

Efficiency Standards for Washing Machines

July 2024

Efficiency standards for washing machines ensure that all new units include innovative technologies to reduce unnecessary water and energy waste. Testing has repeatedly shown that today's efficient models can outperform less efficient machines—while saving households money.

Efficiency standards for washing machines save households money and help protect the environment.

Congress established the first national standards for washing machines in a bipartisan law signed by President Reagan in 1987 and directed the Department of Energy (DOE) to periodically update the standards.



New models sold today meet standards that were set by the Obama administration in 2012 and took full effect in 2018. These standards save a typical consumer with a top-loading machine \$365 over the life of their appliance, when factoring both utility bills and purchase costs.

The least efficient washing machines on the market today use about 75% less energy and far less water than models available before the first national washing machine standards were established. New standards, set to take effect in 2028 (discussed below), will ensure all new models are as efficient as many leading units today.

Efficient models are generally the best at cleaning

Washing machine standards have been designed to preserve consumer choice, with different efficiency requirements for different machine types. Front-loading washers are generally more efficient than top-loading models and are subject to more-stringent standards. They are also better at cleaning. [Wirecutter](#) has found that “front-loaders always outperform top-loaders in stain-removal tests.”

For consumers who choose a top-loading machine, Wirecutter says, “Just make sure to get a high-efficiency model,” as it will clean better and be gentler on clothes than an inefficient top-loader. [Consumer Reports](#) has similarly found that “high-efficiency (HE) washers tend to be much better at removing stains than traditional agitator-style washers.”

Trump action could have welcomed expensive-to-operate models and risked American jobs

In 2020, DOE under President Trump [finalized a rule](#) that could have reversed progress on efficiency and raised costs for households. The rule created a new legal category for [washing machines](#) that have a short cycle as the “normal” cycle. These models could have used unlimited energy and water because DOE never set a separate standard for them. By opening the door to energy- and water-guzzling products, the rule could have led to big increases in purchasers’ utility bills and undermined domestic manufacturers’ investments in making today’s products, putting American jobs at risk. Manufacturers [opposed](#) the loophole, and no manufacturer created a product exploiting it during the short time it was in place.

The rule was unneeded because there are washing machines on the market today that have short cycle times on the “normal” cycle and that meet existing standards. In 2022, DOE [undid the loophole](#), ensuring that all new models continue to meet minimum standards.

New standards taking effect in 2028 will save consumers money and help protect the environment

DOE [finalized new standards](#) in early 2024 at levels [jointly recommended](#) by appliance manufacturers and consumer, climate, and efficiency advocates. The standards continue to preserve the availability of top-loading machines. Both top-loading and front-loading machines will be required to meet efficiency levels equivalent to those achieved by models with an ENERGY STAR® label today. The standards will primarily improve the efficiency of top-loaders (since most front-loading machines already meet ENERGY STAR), with inefficient models in this group required to reduce energy use by about 10%.

The standards will save consumers \$18 billion on utility bills and reduce carbon dioxide emissions by 14 million metric tons over 30 years of sales, DOE estimates. And by easing water use from machines that are currently responsible for [16%](#) of households’ indoor consumption, the standards will help the dry western United States.

Top-loading models that already meet the new standards provide better performance than less efficient models. About three-quarters of ENERGY STAR top-loading models tested by Consumer Reports (including both agitator and non-agitator models) received a washing performance score of 4 or 5, while only about one-quarter of non-ENERGY STAR models achieved such ratings. DOE has also found that models can meet the standards without reducing wash temperatures or lengthening cycle times.

For more information, please contact Madeline Parker at mparker@standardsasap.org

