# 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.