Renewables Portfolio Standard Overview

What Is a Renewables Portfolio Standard?

A Renewables Portfolio Standard (RPS) is a requirement on electric utilities and other electric suppliers to supply a minimum percentage or amount of their load with eligible sources of renewable energy. An RPS is sometimes accompanied with a tradable renewable energy certificate (REC) program to ease compliance.

The RPS Has Become Increasingly Popular

Eighteen states and the District of Columbia have implemented an RPS because an RPS can:

- Provide an efficient, cost-effective way to meet renewable energy targets
- Integrate renewables into electricity supply decisions
- Minimize ongoing government intervention
- Spread costs evenly over targeted area
- Be used in regulated and restructured markets.

The RPS is also popular because renewable energy provides the following public benefits, such as:

- Mitigates natural gas fuel price risk
- Reduces natural gas prices by reducing demand for gas
- May reduce wholesale power prices
- Displaces air emissions and mitigates the risk and cost of compliance with future environmental regulations
- Conserves water resources (relative to conventional electricity generators)
- Promotes local economic development.

State RPS Policies Differ: There Is More than One Way to Design an RPS!

The elements of state RPS policies include the renewable energy targets, resource eligibility, treatment of existing plants, start and end dates, for whom the standards apply, enforcement/penalties, flexibility mechanisms, and REC trading.

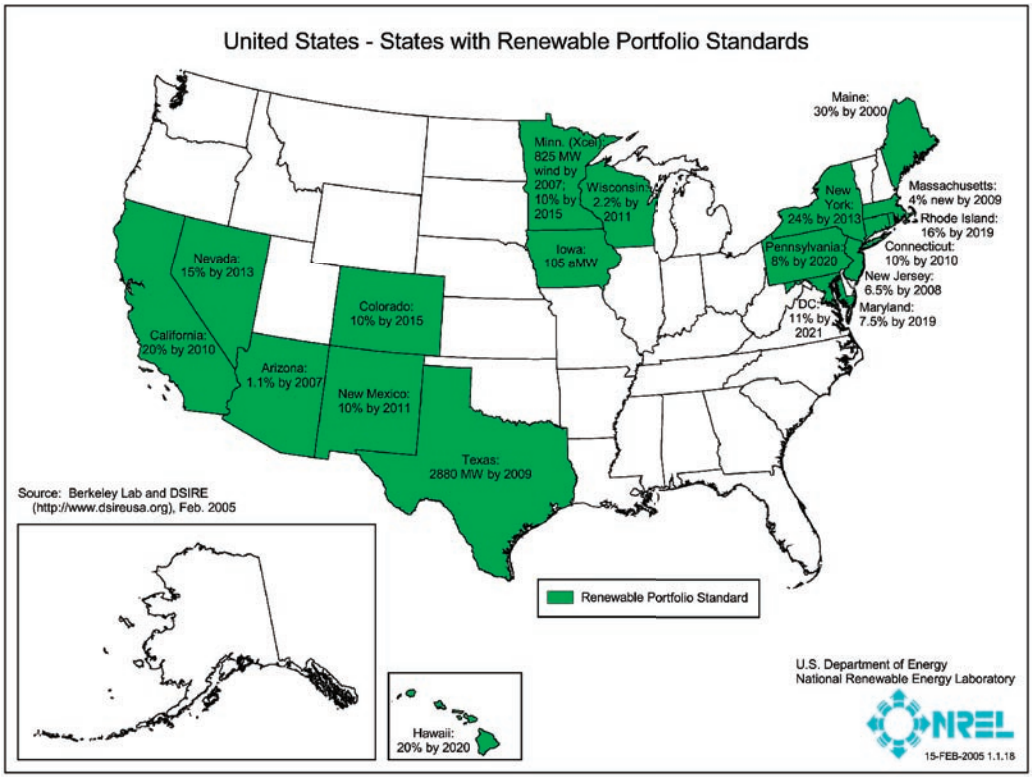
The Most Important Lesson Learned to Date

An RPS can be an elegant, cost-effective, flexible policy to meet renewable energy targets, if designed properly. The legislative and regulatory design details matter!

Design Requirements for an Effective RPS

Past experience shows that an effective RPS requires the following elements:

- Strong political support and a regulatory commitment that is expected to continue for the duration of the policy



- Clear and well-planned renewable resource eligibility rules
- Predictable long-term renewable energy targets that ensure new renewable energy supply
- Standards that are achievable given permitting challenges
- Credible and automatic enforcement (penalties must exceed cost of compliance)
- Flexible compliance rules to ease compliance burdens
- Provisions to ensure long-term contracts.

What Is the Cost of an RPS to the Ratepayer?

The costs of implementing an RPS can vary dramatically by region and by the design of the RPS. Where wind power can be delivered cheaply, RPS policies have even been predicted to result in consumer savings. A summary of eight recent RPS cost analyses found that the expected cost impact of a state RPS can be positive or negative, and for an average residential customer, the cost is typically predicted to average less than $5/year; in nearly half of the studies consumer savings are expected, averaging less than $5/year.

The RPS Bottom Line

The RPS has become increasingly popular because of its benefits and the public benefits of renewable energy. The 18 existing state RPS policies are a key form of support for large-scale renewable projects. Although certain elements are common to every RPS policy, there is more than one way to design an RPS. Careful attention should be paid to the details, and the experiences of other states can aid the design.

A well-designed state RPS can effectively deliver a renewable energy supply and associated benefits, at a low cost or even with consumer savings.

State	Incremental Target	Overall Rate Impacts	Average Impact on Residential Bill
CA	41,000 GWh (2010)	savings: 0.5% in 2010	savings: $3.5/yr in 2010
CO	4,500 GWh (2020)	savings: 0.5% expected value	savings: $2.4/yr expected value
WA	14,300 GWh (2023)	no impact	no impact
MN	6,300 GWh (2010)	savings: 0.7% on average	savings: $4.6/yr on average
IA	4,400 GWh (2015)	savings: 0.3% on average	savings: $3.4/yr on average
WI	7,500 GWh (2013)	cost: 0.6% on average after 2010	cost: $3.3/yr on average after 2010
PA	17,000 GWh (2015	cost: 0.46% on average	cost: $3.5/yr on average
NY	12,000 GWh (2013)	cost: 0.32% in 2009	cost: $3/yr in 2009

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For more information contact: EERE Information Center • 1-877-EERE-INF (1-877-337-3463) • www.eere.energy.gov

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