

Washing Machine Standards Will Cut Costs and Pollution, Shift Sales from Low-Performing Models

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Clothes washers on the market today vary widely in their efficiency, leaving many households with needlessly wasteful machines that are costly to operate. Updated standards finalized by the U.S. Department of Energy in February will ensure that manufacturers include top-performing technologies in all of their models, reducing consumers' utility bills, water waste, and planet-warming emissions.

Standards match a joint recommendation from efficiency advocates and manufacturers.

The Department of Energy (DOE) recently finalized efficiency standards for new washing machines, meeting a legal deadline and adopting standard levels [jointly recommended](#) by appliance manufacturers and consumer, climate, and efficiency advocates.

The new standards will reduce energy use by about 10% for common top-loading machines while also saving water and shifting the market away from models that often have the lowest cleaning performance.

The standards are set to reduce annual utility bills by about \$23 for households replacing a typical inefficient model—and cut carbon dioxide emissions by 14 million metric tons over 30 years of product sales.

Biggest benefits expected for users of top-loading models

The standards strengthen the separate efficiency requirements for top-loading and front-loading clothes washers. The primary improvement is for top-loaders, requiring less efficient models in this group to match the performance of more efficient ones.

The standards will require top-loaders to meet energy and water efficiency levels equivalent to those achieved by models that have an ENERGY STAR® label today. Each of the largest brands sells such models.

The standards also will require front-loaders—which are the more efficient type—to meet efficiency levels equivalent to today's ENERGY STAR levels for that type. Most of these models already do so.

Models that meet the standards have proven performance

Top-loading washing machines that achieve the ENERGY STAR efficiency levels simply perform better, on average, than less efficient models available today, according to an ASAP review of current Consumer Reports washer performance testing ratings.



These more efficient models have a significantly higher washing performance score in testing—4.1 versus 3.1. They also score slightly better on predicted reliability (3.4 versus 3.1).

DOE found that models can meet the standards without reducing cycle wash temperatures (users can choose to save additional energy by selecting a cold-water wash cycle). It found that meeting the standard levels doesn't require longer cycle times than those of today's inefficient machines. And manufacturers can continue to produce models that offer a "short" cycle option for when time is at a premium.

More-efficient models use proven technologies

Top-loading models that already meet the standards use a variety of technologies. Many (but not all) of these efficient models use an impeller (or "wash plate") in place of an agitator, moving clothes in and out of water to reduce water-heating needs and total water use. More-efficient machines also typically use increased spin speeds (reducing the energy used by clothes dryers) and more-efficient motors.



Saving money while protecting the climate and the environment

The standards will reduce utility bills and overall costs to homeowners by ensuring all models are reasonably efficient while providing particular benefit to renters, who usually are unable to choose their own clothes washers. Renters are disproportionately low-income households, and [DOE data](#) show that most renters have a clothes washer in their home, one that is much more likely to be a top-loading model. The standards will help ensure that landlords buy efficient washers—whether they're top-loaders or front-loaders—for their rental units.

The standards will reduce greenhouse gas emissions thanks to reduced energy use by the washers themselves, as well as from clothes dryers and water heaters not having to work as hard. And by easing water use from machines that are currently responsible for 16% of households' [indoor consumption](#), the new standards will help the dry western United States.

Stronger washing machine standards were long overdue

DOE had last updated washing machine efficiency standards in 2012. It was required by law to finalize new standards (or determine that no update was beneficial) by 2020. The new standards will take effect in 2028.

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