

# Federal Home Energy Rating Systems:

Home Energy Yardstick  
Home Energy Score

Air and Climate Public Advisory Committee

December 13, 2010



# Energy Star Home Energy Yardstick

## Process to obtain your score:

- What you need:
  - zip code
  - age of home
  - square footage
  - number of occupants
  - energy bill totals for a consecutive 12-month period
- Homeowners takes 5 minutes online entering data and immediately gets score on 1 – 10 scale (10 being best)



# Home Energy Yardstick

## What you need to know to get started

- **Your energy use and costs for the last year:** You'll need your last 12 months of utility bills OR a 12-month summary statement from your utility company.
- **Energy sources for your home:** natural gas, electricity, fuel oil, propane, coal, wood and/or kerosene?
- **The square footage of your home.**

## Your Home

What is your 5-digit zip code?

How many people live in your home?

What is the square footage of your home, including the basement?

[More information](#)

## Your Fuel Types

In addition to electricity, which fuel type(s) does your home use? **Select no more than 2.**

- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| <input type="checkbox"/> Natural Gas | <input type="checkbox"/> Kerosene |
| <input type="checkbox"/> Fuel Oil    | <input type="checkbox"/> Coal     |
| <input type="checkbox"/> Propane     | <input type="checkbox"/> Wood     |

## Your Energy Use

Would you like to use **annual** or **monthly** billing information to enter your household's energy use? [?](#)

- Annual  
 Monthly

Select the Start Date for the year covered:   [?](#)

Enter Totals for the year:

Electricity  kWh  dollars [?](#)  
Max 70,000

SUBMIT



# ENERGY STAR Home Energy Yardstick • RESULTS

The Home Energy Yardstick compares a household's energy use to similar homes and gives it a score between 0 and 10 (10 being the most energy efficient). An average household scores a 5.

**Yardstick Score: 7.7\***

[PRINT THESE RESULTS](#)

Annual pollution resulting from energy use in this household is **7 MtCO<sub>2</sub>eq of greenhouse gas emissions** - the equivalent of **1 car**.



## About Your Home [\(edit\)](#)

Zip code: 20008  
People living in your Home: 2  
Square Footage: 2,600  
Heating Degree Days: 4221  
Cooling Degree Days: 1313

## Energy Use [\(edit\)](#)

Electricity Use: 7,920 kWh Cost: \$0  
Natural Gas Use: 500 Therms Cost: \$0  
Total Source Energy Consumption: 142,607 kBtu

Improve your Score

Set Energy Use Goal

### Improve your Score Today!

- ✓ ENERGY STAR's Home Energy Advisor. Tell us more about your home and get customized recommendations to improve efficiency and comfort.

How Do You Cool Your Home?

No Air Conditioner

How Do You Heat Your Home?\*

Electric Baseboard/Wall Heater

What Type of Water Heater Do You Have?\*

Instantaneous/Tankless/Indirect Storage with Boiler

\* Required field.

[SUBMIT](#)

- ✓ Get a Home Energy Audit.

- Contact your utility to see if they offer free or discounted energy audits to their customers.
- [Hire a home energy professional](#) to evaluate your home's energy efficiency.



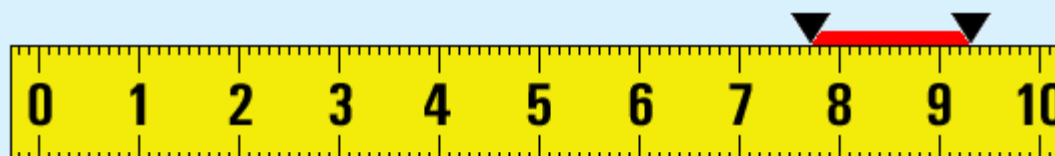
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### Improve your Score

### Set Energy Use Goal

#### Set a Goal

Reduce Your Energy use by:

Electricity:  %

Goal Electricity Use:  kWh

Natural Gas:  %

Goal Natural Gas Use:  Therms

[UPDATE SCORE](#)

Goal Energy Use Results:

New Yardstick Score:

Total \$ Savings:

Avoided Emissions:



# Home Energy Score Pilot

The process to get your score includes:

- A home energy assessor will conduct a brief home walk-through
- Assessor enters data into DOE database to retrieve score on 1-10 scale (10 being best)
- Assessor provides homeowner a list of recommended energy improvements and the associated cost savings estimates

To be a Qualified Assessor:

- Be certified by the Building Performance Institute (BPI) or by a Residential Energy Services Network (RESNET) Provider, and
- Complete and receive a passing grade on DOE's Home Energy Scoring Tool online training module and test.



# Home Energy Score Pilot

- Testing locations for pilot through mid-2011
- Locations include:
  - Allegheny County, PA
  - Cape Cod and Martha's Vineyard, MA
  - Colorado Mountain Region
  - Greater Charlottesville area, VA
  - Indiana
  - Minnesota
  - Omaha and Lincoln, NE
  - Portland area, OR
  - South Carolina
  - Texas

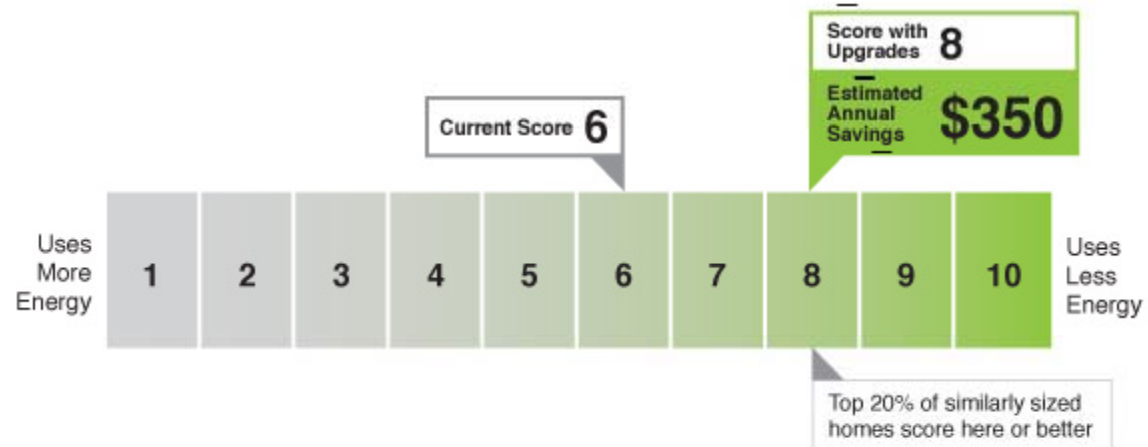


# HOME ENERGY SCORE

Address **12345 Honeysuckle Lane  
Unit 3  
Smithville, AR 99999**

Total Energy **200 MBTUs / year**  
Home Size **2,300 square feet**  
Air Conditioning **Yes**

Climate Zone



Energy use reported in Million British Thermal Units (MBTUs). Estimated savings reflect the amount a homeowner will save on their annual utility bill if all recommended improvements are made. Both energy use and savings estimates assume that 2 adults and 1 child live in the home. Your actual energy use and savings will depend on how you maintain your home, how many people live there, your day-to-day habits and weather. To learn more about how to save energy and money in your home, as well as more about the home energy score, visit: [homeenergyscore.gov](http://homeenergyscore.gov)



U.S. DEPARTMENT OF  
**ENERGY**

Assessor # **55555** Assessment Date **12/31/2010** Label # **123456789**





Most home owners can reduce their energy bills and increase the comfort and safety of their home by changing some basic habits and doing more routine maintenance. Here are some easy ways to save energy and money. Savings from these measures are not included in the Home Energy Score.

### Refrigerator/Freezer

- If your extra refrigerator is only used once in a while, unplug it and prop the door open when it's empty.
- If your extra refrigerator doesn't have much in it, consider replacing it with a smaller Energy Star model.

### Laundry

- Use cold water to wash your clothes. Most detergents clean just as effectively and clothes don't fade as fast.
- Hang your clothes on a line to dry, when appropriate.
- If you use a clothes dryer, set the timer to Autodry so the dryer stops when your clothes are dry. This saves energy and is better for your clothes.
- Clean the dryer lint trap before each use. Clean the dryer vent hose every 6 months, more if you dry a lot of clothes. Be sure your vent hose is free of kinks.

### Buying and Replacing Appliances, Windows and Other Equipment

When you buy or replace appliances, windows or other equipment, be sure to pick ones that have an ENERGY STAR label. If there are no ENERGY STAR choices, compare the products' energy use specifications and pick one that is more energy efficient.

### Heating and Cooling

- Install a programmable thermostat.
- During the winter, lower the thermostat setting at night and when the house is empty.
- During the summer, raise the thermostat setting at night and when the house is empty.
- Avoid the desire to turn the thermostat temperature way up or way down to make the house warmer or colder. It doesn't heat or cool the house any faster but it uses more energy.
- Use ceiling fans alone or with air conditioning. Remember to turn them off when you leave.
- Change your furnace filter every two months (during summer too, if you have central air conditioning). Do it more frequently if you have pets or see that the filters are more than a little dirty.
- Bleed the air out of the radiators within a month of turning the boiler on each winter. Don't block vents and radiators with furniture.
- Install reflectors behind the radiators on outside walls.
- Keep about 2 feet of space cleared around your outside air conditioner/heat pump compressor.

### Curtains and Blinds

- On summer days, close window shades and curtains on the south and west side of the house. On winter days, open them.
- On winter nights, close all window shades and curtains.

### Lights

- When you leave a room, turn lights off.
- Replace incandescent bulbs with compact fluorescent lights (CFLs).

### Computers and Other Electronics

- Use the energy saver settings on computers and other electronics so they go to sleep when you are not using them.
- Plug groups of electronics together into one power strip. Turn off the whole powerstrip when they are not in use.

### Water

- Fix leaky faucets and running toilets right away.
- Install low-flow showerheads and faucet aerators.

### Whole House upgrades save energy and money and can make your home more healthy, comfortable and safe to live in.

For even bigger savings, ask a certified energy professional about "whole house" energy upgrades. Qualified professionals can help you pick the right kind and size of equipment and make sure it is installed correctly. They also help you understand the health, comfort and safety considerations of your decisions when planning improvements.



Address **555 Park Lane | Pittsburgh, PA 99999**

**Improvements recommended now**

These upgrades can help you save energy right away.

	Estimated Utility Bill Savings (\$/year)	Simple Payback Period (years)	Greenhouse Gas Reductions (lbs CO <sub>2</sub> /year)
Basement: Add insulation to walls to R-11.	\$230	2	1,680
Air tightness: Have a professional seal the gaps and cracks that leak air into your home.	\$130	6	970
Attic: Increase attic floor insulation to R-38.	\$120	6	890

**Recommendations for when you need to replace equipment**

These recommendations will help you save energy when it's time to replace or upgrade.

Furnace: Pick one with an ENERGY STAR label.	\$160	3	1,150

It is important to consult a certified energy professional to ensure improvements are made properly and take into account health, comfort, and safety. Proper installation, including details such as complete coverage of rigid insulation and taping the seams, is critical to achieving energy savings. As with any major purchase, you should seek more than one cost estimate before making a buying decision.

**How are savings calculated?**

These estimates are based on standard energy use patterns of 2 adults and 1 child. Actual energy bills and projected savings will vary according to the number and type of appliances, the number of occupants and their behavior, and weather.

**What do lbs of CO<sub>2</sub> mean in my everyday life?**

On average, a car generates about 11,000 lbs of CO<sub>2</sub> each year.

**What does payback period mean?**

For improvements recommended now, simple payback reflects the number of years it will take to cover your upfront costs. For recommendations concerning future equipment replacement, payback time is the number of years it will take for your savings to add up to your upfront cost if you buy an Energy Star, or high-efficiency unit, instead of a lower-efficiency one. Payback periods will vary depending upon local energy costs and the costs of improvements in your area. Only measures with paybacks of 10 years or less are included. If you take into account the opportunity cost of money, the payback time is longer.



# Home Energy Yard Stick

- [https://www.energystar.gov/index.cfm?fuseaction=HOME\\_ENERGY\\_YARDSTICK.showGetStarted](https://www.energystar.gov/index.cfm?fuseaction=HOME_ENERGY_YARDSTICK.showGetStarted)

# Home Energy Score

- <http://www1.eere.energy.gov/buildings/homeenergyscore/>