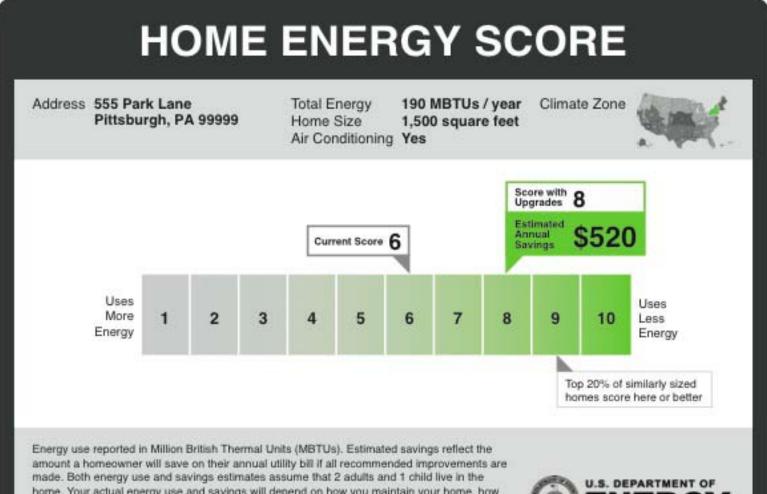
It's ok, honey, we're an 8! The potential for rebound in a residential energy efficiency program

Christa McDermott

American Association for the Advancement of Science (AAAS), 2009-11 Science and Technology Policy Fellow Building Technologies Program, Office of Energy Efficiency and Renewable Energy U.S. Department of Energy, Washington, DC.

Member of the Sustainable Consumption Research and Action Network (SCORAI)

Contact: mcdc@umich.edu



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 BINERGY

Assessor # 85317 Assessment Date 11/05/2010 Label # 000062465

Sample house-specific recommended improvements

HOME UPGRADE RECOMMENDATIONS

Home Energy Score | Session # 000062465 | Page 3

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 (Ibs C0,/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 CO₂ mean in my everyday life? On average, a car generates about 11,000 lbs of CO, 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.

TIPS TO SAVE ENERGY AT HOME

Home Energy Score | Session # 000062465 | Page 2

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.

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 florescent 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.

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.

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.