

Special ♦ Reprint ♦ Edition



States curb reliance on fossil fuels

Some offer rebates to encourage use of solar, wind power

By Traci Watson
USA TODAY

In South Burlington, Vt., keeping up with the Joneses doesn't mean having a new luxury car. It means having an energy-making house.

Sixteen solar panels sit atop the home belonging to Peter Jones and his wife and son. Since April, the panels have supplied all of the family's power and cut in half its use of fuel for the hot-water heater, saving \$500 to \$600 a year.

The Vermont government gave the Jones family a one-third rebate on the roughly \$21,000 cost for panels, pipes and wiring. That made the system affordable for them, Jones says. The state provides up to \$12,500 to residents who install a solar- or wind-power system and up to \$7,500 for a solar hot-water system.

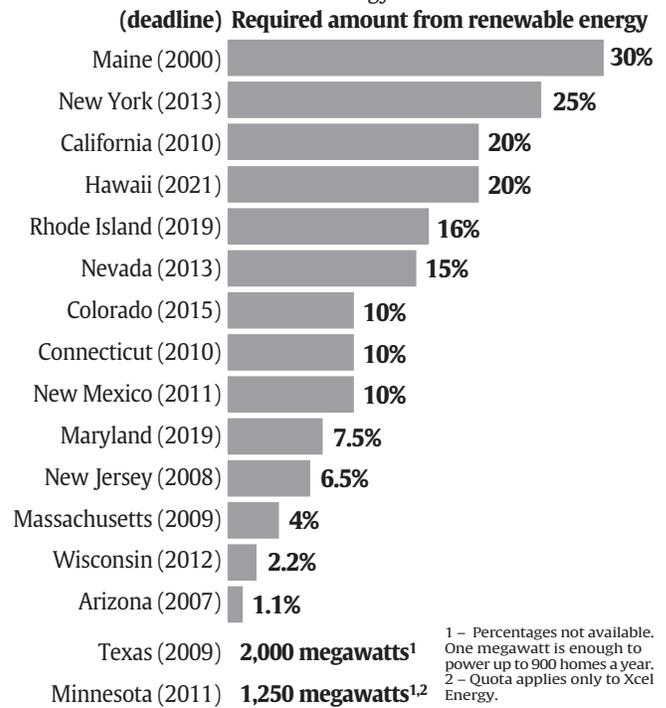
The rebate "was very important to us," says Jones, a biologist and stay-at-home dad. "Governments need to start investing in this. ... These systems are expensive, but so are fossil fuels.

Vermont is not alone in encouraging use of alternative energy sources

In a growing trend, more than a dozen state governments are spending hundreds of millions of dollars to promote power production from wind, sun and other "renewable" sources. Some states are even requiring residents to help pay for it.

Some states switching to renewable energy

Many states have set mandatory goals for the amount of electricity that must come from renewable energy:



1 - Percentages not available. One megawatt is enough to power up to 900 homes a year.
2 - Quota applies only to Xcel Energy.

Source: North Carolina Solar Center, Lawrence Berkeley Laboratory

By Marcy E. Mullins, USA TODAY

Just last week, Colorado voters approved a ballot measure that forces the state's biggest electric companies to buy a share of their power from renewable sources. California is giving grants to dairy farmers to turn cow manure into methane gas, which is then burned to make electricity.

"When people think of energy (policy) ... they tend to think only of Washington," says Lewis Milford of the Clean Energy States Alliance, a states' group promoting renewable energy. "The truth of it is, there is tremendous activity at the state level."

Americans still get most of their electricity from plants that burn coal and natural gas. But those fossil fuels won't last

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forever. Renewable energy comes from sources that are self-sustaining or can be replenished, such as the sun and burnable materials like crops. And energy experts say the new state efforts are expanding production of renewable energy without hurting air quality or contributing to global warming as much as fossil fuels do.

"By 2020, existing state programs are likely to double the amount of the nation's electricity supply that comes from new renewable energy sources," says Ryan Wisler, an energy analyst at the Lawrence Berkeley National Laboratory.

The state programs won't make a big difference anytime soon in how the nation powers itself. Wisler points out that renewable energy now supplies roughly 2% of the nation's electricity, not counting hydropower. So state efforts could raise that figure to 4%-5% — more than 20,000 megawatts, or enough to power nearly 10 million homes.

Paying for the programs

Most homeowners won't notice anything different about their power supply as a result of the new state policies. But they could pay more for the juice to power their air conditioners and computers.

Many renewable energy programs draw funding from varying fees tacked onto power bills. Other programs add as much as a few extra dollars to a typical electric bill because of the cost of meeting quotas for renewable energy — though such quotas can also lower prices and reduce monthly bills.

Despite the fees, measures that

encourage renewable power are gaining favor among Republican and Democratic politicians across the country. Wind and solar energy are no longer an obsession of the tie-dyed crowd. They're viewed as a way to ease dependence on foreign energy.

"It makes common sense to me that we do everything to reduce reliance on energy that's imported," says Hawaii Gov. Linda Lingle, a Republican who recently signed a bill calling for the state to get 20% of its power from renewable energy. "To sit here and stay as we are is not an option."

State and local governments that are taking steps to encourage renewable energy include:

- ▶ **Austin.** Last year, the City Council approved a plan directing the local electric company to get 20% of its power from renewable sources by 2020.

- ▶ **New Haven, Conn.** In October, the city spent thousands of dollars to buy wind energy as well as landfill energy, which is made by burning the gas emitted by rotting garbage.

- ▶ **New York.** In September, the state adopted a goal of obtaining at least 25% of its power from renewable sources by 2013. The goal was first proposed by Republican Gov. George Pataki.

New York's effort highlights an important reason that renewable energy has gone mainstream: States are worried about the lights going out. California suffered through a string of blackouts in the summer of 2001. And 50 million people in the Northeast, Midwest and Canada lost power in a blackout in

August 2003.

That's one reason that New Jersey this year made its electric companies buy a small amount of solar power. Energy from local solar panels, unlike power shipped in from coal-burning plants in the Midwest, won't vanish if regional power grids break down.

"You can shut yourself off from the system and still keep going if you have generation in your own area," says Jeanne Fox, head of the state agency that regulates utilities.

'Only positive comments'

Power companies say that setting quotas on renewable energy raises electricity rates, which is hard on the elderly and poor.

Rate increases have "a disproportionate impact on those least able to afford it," says Scott Segal of the Electric Reliability Coordinating Council, an industry group.

The costs haven't discouraged small communities such as Saratoga Springs, N.Y., population 26,000. Since October, an upstate wind farm has provided 40% of the power for the city's wastewater treatment plant, events hall and other city facilities.

Wind power will cost the city an extra \$43,000 a year, but nobody has complained, says public works commissioner Thomas McTygue.

"We've had only positive comments," McTygue says. "This is how it all starts ... from the ground up. Hopefully it catches on."

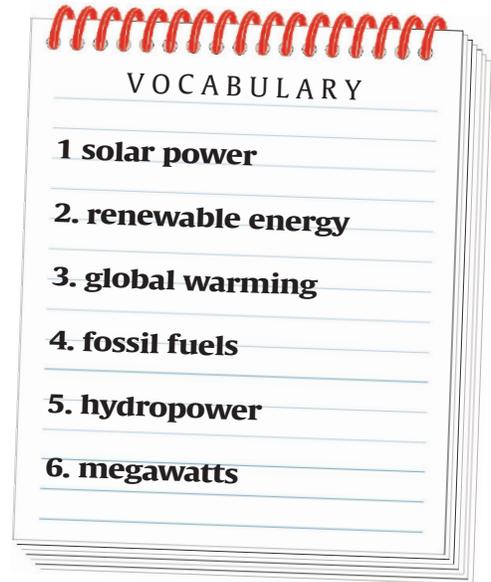
USA TODAY
News

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APPLICATIONS: *environment, cause & effect, knowledge*

DISCUSSION: What are some states doing in an effort to encourage the use of alternative energy sources? Where do most Americans get their electricity from? Why does the U.S. need to reduce its dependency on oil, natural gas and coal? What are the advantages of hydro, wind and solar power? How does setting quotas on renewable energy rates affect power companies? In your opinion, are quotas necessary?

ACTIVITY: Lewis Milford of the Clean Energy States Alliance says, "When people think of energy (policy) ... they tend to think only of Washington. The truth of it is, there is tremendous activity at the state level." Through research, identify one of your state's energy policies. Then, invite a representative from your local power company to discuss the initiative — and its impact on consumers and the environment — with your class. Prior to the discussion, prepare a list of questions you would like answered.



Focus on: Energy

USA TODAY Snapshots®

Millions turning on electricity

Number of electricity customers in the USA:

Residential	116 million
Commercial	15 million
Industrial	595,000
Other ¹	1 million

1 - Miscellaneous sales such as public street lighting, public authorities, railroads, etc.
Source: Department of Energy's Energy Information Administration (2002 statistics)

By Shannon Reilly and Bob Laird, USA TODAY

APPLICATIONS: *environment, cause & effect, responsibility, problem solving*

The average American turns on electricity several times a day expecting it to be readily available. Can you explain how power is produced? How would life be different without it? How do power outages affect individuals, businesses and communities?

In the U.S., 90% of the plants that produce electricity run on non-renewable resources — coal, nuclear energy, gas or oil.*

Unfortunately, extracting and using fossil fuels and uranium creates air, land and water pollution. (Plus, supplies of these resources are limited.)

By conserving electricity, individuals can help protect the environment. As a class, identify five actions you can take every day to reduce the amount of electricity you use. Then, create a short slogan that will help you remember to conserve.

*Source:www.eia.doe.gov