaters. The participant would be eligible to receive rebates for two (2) qualifying furnace units and two (2) qualifying water heaters.

Qualifying packages and/or measures receiving rebates under the program may not receive equipment purchase and installation rebates under any other Questar Gas Energy Efficiency program.

Dwelling unit must be located in Questar Gas' Utah service territory and be a Questar Gas customer (i.e. meter set or account activated).

Projected Participants

Single Family (1-4 units)	
Measure	Participants
ThermWise® Builder Option 1 (ENERGY STAR 2010 - current)	1550
ThermWise® Builder option 2 (ENERGY STAR 2011)	150
ThermWise® Builder option 3 (High performance home)	10
High-Efficiency Gas Storage Water Heater - Tier 1	25
High-Efficiency Gas Storage Water Heater - Tier 2	5
High-Efficiency Gas Condensing Water Heater	10
High-Efficiency Hybrid Gas Water Heater	10
Tankless Gas Water Heater-Tier 1	50
Tankless Gas Water Heater-Tier 2	5
HighEfficiency Gas Furnace-AFUE 90.0%-91.9%	500
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%	300
High-Efficiency Gas Furnace-AFUE 95.0% or greater	50
Residential Gas Boilers	5
Solar Assisted Gas Water Heating	1
Direct Vent Gas Fireplace	20
Multifamily (5 or more units)	
Measure	Participants
ENERGY STAR Multifamily (2010 or earlier building permit)	400
ENERGY STAR Multifamily (2011 building permit)	100
High-Efficiency Gas Storage Water Heater - Tier 1	25
High-Efficiency Gas Storage Water Heater - Tier 2	5
High-Efficiency Gas Condensing Water Heater	10
High-Efficiency Hybrid Gas Water Heater	10
Tankless Gas Water Heater-Tier 1	50
Tankless Gas Water Heater-Tier 2	5
HighEfficiency Gas Furnace-AFUE 90.0%-91.9%	150
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%	220
High-Efficiency Gas Furnace-AFUE 95.0% or greater	5
Residential Gas Boilers	5
Solar Assisted Gas Water Heating	1
Direct Vent Gas Fireplace	10

Builder Rebate Application Process

Process Overview

Purchase Equipment – Builder purchases qualified appliance or builds a qualified home and receives a rebate form.

Equipment Installation – Appliance is installed according to program installation guidelines by a qualified contractor, if required.

Qualified Construction – Home is designed and built, reviewed and inspected according to program guidelines by a qualified contractor, if required.

Submittal – Builder or the designated HERS rater submits the completed rebate form along with a copy of proof of purchase and other required documentation per program requirements.

Receipt and Data Entry – Program staff date stamp and enter data into the program database.

Internal Checklist Review – Data is reviewed for accuracy and qualification.

Copy of Invoice/Proof of Payment – A copy of the Builder invoice is required to verify the validity of the sales and purchase information. Program staff can work with participants to identify acceptable proof of payment options.

Qualified model – The model qualification must be on the most current version of the ENERGY STAR qualified model list at time of purchase or meet the specifications under a list of qualified energy-efficiency measures.

Date sold – The sale date must be within the valid dates of the program and home construction.

Serial number – Builder must provide the appliance serial number to prove uniqueness of each installation.

Correction – If incomplete rebate forms or faulty information is received, builders are contacted in order to correct the application and move the application into the approval stage.

Approval – Payment for the builder is approved after all information is received, entered, and the project passes the internal checklist review.

Payment – Payment is issued and sent to the Builder and the database is updated with payment information. The Company anticipates an approximate six week turn-around from receipt of complete and valid rebate application to payment.

Customer Service

Call Center

A fully staffed call-center provided by PECEI will answer builder, HERS Rater and/or route trade ally questions through consultation, education and recommendations. Established customer service guidelines and protocols are in place to provide answers to commonly asked questions. Call center staff track and record information on all calls and coordinate customer service efforts with Questar Gas builder staff. Call center staff will be prepared with extensive information that includes facts on qualified products, specific benefits of efficient products, and current program rebate parameters. If questions cannot be addressed issues will be escalated to Questar Gas staff. The call-center will be staffed during regular business hours (8:00 am – 5:00 pm Mountain Time) to respond to Builder inquiries.

Trade Allies will also have access to a separate toll-free hotline. Trade allies will be able to reach a PECEI implementation team member to request information on rebates, qualified efficient products, contact information for a field representative, and any other program-related questions.

Resource Coordination

Resource will be available to builders to help them achieve energy-efficient building practices and a successful HERS rating. PECO and Questar representatives will help provide coordinated resources to Builders to address specific questions or help them navigate the process of energy efficient construction, ENERGY STAR certification and/or incorporation of energy efficiency upgrades in new homes.

Website

Information on www.ThermWise.com will increase ease of participation and customer service. Information will include:

Program forms.

Rebate information and qualifications for easy reference.

Trade Ally materials including training information.

Contact information to speak to a live person.

Other

The program will assess other customer service needs as they arise. Possible additions to the customer service toolbox could include:

Bilingual materials.

Trainings and exchange of informational materials with the Questar Gas call center.

Projected Savings

Single Family (1-4 units)			
Measure	Unit Gross Savings (decatherms)	Participants	Total Annual Gross Savings (decatherms)
ThermWise® Builder Option 1 (ENERGY STAR 2010 – current)	13.40	1550	20,770
ThermWise® Builder Option 2 (ENERGY STAR 2011)	20.40	150	3,060
ThermWise® Builder Option 3 (High performance home)	28.00	10	280
High-Efficiency Gas Storage Water Heater - Tier 1	1.71	25	42.75
High-Efficiency Gas Storage Water Heater - Tier 2	3.96	5	19.8
High-Efficiency Gas Condensing Water Heater	9.2	10	92
High-Efficiency Hybrid Gas Water Heater	10.2	10	102
Tankless Gas Water Heater-Tier 1	8.8	50	440
Tankless Gas Water Heater-Tier 2	9.6	5	48
High-Efficiency Gas Furnace-AFUE 90.0%-91.9%	8.19	500	4,095
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%	9.48	300	2,844

High-Efficiency Gas Furnace-AFUE 95.0% or greater	11.47	50	574
Residential Gas Boilers (AFUE of 95% or greater)	15.29	5	76.45
Solar Assisted Gas Water Heating (OG 300 by SRCC)	17.5	1	17.5
Direct Vent Gas Fireplace	3	20	60
Multifamily (5 or more units)			
Measure	Unit Gross Savings (decatherms)	Participants	Total Annual Gross Savings (decatherms)
ENERGY STAR Multifamily (2010 or earlier building permit)	5.87	400	2348
ENERGY STAR Multifamily (2011 building permit)	9.03	100	903
High-Efficiency Gas Storage Water Heater - Tier 1	1.72	25	42.75
High-Efficiency Gas Storage Water Heater - Tier 2	3.96	5	19.8
High-Efficiency Gas Condensing Water Heater	9.2	10	92
High-Efficiency Hybrid Gas Water Heater	10.2	10	102
Tankless Gas Water Heater-Tier 1	8.8	50	440
Tankless Gas Water Heater-Tier 2	9.6	5	48
HighEfficiency Gas Furnace-AFUE 90.0%-91.9%	4.6	150	690
High-Efficiency Gas Furnace-AFUE 92.0%-94.9%	5.6	220	1232
High-Efficiency Gas Furnace-AFUE 95.0% or greater	6.5	10	6.5
Residential Gas Boilers (AFUE of 95% or greater)	16.11	5	80.55
Solar Assisted Gas Water Heating (OG 300 by SRCC)	17.5	1	17.5
Direct Vent Gas Fireplace	2.5	10	25

Implementation

The Program is currently in the marketplace so all existing implementation activities will continue without delay upon Commission approval effective January 1, 2011.

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 2011.

The database will continue to be updated to capture pertinent and required program information. The database is designed to verify rebate eligibility, provide necessary information for program reporting and collect market information.

Data Tracking

Information collected in the database includes:

Builder information including name, site address, and account information.

Trade Ally information (Builder and contractors performing installations including Builder/company name and contact information).

Equipment details including product name, model number, and serial number.

Sales data including price, quantity and where purchased.

Deemed savings of installed measures.

HERS score for ENERGY STAR homes.

Quality Control

The database is structured to allow for quality control in rebate processing including:

Prevention of duplicate payments by checking for duplicate entry of site addresses, serial numbers, account numbers, etc.

Check for completeness by verifying that all required data has been entered and information is within accepted data parameters.

Project qualification verified through site location, and detailed product information (model numbers, etc.).