

Savings from

APPLIANCE STANDARDS

- **Nearly \$500/year** average family savings on utility bills
- **\$80 billion/year** energy and water bill savings
- **490 billion kWh/year** electricity savings (\approx electricity use of 40 million households)
- **300 MMT CO₂/year** emissions reduction (\approx emissions of 60 million cars)
- **\$2.4 trillion** savings from existing standards through 2035 (after added costs)

The Department of Energy (DOE) sets minimum performance requirements for the energy and water use of new appliances and equipment. These products range from refrigerators to furnaces to light bulbs to electric transformers. States usually may not set standards for the same products.

How do they help?

Standards save consumers money and protect them from spiking utility bills. They cut through multiple barriers to energy efficiency, including the fact that the people who pay energy and water bills often do not choose the appliances and equipment that use energy in their homes and businesses, and often do not have access to information on energy efficiency. Appliance standards also reduce stress on the electric grid and natural gas network, help states manage their energy systems, promote innovation, and reduce air pollution and global warming. In addition, they protect manufacturers from a patchwork of state regulation and from wasteful imports.

How much do they cost?

In 2017 the DOE Equipment and Building Standards program was funded at \$54 million. Consumers spent billions of dollars on better products, but will save tens of billions of dollars.

What is at stake?

If funding for the program is cut and standards are not advanced, the following benefits that we could gain from future standards would be lost (2013\$):

	2035	2018–50
Utility bill savings	\$43 billion	\$1.1 trillion
Residential savings per family	\$250	\$5,600

Is the program cost effective?

The appliance standards program leverages billions of dollars in savings from a small federal investment. The benefit-cost ratio for utility bill savings compared to added consumer cost is at least 5:1.

Better Appliances



Dishwasher energy use has gone down 50% since 1987.

Appliance standards have not only saved consumers hundreds of billions of dollars but the quality of appliances also has improved under the standards. The following are a few examples:

Refrigerators. Since the first standard was set in 1987, energy use has gone down more than 50%, average capacity has gone up, temperature control is better, noise levels are down, and refrigerators offer more features. In addition, real prices are down about 35%.

Clothes washers. Energy use has decreased 75% since 1987. Front-loading machines in particular offer bigger tub capacities, are gentler on clothing, are often better at removing stains, and offer greater controls and new features. And real prices are down about 45%.

Dishwashers. Energy use has decreased 50% since 1987. New features have been added and many are quieter. Real prices are down about 30%.

Light bulbs. CFLs and LEDs use about 75% less energy than traditional incandescent bulbs. The bulbs have to be changed much less often, and offer more choice in color range. Although prices are still somewhat higher for a single bulb, the payback period is a few months.