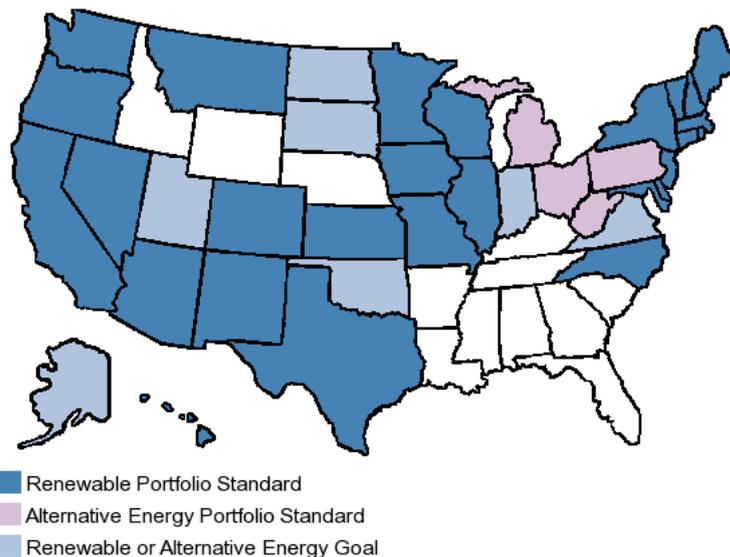


Renewable & Alternative Energy Portfolio Standards



These states have set standards specifying that electric utilities deliver a certain amount of electricity from renewable or alternative energy sources. Most of these requirements take the form of a "renewable portfolio standard" (RPS) or "alternative energy portfolio standard" (AEPS) which requires a certain percentage of a utility's power plant capacity or generation to come from renewable or alternative energy sources by a given date. The standards range from modest to ambitious, and qualifying energy sources vary. Some states also include "carve-outs" (requirements that a certain percentage of the portfolio be generated from a specific energy source, such as solar power) or other incentives to encourage the development of particular resources. Although climate change may not be the prime motivation behind these standards, the use of renewable or alternative energy can deliver significant greenhouse gas reductions. Increasing a state's use of renewable energy brings other benefits as well, including job creation, energy security, and cleaner air. While the first RPS was established in 1983, the majority of states passed or strengthened their standards after 2000. Consequently, while many of these efforts have increased the penetration of renewables; others have not been in effect long enough to do so. Many states allow utilities to comply with the RPS or AEPS through tradeable credits. While the success of state efforts to increase renewable or alternative energy production will depend in part on federal policies such as production tax credits, states have been effective in encouraging clean energy generation. For more information on state renewable and alternative portfolio standards, please refer to our resources: Comparison of Qualifying Resources for Individual States' RPS and AEPS and Detailed Table of State Policies (including RPS/AEPS targets, carve-outs, tiers, classes, incentives, hydropower definitions, and relevant authorities). Please refer to our Renewable Energy Credit Tracking Systems map to see how credits verifying renewable energy generation can be tracked and traded across U.S. regions. For more information on federal portfolio standards, please refer to our: CES Resource Page.

Alaska

50% by 2025

On June 16, 2010, Governor Sean Parnell signed into law House Bill 306, which sets a goal for the state to generate 50% of its electricity from renewable sources by 2025.

Arizona

15% by 2025

On February 27, 2006, the Arizona Corporation Commission introduced new renewable energy standards requiring regulated electric utilities to generate 15 percent of their energy from renewable resources by 2025. Customers will face a slightly higher Environmental Portfolio Surcharge to offset the cost of compliance. If a utility does not meet the standard, the Commission may assess a penalty for non-compliance. The new rules also require a growing percentage of the total resource portfolio to come from distributed generation. Sources of energy that count toward the standard include electricity produced from qualifying biogas, hydropower, fuel cells that use only renewable fuels, geothermal, hybrid wind and solar, landfill gas, solar, and wind.
Press Release RPS

California

33% by 2020

On September 26, 2006 California Governor Arnold Schwarzenegger signed Senate Bill 107, which requires California's three major utilities to deliver at least 20 percent of their electricity from renewable sources by 2010. Sources of energy

that count toward the standard include biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, and tidal current.

On September 15, 2009, Governor Schwarzenegger signed Executive Order S-21-09 directing the state's Air Resources Board (ARB) to adopt regulations increasing California's Renewable Portfolio Standard (RPS) to 33 percent by 2020. The executive order allows renewable energy imported from "resources and facilities" in states throughout the Western Interconnection, the power grid in the West, to count towards the RPS target. The RPS will apply to all load serving entities, including investor-owned utilities, publicly-owned utilities, direct access providers and community choice aggregators.

On April 12, 2011, Governor Jerry Brown signed SBX1-2, which codified the 33% by 2020 target.

SB 107
CA Executive Order S-21-09
SBX1-2
CA RPS Home

Colorado

30% by 2020 (at least 3% from local solar)

On March 22, 2010 Governor Bill Ritter signed legislation (HB 1001) requiring that 30 percent of Colorado's electricity come from renewable energy sources by 2020 ? one of the highest percentage requirements in the U.S. The new 30 percent requirement is the second update of the original renewable energy requirement of 10 percent by 2015 that was set in Amendment 37, which Colorado residents passed in 2004. Legislation enacted in 2007 doubled this requirement to 20 percent by 2020, and now in just six years the state has tripled its commitment to renewable energy.

HB 1001 also calls for 3 percentage points of the 30 percent standard to be met by local solar power to encourage distributed generation without the need to construct new and expensive transmission lines.

Sources of energy that count toward the standard include solar, wind, geothermal, biomass, and small hydroelectric.

HB 1001

Connecticut

27% by 2020

On June 4, 2007, Governor M. Jodi Rell signed House Bill 7432, which expanded the state's previous renewable portfolio standard. HB 7432 requires that 27 percent of the state's electricity come from renewable sources by 2020. The law includes standards for three classes of renewables. By 2020, 20 percent of the renewables must be from Class I, 3 percent must be from Class I or II, and 4 percent must be from Class III. Class I sources include solar, wind, new sustainable biomass, landfill gas, fuel cells (using renewable or non-renewable fuels), ocean thermal power, wave or tidal power, low-emission advanced renewable energy conversion technologies, and new run-of-the-river hydropower facilities with a maximum capacity of five megawatts. Class II sources include trash-to-energy facilities, biomass facilities not included in Class I, and certain hydropower facilities. Class III sources include customer-sited combined heat and power systems with a minimum operating efficiency of 50 percent installed at commercial or industrial facilities on or after January 1, 2006; electricity savings from conservation and load management programs that started on or after January 1, 2006; and systems that recover waste heat or pressure from commercial and industrial processes installed on or after April 1, 2007.

SB 1243, signed on July 1, 2011, creates incentives for residential solar energy and small, customer-side renewable generation projects.

Press Release HB 7432

Delaware

25% by 2025 (at least 3.5% from PV)

On July 24, 2007, Governor Ruth Ann Minner signed Senate Bill 119, which expanded the state's previous renewable portfolio standard to require that 2 percent of the state's electricity supply come from solar photovoltaics by 2019, in addition to 18 percent from other renewable sources by the same date. In July 2010 the renewable energy target was revised to 25% by compliance year 2025-2026, with at least 3.5% from solar photovoltaics.

Sources of energy that count toward the standard include wind, ocean tidal, ocean thermal, fuel cells powered by renewable fuels, hydroelectric facilities with a maximum capacity of 30 megawatts, sustainable biomass, anaerobic digestion, and landfill gas.

2010 RPS

Hawaii

40% by 2030

On June 2, 2004, Governor Linda Lingle enacted Senate Bill 2474, which requires the state's public utilities to provide 20 percent of their electricity from renewable sources by 2020. The RPS timetable and qualifying sources were updated in 2006 with SB 3185.

On January 28, 2008, Governor Lingle and the U.S. Department of Energy signed a Memorandum of Understanding to establish the Hawaii Clean Energy Initiative, a partnership to expand the use of renewable energy in Hawaii. The Initiative includes a goal to meet at least 70 percent of the state's energy needs with renewable production by 2030.

On June 25, 2009 Hawaii Governor Linda Lingle signed into law House Bill 1464, which extends and increases Hawaii's current renewable electricity portfolio standard (RPS) to 40% by 2030; it also increases the interim target for the year 2020 to 25% from a previous target of 20%.

SB 2474
SB 3185
Memorandum of Understanding
HB 1464

Illinois

25% by 2025

On August 28, 2007, Governor Rod Blagojevich of Illinois signed into law Public Act 095-0481, which sets a statewide Renewable Energy Standard and an Energy Efficiency Portfolio Standard. Under the RES, utilities in Illinois must produce a certain percentage of their power from renewable sources, starting with 2 percent in 2008 and increasing to 25 percent by 2025. Seventy-five percent of the electricity used to meet the renewable standard must come from wind power generation; other eligible electricity resources include solar, biomass, and existing hydropower sources. The law also includes an efficiency standard that requires utilities to implement cost-effective energy efficiency measures to reduce electric usage by 2 percent of demand by 2015.

Public Act 095-0481
Press Release

Indiana

In May 2011, Governor Mitch Daniels signed SB 251, creating the Clean Energy Portfolio Standard (CPS). The program sets a voluntary goal of 10% clean energy by 2025, based on 2010 levels. In order to participate in the program, qualifying electric utilities must apply to the Indiana Utility Regulatory Commission (IURC). Participation in the CPS makes utilities eligible for incentives in order to pay for projects. Only public utilities may participate in the program.

The following targets apply to participating utilities:
2013 - 2018: average at least 4% qualifying clean energy;
2019 - 2024: average at least 7% qualifying clean energy;
2025 - 2025: average at least 10% qualifying clean energy.

SB 251

Iowa

105 MW

In 1983, Iowa enacted the Iowa Alternative Energy Production law. The law requires the state's two investor-owned utilities -- MidAmerican Energy and Alliant Energy Interstate Power and Light -- to contract for a combined total of 105 megawatts of their generation from renewable-energy resources, including small hydropower facilities. Sources of energy that count toward the standard include photovoltaics, landfill gas, wind, biomass, hydroelectric, municipal solid waste, and anaerobic digestion.

Kansas

20% by 2020.

On May 22, 2009, Kansas Governor Mark Parkinson signed into law the Senate Substitute for H.B. 2369, which includes a renewable energy standard, net metering provisions, and various other energy efficiency and energy-related provisions. The Renewable Energy Standard mandates that utilities (excluding municipal utilities) obtain 10 percent of their energy from renewable sources by 2011, 15 percent by 2016, and 20 percent by 2020. Renewable sources include wind, solar thermal and solar photovoltaic, various biomass sources, methane from landfills or wastewater treatment facilities, existing hydropower and new hydropower of 10 megawatts or less, and fuel cells using hydrogen produced from renewable sources.

Senate Substitute for H.B. 2369

Maine

40% by 2017

On September 28, 1999, Maine's Public Utilities Commission adopted a renewable portfolio standard, requiring that 30 percent of Maine's power come from renewable sources by 2000. Sources of energy that count toward the standard include fuel cells, tidal power, solar, wind, geothermal, hydroelectric, biomass, and generators fueled by municipal solid waste in conjunction with recycling. In June 2006, the state adopted a renewable portfolio goal to increase new renewable energy capacity by 10 percent by 2017. "New" renewable energy sources include those placed into service after September 1, 2005. In 2007 the state updated the 2006 goal and made it a mandatory target. Resources that satisfy the new capacity requirement cannot also be used to satisfy the 30 percent portfolio requirement.
1999 RPS2007 Law

Maryland

20% by 2022 (at least 2% from solar)

On April 24, 2008, Governor Martin O'Malley signed Senate Bill 209, which accelerates Maryland's existing renewable portfolio standard to require that 20 percent of the state's electricity supply come from renewable sources by 2022. The RPS had previously been expanded by SB 595 on April 24, 2007, to require that 2 percent of electricity come from solar power. SB 209 retained the 2-percent solar carve out.

Sources of energy that count toward the standard include wind, qualifying biomass, methane from the anaerobic decomposition of organic materials in a landfill or wastewater treatment plant, geothermal, ocean, including energy from waves, tides, currents, and thermal differences, a fuel cell that produces electricity from qualifying biomass or methane, and small hydroelectric power plants.
Press Release SB 209 SB 595

Massachusetts

15% new by 2020 with 1% increase each subsequent year

In July 2008, Governor Deval Patrick signed into law SB 2768, which mandates that the state's renewable portfolio standard grow one percent each year beyond the previous standard of 4 percent in 2009. Renewable energy will account for 15 percent of electricity generation by 2020 and 25 percent by 2030.

SB 2768 divides renewable energy into two classes. The RPS applies to Class I renewable energy sources, which are defined as commercial sources beginning in 1998 from one of the following sources: solar photovoltaic, solar thermal, wind, ocean thermal, wave, tidal, fuel cells using renewable fuels, landfill gas, new hydroelectric facilities or incremental new energy from increased capacity or efficiency improvements at existing facilities up to 25 MW, low emission biomass, marine or hydrokinetic, and geothermal energy.

Class II renewable energy sources include facilities that began commercial generation prior to 1998. SB 2768 allows the Department of Energy Resources to specify that a Class II sources make up a percentage of commonwealth generation to support the continued use of these facilities.

SB 2768 also established an Alternative Energy Portfolio Standard, which requires the state to meet 5 percent of its electric load with "alternative energy" by 2020, which includes sources such as combined heat and power plants (CHP) and coal with carbon capture and storage (CCS).
SB 2768

Michigan

10% by 2015

S.B. 213, the Clean, Renewable, and Efficient Energy Act, establishing the standard, was signed into law on October 6, 2008. Energy providers must comply with this new standard through renewable energy generation, renewable energy credits, advanced clean energy generation, and energy optimization programs. The bill specifies biomass, solar photovoltaics and solar thermal energy, wind energy, hydroelectric power, geothermal energy, and energy generated from landfill gas capture as potential sources of renewable energy. Up to 10 percent of the RPS can be met with integrated gasification combined cycle facilities that reduce emissions by 70 percent relative to average coal power plant emissions, or with other advanced clean energy technologies that reduce emissions by 85 percent relative to average coal power plant emissions.

S.B. 213

Minnesota

25% by 2025; Xcel Energy 30% by 2020

On February 22, 2007, Governor Tim Pawlenty signed into law Senate Bill 4, which mandates that 25 percent of

Minnesota's power come from renewable sources by 2025. Xcel Energy, which currently generates about half of the state's electricity, will be required to produce 30 percent of its power from renewable sources by 2020. Sources of energy that count toward the standard include solar, wind, small hydroelectric power plants, hydrogen generated from renewable resources, and biomass from qualifying resources.

SB 4

Missouri

15% by 2021

On November 4, 2008, Missouri voters approved the Missouri Clean Energy Initiative, creating the nation's third state Renewable Portfolio Standard (RPS) to be adopted by ballot initiative. Most state RPSs have been adopted through legislation or executive order. The proposal requires that investor-owned utilities increase renewable electricity generation to two percent of total output by 2011, five percent by 2014, 10 percent by 2018, and 15 percent by 2021. Two percent of generation must come from solar energy; the remainder may come from other renewable sources including landfill gas, wind, biomass, and hydroelectric power. In order to protect rate-payers, utilities are prevented from increasing power prices more than one percent.

The Clean Energy Initiative ramps up the goals set forward in S.B. 54 enacted in Missouri in 2007, which calls on utilities to make a "good-faith effort" to generate 11 percent of electricity from renewable sources by 2021.

SB 54

Montana

15% by 2015

On April 28, 2005, Governor Brian Schweitzer signed into law Senate Bill 415, The Montana Renewable Power Production and Rural Economic Development Act, which established a renewable energy portfolio standard for the state. SB 415 mandates that 15 percent of the state's energy come from renewable sources by 2015, and for each year thereafter. Sources of energy that count toward the standard include wind, solar, geothermal, existing hydroelectric projects, landfill or farm-based methane gas, wastewater-treatment gas, low-emission, nontoxic biomass, and fuel cells where hydrogen is produced with renewable fuels.

SB 415

Nevada

25% by 2025 (at least 6% from solar)

On June 7, 2005 the Nevada Governor Kenny Guinn signed into law Assembly Bill 3, expanding Nevada's previous renewable portfolio standard. The updated standard requires that 20 percent of the state's electricity come from renewable energy sources by 2015, and for each year thereafter. Of the 20 percent, not less than 5 percent must be generated from solar renewable energy systems. Utilities can also earn credit for up to 25 percent of the standard through energy efficiency measures. Sources of energy that count toward the standard include biomass, fuel cells, geothermal, solar, waterpower, and wind.

AB 3

On June 8, 2009 Nevada Governor Jim Gibbons signed into law SB 395, a comprehensive energy bill that contains a variety of climate-related provisions, including the extension and increase of Nevada's RPS, a new permitting system for renewable facilities, energy efficiency measures for public facilities, and measures designed to curb greenhouse gas (GHG) emissions from vehicles. The new RPS requires 25 percent by 2025 and calls for 6 percent to come from solar resources by 2016.

SB 395

New Hampshire

23.8% by 2025

On May 11, 2007, Governor John Lynch signed into law House Bill 873, the Renewable Energy Act, which establishes a renewable energy portfolio standard for the state. HB 873 mandates that 23.8 percent of the state's electricity come from renewable sources by 2025, a goal Governor Lynch had previously set for New Hampshire. Sources of energy that count toward the standard include wind, solar, geothermal, hydrogen derived from biomass fuels or methane gas, ocean thermal, wave, current, tidal energy, methane gas, eligible biomass technologies, and existing small hydroelectric sources.

HB 873

New Jersey

20.38% by 2021 (plus 5316 GWh from solar by 2026)

On April 12, 2006, the New Jersey Board of Public Utilities (BPU) approved new regulations that expanded the state's renewable portfolio standard. The BPU decision requires utilities produce 22.5 percent of their electricity from renewable sources, at least 2 percent of which must come from solar sources. Sources of energy that count toward the remainder of the standard include solar, wind, wave, tidal, geothermal, methane gas captured from a landfill, fuel cells powered by renewable fuels, electricity generated by the combustion of gas from the anaerobic digestion of food waste and sewage sludge at a biomass generating facility, and hydropower.

AB 3520, adopted on January 17, 2010, adjusted the solar carve-out from a percentage requirement to an absolute target of 5316 GWh by 2026.

SB 2036, signed on August 19, 2010, created the nation's first carve-out for offshore wind. The BPU has yet to determine the details of this carve-out.

New Mexico

20% by 2020

On March 5, 2007, Governor Bill Richardson signed into law Senate Bill 418, which established a renewable portfolio for the state. SB 418 mandates that by 2020, 20 percent of an electric utility's power come from renewable sources. Sources of energy that count toward the standard include solar, wind, hydropower, geothermal, fuel cells that are not fossil fueled, and qualifying biomass resources.

SB 418

New York

30% by 2015

On September 24, 2004, The New York Public Service Commission adopted a renewable portfolio standard. The standard required that 25 percent of the state's electricity come from renewable sources by 2013. In January 2010 the requirement was expanded to 30 percent by 2015 by order of the New York Public Service Commission. The standard identifies two tiers of eligible resources, a "Main Tier" and a "Customer-Sited Tier". The "Main tier" is mandatory and is to account for 93 percent of the standard. Eligible sources include biogas, biomass, liquid biofuel, fuel cells, hydroelectric, solar, ocean or tidal power, and wind. The "customer-sited" tier will make up the remaining 7 percent of renewable energy sales and is to come from voluntary green market programs. Sources of energy that count toward the Customer-Sited Tier include fuel cells, solar, and wind resources.

More information available [here](#).

North Carolina

12.5% by 2021 (including 0.2% solar and 0.2% swine waste by 2018)

On August 20, 2007, Governor Mike Easley of North Carolina signed into law S.L. 2007-397, which establishes a Renewable Energy and Energy Efficiency Portfolio Standard for the state. Under the law, by 2021 investor-owned utilities must meet 12.5% of retail electricity demand through renewable energy or energy efficiency measures, and electric membership corporations and municipalities that sell electric power in the state would have to meet a standard of 10% by 2018. Resources that can be used to meet the standard include solar energy, wind energy, hydropower, geothermal energy, ocean current or wave energy, biomass resources, and energy efficiency measures. The law also includes provisions to encourage the use of solar energy, swine and poultry wastes, as well as implementation of energy efficiency programs.

S.L. 2007-397

North Dakota

10% by 2015

In March, 2007, the North Dakota legislature signed HB 1506, which established a voluntary Renewable Portfolio objective of 10% by 2015.

HB 1506

Ohio

25% by 2025 (12.5% from renewables)

On May 1, 2008, Governor Ted Strickland signed substitute Senate Bill 221 into law, establishing an alternative energy

portfolio standard (AEPS) for the state of Ohio. The law mandates that by 2025, at least 25 percent of all electricity sold in the state come from alternative energy resources. At least half of the standard, or 12.5 percent of electricity sold, must be generated by renewable sources such as wind, solar (which must account for at least 0.5 percent of electricity use by 2025), hydropower, geothermal, or biomass. At least half of this renewable energy must be generated in-state. In addition to renewables, the additional 12.5 percent of the overall 25 percent standard can also be met through alternative energy resources like third-generation nuclear power plants, fuel cells, energy-efficiency programs, and clean coal technology that can control or prevent carbon dioxide emissions. The bill also creates a renewable energy credit (REC) tracking system, which allows utilities to buy, sell, and trade credits to comply with the renewable energy and solar energy requirements. Additionally, electric utilities will be required to achieve energy savings of 22.5 percent by the end of 2025 through energy efficiency programs. Utilities must also implement programs to reduce peak energy demand one percent beginning in 2009, and an additional .75 percent per year through 2018.

SB 221

Oklahoma

15% by 2015

On May 27, 2010, Oklahoma enacted a bill (HB 3028) creating a renewable energy goal. The goal calls for 15 percent of the electricity generated in Oklahoma to be derived from renewable sources by 2015. Eligible resources include wind, solar thermal, solar PV, anaerobic digesters, biomass, landfill gas, hydro, and fuel cells. Up to 25% of the goal can be met using energy efficiency.

Oregon

25% by 2025, 20 MW from solar photovoltaic

On June 6, 2007, Governor Ted Kulongoski signed Senate Bill 838, adopting a renewable electricity portfolio standard for the state. SB 838 requires the state's largest utilities to meet 25 percent of their electric load with new renewable energy sources by 2025. Sources of energy that count toward the standard include wind, solar, wave, geothermal, biomass, new hydro or efficiency upgrades to existing hydro facilities.

HB 3039, signed in July 2009, establishes a solar photovoltaic standard within the state renewable portfolio standard. The solar photovoltaic standard is set at 20 megawatts by 2020 and applies to systems greater than 500 kilowatts and less than five megawatts in capacity. Each investor-owned utility will be required to meet their share of this statewide standard. Every kilowatt-hour of electricity generated from these solar photovoltaic systems may count as two kilowatt-hours for the purposes of complying with the state renewable portfolio standard.

SB 838HB 3039

Pennsylvania

18% by 2020 (at least 0.5% from solar)

On December 16, 2004, Governor Edward Rendell signed into law Pennsylvania's Alternative Energy Portfolio Standard, requiring that qualified power sources provide 18 percent of Pennsylvania's electricity by 2020. There are two tiers of qualified sources that may be used to meet the standard. Tier 1 sources must make up 8 percent of the portfolio, and include wind, solar, coalmine methane, small hydropower, geothermal, and biomass. Solar sources must provide 0.5 percent of generation by 2020. Tier 2 sources make up the remaining 10 percent of the portfolio, and include waste coal, demand side management, large hydropower, municipal solid waste, and coal integrated gasification combined cycle.

AEPSA AEPS site

FFF

Rhode Island

16% by 2019

On June 29, 2004, Governor Donald Carcieri signed the Clean Energy Act, requiring state electricity retailers to derive at least 3 percent of the electricity they sell in state from renewable energy by December 31, 2006. The percentage of renewable energy required will then rise 1 percent per year through 2020, though the Rhode Island Public Utility Commission (PUC) is authorized to revise the schedule after 2013. Existing renewable resources may only contribute 2 percent of the required amount of renewables in any year; the rest must be from new renewable energy production. Sources of energy that count towards the standard include direct solar radiation, wind, movement or the latent heat of the ocean, the heat of the earth, small hydroelectric facilities, eligible biomass, and fuel cells using renewable resources.

RPS

South Dakota

10% by 2015

On February 21, 2008, Governor Mike Rounds signed into law HB 1272, which established a voluntary Renewable Portfolio objective of 10% by 2015.

HB 1272

Texas

5,880 MW by 2015

On August 1, 2005, Governor Rick Perry signed a bill increasing the amount of renewable generation required in the state. The law requires that 5,880 megawatts of new renewable generation be built in the state by 2015, which will meet about 5 percent of the state's projected electricity demand. The legislation also sets a cumulative target of installing 10,000 megawatts of renewable generation capacity by 2025. In an effort to diversify the state's renewable generation portfolio, the measure also includes a requirement that the state must meet 500 megawatts of the 2025 target with non-wind renewable generation.

RPS

Utah

20% by 2025

On March 18, 2008, Governor Huntsman signed SB 202, which established a voluntary Renewable Portfolio goal of 20% by 2025. The bill requires utilities pursue renewable energy to the extent that it is cost effective.

SB 202

Vermont

Equal to incremental load growth

On June 14, 2005, Governor Jim Douglas signed a renewable portfolio standard into law, requiring renewable generation to equal incremental load growth between 2005 and 2012, but not requiring utilities to hold renewable energy credits equal to renewable generation. If utilities have not met this requirement, the state will instate an RPS equal to the percentage of load growth between 2005 and 2012. If the state experiences 7 percent load growth, but utilities have not obtained 7 percent of their electricity from eligible renewables by 2012, the state will adopt an RPS of 7 percent. Sources of energy that count toward the standard include wind, solar, small hydropower methane from landfill gas, anaerobic digesters, and sewage-treatment facilities, while excluding municipal solid waste. Vermont utilities are permitted to build generation capacity out of state to comply with the mandate.

On March 20, 2008, Governor Jim Douglas signed the Energy Efficiency and Affordability Act of 2008, which established a renewable energy goal for the state. The law sets a goal of producing 25 percent of the energy consumed in the state from renewable sources, particularly Vermont's farms and forests, by 2025.

As required by the legislature, the Vermont Public Service Board issued recommendations for the future of Vermont's RPS on October 3, 2011.

RPS

Virginia

15% of 2007 sales by 2025

On April 11, 2007, Governor Tim Kaine signed Senate Bill 1416, which established a voluntary renewable portfolio goal. The standard sets a renewable energy target of 12 percent of base year sales by 2022. The standard targets are defined as percentages of 2007 (the base year) electricity sales minus the average annual percentage of power supplied from nuclear generators between 2004 and 2006. A utility may participate in the voluntary RPS program if it demonstrates that it has a reasonable expectation of achieving the 12 percent target in 2022. Sources of energy that count toward the target include solar, wind, geothermal, hydropower, wave, tidal, and biomass energy. Wind and solar receive a double credit toward RPS goals.

HB 1994, signed on March 30, 2009, provided incentives for utilities to meet voluntary RPS targets in the form of increased rates of return allowed by the Virginia State Corporation Commission. HB 2261, signed on February 14, 2013, removed these incentives but did not alter the targets.

SB 1416

Washington

15% by 2020

On November 7, 2006, Washington state voters approved ballot initiative 937, setting renewable energy standards for utility companies in the state. The measure requires all utilities serving 25,000 people or more to produce 15 percent of their energy using renewable sources by 2020. Such sources include wind, solar, and tidal power as well as landfill-methane capture. Sources of energy that count toward the standard include water, wind, solar, geothermal, landfill gas, wave, ocean, tidal power, gas from sewage treatment facilities, biodiesel fuel that is not derived from crops raised on land cleared from old growth or first-growth forests, and qualifying biomass resources.

Initiative 937

West Virginia

25% by 2025

On June 17, 2009, Governor Manchin of West Virginia signed HB 103, the Alternative and Renewable Energy Portfolio Act, mandating that electric utilities (excluding municipal utilities, rural electric cooperatives, and utilities serving fewer than 30,000 residential customers) obtain 25 percent of their electricity from alternative or renewable energy sources by 2025. The bill sets interim targets of 10 percent by 2015 and 15 percent by 2020. Eligible alternative resources are advanced coal technology (e.g., carbon capture and storage, supercritical technology, ultrasupercritical technology and pressurized fluidized bed technology), coal bed methane, natural gas, fuel produced by a coal gasification or liquefaction facility, synthetic gas, integrated gasification combined cycle technologies, waste coal, tire-derived fuel, pumped storage hydroelectric projects, and recycled energy. Eligible renewable resources are solar PV, solar thermal, wind, run-of-river hydropower, geothermal, biomass, biologically-derived fuel, and fuel cell technology. Covered utilities must hold credits equal to their generation; one credit is awarded for each megawatt-hour of alternative energy generation, two credits for renewable energy generation, and three credits for renewable energy generation located on a reclaimed surface mine. The bill also directs the WV Public Service Commission to consider applying both the Alternative and Renewable Energy Standard to utilities not currently covered.

Wisconsin

10% by 2015

On March 17, 2006, Governor Jim Doyle signed Senate Bill 459, the Energy Efficiency and Renewables Act, which increased the state's previous renewable portfolio standard. The revised standard requires utilities to produce 10 percent of their electricity from renewable energy sources by 2015. Sources of energy that count toward the standard include solar, wind, water power, biomass, geothermal technology, tidal or wave action, and fuel cell technology that uses qualified renewable fuels.

SB 273, adopted on May 19, 2010, allows for electricity-displacing technology, such as solar water heating, to count toward the RPS.

Press Release SB 459