



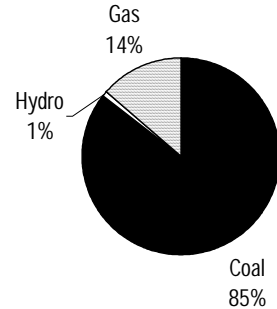
# Renewing New Mexico

## A National Renewable Energy Standard Will Benefit New Mexico's Economy

America's energy choices affect our national security, our economy, our family budgets, and our environment. UCS examined a national policy to increase the United States' use of renewable energy to 20% of electricity supplies by 2020, called a renewable portfolio standard (RPS). This fact sheet shows that under a national standard of 20%, New Mexico has the potential to meet a significant portion of its electricity needs with renewable energy while generating substantial economic and environmental benefits for the state. See our briefing *Renewing Where We Live* for more information on the benefits of a renewable energy standard for the Mountain States.

**Current Electricity Mix.** New Mexico is heavily reliant on coal and natural gas to generate its electricity. Renewable energy sources such as solar and wind energy provide a negligible amount of the state's electricity. In 2000, New Mexico exported about 44% of the electricity generated in the state.

New Mexico's Electricity Mix, 2000



### New Mexico's Renewable Energy Potential

Resource	Generation (billion kWh)	% of 2000 Electricity Sales
Wind	297.0	1,567%
Solar	>19.0	>100%
Geothermal	7.0	37%
Bioenergy	1.6	8%
Landfill Gas	0.1	1%

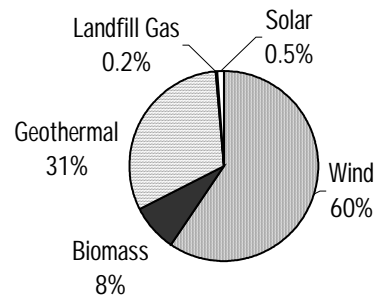
**Renewable Energy Potential.** The resources with the greatest potential in New Mexico are wind, solar, and geothermal energy. New Mexico has an excellent solar resource that could theoretically provide all of the state's electricity use. New Mexico has the technical potential to generate over 16 times its current electricity needs from wind, geothermal, and other renewable resources. Not all of New Mexico's renewable potential will be developed due to economic, physical, and other limitations.

**Renewable Energy Development.** The UCS analysis found that under the 20% national standard, New Mexico would produce the equivalent of 33% of its electricity use from renewable energy (not including hydro) in 2010 and 45% in 2020. By 2020, renewable generation in New Mexico would be more than twice the national standard. New Mexico would develop a diverse mix of its wind, geothermal, bioenergy, solar energy, and landfill gas to help meet the national target. If electricity generation grows at the same rate as electricity use in the state, renewable energy would provide 25% of New Mexico's electricity generation in 2020.

**Economic Development.** Renewable energy development would bring significant economic benefits to New Mexico. Between 2002 and 2020, a 20% national standard would produce

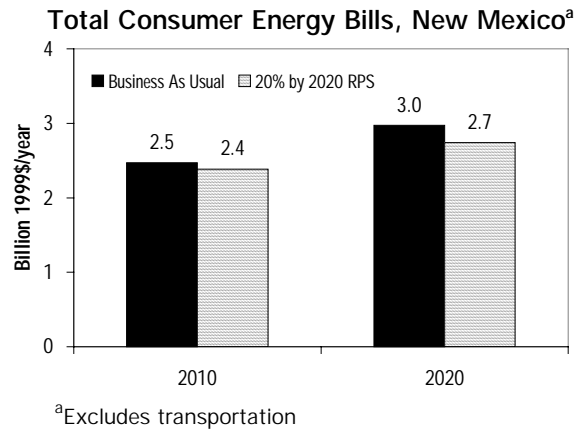
- \$1.6 billion in new capital investment in New Mexico
- \$124 million in new property tax revenues for local communities
- \$25 million in lease payments to farmers, ranchers, and rural landowners from wind power
- \$1.3 billion in additional revenues from the export of renewable energy credits<sup>1</sup>

Renewable Energy Mix in New Mexico under 20% RPS<sup>a</sup>



<sup>a</sup> Numbers may not add to 100% due to rounding.

**Consumer Costs and Benefits.** A national standard of 20% would reduce energy costs to New Mexico consumers. Total annual consumer energy bills (not including transportation) would be \$83 million or 3% lower than under business as usual in 2010 and \$232 million or 8% lower in 2020. The present value of total consumer savings would be over \$885 million between 2002 and 2020. Revenues from renewable energy credit exports and a reduction in natural gas prices more than offset any incremental costs of meeting the renewable energy standard in the state.



**Environmental Benefits.** The increased use of renewable energy in New Mexico would help reduce air pollution in the state and surrounding region. Power plant emissions of carbon dioxide, which is fueling global warming, would be over 40% lower in the Mountain States by 2020 than without the renewable energy standard. Other pollutants that harm human health would also be reduced by a national standard of 20% by 2020.

### Additional Renewable Energy and Energy Efficiency Policies Increase Benefits

UCS examined the impact of increasing energy efficiency along with a renewable energy standard. The Renewable Energy and Energy Efficiency Act of 2001 (S. 1333) combines a 20% standard, net metering, and a public benefits fund. Combining these policies greatly increases consumer savings and environmental benefits, significantly reduces natural gas prices, augments economic development benefits, and provides additional diversity benefits compared to the 20% standard alone. These policies would also allow New Mexico to capture a larger share of its solar energy potential. Increasing both energy efficiency and renewable energy is the best option for New Mexico.

### A 10% Renewable Energy Standard Would Have Fewer Benefits

UCS also looked at what would happen under a renewable energy standard of 10% by 2020, similar to a provision in the Senate’s Energy Policy Act of 2002 (S. 1766), introduced by Senators Daschle (D-SD) and Bingaman (D-NM). Under a 10% standard, New Mexico would achieve less diversity and savings on consumer energy bills and fewer environmental benefits than under a 20% standard. The added diversity, economic development, environmental, and long-run consumer benefits make the 20% renewable energy standard the preferred option for New Mexico.

### Impact of National RPS Proposals in New Mexico

In 2020:	20% RPS	Combined Policies of S. 1333 <sup>a</sup>	10% RPS
Cumulative New Capital Investment	\$1.6 billion <sup>b</sup>	\$2.1 billion <sup>c</sup>	\$1.3 billion
Cumulative Consumer Energy Bill Savings <sup>d</sup>	\$0.9 billion	\$1.6 billion	\$0.8 billion
Changes in Annual Consumer Energy Bills <sup>d</sup>	-\$232 million -8%	-\$534 million -18%	-\$163 million -5%
Changes in Annual CO <sub>2</sub> Emissions from regional power plants	-41%	-53%	-18%

**Notes**

- a. Includes 20% RPS, 2 c/kWh public benefits fund charge, and net metering.
- b. All dollars presented in 1999\$.
- c. Includes investments in energy efficiency.
- d. Excludes transportation.

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<sup>1</sup> Results presented are in 1999\$. Cumulative results are in net present value using a 5% real discount rate.