



Renewing New York's Economy

A 10 Percent National Renewable Electricity Standard Will Create Jobs and Save Consumers Money

In June 2005, for the third time in four years, the U.S. Senate passed an energy bill that requires all large electric utilities to gradually increase their use of wind, solar, and other renewable energy sources to at least 10 percent by 2020.¹ Because the House of Representatives' energy bill failed to include such a renewable electricity standard, Senate and House negotiators will have to decide this summer whether to include a standard in the final bill.

An unprecedented surge in natural gas power plant construction has contributed to rising natural gas and electricity prices over the past several years. Consumer natural gas prices have more than doubled. High gas prices are forcing industrial users such as the petrochemical industry to move their operations overseas. U.S. chemical workers lost approximately 78,000 jobs between 2000 and 2004, after natural gas prices began to rise.² Farmers are also feeling the pain because natural gas accounts for 90 percent of the cost of fertilizer. These prices show no signs of abating.

The Senate's 10 percent national standard, which is modeled after standards already enacted in New York and 20 other states, would reduce natural gas and electricity prices and provide significant economic and environmental benefits for the Empire State.

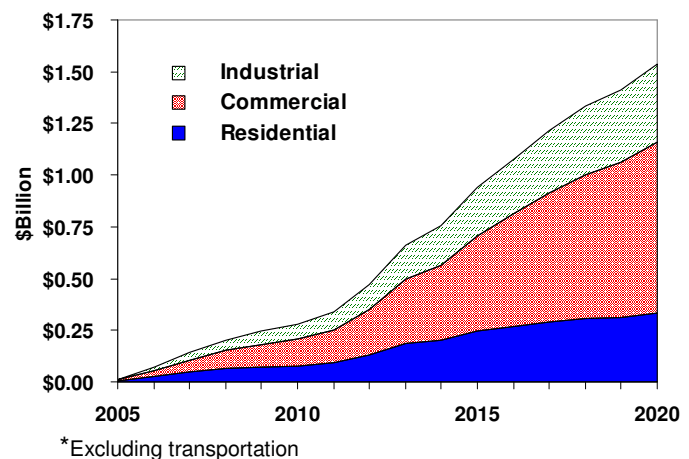
Economic Benefits for Rural Communities

Thanks to its plentiful wind, solar and bioenergy resources, New York actually has the potential to generate nearly all of its current electricity needs from renewable energy. The Union of Concerned Scientists (UCS) examined the costs and benefits of a national 10 percent renewable electricity standard similar to the one passed by the U.S. Senate³ and found that New York would increase its total homegrown renewable power to 4,060 megawatts (MW) by 2020—enough to meet the needs of nearly 2.5 million typical homes. Doing so would provide 12 percent of the electricity sales in the state that are covered by the standard.⁴ It would also reduce the use of imported fossil fuels, which results in nearly \$3 billion leaving the state annually.

Furthermore, increased renewable energy development would create significant economic benefits for New York, especially in rural communities where many of the renewable energy generating facilities would be located. By 2020, the 10 percent national standard would provide in New York:

- \$1.7 billion in new capital investment
- \$107 million in new property tax revenues for local communities
- \$29 million in lease payments to farmers and rural landowners resulting from wind power generation⁵

Cumulative Energy Bill Savings in New York by Sector*
(under a 10 percent by 2020 renewable electricity standard)



Consumer Savings

The 10 percent by 2020 standard would also increase competition in the marketplace, reducing long-term energy costs for homes and businesses by gradually bringing natural gas and electricity prices down. By 2020, the savings in New York alone would amount to more than \$1.5 billion. Every sector of the state's economy would benefit, with commercial, industrial, and residential customers saving a total of \$830 million, \$380 million, and \$330 million respectively by 2020.

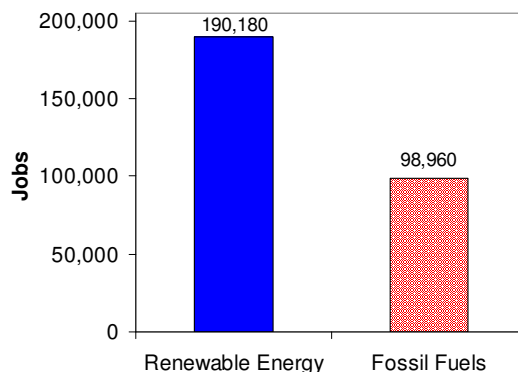
At the national level, the 10 percent standard would save consumers \$28 billion on their electricity and natural gas bills by 2020. A June 2005 U.S. Energy Information Administration (EIA) study—using more pessimistic renewable energy costs and performance assumptions—still similarly found that this standard would save consumers \$22.6 billion by 2025 while lowering electricity and natural gas prices.⁶

New Jobs for New Yorkers

Renewable energy development resulting from the 10 percent national standard would create high-paying jobs in New York and throughout the United States. By 2020, the 10 percent standard would generate more than 190,000 jobs nationally in manufacturing, construction, operations, maintenance, and other industries—nearly twice as many as fossil fuels, representing a net increase of 91,220 jobs. Renewable energy would also provide an additional \$5.1 billion in income and \$5.9 billion in gross domestic product in the United States' economy.

A Renewable Energy Policy Project study found that a national commitment to build 50,000 MW of wind power would create 6,550 new manufacturing jobs and nearly \$2.2 billion in investment in New York.⁷ By comparison, UCS and EIA analyses have found that a 10 percent national renewable standard would result in the development of 46,000 MW to 82,000 MW of wind power in the U.S. by 2020.

U.S. Jobs Created by Renewable Energy* vs. Fossil Fuels, 2020



*Under a 10 percent by 2020 renewable electricity standard

Public Health and Environmental Protection

Increased renewable energy use would reduce toxic air pollution from power plants that threaten people's health by burning coal, oil, and natural gas. It would also reduce carbon dioxide emissions (which cause global warming by trapping heat in the atmosphere) 166 million metric tons nationally by 2020—a reduction of 5.5 percent below “business as usual” levels, equivalent to taking 24.7 million cars off the road. And by reducing the need to extract, transport, and consume fossil fuels, a national renewable standard would limit the damage done to our water and land and conserve our natural resources for future generations.

A Cleaner, Safer Energy Future

The 10 percent national standard would make New York's energy supply—and the energy supply of the entire United States—more reliable and secure. It would use local energy sources to improve rural economies in New York, create high-skilled jobs, and put energy dollars back into the pockets of New York's consumers. The advantages of renewable energy are so strong, in fact, that analyses by both EIA and UCS show that increasing the national standard from 10 to 20 percent by 2020 would significantly boost all of these benefits. A national standard is a common-sense step away from our dependence on an unstable, dirty fossil fuel supply, and toward a future built on clean, renewable energy.

For additional information, visit the UCS Clean Energy website at www.ucsusa.org/clean_energy.

¹ The renewable electricity standard is also known as a renewable portfolio standard or RPS.

² Wall Street Journal, February 17, 2004.

³ UCS used a modified version of the U.S. Energy Information Administration's (EIA) National Energy Modeling System to examine the costs and benefits of increasing renewable energy use by way of a national renewable electricity standard of 10 percent by 2020 and renewable energy tax credits (passed by the U.S. Senate in July 2003 as part of the comprehensive energy bill HR 6). For national results, see the September 2004 UCS report *Renewing America's Economy*. More information about this modeling approach can be found in the October 2001 UCS report *Clean Energy Blueprint*, which is available at www.ucsusa.org/clean_energy/renewable_energy/page.cfm?pageID=44.

⁴ Electricity sales from small utilities and hydroelectric facilities are exempt from the Senate renewable electricity standard.

⁵ Results are presented in cumulative net present value (NPV) 2002 dollars, using a seven percent real discount rate. Job results are for the year 2020.

⁶ Letter to Senator Bingaman from EIA, June 15, 2005. Results are cumulative NPV 2003 dollars, using a seven percent real discount rate.

⁷ Sterzinger, G. and M. Svrcke. *Wind Turbine Development: Location of Manufacturing Activity*. Renewable Energy Policy Project, September 2004.