

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

December 1, 2009

Dear ENERGY STAR® Geothermal Heat Pump Partner or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) is pleased to provide you with the final ENERGY STAR Version 3.0 Geothermal Heat Pump (GHP) specification. This letter lays out the Agency's final decisions regarding these new requirements and outlines the general process for qualifying products.

GHPs qualifying for ENERGY STAR under the Version 3.0 specification will offer consumers a savings of more than 45 percent over a conventional product. When the Tier 2 and 3 requirements go into effect on January 1, 2011 and January 1, 2012, ENERGY STAR qualified GHPs will be over 50 and 60 percent more efficient than conventional models, respectively.

The Version 3.0 specification was developed through a process that included the release of two draft specifications and stakeholder input and discussions. Previous drafts of the specification, stakeholder comments, and related materials are available on EPA's ENERGY STAR Web site at www.energystar.gov/RevisedSpecs. Click on the "Geothermal Heat Pumps" link.

The scope of the Version 3.0 specification is limited to equipment designed specifically for residential use. Due to design and application complexity of equipment built for and operated in commercial settings (i.e., three-phase units) as well as lack of performance data, the Version 3.0 requirements continue to exclude these types of systems. EPA will work with interested manufacturers to learn more about the market and technologies for commercial systems over the next several months to determine how they might be addressed under the ENERGY STAR program. To assist EPA as it considers including these systems in future specifications, manufacturers are encouraged to provide performance data for commercial products or other equipment (e.g., VRF multi-split systems) not included under the scope of this specification.

Key changes to the Version 3.0 specification since the Final Draft specification are summarized below:

- **Test Criteria Clarifications:** Based on suggestions from stakeholders, EPA made slight modifications to the descriptions of closed loop, open loop, and DGX systems in the Test Criteria section of the specification to provide further clarification.
- **Enhanced Verification Program:** In this final Version 3.0 specification, EPA changed the specific requirements for product certification (Section 6) and certification organizations (Section 7), since these requirements will be developed as part of ENERGY STAR's broader verification testing policies. As part of the Memorandum of Understanding signed by EPA and the Department of Energy (DOE), EPA is developing requirements for the ENERGY STAR Enhanced Verification Program to ensure that all products are tested in a manner that ensures compliance with the ENERGY STAR specifications. The Enhanced Verification Program requirements are still to be determined and will be developed through a separate stakeholder process. The effective date for these requirements will be determined as part of the broader ENERGY STAR testing efforts.

Water-to-Water Geothermal Heat Pumps

This final Version 3.0 specification is effective immediately and water-to-water geothermal heat pumps are now eligible for ENERGY STAR qualification. In order to be considered for a tax credit, products must be ENERGY STAR qualified and be listed on the ENERGY STAR qualified product list. Manufacturers can now submit qualified product data to EPA using the enclosed Qualified Product Information (QPI) form, which is also available on the [Geothermal Heat Pumps for Partners](#) page on the ENERGY STAR Web site. EPA will make every effort to review these QPI forms within one week of submission and promptly post qualified

product data on the ENERGY STAR Web site. EPA expects to update the water-to-water qualified product list on a weekly basis through the end of the year.

Federal Tax Incentives

Currently only those geothermal heat pumps that meet ENERGY STAR requirements and are listed on the ENERGY STAR qualified product lists are eligible for the 30% Federal tax credit. According to the Internal Revenue Service (IRS) guidance, the Federal tax credit is tied to the ENERGY STAR specification that is in effect at the date of purchase. Before today, water-to-water models were not covered by ENERGY STAR and thus were not eligible for the Federal tax credit. As of today, water-to-water GHP models that meet the ENERGY STAR requirements outlined in this Version 3.0 specification, have been reviewed and listed by EPA, and are purchased on or after December 1, 2009 are eligible for the Federal tax credit. Additional guidance is provided on the ENERGY STAR Frequently Asked Questions (FAQ) Web site at www.energystar.gov/faqs. (Search for "GHP.")

Please note that Congress determines the eligibility requirements for Federal tax incentives. The IRS is responsible for implementing Congress' decisions and for handling consumer inquiries. EPA only has jurisdiction over the requirements of the ENERGY STAR geothermal heat pump specification. Therefore, stakeholders with specific questions regarding the requirements of the tax incentive itself should contact the IRS directly.

Partnering under the Version 3.0 Specification

Existing ENERGY STAR Partners: To continue your partnership with ENERGY STAR under Version 3.0, please complete and submit the enclosed Commitment Form. Existing partners must recommit to the Version 3.0 specification by January 1, 2010 to ensure uninterrupted partnership status. Please send your completed Commitment Form to join@energystar.gov.

New ENERGY STAR Partners: Manufacturers that are not currently an ENERGY STAR partner will need to complete and submit both a Partnership Agreement and a Commitment Form (packaged together as a "Partnership Agreement Packet" on the ENERGY STAR Web site). The Partnership Agreement only needs to be signed once; after that, you may expand your participation into other product areas, as appropriate, by submitting an updated Commitment Form. The Partnership Agreement Packet can be found on the ENERGY STAR Web site at www.energystar.gov/join. Click on "Manufacturers of ENERGY STAR Qualified Products."

EPA thanks stakeholders who provided feedback during the specification revision process and looks forward to working with you to qualify and market your energy-efficient GHP products. If you have any questions or concerns about the specification or partnership process, please feel free to contact me at (206) 553-6377 or fanara.andrew@epa.gov.

Sincerely,



Andrew Fanara
U.S. EPA
Climate Protection Partnership Division
ENERGY STAR Product Development Team