

DOE's Proposed Energy Savings Threshold Would Have Blocked \$100 Billion in Utility Bill Savings

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Summary

The Department of Energy (DOE) recently proposed changes to the agency's "Process Rule" that would make it much harder for a future administration to update efficiency standards. Among other roadblocks, the proposal includes a prohibition on new standards that save less energy than an arbitrary threshold. According to DOE's own analyses, if that threshold had been in place historically, it would have blocked about \$100 billion in utility bill savings for consumers and businesses while increasing energy and water waste and emissions that harm public health and contribute to climate change.

DOE's Process Rule lays out the policies and procedures for how the agency conducts rulemakings to set new efficiency standards for appliances and equipment. Prior to 2020, the Process Rule had been a guidance document, but under the first Trump administration, DOE made the Process Rule binding on the agency and added a series of hurdles and restrictions for setting new standards. The Biden administration subsequently reversed those changes. The current Trump administration is now proposing to largely revert to the prior changes, which would make it much harder for a future administration to update efficiency standards. Among other roadblocks, the July 2026 proposed rule¹ would prevent DOE from issuing a standard that does not deliver at least 2 quadrillion Btus ("quads") of full-fuel-cycle energy savings or reduce energy use by at least 10%. If this stringent energy savings threshold had been in place historically, it would have blocked at least 30 standards² that collectively are delivering very large energy, water, and utility bill savings while cutting air pollutant and climate change emissions.

Table 1 shows DOE's prior estimates of the cumulative 30-year savings from standards that would have been blocked by the recently proposed energy savings threshold. DOE's proposed threshold would have blocked at least:

- 11.3 quads of energy savings—equivalent to about 12% of total U.S. annual energy use
- 2.4 trillion gallons of water savings
- \$98 billion in operating cost savings for consumers and businesses
- 1 million tons of nitrogen oxides (NO_x) reductions
- 451 million metric tons of carbon dioxide (CO₂) reductions

¹ www.govinfo.gov/content/pkg/FR-2026-07-07/pdf/2026-13674.pdf.

² www.regulations.gov/document/EERE-2025-BT-STD-0001-0039. There are five additional rules that appear to fall below the proposed energy savings threshold, but DOE did not conduct a 30-year analysis for them.

Table 1. Savings from standards that would have been blocked by DOE's proposed energy savings threshold

Product	Final rule date	Cumulative 30-year savings				
		Energy (quads)	Water (trillion gallons)	Operating costs (billion 2025\$)	NOx (thousand tons)	CO ₂ (million metric tons)
Room ACs	1997	0.51	--	**	**	**
Packaged terminal ACs and HPs	2008	0.03	--	**	1.1	1.1
Ranges and ovens	2009	0.14	--	**	6.1	13.7
Direct heating equipment	2010	0.21	--	2.6	8.1	8.8
Pool heaters	2010	0.02	--	0.3	0.7	0.8
Clothes dryers	2011	0.40	--	6.0	15.1	18.7
Room ACs	2011	0.32	--	5.3	14.2	17.4
Dishwashers	2012	0.07	0.14	1.9	3.5	4.1
Metal halide lamp fixtures	2014	0.44	--	2.3	31.6	25.2
Commercial clothes washers	2014	0.07	0.02	0.7	9.1	4.1
Automatic commercial ice makers	2015	0.18	--	1.8	16.2	10.9
Single package vertical ACs and HPs	2015	0.15	--	1.2	16.0	8.9
Ceiling fan light kits	2016	0.05	--	1.0	5.2	3.4
Commercial warm air furnaces	2016	0.23	--	1.3	41.2	12.4
Residential boilers	2016	0.16	--	2.0	122.6	9.5
Commercial and industrial pumps	2016	0.29	--	1.9	31.0	17.0
Commercial prerinse spray valves	2016	0.10	0.12	2.0	14.7	5.9
Dehumidifiers	2016	0.30	--	3.9	33.1	18.6
Walk-in coolers and freezers	2017	0.85	--	5.0	58.0	46.0
Commercial packaged boilers	2020	0.27	--	3.4	41.0	16.0
Air compressors	2020	0.16	--	0.8	11.0	8.2
Portable ACs	2020	0.49	--	5.4	32.2	25.6
Pool heaters	2023	0.70	--	5.0	241.0	29.0
Commercial water heaters	2023	0.70	--	3.0	103.0	38.0
Cooking products	2024	0.22	--	1.8	7.6	4.0
Clothes washers	2024	0.67	1.89	19.6	27.7	14.0
Dishwashers	2024	0.31	0.24	3.5	22.4	9.5

Walk-in coolers and freezers	2024	1.60	--	6.9	53.8	28.8
Gas instantaneous water heaters	2024	0.58	--	4.7	86.0	32.0
Commercial refrigeration equipment	2024	1.11	--	4.9	36.9	19.7
Total	--	11.3	2.4	98	1,090	451

Notes: The 30-year savings reflect DOE’s estimates at the time each rule was finalized. The cumulative operating cost savings reflect a discount rate of 3%. The NOx emissions reductions for the 2008 packaged terminal ACs and HPs final rule and the CO₂ and NOx emissions reductions for the 2014 metal halide lamp fixtures final rule reflect the averages of the ranges DOE estimated.

**For rules prior to 2010, we were unable to extract cumulative operating cost savings from DOE’s published documents. We were also unable to extract emissions reductions for the 1997 room ACs final rule over a 30-year period.

For the standards that would have been blocked by DOE’s proposed energy savings threshold, the operating cost savings for consumers and businesses significantly outweigh the additional upfront cost: for the 27 rules for which DOE reported cumulative operating cost savings and incremental product costs, the savings outweigh the costs by more than a factor of three.

Appendix A shows the sources for the savings estimates.

Appendix A. Sources for savings estimates

The energy savings in Table 1 are sourced from a table that DOE published in conjunction with issuing the proposed changes to the Process Rule.³ Table A1 below shows the sources for the other savings estimates in Table 1.⁴

Table A1. Sources for estimates of water savings, operating cost savings, and emissions reductions

Product	Final rule date	Sources
Packaged terminal ACs and HPs	2008	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2008-10-07/pdf/E8-23312.pdf .
Ranges and ovens	2009	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2009-04-08/pdf/E9-7545.pdf .
Direct heating equipment	2010	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2010-04-16/pdf/2010-7611.pdf . DOE National Impact Analysis: www.regulations.gov/document/EERE-2006-STD-0129-0148 .
Pool heaters	2010	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2010-04-16/pdf/2010-7611.pdf . DOE National Impact Analysis: www.regulations.gov/document/EERE-2006-STD-0129-0148 .
Clothes dryers	2011	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2011-04-21/pdf/2011-9040.pdf . DOE National Impact Analysis: www.regulations.gov/document/EERE-2007-BT-STD-0010-0054 .
Room ACs	2011	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2011-04-21/pdf/2011-9040.pdf . DOE National Impact Analysis: www.regulations.gov/document/EERE-2007-BT-STD-0010-0054 .
Dishwashers	2012	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2012-05-30/pdf/2012-12340.pdf .
Metal halide lamp fixtures	2014	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2014-02-10/pdf/2014-02356.pdf .
Commercial clothes washers	2014	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2014-12-15/pdf/2014-29197.pdf . DOE Technical Support Document: www.regulations.gov/document/EERE-2012-BT-STD-0020-0036 .

³ www.regulations.gov/document/EERE-2025-BT-STD-0001-0039.

⁴ We converted the estimates of operating cost savings to 2025\$.

Automatic commercial ice makers	2015	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2015-01-28/pdf/2015-00326.pdf .
Single package vertical ACs and HPs	2015	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2015-09-23/pdf/2015-23029.pdf .
Ceiling fan light kits	2016	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2016-01-06/pdf/2015-33071.pdf .
Commercial warm air furnaces	2016	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2016-01-15/pdf/2015-33067.pdf .
Residential boilers	2016	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2016-01-15/pdf/2016-00025.pdf .
Commercial and industrial pumps	2016	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2016-01-26/pdf/2016-00324.pdf .
Commercial prerinse spray valves	2016	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2016-01-27/pdf/2016-00068.pdf .
Dehumidifiers	2016	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2016-06-13/pdf/2016-12881.pdf .
Walk-in coolers and freezers	2017	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2017-07-10/pdf/2017-14079.pdf .
Commercial packaged boilers	2020	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2020-01-10/pdf/2019-26356.pdf .
Air compressors	2020	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2020-01-10/pdf/2019-26355.pdf .
Portable ACs	2020	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2020-01-10/pdf/2019-26350.pdf .
Pool heaters	2023	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2023-05-30/pdf/2023-10849.pdf .
Commercial water heaters	2023	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2023-10-06/pdf/2023-20392.pdf .
Cooking products	2024	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2024-02-14/pdf/2024-02008.pdf .
Clothes washers	2024	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2024-03-15/pdf/2024-04736.pdf .
Dishwashers	2024	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2024-04-24/pdf/2024-08212.pdf .
Walk-in coolers and freezers	2024	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2024-12-23/pdf/2024-28474.pdf .
Gas instantaneous water heaters	2024	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2024-12-26/pdf/2024-30369.pdf .
Commercial refrigeration equipment	2024	DOE Final Rule: www.govinfo.gov/content/pkg/FR-2025-01-21/pdf/2024-31214.pdf .