

Appliance Efficiency Standards Save Consumers Money and Cut Climate Pollution

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Federal efficiency standards have a proven record of saving households and businesses money and reducing planet-warming emissions, but many have fallen out of date in recent years. The U.S. Department of Energy (DOE) is catching up by updating dozens of standards.

Efficiency standards for common appliances and commercial and industrial equipment ensure that new products for sale meet a minimum level of efficiency performance.

First set in 1987, national standards now cover more than 50 categories of products, from furnaces and refrigerators to electric motors and commercial air conditioners. DOE is required by law to periodically review each standard to determine if an update is warranted. This process is open and transparent, with multiple rounds of input from product manufacturers, public interest groups, and the public.

Three in five Americans support strengthened standards, according to a poll published by Morning Consult this spring.

STANDARDS SAVE MONEY FOR HOUSEHOLDS AND BUSINESSES

Efficient products generally cost less over the lifetime of the product, more than paying back any increase in upfront costs through lower utility bills. As a result of standards in effect today, the average American household saves about \$500 annually on utility bills—but greater savings are possible.

These savings especially benefit low- and moderate-income households, who generally spend a disproportionate share of their income on energy bills. And they help renters by ensuring any appliance chosen by a landlord meets a minimum efficiency threshold. In addition, standards often help lower the price of efficient products because of economies of scale as the products are mass produced.

DOE sets standards that save consumers more money than they cost.

STANDARDS PROTECT PUBLIC HEALTH, THE CLIMATE, AND THE ELECTRIC GRID

By saving energy, standards help reduce pollution from power plants and from our homes and buildings. Curbing these pollutants—such as nitrogen oxides, sulfur dioxide, and carbon dioxide—is vital to protecting public health and the climate.

As growing populations and more extreme weather increase spikes in power demand on hot and cold days, more-efficient appliances and equipment reduce strain on the power grid. This can help prevent blackouts and avert the need for additional transmission lines and other costly infrastructure.

ASAP advocates for appliance, equipment, and lighting standards that cut planet-warming emissions and other air pollution, save water, and reduce economic and environmental burdens for low- and moderate-income households. ASAP's steering committee includes representatives from environmental and efficiency nonprofits, consumer groups, the utility sector, and state government. Learn more at appliance-standards.org

Efficiency standards also cut water waste. Strong standards for washing machines and dishwashers, for example, can help these appliances use less water while still ensuring strong cleaning performance—especially critical as large areas of the country face challenges with water supplies.

STANDARDS MAKE ENERGY-SAVING FEATURES FROM TOP PRODUCTS AVAILABLE TO ALL CONSUMERS

Innovations to improve energy efficiency generally become available in top-of-the-line products first. Strong, up-to-date standards then help drive those features into all models.

By law, DOE must ensure that consumers continue to have access to product features they value. DOE is expressly prohibited from eliminating categories of products that use a particular fuel type and has not proposed any standard that would do so.

When a new standard takes effect, manufacturers put engineering know-how into driving cost down on the lowest tier products to compete—while striving to offer new, higher efficiency models to differentiate their best products in the market. As a result, efficiency performance keeps improving.

Thanks to efficiency standards, a typical new refrigerator uses just 25% as much electricity as one sold in the 1970s, even while new refrigerators are larger, cheaper, and have more features, such as automatic defrost and ice-making.

STANDARDS PROVIDE MANUFACTURERS CERTAINTY AND A LEVEL PLAYING FIELD

Standards ensure a level playing field where manufacturers can't be undercut by competitors selling inefficient products.

All new and updated standards must be designed to take into account any economic impacts on manufacturers. Cost savings for households and businesses that use the products generally dwarf these costs. After standards have been finalized, manufacturers usually have at least three years to modernize designs as needed before they take effect.

THE DEPARTMENT OF ENERGY IS CATCHING UP

While efficiency standards have a long history of success, they have fallen out of date—resulting in energy waste. When the current administration took office in January 2021, DOE had already missed 28 legal deadlines for reviewing and updating standards. By January 2025, another 19 product updates would come due. The efficiency levels for many products have not been updated in more than a decade.

In this administration, DOE has determined that some standards do not need to be strengthened. For about 30 products, DOE has found that technological change has opened the door for improvement and proposed new standards. Several have been finalized, while many others remain pending following public comment.