

## DETAILED HOME ENERGY EFFICIENCY SELF-ASSESSMENT AND IMPROVEMENT PLANNING TOOL

This tool lists 31 characteristics of an energy efficient home. You can use it to assess your own residence, determine what improvements your home needs, establish a priority for each improvement you identify and document which improvements you make over time.

For further information: the last page of this tool has links to US Department of Energy videos on home energy assessments and guidance on many energy efficiency upgrades and incentives, For questions about this tool and information on JCED's professional energy audits, contact us at [info@johnsoncleanenergydistrict.org](mailto:info@johnsoncleanenergydistrict.org)

EXTERIOR	YES/NO	IMPROVEMENTS NEEDED/PLANNED	PRIORITY (1 = MOST IMPORTANT)	DATE COMPLETED
Siding is intact, without holes or gaps; seams are sealed <sup>1</sup>				
Siding is sealed around windows and doors				
Entry points for pipes and wires are sealed				
The sidewalls have an air sealing insulation wrap under the siding (e.g., Tyvek)				
Sidewall insulation exists between the sidewall studs and/or foam sheets under the siding <sup>2</sup>				
ATTIC	YES/NO	IMPROVEMENTS NEEDED/PLANNED	PRIORITY (1 = MOST IMPORTANT)	DATE COMPLETED
Attic has at least 10 inches of insulation				
Access door to the attic has weatherstripping on the edges and is insulated on the attic side				

<sup>1</sup> Holes, gaps, and seams can be filled with caulk and/or spray foam

<sup>2</sup> Pre-1945 seldom has wall insulation unless new siding or exterior plugs for blown-in insulation (1" holes every 16" on exterior

Holes in the attic floor for wires, pipes and ducts are sealed				
Check attic ventilation <sup>3</sup>				

<b>BASEMENT</b>	<b>YES/NO</b>	<b>IMPROVEMENTS NEEDED/PLANNED</b>	<b>PRIORITY (1 = MOST IMPORTANT)</b>	<b>DATE COMPLETED</b>
The space where the wall and the foundation meet is sealed				
Insulation is present at the top of the basement wall <sup>4</sup>				
Holes in the basement ceiling for pipes, drains and electrical wiring are sealed				
Metal ducts are sealed where they meet the ceiling, floor, or walls.				
Heating and cooling duct seams and joints are taped				
Cracks and service entry holes in the foundation are sealed on both the inside and the outside <sup>5</sup>				
Cracks around basement windows are filled with masonry caulk or spray foam				
If the basement or basement garage is not heated, the ceiling is insulated				

<sup>3</sup> Look on roof for (1) four to six 1-sq ft "hotboxes", (2) ridge vents running full length of roof ridge, and/or (3) screened soffit vents under the eaves. If present, you can generally assume adequate ventilation but speak to contractor if you are increasing insulation

<sup>4</sup> Expandable foam and/or foam board are good choices for top of the basement wall

<sup>5</sup> Look for all entry holes, such as gas lines, electricity, AC, water supply, internet, cable, etc

<b>WINDOWS</b>	<b>YES/NO</b>	<b>IMPROVEMENTS NEEDED/PLANNED</b>	<b>PRIORITY (1 = MOST IMPORTANT)</b>	<b>DATE COMPLETED</b>
Windows have double or triple paned glass				
Single paned windows are covered by storm windows in cold months				
Seams between window glass and wood parts are sealed				

<b>DOORS</b>	<b>YES/NO</b>	<b>IMPROVEMENTS NEEDED/PLANNED</b>	<b>PRIORITY (1 = MOST IMPORTANT)</b>	<b>DATE COMPLETED</b>
Exterior doors are insulated and weather-stripped				
Storm doors are installed over uninsulated exterior doors				
Door thresholds <sup>3</sup> are intact and do not leak air.				

<b>HEATING AND COOLING SYSTEMS</b>	<b>YES/NO</b>	<b>IMPROVEMENTS NEEDED/PLANNED</b>	<b>PRIORITY (1 = MOST IMPORTANT)</b>	<b>DATE COMPLETED</b>
Heating system is ENERGY STAR certified & less than 10 yrs old				
Heating system has 95% or greater annual fuel utilization efficiency (AFUE) – see the label				
The furnace is electric				
The home uses a heat pump <sup>4</sup> (geothermal, ducted or mini-split) for heating & cooling				

A smart or programmable thermostat adjusts settings automatically				
Photovoltaic solar panels generate electricity				
The air conditioner is ENERGY STAR certified and less than 10 years old				
The water heater is ENERGY STAR certified and less than 10 years old				

<b>MAJOR APPLIANCES</b>	<b>YES/NO</b>	<b>IMPROVEMENTS NEEDED/PLANNED</b>	<b>PRIORITY (1 = MOST IMPORTANT)</b>	<b>DATE COMPLETED</b>
Oven is electric and ENERGY STAR certified				
Cooktop is induction electric				
Refrigerator and dishwasher are ENERGY STAR certified				
Dishwasher is ENERGY STAR certified				
Clothes washer and dryer are electric and ENERGY STAR certified				
<b>LIGHTING</b>	<b>YES/NO</b>	<b>IMPROVEMENTS NEEDED/PLANNED</b>	<b>PRIORITY (1 = MOST IMPORTANT)</b>	<b>DATE COMPLETED</b>
Interior and exterior light fixtures have LED bulbs				
Lights in unused rooms are routinely turned off				

**DEPARTMENT OF ENERGY (DOE) DIY HOME ASSESSMENT VIDEO**

<https://www.energy.gov/energysaver/do-it-yourself-home-energy-assessments>

**DOE GUIDANCE ON ENERGY UPGRADES AND INCENTIVES [WWW.ENERGY.GOV/ENERGYSAVER](http://WWW.ENERGY.GOV/ENERGYSAVER)**

**ENVIRONMENTAL PROTECTION AGENCY PRODUCT GUIDE [WWW.ENERGYSTAR.GOV](http://WWW.ENERGYSTAR.GOV)**

**JCED PROFESSIONAL HOME ENERGY ASSESSMENTS & ENERGY COACHING**

JCED contracts with energy coaches to conduct detailed energy audits and assist homeowner evaluate and prioritize upgrades. Auditors with All Pro Home Inspections are certified by the American Society of Home Inspectors and have 40+ years of experience in Johnson County. To learn more, contact JCED at [gail-ardery@uiowa.edu](mailto:gail-ardery@uiowa.edu).