

*RENEWABLE PORTFOLIO STANDARDS  
IN THE UNITED STATES OF AMERICA*

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*December 4, 2009*



**About the Southern States Energy Board**

The **Southern States Energy Board** is an interstate compact, comprised of governors and state legislators from sixteen southern states, Puerto Rico and the U.S. Virgin Islands, as well as a presidential appointee. The Board's mission is to promote economic development and enhance the quality of life in the South, through innovations in energy and environmental programs, policies and technologies.

**Our Mission**

Through innovations in energy and environmental policies, programs, and technologies, the Southern States Energy Board enhances economic development and the quality of life in the South.

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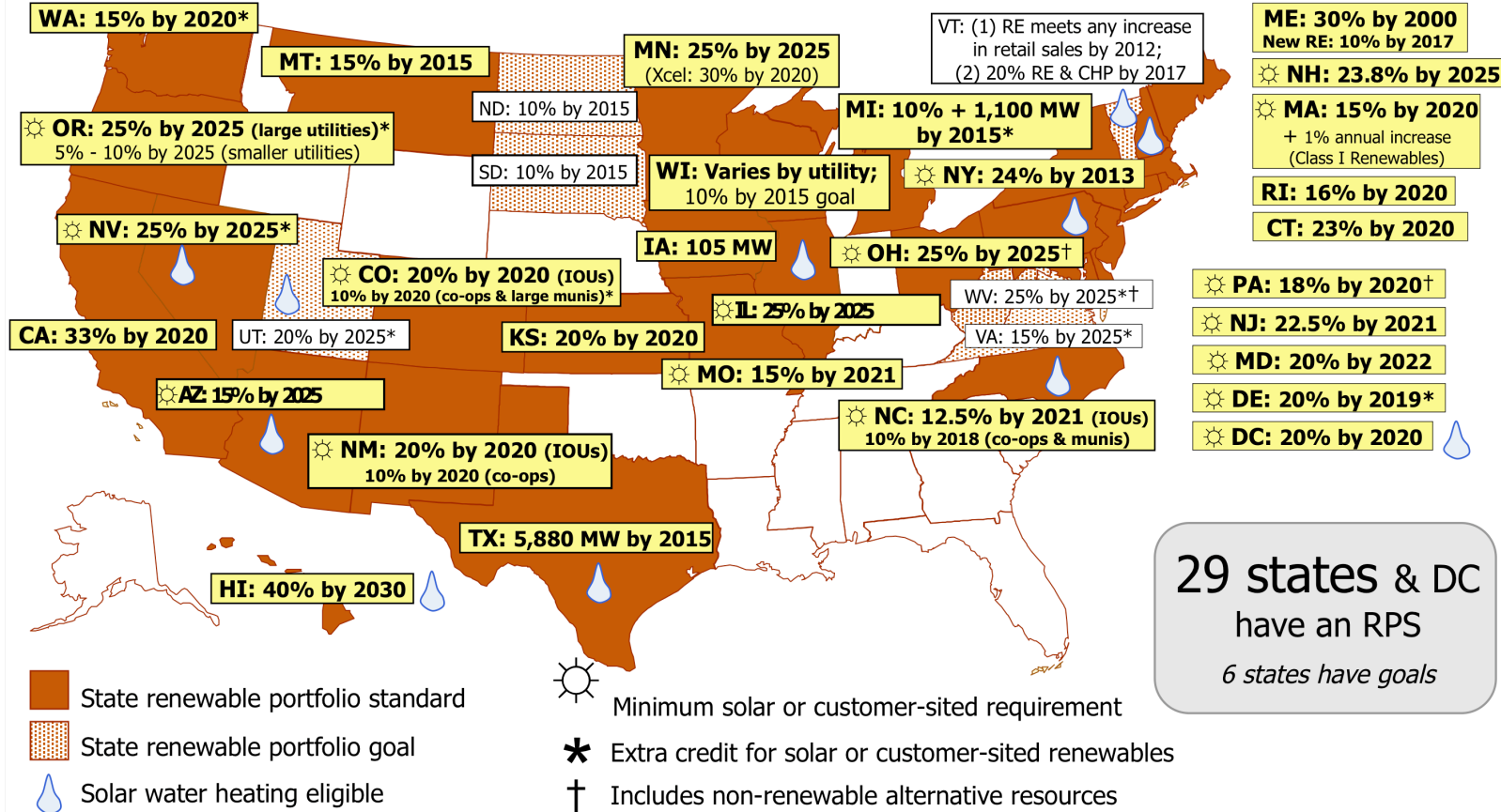
# Renewable Portfolio Standards In the United States of America

NC State University

North Carolina **SolarCenter**

## Renewable Portfolio Standards

[www.dsireusa.org](http://www.dsireusa.org) / November 2009



INTERSTATE RENEWABLE ENERGY COUNCIL





*The enclosed information is compiled from the  
Database of State Incentives for Renewables and Efficiency (DSIRE).*

*The original summary can be found at:*

<http://www.dsireusa.org/summarytables/rrpre.cfm>

**Renewable Portfolio Standards**  
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<b><u>State</u></b>	<b><u>RPS Standard</u></b>	<b><u>Eligible Technologies</u></b>	<b><u>Applicable Sectors</u></b>	<b><u>Technology Minimum</u></b>	<b><u>Credit Trading</u></b>
AZ	15% by 2025	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Geothermal Heat Pumps, CHP/Cogeneration, Solar Pool Heating (commercial only), Daylighting (non-residential only), Solar Space Cooling, Solar HVAC, Additional technologies upon approval, Anaerobic Digestion, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Rural Electric Cooperative, Retail Supplier	Distributed Generation: 30% of annual requirement in 2012 and thereafter (4.5% of sales in 2025); half of this must be from residential installations and half from non-residential, non-utility installations	Yes
CA	20% by 2010 33% by 2020	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, Municipal Solid Waste, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel, Fuel Cells using Renewable Fuels	Municipal Utility, Investor-Owned Utility, Retail Supplier	None	No
CO	Investor-owned utilities: 20% by 2020 Electric cooperatives: 10% by 2020 Municipal utilities serving more than 40,000 customers: 10% by 2020	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, "Recycled Energy," Anaerobic Digestion, Fuel Cells using Renewable Fuels	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative, (Only Municipal Utilities Serving 40,000+ customers)	Solar-electric (IOUs only): 4% of annual requirement (0.8% of sales in 2020); half of solar-electric requirement must be located on-site at customers' facilities	Yes
CT	27% by 2020	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Fuel Cells, Municipal Solid Waste, CHP/Cogeneration, Low E Renewables, Tidal Energy, Wave Energy, Ocean Thermal	Municipal Utility, Investor-Owned Utility, Retail Supplier	Class I: 20% by 2020 Class I or Class II: 3% by 2010 Class III: 4% by 2010	Yes





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DE	20% by compliance year 2019-2020	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Retail Supplier	Solar Photovoltaics: 2.005% by compliance year 2019-2020	Yes
FL	7.5% by 2015	Photovoltaics, Landfill Gas, Wind, Biomass, Municipal Solid Waste	Municipal Utility	No	N/A
HI	40% by 2030	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Geothermal Heat Pumps, Municipal Solid Waste, CHP/Cogeneration, Hydrogen, Seawater AC, Solar AC, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Ethanol, Methanol, Biodiesel, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Rural Electric Cooperative	No	No
IL	25% by compliance year 2024-2025	Yes; specific technologies not identified	Investor-Owned Utility, Retail Supplier	Wind (IOUs): 75% of annual requirement (18.75% of sales in compliance year 2024-2025) Wind (ARES): 60% of annual requirement (15% of sales in compliance year 2024-2025) PV (All): 6% of annual requirement in compliance year 2015-2016 and thereafter (1.5% of total sales in compliance year 2024-2025)	Yes

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IA	105 MW	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Municipal Solid Waste, Anaerobic Digestion	Utility	N/A	N/A
KS	20% of peak demand capacity by 2020	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Small Hydroelectric, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Rural Electric Cooperative	No	Yes
ME	Total: 40% by 2017 Class I (New Resources): 10% by 2017	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Municipal Solid Waste, CHP/Cogeneration, Tidal Energy, Other Distributed Generation Technologies	Investor-Owned Utility, Retail Supplier	No	Yes
MD	20% by 2022	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Fuel Cells using Renewable Fuels	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative, Retail Supplier, Retail Electricity Suppliers	Solar-Electric: 2% by 2022	Yes
MA	Class I (New Resources): 15% of by 2020 and an additional 1% each year thereafter Class II (Existing Resources): 7.1% in 2009 and thereafter (3.6% renewables and 3.5% waste-to-energy)	Geothermal Electric, Municipal Solid Waste, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Retail Supplier	In-State, On-Site Generation: TBD by Department of Energy Resources	Yes





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MI	All utilities: 10% by 2015 Detroit Edison: 300 MW of new renewables by 2013 and 600 MW by 2015 Consumers Energy: 200 MW of new renewables by 2013 and 500 MW by 2015	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, CHP/Cogeneration, Coal-Fired w/CCS, Gasification, Anaerobic Digestion, Tidal Energy, Wave Energy	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative, Retail Supplier	No	Yes
MN	Xcel Energy: 30% by 2020 Other utilities: 25% by 2025	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Municipal Solid Waste, Hydrogen, Co-Firing, Anaerobic Digestion	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	Wind or Solar (Xcel only): 25% by 2020; maximum of 1% from solar	Yes (limitations apply)
MO	15% by 2021	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Anaerobic Digestion, Small Hydroelectric, Fuel Cells using Renewable Fuels	Investor-Owned Utility	Solar-Electric: 2% of annual requirement (0.3% of sales in 2021)	Yes
MT	15% by 2015	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Anaerobic Digestion, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Retail Supplier	No	Yes
NV	25% by 2025	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Waste Tires (using microwave reduction), Geothermal Hot Water District Heating Systems, Solar Pool Heating, Anaerobic Digestion, Biodiesel	Investor-Owned Utility, Retail Supplier	Solar: 5% of annual requirement through 2015 (1.2% of sales in 2015); 6% for 2016-2025 (1.5% of sales in 2025)	Yes

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NH	23.8% by 2025	Solar Water Heat, Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, Hydrogen, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Ethanol, Biodiesel	Investor-Owned Utility, Rural Electric Cooperative, Retail Supplier, (all electricity suppliers, except municipal suppliers)	New Renewables (General): 16% by 2025 New Solar-Electric: 0.3% by 2014 Existing Biomass: 6.5% by 2011 Existing Small Hydro: 1% by 2009	Yes
NJ	22.5% by compliance year 2020-2021	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Resource-Recovery Facilities approved by the DEP, Anaerobic Digestion, Tidal Energy, Wave Energy, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Retail Supplier	Solar-Electric: 2.12% by compliance year 2020-2021	Yes
NM	Investor-owned utilities: 20% by 2020; Rural electric cooperatives: 10% by 2020	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Zero emission technology with substantial long-term production potential, Anaerobic Digestion, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Rural Electric Cooperative	For IOUs only in 2020 Solar: 20% of RPS requirement (4% of sales) Wind: 20% of RPS requirement (4% of sales) Geothermal, biomass, certain hydro facilities and other renewables: 10% of RPS requirement (2% of sales) Distributed Renewables: 3% of RPS requirement (0.6% of sales)	Yes
NY	24% by 2013	Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Fuel Cells, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Ethanol, Methanol, Biodiesel	Investor-Owned Utility	Customer-Sited: 2% of annual incremental requirement (0.1312% of sales in 2013)	No





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NC	Investor-owned utilities: 12.5% by 2021 Electric cooperatives, municipal utilities: 10% by 2018	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, CHP/Cogeneration, Hydrogen, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	Solar: 0.2% by 2018 Swine Waste: 0.2% by 2018 Poultry Waste: 900,000 MWh by 2014	Yes
ND	10% by 2015	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Hydrogen, Electricity from Waste Heat, Anaerobic Digestion	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	No	Yes
OH	25% alternative energy resources by 2025	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Municipal Solid Waste, Waste Heat, Energy Storage, Clean Coal, Advanced Nuclear, Anaerobic Digestion, Microturbines	Investor-Owned Utility, Retail Supplier	Renewables: 12.5% by 2024 (includes solar-electric minimum) Solar-Electric: 0.5% by 2024	Yes
OR	Large utilities: 25% by 2025 Small utilities: 10% by 2025 Smallest utilities: 5% by 2025	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Hydrogen, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative, Retail Supplier	PV (IOUs): 20 MW sized 500 kW to 5 MW by 2020	Yes
PA	18% alternative energy resources by compliance year 2020-2021	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Municipal Solid Waste, CHP/Cogeneration, Waste Coal, Coal Mine Methane, Coal Gasification, Anaerobic Digestion, Other Distributed Generation Technologies	Investor-Owned Utility, Retail Supplier	Tier I: 8% by compliance year 2020-2021 (includes PV minimum) Tier II: 10% by compliance year 2020-2021 PV: 0.5% by compliance year 2020-2021	Yes

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RI	16% by 2019	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel, Fuel Cells using Renewable Fuels	Investor-Owned Utility, Retail Supplier	No	Yes
SD	10% by 2015	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrogen, Electricity Produced from Waste Heat , Anaerobic Digestion	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	No	Yes
TX	5,880 MW by 2015; goal of 10,000 MW by 2025	Solar Water Heat, Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Geothermal Heat Pumps, Tidal Energy, Wave Energy, Ocean Thermal	Investor-Owned Utility, Retail Supplier, (Municipal Utilities and Coops May Opt-in)	Non-Wind: Goal of 500 MW	Yes
UT	20% of adjusted retail sales by 2025	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, CHP/Cogeneration, Hydrogen, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	No	Yes
VT	20% by 2017 Minimum obligation: (1) any increase in retail electric sales between 2005-2012 that is also at least 5% of 2005 sales; OR (2) 10% of retail electric sales in 2005	Solar Water Heat, Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Anaerobic Digestion, Fuel Cells using Renewable Fuels	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	No	N/A





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VA	15% of base year (2007) sales by 2025	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Energy from Waste, Anaerobic Digestion, Tidal Energy, Wave Energy	Investor-Owned Utility	No	Yes
WA	15% renewables by 2020 and all cost-effective conservation	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	No	Yes
WV	25% alternative and renewable energy resources by 2025	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Municipal Solid Waste, Other Non-Renewable Alternative Energy Resources (see summary for list), Anaerobic Digestion, Small Hydroelectric, Biodiesel	Investor-Owned Utility, Retail Supplier, (serving more than 30,000 customers)	At least 90% must come from eligible resources other than natural gas	Yes
WI	Statewide target of 10% by 2015; requirement varies by utility	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Tidal Energy, Wave Energy, Fuel Cells using Renewable Fuels	Municipal Utility, Investor-Owned Utility, Rural Electric Cooperative	No	Yes (limitations apply)
DC	20% by 2020	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Municipal Solid Waste, Solar Space Cooling, Cofiring, Tidal Energy, Wave Energy, Ocean Thermal	Investor-Owned Utility, Retail Supplier	Solar: 0.4% by 2020	Yes