

Appliance and Equipment 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. Standards finalized by the U.S. Department of Energy (DOE) in recent years are set to save households more than \$100 annually.

Efficiency standards for residential, 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.

A 2024 [YouGov poll](#) found that nearly 60% of Americans support stronger appliance efficiency standards, while only 25% oppose them, with the rest not having a view. A [Morning Consult poll](#) in 2023 found similar results.

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. Standards updated during the Biden administration will save households an average of \$107 on utility bills each year and will save businesses a total of more than \$2 billion annually (figures averaged over the next twenty years).

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

Standards protect the climate, public health, 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 growth in data centers and domestic manufacturing increases electricity demand in many regions, more-efficient appliances and equipment reduce strain on the power grid. This can help reduce or delay the need for additional transmission lines and other costly infrastructure.



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.

When a new standard takes effect, manufacturers put engineering know-how into driving costs 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 the standards take effect.

The Department of Energy has caught up on many overdue standards

When the Biden administration took office in January 2021, DOE was behind on 28 legal deadlines for reviewing and updating standards. The efficiency levels for many products had not been updated in more than a decade. Standards that DOE has completed since—including for [water heaters](#), [clothes dryers](#), and [rooftop air conditioners](#), among other products—are together set to reduce climate change emissions by more than [2.1 billion metric tons](#) and save consumers hundreds of billions of dollars over 30 years.

For more information, please contact Michael Johnson at mjohnson@standardsasap.org

