Home Energy Audits

In a Nutshell

According to the U.S. Department of Energy (DOE), the average home wastes more than 30% of the energy it consumes. A home energy audit helps homeowners determine where their house is losing energy and money - and how such problems can be corrected to make the home more energy efficient. An energy auditor can check for leaks, examine insulation, inspect the furnace and ductwork, and perform a blower door test using an infrared camera. Information about discounted or free home energy audits for income-qualified indiviuals is available below.

The “How To”

Most homeowners know a lot more about their television or their car than they do about their home. You can begin the process of a home audit by finding an auditor through the Home Energy Score Certified Assessor database or (in Illinois only) the Illinois Association of Energy Raters. Energy.gov also provides a guide for Do-It-Yourself Home Energy Assessments.

Residents can take advantage of a $150 tax credit for a home energy audit (or get one for free, for income-qualified residents in MO and IL). They can then make a plan to make their home more efficient using incentives from utilities in MO and IL, available tax credits and rebates, and income-qualified home weatherization assistance in MO and IL.

A home energy audit can provide homeowners with a Home Energy Score, with a projected higher score if the recommended cost-effective improvements are made. A complete home energy audit should include at least the following:

1. A blower door test
2. Combustion testing on all gas appliances
3. An attic examination
4. Checking for lighting issues

Dollars & Cents

There is a $150 tax credit available for home energy audits, as well as a number of resources available to pay for the improvements recommended by the audit. Rewiring America offers a calculator for rebates and tax credits for home energy efficiency projects from the Inflation Reduction Act. Renew Missouri offers a list of energy efficiency rebates and incentives from Ameren. In the City of St. Louis, the PACE program offers financing for energy efficiency and renewable energy improvements. For businesses, a list of loans and rebates for energy efficiency improvements is available from Building Energy Exchange St. Louis.

Home energy audits can be of significant value to homeowners. As noted above, the average home wastes 30% of all the energy coming into it. This can be due in part to old, inefficient furnaces and water heaters, poor attic

insulation, or “phantom” electronics. Fixing these problems can save thousands of dollars. Upgrades can pay for themselves in a short period of time. In addition, the home will be more comfortable and less drafty. Home energy audits can also make the home safer, by identifying sources of indoor air polution, such as gas and carbon monoxide. The reduction of energy usage by a number of buildings can have a positive effect on the whole community, by reducing the need to build new power plants and add additional power lines or gas pipes to a neighborhood.

In addition, a building with lower utility bills and a certified audit can command a higher price at sale. The “total cost of ownership,” including mortgage payments, utility payments, insurance, and property taxes may go down, allowing the new owner to afford a higher sale price. In Missouri, Pearl Certification and Renew Missouri have formed a partnership to create a statewide network of certified efficient homes and help make energy efficiency a part of home values.

Discover More

The DOE offers a number of home energy audit resources, including The Home Energy Saver™ (HES) tool, the Energy Efficiency and Renewable Energy website and Energy Star. Energy Star provides a tool to measure the efficiency of your home. Energy.gov published a guide to prepare your home for a professional energy audit and choose an auditor. The Building Performance Institute, Inc., provides a guide to Home Energy Auditing Standards.