



FACT SHEET

# DEHUMIDIFIER STANDARDS: SAVING ENERGY AND MONEY

The U.S. Department of Energy recently finalized an updated energy efficiency standard for dehumidifiers, which will save energy, reduce consumer utility bills, and help limit global warming—without reducing the ability of this equipment to improve indoor air quality and maintain comfort. Dehumidifiers are used in about 13 percent of American homes. The new standard will save the average household up to \$140 in energy costs over the life of a dehumidifier and conserve enough electricity nationally over the next three decades to power 3 million U.S. households for a year.

## WHY A STANDARD?

The DOE last set a standard for dehumidifiers in 2009 and was required by law to update it. Dehumidifiers that meet the 2009 standard still use as much electricity as two refrigerators every year, at a significant cost to U.S. households.<sup>1</sup>

The new dehumidifier standard will help Americans save more energy, thanks in large part to an updated test procedure used to calculate how much electricity each dehumidifier model uses. The standard takes effect in 2019. The new test procedure reflects where people actually use dehumidifiers in their homes—often in basements or crawl spaces that may be cooler than other areas of the dwelling—which can affect the efficiency of the dehumidifier.<sup>2</sup> The new standard will ensure that dehumidifiers are designed to operate in these cooler spaces in a way that delivers the efficiency gains they promise, saving consumers energy and money.

## BASIS IN LAW

The DOE was statutorily obligated to consider an update for dehumidifiers and to set the standard level at the maximum levels that are technologically feasible and economically justified per the legal process for establishing energy efficiency standards and conducting regularly scheduled reviews to strengthen them. 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. This is the second update of the dehumidifier efficiency standards initially established for those manufactured as of October 1, 2007.

## AMERICAN CONSUMERS BENEFIT

Improved dehumidifier standards represent a double win for American consumers:

- **Utility bill savings.** Shipments of dehumidifiers in the United States are expected to double from about 1.5 million annually to approximately 3 million a year in 2048. Standards already save the average household about \$500 each year on their energy bills, so the updated standard will add to these significant savings.<sup>3</sup>

- **Energy and pollution savings.** Across the country, the new dehumidifier standard could save 30 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 4 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:

- Manufacturers need to meet only 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>4</sup> This is 10 times the number of jobs in oil and gas drilling and 30 times more than in coal mining.<sup>5,6</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>7</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>8</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>9,10</sup> In a 2016 postelection survey, 76 percent of Trump voters said they support policies that would require manufacturers to make appliances more energy efficient.<sup>11</sup>

### ENDNOTES

1 Lauren Mattison and Dave Korn, “Dehumidifiers: A Major Consumer of Residential Electricity,” Cadmus Group, <http://www.cadmusgroup.com/wp-content/uploads/2012/11/Dehumidifier-Metering-Study-Mattison-050912.pdf> (accessed December 28, 2016).

2 U.S. Department of Energy, (hereinafter DOE), Energy Efficiency and Renewable Energy Office, *Energy Conservation Program: Test Procedures for Dehumidifiers; Final rule*, July 2015, <https://www.regulations.gov/document?D=EERE-2014-BT-TP-0010-0019>.

3 DOE, Energy Efficiency and Renewable Energy Office, *Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Residential Dehumidifiers*, Chapter 9, May 2015, <https://www.regulations.gov/document?D=EERE-2012-BT-STD-0027-0030>.

4 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).

5 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).

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

7 Ibid.

8 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>.

9 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>.

10 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>.

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