



Renewable Electricity Standards at Work in the States

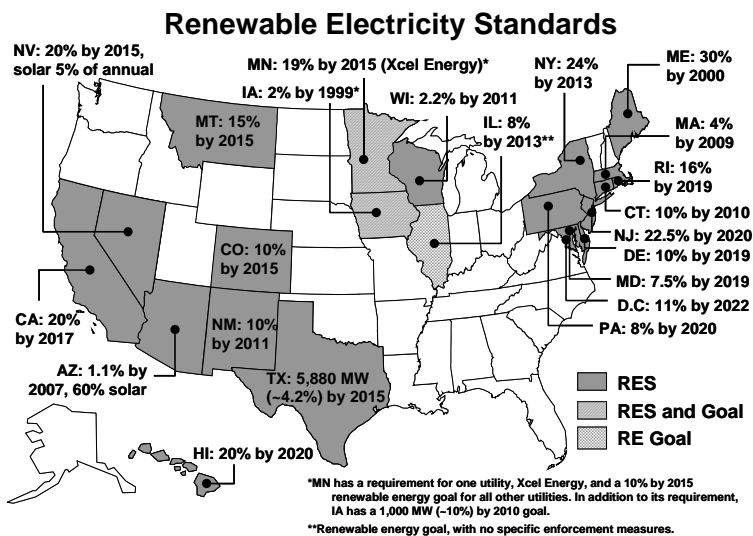
In a growing number of states, renewable electricity standards (RES)—also called renewable portfolio standards—have emerged as an effective and popular tool for promoting a cleaner, renewable power supply. An RES requires electric utilities to gradually increase the amount of renewable energy resources—such as wind, solar, and bioenergy—in their electricity supplies. State leadership has demonstrated that an RES can reduce market barriers and stimulate new markets for renewable energy. Because renewable energy can help meet critical national goals for fuel diversity, price stability, economic development, our environment, and energy security, an RES should play a vital role in America’s national energy policy.

Which States have an RES?

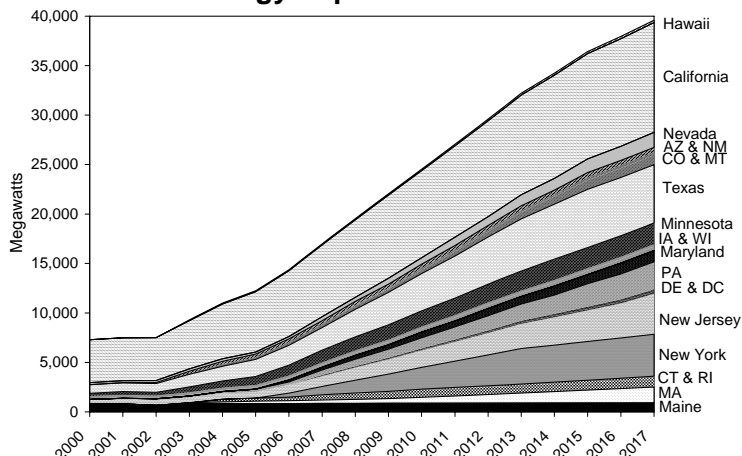
To date, 20 states and Washington D.C. have implemented minimum renewable energy standards.¹ On Election Day 2004, Colorado voters passed the first-ever RES ballot initiative requiring the state’s utilities to generate 10 percent of their electricity from renewable energy sources by 2015. Delaware, Hawaii, Maryland, Montana, New York, Pennsylvania, Rhode Island, and Washington D.C. also enacted minimum renewable electricity standards since the beginning of 2004. Eight states enacted an RES as part of legislation that deregulated electricity generation, and 13 states enacted standards outside of utility restructuring. In August 2005, Texas created the second-largest new renewable energy market in the country, behind only California, when the state increased its requirement from 2,880 megawatts (MW) by 2009 to 5,880 MW by 2015. Several other states—including Minnesota, Nevada, New Mexico, New Jersey, and Pennsylvania—have also revisited and increased or accelerated their standards.

New Renewable Energy Development

UCS projects that state RES laws and regulations will provide support for nearly 31,100 megawatts (MW) of new renewable power by 2017—an increase of 230 percent over total 1997 U.S. levels (excluding hydro). This represents enough clean power to meet the electricity needs of 20.3 million typical homes. The standards in California, Texas, New York, New Jersey, and Pennsylvania create the five largest markets for new renewable energy growth. By 2017, annual new renewable energy production from all state RES programs will reduce carbon dioxide emissions—the heat-trapping gas primarily responsible for global warming—by nearly 75 million metric tons. This level of reductions is equivalent to taking 11.1 million cars off the road or planting more than 17.9 million acres of trees—an area larger than the state of West Virginia.



Renewable Energy Expected From State Standards*



* Projected development assuming states achieve annual RES targets.

Success in the States: Creating a National RES Model

While most standards have been enacted too recently to fully evaluate their effectiveness, a number of studies have found that renewable electricity standards are and will continue to be the primary driver of new renewable energy generation in the United States.² In fact, nearly half of the total wind development installed

between 2001 and 2004 has resulted from state RES policies.³ In Minnesota, Xcel Energy has acquired about 600 MW of wind and bioenergy as a result of its requirement. Wisconsin utilities have secured enough renewable resources to meet their targets through 2011, and Iowa has met and exceeded its relatively low renewable energy requirement. But the most successful RES so far may belong to Texas.

The Texas legislature adopted an RES in 1999 that required 2,880 MW of renewable electricity generating capacity (2,000 MW new) to be installed by 2009. The RES was signed into law by then-Governor George W. Bush. Currently, nearly 1,900 MW of renewable energy have already been installed in Texas, putting the state on track to meet its original 2009 requirement several years early. As a result, in August 2005, the Texas legislature increased the new capacity requirement to 5,000 MW by 2015. The Texas RES has been successful, in part, due to the availability of good renewable energy resources, strong political support and regulatory commitment, and the inclusion of the following key provisions in the legislation:

- New renewable energy requirements are high enough to trigger market growth in the state
- Requirements can be met using tradable renewable energy credits
- Retail providers that do not comply with the RES target must pay significant financial penalties⁴

In states where utilities divested generation and credit-worthy power marketers have not emerged (as in the Northeast), or utilities have had credit problems (as in Nevada), new renewable energy projects have had a difficult time obtaining contracts and financing. Many of these states are addressing the issues by creating new supplemental mechanisms, such as using state agencies to provide financing or credit price guarantees.

Why Do We Need A National RES?

States have demonstrated that renewable electricity standards can be effective. In addition, survey after survey shows that Americans strongly favor clean renewable energy sources and support a national renewable electricity standard. Because investments in renewable energy create important benefits for the entire nation, the RES should now become a cornerstone of America's national energy policy. A strong national commitment to renewable energy is needed to:

- Diversify our fuel mix and enhance the reliability of fuel supplies
- Increase economic development and family-wage jobs
- Insulate our economy from fossil fuel price spikes and supply shortages
- Create new competition to help restrain fossil fuel price increases
- Improve our national security
- Reduce a growing reliance on imported fuel and electricity
- Reduce renewable energy technology costs by creating economies of scale and a national market for the most cost-effective resources
- Protect our environment and public health
- Build a strong domestic renewable energy industry, which can serve growing international markets and domestic markets

Existing state commitments are an excellent start, but a national RES is necessary to satisfy these goals for the entire country.

¹ For detailed information on state RES programs and other state policies to promote renewable energy, see UCS website, http://www.ucsusa.org/clean_energy/clean_energy_policies/clean-energy-policies-and-proposals.html.

² See UCS website, http://www.ucsusa.org/clean_energy/clean_energy_policies/experts-agree-renewable-electricity-standards-are-a-key-driver-of-new-renewable-energy.html.

³ Wisser, R. "The Impact of State Clean Energy Fund Support for Wind Power". Lawrence Berkeley National Laboratory (LBNL). WINDPOWER 2005 Conference, May 18, 2005.

⁴ Wisser, R., and O. Langniss. *The Renewables Portfolio Standard in Texas: An Early Assessment*. LBNL. November, 2001.