

Stove Standards Will Reduce Waste in Electric Units with Little Impact for Gas Models

April 2024

Recently finalized standards for stoves will primarily affect new electric models, while requiring no change for 97% of new gas units sold. The standards, supported by manufacturers, are expected to have one of the smaller impacts of new efficiency standards—which together will significantly reduce consumer costs and climate pollution.

The Department of Energy (DOE) finalized standards for new gas and electric stoves and ovens in January, meeting a legal deadline.

Standards follow joint recommendation from manufacturers and efficiency advocates

The DOE adopted final stove standards at levels [jointly recommended](#) by appliance manufacturers and consumer, climate, and efficiency advocates. The stove makers, represented by the Association of Home Appliance Manufacturers, [said](#) that the final standards will “save energy while preserving cooking methods and features valued by home cooks and allowing manufacturers the flexibility necessary to continue innovating.”

Improve efficiency of 3% of new gas units sold

The DOE examined the performance of 63 models of gas stoves. Only two of these models do not already meet the efficiency levels required by the new standards, the department’s analysis shows. In total, 3% of gas stove shipments do not already meet the new standards, DOE’s analysis shows.

Manufacturers have until January 31, 2028, to modify this small share of models to meet the standards. DOE’s analysis has shown that manufacturers can optimize burner and grate design (including grate weight, flame angle, and distance from burner ports to the cooking surface) to improve energy efficiency performance.



Reduce energy waste when electric models aren’t being used

For electric smooth-top stoves, the new standards will ensure all new models use at least 17% less energy annually than the lowest-performing models sold today. Manufacturers can achieve this by reducing standby power consumption in lower-performing models, which would have no impact on



cooking (and ensure models can still have clocks and displays). DOE data show that 77% of electric smooth-top units sold today will not be affected, while the remaining models will need to be modified to be more efficient. This can be achieved by using a switch-mode power supply instead of a linear power supply.

Nearly all the energy savings from the standards will be achieved from electric stoves, rather than from gas stoves, according to DOE data.

Full suite of efficiency standards set to slash costs and climate pollution

The DOE is [catching up on updating efficiency standards](#) for dozens of residential and commercial products. If it finalizes all pending standards, the department will provide nearly \$1 trillion in savings for consumers and cut 2.5 billion metric tons or more of greenhouse gas emissions over 30 years of product sales, it [said](#) in December.

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

