

Department of Energy

New Conservation Standards

WHAT'S HAPPENED?

The Department of Energy (DOE) has recently taken a significant step toward energy efficiency by introducing new conservation standards for commercial gas water heaters. These regulations are scheduled to take effect on **October 6, 2026**.

By transitioning to more energy efficient water heaters, businesses can expect to save costs on utility bills. The transition aligns with U.S. and global efforts to combat climate change and greenhouse gas emissions.

A Summary of the Rule

Commercial water heaters manufactured on and after **October 6, 2026** must meet the new minimum DOE energy conservation standard, as outlined to the right.

EQUIPMENT	CURRENT STANDARDS	AMENDED STANDARDS
Gas-Fired Storage	TE = 80% SL = Q/800 + 110(Vr) ^{1/2}	TE = 95% SL = 0.86*(Q/800 + 110(Vr) ^{1/2})
Gas-Fired Instantaneous	TE = 80% SL (≥10gal) = Q/800 + 110(Vr) ^{1/2}	TE = 96% SL (≥10gal) = Q/800 + 110(Vr) ^{1/2}
Residential-Duty Commercial Gas-Fired Storage	Medium Draw Pattern UEF=0.6002-(0.0011xVr) High Draw Pattern UEF=0.6597-(0.0009xVr)	Medium Draw Pattern UEF=0.8702-(0.0011xVr) High Draw Pattern UEF=0.9297-(0.0009xVr)

*TE=Thermal Efficiency (%), SL=Standby Loss (Btu/h), UEF=Uniform Energy Factor, Q=Input Rate (Btu/h), Vr=rated storage volume.

Targeting Non-Condensing Models

The Impact Ahead

Non-condensing water heaters, which allow excess heat to escape through venting, are targeted for phase out by this regulation. Unlike non-condensing water heaters, high-efficiency condensing products capture and utilize the latent heat energy from the combustion process that would otherwise be wasted, resulting in improved overall efficiency.

According to the DOE, the adoption of these standards will reduce carbon emissions by 38 million metric tons between 2026 and 2055. To put this in perspective, this is equivalent to the average annual emissions of approximately 37 coal-fired power plants.

While the new conservation standards will result in positive environmental impacts, we still must confront the reality that replacing legacy water heaters with new high-efficiency products will present unique challenges, especially when it comes to venting. Noncondensing gas water heaters typically use category I B-vent, which is not suitable for use with condensing water heaters. As a result, replacing older water heaters will most often mean replacing the venting, adding cost and complexity to projects.



Partnering with Rheem Commercial Water

As the industry adapts to these changes, Rheem Commercial Water is your trusted partner; we are with you Every Step of the Way. Our product portfolio includes world class commercial water heaters, which already meet the new standards and we will continue developing new innovative solutions to meet the market needs over the coming years.

For more information about the new ruling, visit <u>Energy Conservation Program: Energy</u> <u>Conservation Standards for Commercial Water Heating Equipment.</u>