

# LEARN ABOUT YOUR HOME ENERGY USE

Paying bills may not be any fun, but you can learn a lot about your home energy consumption from a home energy audit and your utility bill. A home energy audit can help you understand how you use energy in your home and identify ways you can save energy. Have members of your group audit their home energy use and set goals for the changes they plan to make.

## Outcomes

Learn how to conserve energy in your home by conducting a home energy audit and understanding your utility bill.

## Audience

Adults

## Time

60 minutes

## Concepts

- Understand how to conduct a home energy audit and find out where to conserve energy in your house.
- Understand how to read your utility bill to see where you can conserve energy and save money.
- Learn how to conserve energy within your home.

## Supplies

- ENERGY STAR Home Energy Yardstick, [www.energystar.gov](http://www.energystar.gov), search: "energy yardstick"
- U.S. Department of Energy, [www.energysavers.gov](http://www.energysavers.gov), search: "home energy audit"
- Home Energy Saver, [www.hes.lbl.gov](http://www.hes.lbl.gov)
- Examples of weatherizing materials such as caulk, weather-stripping, plastic for windows, etc



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## Preparation

- Home energy audit: Use the resources listed in supplies to help you conduct your own energy audit or contact your utility provider to set up a home energy audit (your utility provider has professional energy auditors that can conduct energy audits).
- Utility bill: ask participants to bring in their utility bill

## Procedure

### Home energy audit:

- For your own energy audit, start with a walk-through of your home and keep a checklist of areas you have inspected and problems you found.
- First, make a list of obvious air leaks, called drafts, which are often found along baseboards or the edge of flooring. Seal air leaks by caulking or applying weather-stripping.
- Heat loss can waste a lot of energy and money in your home. Check insulation and seal any gaps with an expanding foam caulk or other permanent sealant. Make sure vents are not blocked by insulation.
- Inspect heating and cooling equipment by checking filters and replacing them as needed. Consider replacing units 15 years or older.
- Examine light bulbs in your house and consider replacing light bulbs with more energy efficient bulbs such as compact fluorescent lamps (CFLs), or light-emitting diodes (LEDs).
- Consider strategies for reducing energy use of your appliances and electronics such as unplugging an item when it is not in use, using the items less often, or purchasing a new, more efficient product.

### Utility bill

- Have participants analyze their utility bills. They can compare energy consumption among group members. Analyze how energy consumption changes during different times of the year.
- Consider tracking your group member's energy consumption over time.
- Make goals for reducing energy consumption.
- Discuss what factors affect energy use and encourage participants to share what steps they've taken to reduce energy consumption.

## Discussion questions

- What did you learn from your home energy audit? What was surprising to you?
- Where did you find the most opportunities to conserve energy?
- Do you winterize your home when seasons change? Why or why not? What barriers stand in your way?
- What did you learn from analyzing your utility bill?
- Will you inspect your utility bill differently after this exercise?
- What goals did you make to reduce your energy consumption? How can this save you money?
- What more do you want to learn about energy conservation?

## Additional activity ideas

### Discuss alternatives to laundry dryer

- Clothes dryers are typically one of the top three energy-using appliances in the home. By air drying your clothes on the line or on drying racks, you can save energy and money. An average family spends \$80 to \$120 per year drying clothes. Other ways to conserve energy with laundry include using a drying rack, using cold water instead of hot or warm water and avoiding laundromats.
- Discussion questions:
  - Do you currently use a clothesline or a drying rack? Why or why not?
  - How do you feel about using a clothesline? Studies show that when people see others acting in certain ways, they are more likely to change their own behavior. Do you think you might influence others by simply using a clothesline? What message does it send?
  - Do you currently use cold water instead of hot or warm water? Why or why not? Did you know switching to cold water can save energy and money?
  - What are the biggest barriers to switching your laundry habits? Could they be easy to overcome?

## Resources

- Department of Energy's Home Energy Audit checklist [www.energy.gov/articles/energy-saver-101-infographic-home-energy-audits](http://www.energy.gov/articles/energy-saver-101-infographic-home-energy-audits)
- Clean Energy Resource Team's Right Light Guide [www.cleanenergyresourceteams.org/sites/default/files/CERTs\\_RightLightGuide\\_2014.pdf](http://www.cleanenergyresourceteams.org/sites/default/files/CERTs_RightLightGuide_2014.pdf)