IANR NebGuide University of Nebraska Lincoln

University of Nebraska–Lincoln Extension, Institute of Agriculture and Natural Resources

Know how. Know now.

G2230

Home Efficiency: Refrigerators

F. John Hay, Extension Educator – Energy
Lynn Chamberlin, Nebraska Energy Office

Refrigerators consume a significant amount of energy. Consider how you're using your unit(s) and whether it's more economical to replace with an energy-efficient model.

Like an old friend, your old refrigerator sits out in the garage faithfully chugging away, but sucking up enough power to light up a small town.

Refrigerators and freezers can consume nearly a sixth of all electricity in a typical American home, using more energy than any other single household appliance (*Figure 1)*. Although it may be difficult to believe, that old friend that has been running faithfully since the 1980s — or earlier — may be adding over $140 a year to your electric bill; in the case of old chest freezers, $108 a year.

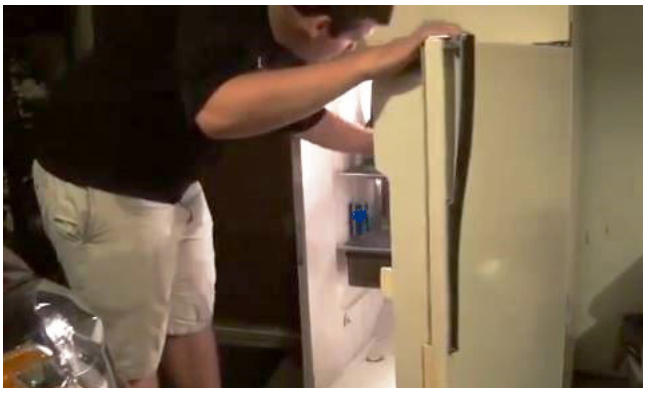
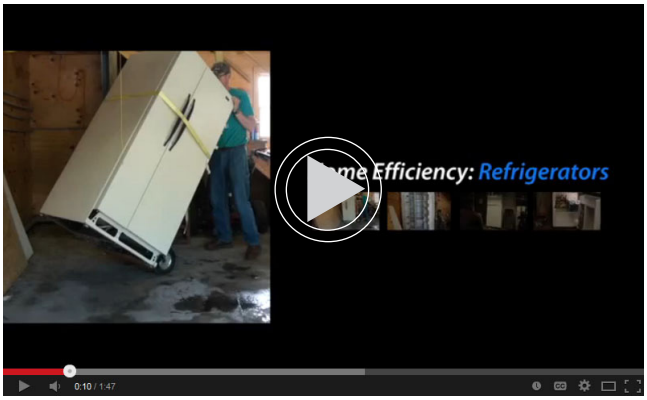


Figure 1. Refrigerators and freezers, especially older models, are a major energy user in homes.

Keep in mind, appliances have two price tags: one is the purchase price you pay at the store, and the other is the operating cost paid month after month, year after year, in the form of your electric bill.

When looking for ways to reduce your home electrical bill, consider how you use your refrigerator(s) and freezer(s). If you have a second unit in your basement or garage, answer these questions:

- What do you store in it?
  Are you paying an additional $9-12 each month to keep some drinks or fishing worms cool?



https://www.youtube.com/watch?v=Q_hQ0DVQFpU

- How old is it?
  If it is 8 years old or older you could save 40 percent of your energy use by replacing it with a new model. If it is less than 5 years old, you will need to research the benefits of replacing the unit.
- How full is it?
  Are you paying monthly to run a partially full or nearly empty freezer? Can you use the second unit seasonally and unplug it when it is not needed?

Fortunately, appliances have become much more efficient over the past couple of decades. While there is still room for improvement, today's models use 60 percent less electricity on average than 20-year-old models. If you replace an old, inefficient refrigerator or freezer with a new, more efficient model, the new unit can easily pay for itself just from the energy savings alone.

Shopping Tips

Some things to keep in mind when considering purchasing a new, efficient refrigerator:

- Compare the Energy Guide labels and consider the cost savings that ENERGYSTAR®-qualified models provide.

- 16- to 20-cubic-foot models with top or bottom freezers are the most efficient sizes and styles. If you can't live without something larger or a side-by-side model, find the most efficient model available.
- Automatic ice makers and through-the-door dispensers can increase energy use by 14 to 20 percent.

Remember Rebates and Recycling

Numerous federal, state, and local programs offer rebates for purchasing high efficiency or ENERGY-STAR appliances, as well as for recycling your old unit (*Figure 2*).

Figure 2. Before hauling an old refrigerator or freezer to the curb, check to see if there's a rebate for recycling it.

This publication has been peer reviewed.

UNL Extension publications are available online at *http://extension.unl.edu/publications*.

Index: Consumer Education
Energy Conservation
Issued April 2014