the Home Upgrade Hub

Missoula County's Resource for Healthy & Efficient Homes

DIY Home Assessment Worksheet

Use this worksheet as a step-by-step guide for assessing your homes energy use and energy efficiency. By systematically reviewing building characteristics, electrical consumption, and heating and cooling systems, you can pinpoint areas where energy efficiency improvements will have the greatest impact.

Information Inputs – Building

A home's structure and materials play a major role in its energy efficiency. This assessment includes:

- **Building Size, Type, and Occupancy** – Understanding the square footage, number of stories, and type of home (single-family, multi-family, mobile home, etc.) provides insight into energy needs. The number of occupants and their usage habits also influence energy consumption patterns.
- **Attic Insulation and Air Sealing** – Checking the insulation levels and identifying any air leaks in the attic helps determine if additional insulation or sealing is needed to prevent heat loss.
- **Windows and Doors Assessment** – Examining window and door types, their condition, and whether they are properly sealed can reveal potential sources of drafts and energy loss.
- **Building Envelope Assessment** – Evaluating the walls, foundation, and exterior materials of the home helps identify insulation gaps, air leaks, or thermal bridging issues that could impact energy efficiency.

Information Inputs – Electrical

A home's electrical system and energy usage patterns significantly impact energy costs. This section includes:

- **Utility Bills Review** – Analyzing past utility bills helps establish baseline energy consumption and identify seasonal variations or unusual spikes in usage.
- **Appliance Energy Use** – Assessing the efficiency of major household appliances (refrigerator, dishwasher, washer/dryer, etc.) helps determine if upgrades to ENERGY STAR-rated models could reduce electricity consumption.
- **Operating Schedules and Occupancy Patterns** – Understanding when and how different appliances and systems are used helps identify opportunities to optimize energy usage through timers, smart controls, or behavioral changes.
- **HVAC System Inspection** – Checking heating and cooling equipment for wear, maintenance issues, and efficiency ratings ensures that systems are running optimally and not wasting energy.
- **Lighting Assessment** – Evaluating the types of lighting in use (incandescent, CFL, LED) and their efficiency provides insights into potential energy savings through lighting upgrades.

By gathering and analyzing these inputs, homeowners can develop a clear roadmap for improving their home's energy performance. This worksheet serves as a tool to identify practical upgrades that can reduce energy costs, improve comfort, and contribute to a more sustainable living environment.

Home Energy Assessment Worksheet

Building Information

- **Home Type:** (e.g., Single-family, Duplex, Townhouse, Mobile Home)
- **Age of Home:** _____ years
- **Basement or Crawlspace:** (Circle one) Basement / Crawlspace / Slab-on-grade
- **Size of Home:** _____ sq. ft.
- **Number of Stories:** _____
- **Overhanging Sections (e.g., second story over garage, cantilevered sections):** _____
- **Occupancy:**
    - Number of occupants: _____
    - Work from home: Yes / No / Sometimes
    - Out of the house most of the day: Yes / No / Sometimes
    - Other relevant behavioral patterns: _____

Utility Information

- **Utility Provider:** _____
- **Billing Units:** kWh / Therms / Other: _____
- **Total Annual Energy Usage:**
    - **Electricity:** _____ kWh
    - **Natural Gas (if applicable):** _____ Therms
- **Seasonal Spikes in Usage:** (Describe any notable increases during specific seasons) _____

Appliance Inventory

Appliance	Age (Years)	Energy Star Certified (Y/N)	Estimated Annual Usage (kWh/Therms)	Notes (Efficiency Ratings, Usage Patterns, etc.)
Refrigerator				
Freezer				
Dishwasher				
Clothes Washer				
Clothes Dryer				
Oven/Stove				
Microwave				
Water Heater				
Heating System				
Cooling System				
Other (Specify)				

HVAC System

- **Model** (If findable)_____
- **Type:** (Circle one) Furnace / Boiler / Heat Pump / Electric Resistance / Other:_____
- **Fuel Type:** Natural Gas / Propane / Electric / Other: _____
- **Age of System:** _____ years
- **Ductwork Condition:** Good / Fair / Poor
- **Filter Type & Replacement Schedule:** _____
- **Does the system meet your comfort needs?** Yes / No (Explain) _____
- **Is HVAC system oversized or undersized?** Yes / No / Unsure
- **Is HVAC in the attic?** Yes / No

Attic Inspection

- **Insulation Type:** (e.g., Fiberglass, Cellulose, Spray Foam, Vermiculite) _
- **Insulation Depth:** _____ inches
- **Adequacy of Insulation:** Good / Needs Improvement
- **Presence of Air Sealing Measures (e.g., around recessed lights, vents):** Yes / No
- **Conditioned vs. Unconditioned Attic:** (Circle one) Conditioned / Unconditioned

Basement / Crawlspace Inspection

- **Foundation Wall Condition:** Good / Needs Repair
- **Rim Joist Insulation Present:** Yes / No
- **Insulation Between Basement & Floor Above:** Yes / No
- **Basement Conditioned or Unconditioned:** Conditioned / Unconditioned
- **Comfort Level in Basement:** Comfortable / Too Cold / Too Humid / Other: _____

Windows & Doors

Location	Material of Frame	Type of Window/Door	Square Footage	Weatherstripping (Y/N)	Age (Years)

Building Envelope – Exterior

- **Siding Type, Condition & Age:** _____
- **Presence of Air Barrier (e.g., Tyvek):** Yes / No
- **Penetrations from Appliances & Utility Lines Sealed:** Yes / No
- **Roof Age & Condition:** _____
- **Foundation Condition (Where Building Meets Foundation):** _____

Building Envelope – Interior

- **Existing Insulation Type:** _____
- **Thermal Inspection Findings (e.g., cold spots, drafts):** _____
- **Air Sealing Needs:**
  - Outlets & Baseboards: Yes / No
  - Garage Connection: Yes / No
  - Plumbing Penetrations: Yes / No
  - Dropped Ceilings: Yes / No
  - Around Vents & Ductwork: Yes / No
- **Signs of Moisture or Condensation:** Yes / No (Describe) _____