



A Clean-Energy Standard Would Lower Household Electricity Bills

Ben Furnas May 19, 2009

A national renewable electricity standard, a key piece of the clean-energy legislation currently before Congress, would save households and businesses in every state billions of dollars in electricity and natural gas bills. A renewable energy standard would require a certain portion of the nation's electricity to come from clean, renewable sources such as wind, solar, and geothermal.

The table to the right shows the cumulative savings from residential electricity and natural gas use per household under a renewable electricity standard from 2010-2030 in the lower 48 states. It also shows the cumulative savings for all residential, industrial, and commercial electricity and natural gas usage.

The numbers come from the Union of Concerned Scientists, who earlier this year analyzed a renewable electricity standard that would aim to have 25 percent of our electricity come from renewable sources by 2025.¹ They found that this standard would save families and businesses \$95 billion in electricity and natural gas bills through 2030 and spur new investments and hundreds of thousands of new clean-energy jobs.

The savings are in 2006 dollars and are discounted each year at 7 percent (*after inflation*), the standard for assessing future costs and benefits by the Office of Management and Budget.² Variation comes from the state's current blend of electricity sources and the trajectory of various types of electricity prices under a phased-in renewable electricity standard.

These savings arise because an increase in renewable energy usage eases demand for coal and fossil fuels, increases competition, and reduces the whole system's susceptibility to price shocks.

A diverse renewable energy system would save households and businesses money

Cumulative savings on electricity and natural gas bills between 2010-2030 under a 25-percent renewable energy standard of power generation by 2025

	Residential savings per household	Total residential, commercial, and industrial savings
Alabama	\$27	\$360 million
Arizona	\$116	\$1.3 billion
Arkansas	\$397	\$1.7 billion
California	\$228	\$10.7 billion
Colorado	\$136	\$1.2 billion
Connecticut	\$191	\$1.2 billion
Delaware	\$71	\$130 million
Florida	\$43	\$1.8 billion
Georgia	\$55	\$1.1 billion
Idaho	\$144	\$380 million
Illinois	\$209	\$3.3 billion
Indiana	\$259	\$2.1 billion
Iowa	\$113	\$330 million
Kansas	\$97	\$250 million
Kentucky	\$25	\$320 million
Louisiana	\$838	\$5.4 billion
Maine	\$187	\$470 million
Maryland	\$51	\$620 million
Massachusetts	\$182	\$2.1 billion
Michigan	\$213	\$2.8 billion
Minnesota	\$90	\$440 million
Mississippi	\$26	\$210 million
Missouri	\$80	\$450 million
Montana	\$198	\$360 million
Nebraska	\$96	\$160 million
Nevada	\$169	\$760 million
New Hampshire	\$171	\$390 million
New Jersey	\$363	\$4.2 billion
New Mexico	\$126	\$450 million
New York	\$330	\$8.6 billion
North Carolina	\$48	\$970 million
North Dakota	\$133	\$90 million
Ohio	\$236	\$3.6 billion
Oklahoma	\$414	\$2.2 billion

While in many cases the savings per household may seem modest, the bottom line is clear: a bold, renewable electricity standard would *save* families and businesses money, encourage investment in clean energy, create jobs, and help to stave off catastrophic climate change.

What’s more, the bolder the set of renewable energy targets is, the better the result for families, businesses, and the planet. As Marchant Wentworth of the Union of Concerned Scientists explained, a less ambitious target would mean “less money in people’s pockets, fewer jobs, and a continued dependence on dirty fuels.”³

Endnotes

- 1 Union of Concerned Scientists, “Clean Power, Green Jobs: A National Renewable Electricity Standard Will Boost the Economy and Protect the Environment,” available at http://www.ucsusa.org/assets/documents/clean_energy/Clean-Power-Green-Jobs-25-RES.pdf
- 2 Office of the Management and Budget, “Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs” (October 1992), available at <http://www.whitehouse.gov/omb/circulars/a094/a094.html>
- 3 Union of Concerned Scientists, “Energy Dept. Analysis Concludes a Strong National Renewables Electricity Standard Is Achievable and Affordable” (April 2009), available at http://www.ucsusa.org/news/press_release/eia-analysis-shows-res-is-doable-affordable-0230.html

	Residential savings per household	Total residential, commercial, and industrial savings
Oregon	\$206	\$1.1 billion
Pennsylvania	\$335	\$6.0 billion
Rhode Island	\$157	\$290 million
South Carolina	\$58	\$550 million
South Dakota	\$88	\$70.0 million
Tennessee	\$22	\$390 million
Texas	\$693	\$21.1 billion
Utah	\$136	\$530 million
Vermont	\$168	\$190 million
Virginia	\$48	\$810 million
Washington	\$193	\$1.8 billion
West Virginia	\$64	\$280 million
Wisconsin	\$224	\$1.7 billion
Wyoming	\$326	\$330 million

Note: Values in cumulative 2006 dollars using a 7-percent real discount rate.
Source: Union of Concerned Scientists