

# The Renewable Energy Standard: Boosting Missouri's Economy

Missouri's Renewable Energy Standard is the smart way to encourage renewable energy projects in the Midwest, create jobs, and keep Missouri's businesses competitive.

In 2008 Missouri voters approved the Renewable Energy Standard by a 2-1 margin.<sup>1</sup> The Standard requires that investor-owned utilities gradually increase renewable electricity generation over the years so that by 2021, Missouri's energy mix will contain 15 percent renewable energy coming from sources like solar energy, wind, and biogas and biomass. To protect ratepayers, utilities are prevented from increasing power prices more than 1 percent.



## Already the Renewable Energy Standard Has Benefitted Missouri's Economy

A 2008 University of Missouri St. Louis study predicted that the Renewable Energy Standard would create 9,591 jobs and generate \$2.86 billion in economic activity in the state over the next 20 years.<sup>2</sup>

The solar industry has benefitted from the Standard, which includes a solar rebate program that makes it cheaper for residential and commercial utility customers to install a solar photovoltaic (PV) system on their home or business. Ameren and KCP&L currently provide an incentive of \$2 per watt for customer-based installations—making solar more affordable. As a result, Missouri solar installations have increased from 101 kW in 2009 to more than 7.8 MW in 2012.<sup>3</sup> In all, the solar industry in Missouri now employs more than 1,800 Missourians<sup>4</sup>, and Missouri is home to 61 solar companies.<sup>5</sup>

The Farmers City Wind Power Project in Atchison County<sup>6</sup> is an example of how renewable energy spurs the local economy. Its 73 wind turbines generate 146 MW of clean, renewable energy, nearly doubling the wind power capacity in Missouri when it came online. Benefits of this project include:

- \$365,000 annually in lease payments to landowners, many of them farmers who are still able to grow soybean and corn
- Up to \$1 million in annual local taxes
- 150 jobs created during the construction period.



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## Studies Suggesting the Renewable Energy Standard Hurts Missouri's Economy Are Flawed

Despite broad support for the Renewable Energy Standard among Missourians, there are critics who seek to weaken or repeal it. In November 2012, the Beacon Hill Institute, a think tank nested within Suffolk University, released a study concluding that, by 2021, the Renewable Energy Standard would increase Missouri's electricity prices by 15 percent, lower employment by 6,000 jobs, and decrease investment by \$75 million.<sup>7</sup> This study is deeply flawed for a variety of reasons, including:

### ■ It ignores the cap to keep electric rates from rising no more than 1 percent—

Beacon Hill claims that the rate cap was “complex” and “it was unclear how the rule would be interpreted by utility regulators” so it was simply left out of its analysis.<sup>8</sup> But this cost cap is a critical piece of the Renewable Energy Standard, which guarantees that rates will not raise more than one percent compared to if utilities were investing in coal, natural gas, and other sources. This makes an increase of 15 percent infeasible and the rest of Beacon Hill's analysis grossly exaggerated.

### ■ It assumes the price of renewable energy will increase—

Beacon Hill assumes that the cost of wind and solar energy will increase over time despite widespread analysis conclusively showing that the cost of wind and solar energy will continue to decrease. Respected institutions including the Energy Information Administration, the Lawrence Berkeley National Laboratory, the National Renewable Energy Laboratory, Bloomberg, and Black & Veatch<sup>9</sup> have all released studies highlighting the continually falling prices of solar and wind energy.

### ■ It assumes new wind projects will have diminished returns—

Beacon Hill argues that because of the swift expansion of wind power lately, new projects will be built in areas that are less productive and more expensive to develop without citing any study or report. However, this is not the case in Missouri where there is still plenty of excellent and cost-effective wind resource available. In fact, Missouri's wind resources could power the state's electricity needs nine times over.<sup>10</sup>



### ■ It assumes that established wind measurements are wrong—

Beacon Hill asserts that the capacity factor for the average wind farm (the amount of time a wind farm is actually generating power) is half of what industry-leading organizations have measured.<sup>11</sup> Beacon Hill's analysis is based on two studies, one of which is not even published in a peer-reviewed journal.<sup>12</sup> Lowering the capacity factor means that Beacon Hill's models assume wind turbines generate less power than they actually are, and fictitiously drive up the cost of producing wind power.

### ■ It does not consider how the Renewable Energy Standard has benefitted Missouri—

The Beacon Hill report does not attempt to include any economic benefits of renewable energy include new jobs, a new tax base, or new lease payments to landowners. The solar industry employs more than 1,205 Missourians and the wind industry supports up to 1,000 jobs. Missouri's 459 MW of wind power in 2010 led to over \$2.5 million in annual property tax payments by wind project owners, and more than \$1.3 million in annual land lease payments to landowners.

## Support the Renewable Energy Standard

We urge you to vote against any legislation that would weaken or repeal the Renewable Energy Standard. Missouri's Renewable Energy Standard is widely supported by Missourians. It is the right way to encourage renewable energy projects in the Midwest, spur job growth, and keep Missouri's businesses competitive.

1 <http://www.moenergy.org/mayjune-2012-energy-perspectives-newsletter/126.html>

2 <http://pprc.umsl.edu/data/PropCEconomicImpactFullReport.pdf>

3 [http://www.missouripartnership.com/Portals/0/PDF/solar\\_web,%20nobg.pdf](http://www.missouripartnership.com/Portals/0/PDF/solar_web,%20nobg.pdf)

4 <http://www.brookings.edu/research/interactives/aggregate-clean-economy>

5 <http://www.solarworksforamerica.com/States/missouri.html>

6 <http://www.iberdrolarenewables.us/pdf/farmers-city-fact-sheet.pdf>

7 <http://www.beaconhill.org/BHIStudies/RPS/MO-RPS-BHI-2012-1115.pdf>

8 [http://www.stltoday.com/business/local/renewable-energy-laws-in-cross-hairs-of-conservative-groups/article\\_8f1d96af-6df4-5812-be9d-1fd8e8435854.html](http://www.stltoday.com/business/local/renewable-energy-laws-in-cross-hairs-of-conservative-groups/article_8f1d96af-6df4-5812-be9d-1fd8e8435854.html)

9 [http://www.windpoweringamerica.gov/pdfs/2011\\_annual\\_wind\\_market\\_report.pdf](http://www.windpoweringamerica.gov/pdfs/2011_annual_wind_market_report.pdf); <http://emp.lbl.gov/sites/all/files/LBNL-5919e-PRESENTATION.pdf>;

<http://www.nrel.gov/docs/fy12osti/54526.pdf>; <http://www.bloomberg.com/news/2012-11-01/wind-farm-operating-costs-fall-38-in-four-years-bnef-says-1-.html>;

<http://bv.com/docs/reports-studies/nrel-cost-report.pdf>

10 [http://www.awea.org/\\_cs\\_upload/learnabout/publications/6400\\_2.pdf](http://www.awea.org/_cs_upload/learnabout/publications/6400_2.pdf)

11 [http://www.windpoweringamerica.gov/pdfs/2011\\_annual\\_wind\\_market\\_report.pdf](http://www.windpoweringamerica.gov/pdfs/2011_annual_wind_market_report.pdf)

12 Nicolas Boccard, “Capacity Factors for Wind Power: Realized Values vs. Estimates,” *Energy Policy* 37, no. 7 (July 2009): 2680, as found in <http://www.beaconhill.org/BHIStudies/RPS/MO-RPS-BHI-2012-1115.pdf>. Also, “The Capacity Factor of Wind, Lightbucket,” <http://lightbucket.wordpress.com/2008/03/13/the-capacityfactor-of-wind-power/>, and National Wind Watch, FAQ, <http://www.windwatch.org/faq-output.php>.