Home Energy Audit Checklist

A free room-by-room DIY walk-through · 7 steps · 2 pages

EcoHome Intelligence
ecohomeintelligence.com

How to use it: tick each item as you go and jot what you find in the notes column ("kitchen outlet, north wall"). Work top to bottom: the early sections are free to check. Underlined links open the matching guide on our site.

1 Your bill (5 minutes)

		NOTES
☐	Compare this month's **kWh** (or therms) with the same month last year. Usage up means waste at home; usage flat but bill up means rates.	
☐	Note your price per kWh, including delivery charges. You need it to put a dollar value on anything you find.	

2 Air leaks (DOE smoke test)

		NOTES
☐	On a windy day, or with windows shut and all exhaust fans on, hold a lit incense stick near windows, doors, outlets, switch plates, ceiling fixtures, plumbing penetrations and the attic hatch. Smoke that moves sideways marks a leak.	
☐	Close each exterior door on a sheet of paper. If it slides out easily, the weatherstripping is not sealing.	
☐	Check outlets and switches on exterior walls; seal leaky ones with foam gaskets behind the cover plate.	
☐	Look where pipes, wires and vents pass through walls, floors and the attic floor; gaps there are often the largest leaks.	

→ Read: Finding air leaks · Door weatherstripping

3 Attic and insulation

		NOTES
☐	Look across the attic floor: if the insulation is level with or below the tops of the floor joists, you probably need more (ENERGY STAR). Walk only on joists, and do not disturb grey, pebble-like vermiculite insulation until it has been tested for asbestos.	
☐	Check the attic hatch or door is insulated on top and weatherstripped around the edge.	
☐	In the basement or crawlspace, check the rim joist (where the house sits on the foundation) for gaps and bare wood.	

→ Read: Attic insulation · Sealing the attic hatch · Drafty basement

4 Heating and cooling

		NOTES
☐	Check the air filter. ENERGY STAR advises checking it monthly and changing it at least every three months.	
☐	Is the thermostat set back at night and when the house is empty? Is it out of direct sun and away from drafts and supply vents?	
☐	Heat pump with electric backup: find out whether auxiliary heat runs on mild days (see the thermostat's aux heat or lockout setting).	
☐	Look at any ducts you can reach in the attic, basement or garage for disconnected joints and gaps.	
☐	Check indoor humidity with a hygrometer; EPA recommends keeping it below 60%, ideally 30–50%.	

→ Read: Smart thermostats · Aux heat running too much · Basement dehumidifiers

5 Standby power (the night walk)

NOTES

- [ ] After dark, walk through every room and list anything with a glowing light, clock or warm power brick.
- [ ] Measure the biggest suspects (TV and media, game consoles, computer, printer, old appliances) with a plug-in watt meter.
- [ ] Put the worst clusters on a smart power strip or timer so they switch off overnight.

→ Read: What is vampire power? · Energy-monitoring plugs · Smart power strips

6 Lighting and hot water

NOTES

- [ ] Replace remaining incandescent or halogen bulbs in the most-used fixtures with ENERGY STAR certified LEDs.
- [ ] Check the water heater thermostat; DOE suggests 120°F for most households.
- [ ] Note any lights left on in garages, closets and outside during the day; those are candidates for motion sensors or photocells.

→ Read: LED vs incandescent cost

7 Decide the order

NOTES

- [ ] List everything you found. Do the free fixes first (settings, schedules, filters), then the cheap ones (gaskets, weatherstripping, power strips), then the bigger jobs (insulation, sealing ducts).
- [ ] For each bigger job, estimate the saving at your price per kWh before you buy anything.

Tools that help

Optional: nothing above needs them, but they make the checks faster. Each guide compares models using makers' specifications.

TOOL	WHAT IT FINDS OR FIXES	OUR GUIDE
Thermal leak detector	Cold spots around windows, doors and outlets (step 2)	Detectors under $50
Thermal camera	Missing insulation and leaks across a whole wall (steps 2–3)	Thermal cameras
Energy-monitoring plug	What each device draws, on and off (step 5)	Monitoring plugs
Smart power strip	Standby clusters left on overnight (step 5)	Smart power strips
Smart thermostat	Setbacks and schedules you will actually keep (step 4)	Smart thermostats
Dehumidifier	Basement humidity above 50–60% (step 4)	Basement dehumidifiers

Sources: U.S. Department of Energy, Energy Saver Guide (2022); ENERGY STAR (DIY checks and inspections; Heat and Cool Efficiently); U.S. EPA indoor humidity guidance. EcoHome Intelligence guides are AI-assisted and reviewed by a person; we do not test products in-house. This checklist is general guidance, not a professional energy audit. Turn off power before working near electrical boxes, and call a professional for anything involving gas appliances, wiring or ductwork you cannot safely reach.