



FACT SHEET

# CEILING FAN STANDARDS: SAVING ENERGY & MONEY

The U.S. Department of Energy recently finalized an updated energy efficiency standard for ceiling fans, which will save energy, reduce consumer energy bills, and help limit global warming, without reducing the ability of this equipment to improve indoor air quality and maintain comfort. About 80 million American households have at least one ceiling fan. Ceiling fans are also used to cool commercial and industrial spaces, like warehouses or airline hangars. The new standard will cut the energy use of ceiling fans by more than 25 percent and save the average household \$25 per fan and the average business owner \$128 for large industrial fans. Nationally, the standard will conserve enough electricity over the next three decades to power 17 million U.S. households for a year.

## WHY A STANDARD?

Congress passed a bill requiring that ceiling fans meet an energy efficiency standard as of 2007 but it was only prescriptive, requiring separate lighting and fan controls, adjustable speed controls, and the capability to reverse the fan blades. The new standard is the first performance-based standard for ceiling fans, meaning they will not be permitted to use more than a certain amount of energy to operate. The level varies across fan types.

Given the prevalence of ceiling fans in homes and businesses, this new standard will help Americans save more energy. It takes effect in 2020.

## BASIS IN LAW

The Department of Energy was statutorily obligated to consider an update for the ceiling fans standard and to set it at the maximum levels that are technologically feasible and economically justified per the legal process for establishing energy efficiency standards. This mechanism is part of a federal standards program that has been saving Americans money since the bipartisan enactment of the National Appliance Energy Conservation Act of 1987, which was signed into law by President Reagan.

## AMERICAN CONSUMERS BENEFIT

Improved ceiling fan standards represent a double win for American consumers:

- **Utility bill savings.** There are approximately 20 million new ceiling fans shipped annually in the United States. Energy efficiency standards already in place, across all products, save the average household about \$500 each year on their energy bills, so the updated ceiling fan standard will add to these significant savings.<sup>1</sup>

- **Energy and pollution savings.** Across the country, the new ceiling fan standard could save 200 billion kilowatt-hours of electricity over the next 30 years of sales, reducing climate-changing pollution by an amount equivalent to the harmful emissions from about 25 million cars in a year. Energy efficiency also reduces power plant pollution that damages human health.

## AMERICAN MANUFACTURERS BENEFIT

U.S. manufacturers support national appliance and equipment standards for several reasons:

- When there is a federal minimum efficiency standard, manufacturers need to meet only that one standard that is applicable in all 50 states, rather than navigate a patchwork of state-level requirements.
- Standards are technology neutral, meaning manufacturers may meet them through whatever ways they prefer, including using already available technology. Or they might choose to develop improved products that might be even more cost-effective.
- Since all products on the market must meet the federal standard regardless of where they are manufactured, standards also ensure that U.S. companies are not undercut by overseas manufacturers offering inexpensive—and inferior—products to American consumers.

## ENERGY EFFICIENCY IMPACTS ON JOBS AND EQUITY

- Energy efficiency accounts for nearly 1.9 million U.S. jobs, including the production of efficient appliances and equipment.<sup>2</sup> This is 10 times the number of jobs in oil and gas drilling and 30 times more than in coal mining.<sup>3,4</sup> And thousands more jobs will be added in the coming year.
- Energy efficiency standards benefit low-income households, which spend a disproportionate share of their income on energy (sometimes two to three times the proportion paid by higher-income families) and often live in homes with inefficient appliances and equipment.<sup>5</sup>
- Pollution from fossil-fueled power plants can worsen asthma symptoms, exacerbate allergies, affect the nervous system, increase the risk of heart attack, and lead to premature death.<sup>6</sup> Efficient energy use helps reduce the need to burn fossil fuels to generate electricity.

## PUBLIC SUPPORT

Polls repeatedly show that the majority of Americans support energy efficiency.<sup>7,8</sup> In a 2016 post-election survey, 76 percent of Trump voters said they support policies that would require manufacturers to make appliances more energy efficient.<sup>9</sup>

### ENDNOTES

1 DOE, Energy Efficiency and Renewable Energy Office, Technical Support Document: *Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Ceiling Fans*, Chapter 3, November 2016, <https://www.regulations.gov/document?D=EERE-2012-BT-STD-0045-0149..>

2 E2 and E4theFuture, “Energy Efficiency Jobs in America,” [http://www.e2.org/wp-content/uploads/2016/12/EnergyEfficiencyJobsInAmerica\\_FINAL.pdf](http://www.e2.org/wp-content/uploads/2016/12/EnergyEfficiencyJobsInAmerica_FINAL.pdf)

3 Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*, 2015 Second Quarter, last modified June 2, 2016, [https://data.bls.gov/cew/apps/table\\_maker/v4/table\\_maker.htm?type=8&year=2015&qtr=2&own=5&area=US000&supp=0](https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm?type=8&year=2015&qtr=2&own=5&area=US000&supp=0).

4 Environmental Entrepreneurs and E4TheFuture, “Energy Efficiency Jobs in America,” December 2016, <https://www.e2.org/energyefficiencyjobs/>.

5 Ibid.

6 Ariel Dreihobl and Lauren Ross, “Lifting the High Energy Burden in America’s Largest Cities,” Energy Efficiency for All and American Council for an Energy-Efficient Economy, April 2016, <http://energyefficiencyforall.org/resources/lifting-high-energy-burden-americas-largest-cities#sthash.O6JdtSvD.dpuf>.

7 Sheryl Carter, “Energy Efficiency Is Fueling the Economy, Growing Jobs,” NRDC Expert Blog, December 19, 2016, <https://www.nrdc.org/experts/sheryl-carter/energy-efficiency-fueling-economy-growing-jobs>.

8 Hart Research, “Americans’ Views on Federal Fossil Fuel Policy and Clean Energy,” memo to NRDC and League of Conservation Voters, October 5, 2016, <https://www.nrdc.org/sites/default/files/views-on-fossil-fuel-policy-clean-energy-summary.pdf>.

9 Glover Park Group, “Survey of Trump Voters December 2016” 2016. <http://www.slideshare.net/GloverParkGroup/gpg-survey-of-trump-voters-december-2016>.