

Home Energy Audit

A Home Energy Audit involves a thorough assessment of a home's energy use, with the goal of identifying ways to make the home more energy-efficient. This process helps homeowners minimize energy waste and reduce utility costs.

Step 1: **Preparation**

Gather necessary tools such as a notepad, flashlight, ladder, and an energy bill. Make a sketch of the home's layout, noting the location of windows and doors.

Step 2: **Inspection**

Conduct a walk-through of your home, inspecting all areas including the attic, basement, and all living spaces. Look for any obvious drafts, leaks, or insulation issues.

Step 3: **Air Leaks**

Check for air leaks around windows, doors, outlets, and other openings. Use a smoke pencil or incense stick to locate drafts. Make a note of all leaks for later sealing.

Step 4: **Insulation**

Examine the insulation in your attic and walls. Determine if the insulation level is adequate based on recommended guidelines for your geographic area.

Step 5: **Heating/Cooling**

Inspect your heating and cooling systems. Clean or replace filters, and schedule maintenance if necessary. Make sure thermostats are working properly.

Step 6: **Lighting Assessment**

Evaluate the lighting in each room. Consider replacing incandescent bulbs with energy-efficient LEDs or CFLs.

Step 7: **Appliance Check**

Review the age and efficiency of major appliances. Contemplate upgrading to ENERGY STAR-rated products.

Step 8: **Energy Consumption**

Analyze your energy bill to understand your consumption patterns. Note peak usage times and consider ways to reduce demand during these periods.

Step 9: **Water Usage**

Check for any plumbing leaks and assess the efficiency of faucets, showerheads, and toilets. Install aerators or low-flow devices if necessary.

Step 10: **Final Review**

Compile a list of found issues and potential improvements based on the audit. Prioritize actions based on cost-effectiveness and ease of implementation.

Step 11: **Implementation**

Begin making the improvements identified during the audit, starting with the easiest and most cost-effective solutions, such as sealing leaks and changing lightbulbs.

General Notes

Professional Audit

Consider hiring a professional auditor for a more detailed analysis, including a blower door test and thermographic scan, if the initial audit suggests significant inefficiencies.

Incentives

Research federal, state, or local incentives for energy efficiency improvements. There may be financial aid or tax credits available for certain upgrades.