SUN DAY CAMPAIGN

6930 Carroll Avenue, Suite #340
Takoma Park, MD 20912
301-270-6477, ext.23
sun-day-campaign@hotmail.com

SUSTAINABLE ENERGY STUDY #22

Report Shows Clean Energy Boom In U.S. - The United States Is Reaping the Rewards of State Renewable Electricity Standards:

U.S. Public Interest Research Group, September 17, 2007

http://www.uspirg.org/news-releases/new-energy-future/new-energy-future/u.s.-pirg-report-shows-clean-energy-boom-in-u.s

State renewable electricity standards (RES) are cutting pollution, saving money, creating jobs, and fueling a clean energy boom in all 25 U.S. states that have passed similar policies, according to a new report released today by the U.S. Public Interest Research Group (U.S. PIRG). U.S. PIRG also called on Congress to establish a national RES.

America now generates twice as much electricity from the wind and the sun as it did just four years ago. RES policies have been among the most important factors in encouraging the development of renewable energy. The new report, "Reaping the Rewards," documents the benefits that have already been achieved by states that have adopted renewable electricity standards.

“Citizens across the nation are already reaping the rewards from the states’ leadership on clean energy,” said U.S. PIRG Clean Energy Associate Sean Garren. “Thanks to state renewable electricity standards, clean energy is booming in the U.S.,” continued Garren.

"Reaping the Rewards" found that RES states are leading the way in renewable energy development.

** In 2006, more than two-thirds of all new renewable electric generating capacity in the United States was built in RES states. In 2007, more than 70 percent of planned renewable generation is expected to be built in RES states.

** Texas stands out as the state with the most aggressive renewable energy development in recent years, adding 2,000 megawatts of new renewable energy capacity. Texas is followed by Washington, New York, and Colorado.

** Renewable energy is addressing a greater share of new energy needs in RES states. In 2007, renewables account for about 38 percent of planned capacity additions in RES states, compared to just 12 percent in non-RES states.

The report also found significant environmental benefits as a result of new renewable energy development. Renewable energy sources built after the adoption of state RES policies will:

** reduce America's global warming emissions by approximately 8.4 million metric tons per year, the equivalent of taking more than 1.5 million cars off America's roads.

** avert approximately 2,100 tons of nitrogen oxide emissions, 44 tons of sulfur dioxide emissions, and 220 tons of non-methane hydrocarbon emissions each year.

** save approximately 1.2 billion gallons of water per year.

Renewable energy can play an important role in revitalizing America's economy by creating new high quality jobs and accelerating rural economic development. Renewable energy has had particular benefits for rural economies. Texas landowners, for example, now receive an estimated $9.5 million in royalty payments from wind farm operators, while one town in rural Colorado saw its tax base increase by 29 percent as a result of a wind farm development there. RES policies also play an important role in attracting manufacturing facilities by making a long-term commitment to building the market for renewable energy technologies.

"State officials across the nation deserve tremendous credit for recognizing the benefits of jumpstarting renewable energy and taking action," said Garren.

In order to expand the benefits of renewable energy development, the report concludes that the United States should adopt a renewable electricity standard requiring at least 25 percent of America's electricity to come from new renewable sources by 2025. This summer, the House passed a national RES that would establish a 15 percent requirement. The Senate also passed energy legislation this summer, but did not include an RES. The Senate can accept the House RES when the two bills are negotiated in conference this fall.

"After a decade of leadership in the states, it is time for Congress to follow," said Garren. "The House has taken an important step in the right direction by passing the RES, and the Senate should join them. In addition to strong fuel economy improvements and energy efficiency provisions, no energy bill will be complete without a national renewable electricity standard," continued Garren.

# # # # # # # #

Executive Summary

Reaping the Rewards - How State Renewable Electricity Standards Are Cutting Pollution, Saving Money, Creating Jobs And Fueling A Clean Energy Boom:

Renewable energy in the United States is on the rise. America now generates twice as much electricity from the wind and the sun as we did just four years ago, and 2007 promises to be another year of record growth.

The renewable energy boom is the result of a series of federal and state policies designed to promote cleaner sources of electricity, as well as technological improvements that have reduced the cost of renewable energy over the last three decades, rising fossil fuel prices, and increased concern about global warming. Renewable electricity standards (RES), which require increasing percentages of the electricity supplied to consumers to come from renewable resources, have been among the most important factors in encouraging the development of renewable energy.

Twenty-five states and the District of Columbia have adopted an RES. And while many of those policies are in their infancy, RES states have already begun to reap the benefits in increased renewable energy development, reduced pollution, cost savings and economic growth.

The 25 states that have adopted an RES are leading the nation in renewable energy development.

• Approximately 54 percent of the electricity consumed in the United States is in states with RES policies. States with RES programs, however, account for 75 percent of America's renewable energy generating capacity.

• In 2006, more than two-thirds of all new renewable electric generating capacity in the United States was built in RES states. The same is likely to hold true in 2007, with more than 70 percent of planned renewable generation capacity expected to be built in RES states. (RES policies also spur renewable energy development in nearby states, while some renewable energy built in RES states is spurred by other public policies.)

• Renewable energy will make up a larger proportion of new power generation in RES states in 2007 than in states without RES policies. In 2007, renewable electricity generators account for about 38 percent of planned capacity additions in RES states, compared to just 12 percent in non-RES states.

• Of the top 20 utilities with long-term contracts for wind power in the United States, 17 of them are covered in whole or in part by RES policies.

• While many public policies have contributed to the growth of renewable energy, the RES has played an important role. The U.S. Department of Energy estimates that RES policies contributed to the construction of about half of the wind energy added in the United States between 2001 and 2006, with the share increasing to 60 percent in 2006.

State RES policies are reducing pollution and saving natural resources.

• Renewable energy sources built after the adoption of state RES policies reduce America's global warming emissions by approximately 8.4 million metric tons per year, the equivalent of taking more than 1.5 million cars off America's roads.

• Renewable generators in RES states also produce fewer emissions of health threatening pollutants that contribute to the formation of smog and soot than fossil fuel generators. Renewable energy, therefore, can reduce the overall cost of complying with federal limits on

these pollutants and make it more possible to set tighter limits that are more protective of human health in the future.

• Renewable generators in RES states also save vast amounts of water—approximately 1.2 billion gallons per year.

Renewable energy development in RES states is boosting local economies.

• Over the last two years, several of the world's leading manufacturers of wind turbines and solar panels have either built new manufacturing facilities or expanded existing facilities in the United States. RES policies play an important role in luring manufacturing facilities, as they represent a long-term commitment to build the market for renewable energy technologies. Colorado, Pennsylvania, Oregon, Texas, and Massachusetts are among the RES states that have experienced increases in renewable energy manufacturing activity in recent years.

• Renewable energy development in RES states has had ripple effects that extend across the nation. Increased demand for renewable energy creates increased demand for raw materials, construction, accounting, engineering and a wide variety of services. While the benefits of renewable energy are strongest in local economies near manufacturing facilities and renewable energy installations, every state in the nation has at least one business that participates in the renewable energy economy and benefits from its growth.

• Renewable energy has had particular benefits for rural economies. Texas landowners, for example, now receive an estimated $9.5 million in royalty payments from wind farm operators, while one town in rural Colorado saw its tax base increase by 29 percent as a result of a wind farm development there.

State RES policies also have the potential to save electricity consumers money.

• A 2007 analysis by the energy research firm, Wood MacKenzie estimated that adoption of a 15 percent federal renewable electricity standard would save more than $100 billion in electricity costs by 2026, largely by driving down the cost of natural gas.

• In many states, such as Colorado and Washington, wind farms have proven to be the least-cost source of electricity, especially when all the likely future costs of fossil fuel-fired power plants are included (such as the risk of energy price spikes and the future cost of carbon dioxide emissions).

• Solar power, while currently more expensive than other forms of power generation, can play an important role in reducing demand for power at peak periods, when it is most expensive.

• Renewable energy development reduces upward pressure on natural gas prices. A 2005 study by researchers at the Lawrence Berkeley National Laboratory estimated that the 18 state RES policies then in effect would produce savings of approximately $10 billion in lower natural gas bills as a result of reduced demand for natural gas.

Adoption of a national RES would increase the benefits of renewable energy to the environment and the economy.

• The United States should adopt a renewable electricity standard that calls for 25 percent of America's electricity to come from new renewable sources by 2025.

• States that have not yet adopted RES policies should consider doing so, while those that have adopted RES policies should consider strengthening them by increasing the required percentage of renewable energy, excluding nonrenewable or polluting energy sources, and refining their policies to ensure that renewable energy targets are met.

• The state and federal governments should also adopt complementary policies to hasten the deployment of renewable energy along with policies to improve the energy efficiency of the American economy.

The Executive Summary can be found at:

http://www.uspirg.org/home/reports/report-archives/new-energy-future/new-energy-future/reaping-the-rewards-how-state-renewable-electricity-standards-are-cutting-pollution-saving-money-creating-jobs-and-fueling-a-clean-energy-boom#Ri9BSFO9iT2lZ1u3fbQa2w