

Renewable Portfolio Standard Overview

What Is a Renewable Portfolio Standard?

A Renewable 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 credit (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:

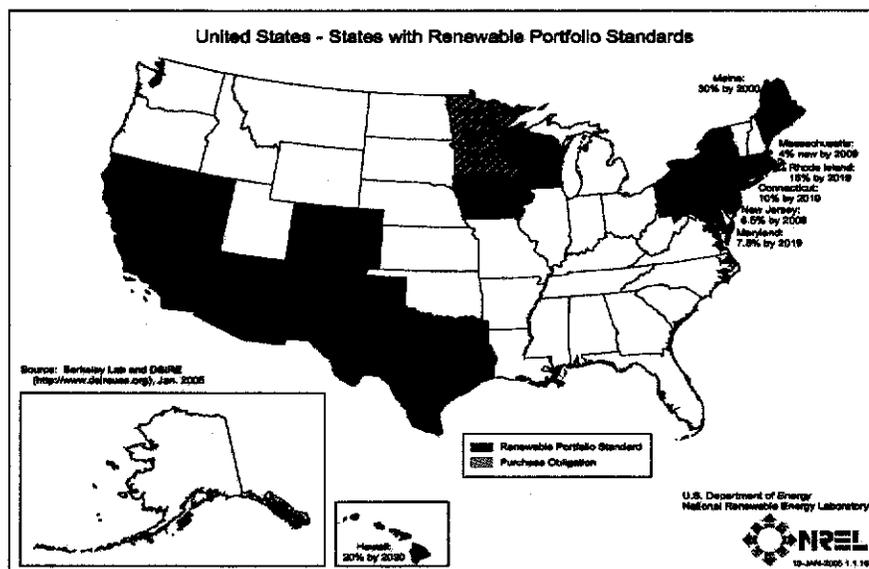
- Provides an efficient, cost-effective way to meet renewable energy targets
- Integrates renewables into electricity supply decisions
- Minimizes ongoing government intervention
- Spreads costs evenly over targeted area
- Can be used in regulated *and* restructured markets.

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

- Mitigates natural gas fuel price risk
- Reduces natural gas prices by reducing demand for gas
- Reduces wholesale power prices
- Displaces air emissions and mitigates risk/cost of future environmental compliance
- Conserves water resources (unlike 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 RPS structure, standard levels, resource eligibility, treatment of existing plants, tiers and bands, start and end dates, application of standards, 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, or it can be a poorly designed, ineffective, costly way to meet renewable energy targets. The legislative and regulatory design details matter!

Design Requirements for an Effective RPS

- Strong political support and regulatory commitment that is expected to continue for the duration of the policy
- Clear and well-planned renewable energy 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)
- Applied to electricity suppliers that are in a position to enter into long-term contracts.

What Is the Cost of an RPS to the Ratepayer?

The costs will vary dramatically by region and by the design of the RPS. Where wind supply can be delivered cheaply, RPS policies have been found to provide consumer savings. A summary of eight recent RPS cost analyses found that the cost impact of a state RPS can be positive or negative and is typically predicted to average plus or minus \$5/year for an average residential customer.

State	Incremental Target	Overall Rate Impacts	Avg. 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
MIN	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

The RPS Bottom Line

- The eighteen existing state RPS policies are a key form of support for large-scale renewable projects.
- Additional states are considering the RPS.
- A state RPS can effectively deliver renewable energy supply and associated benefits, at a low cost or even with consumer savings.
- Designing an RPS requires careful attention.
- Experience in other states can help in the design of an RPS.