

ENERGIZE MISSOURI HOMES

MISSOURI DEPARTMENT OF NATURAL RESOURCES



HOMEOWNER UPGRADES and GEOTHERMAL

Auditor Frequently Asked Questions

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Homeowner Upgrades and Geothermal Program

What are the expected energy auditing practices for the Homeowner Upgrades and Geothermal Program?

Energize Missouri Homes qualified auditors are encouraged to use standard industry best practices when conducting an energy audit. These include performing a whole house assessment of the home; testing the combustion safety to protect against poor air quality, natural gas leakage, and potential carbon monoxide poisoning; using diagnostic tools such as a blower door and duct blaster.

For more information on energy auditing best practices, please view the Home Energy Audits Fact Sheet available at <http://www.dnr.mo.gov/transform/energizemissourihomes.htm> under the Additional Resources section.

What are the requirements to become an *Energize Missouri Homes* qualified auditor?

Auditors wishing to participate in the *Energize Missouri Homes* training program must be included in the Missouri Department of Natural Resources' Missouri Certified Home Energy Auditor Directory or be certified through a program approved by the department. To become qualified, eligible auditors must participate in a one-day training program, complete an in-class assessment and submit a field assessment within 15 days of attending the training session.

How are funds allocated among the program aggregator regions?

Each program aggregator was awarded a grant amount through a competitive award process. The department retains the right to reallocate funds as necessary.

Are mixed commercial and residential buildings eligible?

No. Eligibility is restricted to buildings that are purely residential in nature.

How will homeowners be able to identify *Energize Missouri Homes* qualified auditors?

A directory of *Energize Missouri Homes* qualified auditors will be available for download at <http://www.dnr.mo.gov/transform/energizemissourihomes.htm>. Homeowners may select their preferred energy auditor from anywhere in the state.

How are the audit summary form and accompanying application documents reviewed?

Applications are reviewed in the order in which they are received. The first step of the review process is to verify if the submittal includes all of the required documents. If any one of the required documents is missing, the program aggregator will send a notification to the homeowner that the missing document must be submitted prior to reviewing the application. Applications that have all necessary documents will then be reviewed for eligibility and compliance with program requirements and all applicable terms and conditions. Once the application is deemed complete, eligible and compliant, the program aggregator will send a letter of approval to the homeowner. Homeowners should allow two to three weeks for review of complete submittals.

How long after submitting the audit summary form and accompanying application documentation will a homeowner receive confirmation that funds have been reserved?

Homeowners should allow two to three weeks after submitting all of the required documents to the program aggregator to receive a letter confirming reservation of funds or declining the application if it does not comply with the program's eligibility requirements.

When the program aggregator notifies the homeowner of audit summary form approval, will the program aggregator notify the auditor as well?

No. The auditor will need to communicate with the homeowner to identify if the audit summary form has been approved and if funds have been successfully reserved for the homeowner.

For additional information and clarification please email EMH.upgrades@shawgrp.com

Field Assessments

Can an auditor perform the field assessment audit on his own home or on a home that he has previously audited?

Yes. The field assessment serves as a practice for the auditor in how documentation must be submitted under this program and auditors are permitted to use their own home or previously audited homes to complete the field assessment.

How do I submit my field assessment?

Field assessments must be submitted both electronically and in hard copy within 15 days of the auditor attending an *Energize Missouri Homes* training session. Documents must be submitted at EMH.upgrades@shawgrp.com and to the address listed below:

Missouri Department of Natural Resources - Division of Energy
Attn. *Energize Missouri Homes*
1101 Riverside Drive P.O. Box 176
Jefferson City, MO 65102-0176.

For additional information and clarification please email EMH.upgrades@shawgrp.com

REM/Design™ Modeling

How does the thermal boundary layer location impact the model?

Changing the thermal boundary layer will have minimum impact on the building simulation results. The thermal boundary layer location is used by REM/Design™ for code compliance reports and is not applicable to the Homeowner Upgrades and Geothermal Program. The department recommends that *Energize Missouri Homes* qualified auditors set the thermal boundary layer to “REM Default.”

What is considered a sunspace for purposes of REM/Design™?

A sunspace is a space which is not conditioned by the building's heating or cooling system and which can be isolated from the conditioned space by closing doors, window, vents, etc. The sunspace should normally be open to the living space only when it is warm enough to deliver heat to the living space (rather than removing heat). A sunspace is not a sunroom. A sunroom is a heavily glazed space that cannot be isolated from the rest of the building and is therefore treated as part of the normal conditioned space.

Do appliances need to be modeled in REM/Design™?

Yes. Appliances must be modeled in the baseline and in the proposed REM/Design™ BLG files because they account for a home's energy use. However, appliance upgrades are not eligible for the Homeowner Upgrades and Geothermal Program and therefore the appliances included in the baseline and in proposed BFL files must remain the same. For more information on what is considered an appliance under the Homeowner Upgrades and Geothermal Program, refer to the program guidelines available at: <http://www.dnr.mo.gov/transform/energizemissourihomes.htm>.

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Energy Efficiency Upgrades

Can a homeowner self-perform the work on his home or does he need to hire an external contractor?

Homeowners are allowed to self-perform work in their homes. However, in this situation, a homeowner will not receive a rebate for the labor performed.

Can a home audited prior to the program launch date be eligible to participate in the program?

No. Eligible energy audits must be performed after the official program launch date of Nov. 15, 2010. Additionally, auditors must be qualified through *Energize Missouri Homes* at the time the audit is performed.

What will happen if, after the audit, the homeowner does not proceed with the selected upgrades or is unable to satisfy tier I, tier II or tier III requirements?

The homeowner will not have complied with program requirements and will therefore not be eligible to receive a program rebate for the audit or upgrades.

Is there a requirement for installation of energy efficiency upgrades before a homeowner can pursue tier III installation of a geothermal system?

No. However to realize the most benefit from the installation of a geothermal heat pump system, a homeowner is encouraged to consider a geothermal system only after making the home as energy efficient as possible by performing other energy efficiency upgrades such as air sealing, adding insulation, retrofitting mechanical equipment, and weatherizing the home. Making these upgrades first will allow homeowners to install smaller geothermal systems that are less expensive and therefore a better investment for the homeowner.

For more information on energy auditing best practices, please view the Geothermal Systems Fact Sheet available at <http://www.dnr.mo.gov/transform/energizemissourihomes.htm> under the Additional Resources section.

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Measurement and Verification

Will measurement and verification occur for this program?

Yes. The department will review each submitted file for eligibility and completion. In addition, the department will perform evaluation, measurement and verification on a statistically selected sample of homes participating in the program. A minimum of 10 percent of all participating homes will receive an on-site monitoring visit by a representative of the department.

What are the penalties for falsified information detected through measurement and verification?

Funds available under the Homeowner Upgrades and Geothermal Program are federal American Recovery and Reinvestment Act dollars. As such, there are stringent penalties associated with any misuse of funds or fraudulent activity. Should this occur the department will notify the appropriate federal and state authorities. Penalties for misuse of funds or fraudulent activity under the Homeowner Upgrades and Geothermal Program may be monetary, involve forfeiture of property, or may even include jail time, if convicted. The culpable party may also be suspended from further participation in the Homeowner Upgrades and Geothermal Program and participation in other department programs.

What constitutes fraudulent activity?

Under the Homeowner Upgrades and Geothermal Program, fraudulent activities include, but are not limited to the following:

- Submitting an application for an audit that was performed prior to Nov. 15, 2010 or prior to receiving *Energize Missouri Homes* auditor qualification.
- Falsifying information on the application forms or in the REM/Design™ files. Types of falsified information include but are not limited to the date on which the audit was performed, the age of the home, the specifications of the equipment or materials being installed, or the condition of the home in its current form.
- Providing signature on an Audit Summary Form for an audit that was performed by another individual.

Any of the above listed activities would be subject to immediate and permanent suspension from the Homeowner Upgrades and Geothermal Program, as well as additional penalties as applicable.

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Program Funding

Can funds be reserved for the energy audit?

No. Program rebates are reserved for the homeowner for the energy audit and for the proposed energy upgrades in conjunction with the audit. The reservation of funds occurs after the energy audit is performed and only if the homeowner commits to conducting energy efficiency upgrades that satisfy tier I, tier II or tier III requirements.

When will the *Energize Missouri Homes* qualified auditor receive payment for the audit?

The *Energize Missouri Homes* qualified auditor should receive payment from the homeowner immediately after conducting the energy audit. The Homeowner Upgrades and Geothermal Program is a rebate program; rebates are provided directly to the homeowner and not to the energy auditor.

How long will it take for the homeowner to receive the program rebate?

Upon adequate submittal of the rebate request form and other supporting materials, the homeowner should allow six to eight weeks before receiving the rebate.

Will there be a public means of tracking funds?

Yes. *Energize Missouri Homes* qualified auditors will be periodically provided with information regarding the level of funds remaining in the Homeowner Upgrades and Geothermal Program. In addition, remaining program funds will be provided to the public via the program website at <http://www.dnr.mo.gov/transform/energizemissourihomes.htm>.

If a homeowner receive a rebate under the Homeowner Upgrades and Geothermal Program and intends to apply to receive a federal tax credit for an energy efficient product, does the homeowner have to subtract the rebate first before calculating the tax credit?

At this time the Internal Revenue Service has not issued guidance on how federal tax credits interact with state rebates. However, in the past it has been established that for rebates that constitute taxable income, such as Homeowner Upgrades and Geothermal Program rebates, homeowners do not have to subtract the rebate amount from the total cost of the project. In essence, the homeowner will receive a tax credit on the entire cost of the project, because the homeowner had to pay taxes on the state rebate. Please note that Internal Revenue Service guidance is subject to change at any time. Please contact the Internal Revenue Service, a tax attorney, or other tax specialist for current information.

How does a manufacturer point of purchase rebate affect the Homeowner Upgrades and Geothermal Program rebate levels?

The Homeowner Upgrades and Geothermal Program will only provide a rebate for costs incurred by the homeowner. If the homeowner receives a discount or a point of purchase rebate on equipment, the Homeowner Upgrades and Geothermal Program will provide a rebate for a percentage of the cost not covered by the discount.

What is the maximum geothermal system capacity that is allowed under the program?

Under the Homeowner Upgrades and Geothermal Program there is no minimum or maximum tonnage requirement for geothermal systems. However, any project involving a system more than 5.5 tons of capacity will require additional National Environmental Policy Act review from the U.S. Department of Energy. Furthermore, any geothermal systems that are open looped or lake/pond systems will require additional review. A reservation of funds will not be made for the homeowner until after U.S. Department of Energy provides confirmation that the project is cleared from the National Environmental Policy Act.

What information is required on the geothermal system to complete the National Environmental Policy Act / National Historic Preservation Act Form?

The description of the geothermal system on the National Environmental Policy Act form must include the following:

- System capacity in tons.
- System type – closed-loop or open-loop.
- System configuration – horizontal or vertical.
- Ground, lake/pond.
- Heat pump model type (e.g., water-to-water, water-to-air).
- Heat exchange fluid.
- Number of wells, well depth, loop flow.
- Heating efficiency (COP) and cooling efficiency (EER).
- If applicable, supplemental heating type (e.g., electric, natural gas) and capacity.

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