

Union of Concerned Scientists Citizens and Scientists for Environmental Solutions

Renewable Energy Standards at Work in the States

In a growing number of states, renewable energy standards for electricity – also called a renewable portfolio standard (RPS) – have emerged as an effective and popular tool for promoting a cleaner, renewable power supply. State leadership has demonstrated that an RPS can reduce market barriers and stimulate new markets for renewable energy. Because renewable energy can help meet critical national fuel diversity, energy security, economic, and environmental goals, a renewable energy standard should be a cornerstone of America's national energy policy.

Which States have an RPS?

To date, 13 states have implemented minimum renewable energy standards.¹ Most recently, California enacted the largest RPS in the nation, requiring the state's 3 largest investor-owned utilities to gradually increase their use of renewable energy for electricity to 20% by 2017. As part of restructuring their electricity

industries, Arizona, Connecticut, Maine, Massachusetts, Nevada, New Jersey, New Mexico, and Texas enacted renewable portfolio standards. Pennsylvania included renewable standards in restructuring settlements with distribution companies. Wisconsin enacted a renewable standard as part of electricity reliability legislation, without restructuring to allow retail competition. Iowa and Minnesota have enacted minimum renewable energy requirements for regulated utilities. In 2001, Nevada became the first state to revisit and significantly increase its RPS.

New Renewable Energy Development

State RPS laws will provide for nearly 12,400 megawatts (MW) of new renewable power by 2012 - an increase of more than 90% over total 1997 U.S. levels (excluding hydro). This represents enough clean power to meet the electricity needs of 7.5 million homes. The RPS initiatives in California and Texas create the two largest markets for new renewable energy growth. Significant development has already occurred in Wisconsin, Iowa, Minnesota, and Texas (see below). Wisconsin utilities have acquired enough renewable electricity to meet their target through 2005. Total new renewable

States with Renewable Portfolio Standards







* Projected development assuming states achieve annual RPS targets.

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energy production from state RPS programs will reduce as much carbon dioxide – the main greenhouse gas that causes global warming – as taking 5.3 million cars off the road or planting over 1.6 billion trees.

Texas RPS: A National Model

So far, Texas has the most successful state initiative. The Texas legislature adopted a renewable energy standard in 1999 that requires 2,000 MW of new renewable generating capacity to be installed by 2009. The RPS was signed into law by then-Governor George W. Bush and implemented by Federal Energy Regulatory Commission Chair Pat Wood, a former Texas utility regulator. The first milestone calls for 400 MW to be installed by the end of 2002. Instead, more than 900 MW have been installed, largely because of the cost-effectiveness of numerous wind power projects and the expiration of the federal production tax credit for wind in 2001 (which was extended again by Congress through 2003). The Texas standard has been successful, in part, due to the availability of good renewable energy resources in the state and the inclusion of the following key provisions in the RPS legislation:

- New renewable energy requirements are high enough to trigger market growth in the state
- Requirements apply across the board to all electricity providers
- Requirements can be met using tradable renewable energy credits
- Retail providers that do not comply with the RPS target must pay significant financial penalties

Why Do We Need A Federal RPS?

States have demonstrated that renewable energy standards can be effective. Investments in renewable energy create important benefits for the entire nation. The RPS 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 our supplies
- 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 the cost of renewable energy technologies by creating economies of scale and a
 national market for the most cost-effective renewable energy sources
- Protect our environment and public health
- Build a strong domestic renewable energy industry, which can then serve growing international markets as well as domestic markets

Existing state commitments are an excellent start but not enough to satisfy these goals for the nation. Finally, the public supports a national renewable energy standard. Survey after survey shows that Americans strongly favor clean renewable energy sources.

The Union of Concerned Scientists is a nonprofit partnership of scientists and citizens combining rigorous scientific analysis, innovative policy development, and effective citizen advocacy to achieve practical environmental solutions.

¹ For detailed information on state RPS programs and other state policies to promote renewable energy, see UCS website, <u>http://www.ucsusa.org/clean_energy/renewable_energy/page.cfm?pageID=114</u>.