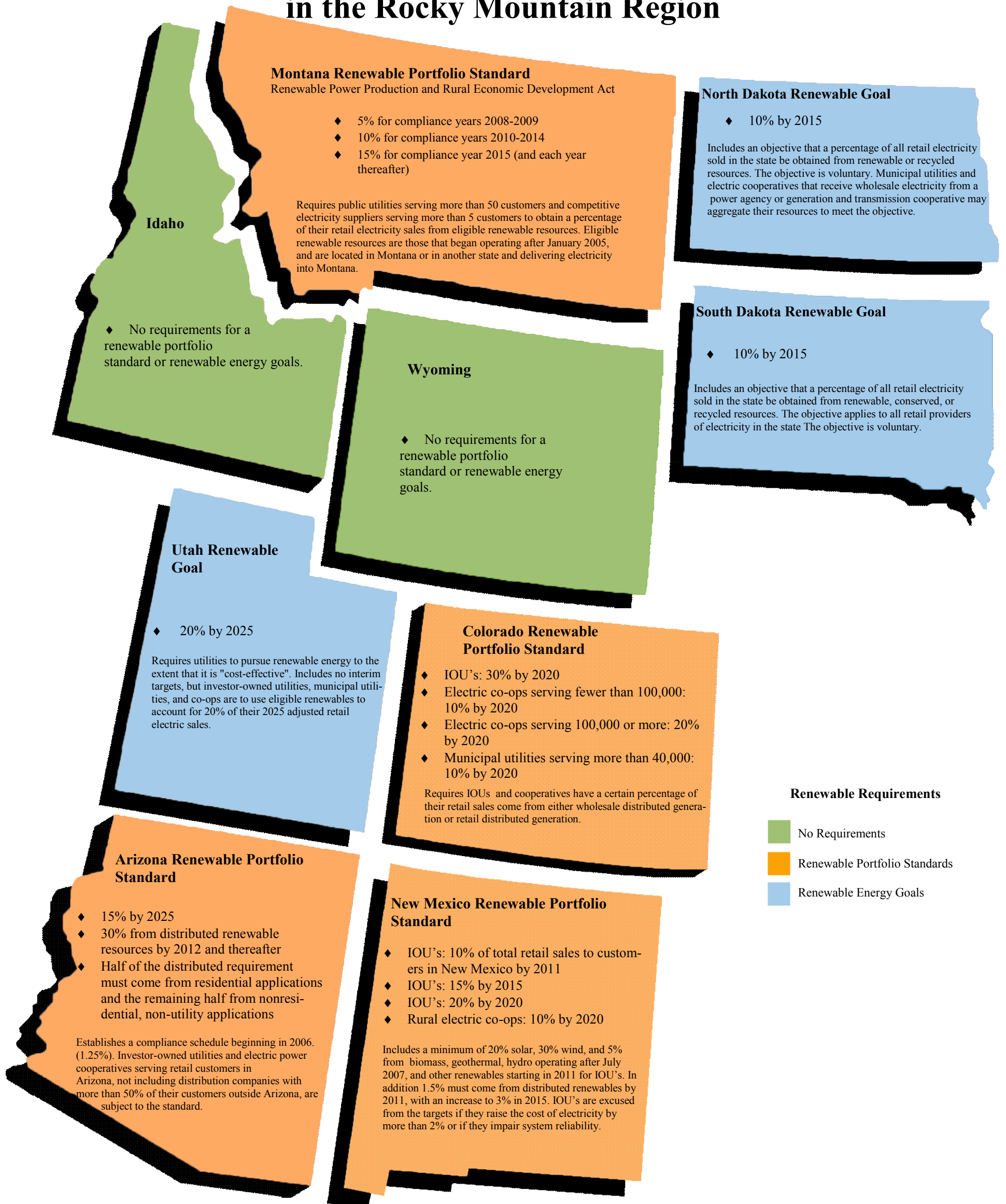


# Renewable Energy Requirements and Goals in the Rocky Mountain Region



## Notes of Interest...

In 2013, Colorado increased the standard for rural electric cooperatives from 10% to 20% by 2020. The law also permits co-ops to add a monthly surcharge — up to 2% of a customer's monthly bill — to fund projects needed to comply with the standard. It was the third time Colorado raised the threshold, since the standard was created by ballot initiative in 2004.

Colorado's standard includes a multiplier, so electricity generated at a community-based project -- a project not greater than 30 MW in capacity owned by individual residents of a community, an organization or cooperative controlled by individual residents, a local government entity, or a tribal council -- can receive 150% credit.

In Utah the goal requires utilities to pursue renewable energy to the extent it is "cost-effective". The guidelines for determining the cost-effectiveness of acquiring an energy source include an assessment of whether acquisition of the resource will result in the delivery of electricity at the lowest reasonable cost, as well as an assessment of long-term and short-term impacts, risks, reliability, financial impacts on the affected utility, and other factors determined by the Utah Public Service Commission.

South Dakota's retail providers may deduct from their baseline retail sales the proportion of electricity obtained from hydroelectric facilities with an in-service date before July 1, 2008.

In Arizona, a REC is a bundled package of the kWh, the renewable attributes, and any environmental attributes. All three must be delivered to Arizona customers and utilities in order to meet the requirements.

New Mexico has a "renewable energy and conservation fee" to support programs or projects to promote the use of renewable energy, load management, or energy efficiency. Distribution cooperatives may collect a fee of no more than 1% of the customer's bill, not to exceed \$75,000 annually from any single customer.

# What is an Eligible Renewable Resource?

Wind, solar, geothermal, certain hydroelectric projects, certain new hydroelectric projects at an existing reservoir or on an existing irrigation system, certain hydroelectric project expansions, landfill or farm-based methane gas, wastewater-treatment gas, biomass (with limits), and renewable fraction from flywheel storage, hydroelectric pumped storage, batteries, and compressed air.

Solar, wind, biomass, hydropower, geothermal, hydrogen derived from another eligible resource, and recycled energy systems that generate electricity from currently unused waste heat resulting from combustion or other processes and that do not use an additional combustion process. Hydropower facilities must have an in-service date of January 1, 2007, or later, or must qualify as new hydropower generation obtained from re-powering or efficiency improvements to facilities.

Wind, solar, hydroelectric, biomass, geothermal resources, and electricity generated from currently unused waste heat from combustion or another process that does not use an additional combustion process and that is not the result of a system whose primary purpose is the generation of electricity. Hydrogen generated by any of the preceding resources is eligible.

Electric generation facilities operating after January 1995 that produce electricity from solar; wind; biomass; hydroelectric (under certain conditions); wave, tidal or ocean-thermal energy; geothermal; or waste gas and waste heat. Solar-thermal installations, methane gas from an abandoned coal mine and methane gas from a coal degassing operation associated with a permit, compressed air, and municipal solid waste count.

Solar-electric energy, wind energy, geothermal-electric energy, biomass facilities that burn non-toxic plants, landfill gas, animal waste, hydropower, recycled energy, and fuel cells using hydrogen derived from eligible renewables. Coal mine methane and pyrolysis of municipal solid waste qualify, if the Colorado Public Utilities Commission determines they are greenhouse gas neutral technologies.

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, anaerobic digestion, fuel cells using renewable fuels, geothermal direct-use, and additional technologies upon approval. CHP only counts when the source fuel is an eligible renewable energy resource.

Electric energy generated by low- or zero-emissions generation technology with substantial long-term production potential; solar; wind; geothermal; hydropower facilities brought in service after July 1, 2007; fuel cells that are not fossil fueled; and biomass resources, including agriculture or animal waste, small diameter timber, salt cedar and other phreatophyte or woody vegetation removed from river basins or watersheds in New Mexico, landfill gas, and anaerobically digested waste biomass. Renewable energy does not include electric energy generated from nuclear facilities.

## To learn more ...

Information included in this report is from the Database of State Incentives for Renewables and Efficiency (DSIRE). DSIRE is operated and funded by the North Carolina Solar Center at North Carolina State University, with support from the Interstate Renewable Energy Council, Inc., and the U.S. Department of Energy. Individual information about standards and goals is available for each state:

Montana — MCA 69-3-2001 et seq.

North Dakota — ND Century Code § 49-02-24 et seq.

South Dakota — SDCL § 49-34A-101 et seq. and SDCL § 49-34A-94 et seq.

Colorado — CRS 40-2-124

New Mexico — N.M. Stat. § 62-16-1 et seq. and N.M. Stat. § 62-15-34 et seq.

Utah — Utah Code 54-17-101 et seq. and Utah Code 10-19-101 et seq.

Arizona — AAC R14-2-1801 et seq.

## California's influence on renewables . . . .

California's electric utilities must have **33%** of their retail sales derived from eligible renewable energy resources in 2020 and all subsequent years. Interim targets include:

- ◆ 20% of retail sales by December 31, 2013
- ◆ 25% of retail sales by December 31, 2016

Publicly owned municipal utilities, not regulated by the California Public Utility Commission, still must meet certain standards. Their governing boards are charged with establishing procurement requirements based on the interim goals. To meet California's RPS reporting requirements and the tracking needs of other states in the Western Electricity Coordinating Council, the Energy Commission and the Western Governors' Association developed the Western Renewable Energy Generation Information System (WREGIS). WREGIS tracks renewable energy generation and creates certificates for renewable energy credits, used to demonstrate compliance with state RPS policies. One REC represents one megawatt-hour of electricity generated from a renewable resource. About 62% of the (renewable attributes) of wind generated in Montana is used to meet California's RPS.