

Cool Energy Costs with a New Refrigerator

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It sits in the kitchen, quietly humming away to keep your food cold. Most people don't think much about their refrigerator—as long as it's working. Most models will operate for a very long time without any problems, but that doesn't mean it's performing at maximum efficiency.

If your refrigerator dates from the 1980s, replacing it with a new model could cut your electric bill by \$100 per year, according to ENERGY STAR. Savings could be as much as \$200 annually if you bought your refrigerator in the 1970s—but only if you dispose of the old unit. (Recycling an old appliance is preferable because it allows the metal, plastic, and glass to be reused, and prevents toxic chemicals from ending up in landfills.)

To estimate how much energy your refrigerator consumes, [visit www.energystar.gov](http://www.energystar.gov) and search for "Refrigerator Retirement Calculator." Type your refrigerator's model number into the calculator and you'll receive an estimate of how much energy it uses and how much money a new one may save.

Hidden energy gobblers

More than a quarter of U.S. households own a second refrigerator, a number that increases by 1 percent per year, according to a 2009 U.S. Department of Energy report. However, these appliances are often older and less efficient refrigerators manufactured prior to 1993 use two to three times more energy than today's ENERGY STAR-qualified models.

In addition, a second refrigerator will increase your air-conditioning costs since it produces heat. And because fridges are designed to operate in conditioned rooms, keeping one in an area more exposed to temperature extremes, such as porches, garages, and basements will force it draw more power to operate properly. In winter, you even run the risk of damaging the compressor because it will not be able to complete defrost cycles.



Although convenient, a second refrigerator can mean \$420 to \$750 in additional energy costs over the lifetime of the appliance. If you can't live without your second fridge, reduce its energy use substantially by plugging it in just to keep drinks and food cold during parties or other special events. However, you may consider a cheaper alternative—filling a large bucket or cooler with ice and letting it melt slightly since icy water cools soda and beer faster than ice alone.



Buying a new fridge

When shopping for a new refrigerator, look for one with a top-mounted freezer—it typically uses 10 percent to 25 percent less energy than bottom-mount or side-by-side models, according to ENERGY STAR. Also, a larger refrigerator will require more energy, so purchase the size you really need to fit your lifestyle.

Once your new refrigerator is up and running, you can do some simple things to keep it operating as efficiently as possible. Cooling coils, on the back or underneath the unit, act like dust collectors. So make sure to vacuum them once or twice a year.

Over time, the gasket around the fridge door will loosen. If you notice that the gasket seal is loose or discolored, replace it. ■

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The Cooperative Research Network monitors, evaluates, and applies technologies that help electric cooperatives control costs, increase productivity, and enhance service to their consumers. Additional research provided by ESource.

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