

# Stanford scientist to unveil 50-state plan to transform US to renewable energy

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Stanford Professor Mark Jacobson and his colleagues recently developed detailed plans to transform the energy infrastructure of New York, California and Washington states from fossil fuels to 100 percent renewable resources by 2050. On Feb. 15, Jacobson will present a new roadmap to renewable energy for all 50 states at the annual meeting of the American Association for the Advancement of Science (AAAS) in Chicago.

The online interactive roadmap is tailored to maximize the resource potential of each state. Hovering a cursor over California, for example, reveals that the Golden State can meet virtually all of its power demands (transportation, electricity, heating, etc.) in 2050 by switching to a clean technology portfolio that is 55 percent solar, 35 percent wind (on- and offshore), 5 percent geothermal and 4 percent hydroelectric.

"The new roadmap is designed to provide each state a first step toward a renewable future," said Jacobson, a professor of civil and environmental engineering at Stanford. "It provides all of the basic information, such as how many [wind turbines](#) and solar panels would be needed to power each state, how much land area would be required, what would be the cost and cost savings, how many jobs would be created, how much pollution-related mortality and global-warming emissions would be avoided."

The 50-state roadmap will be launched this week on the website of The Solutions Project, a national outreach effort led by Jacobson, actor Mark

Ruffalo (co-star of The Avengers), film director Josh Fox and others to raise public awareness about switching to clean energy produced entirely by wind, water and sunlight. Also on Feb. 15, Solutions Project member Leilani Munter, a professional racecar driver, will publicize the 50-state plan at a Daytona National Speedway racing event in Daytona, Fla., in which she will be participating.

"Global warming, air pollution and energy insecurity are three of the most significant problems facing the world today, said Jacobson, a senior fellow at the Stanford Woods Institute for the Environment and Precourt Institute for Energy. "Unfortunately, scientific results are often glossed over. The Solutions Project was born with the vision of combining science with business, policy, and public outreach through social media and cultural leaders – often artists and entertainers who can get the information out – to study and simultaneously address these global challenges."

**More information:** Jacobson will deliver his AAAS talk on Saturday, Feb. 15, at 1:30 p.m. CT, at the Hyatt Regency Chicago, Columbus Hall CD, as part of a symposium entitled, "Is it possible to reduce 80% of greenhouse gas emissions from energy by 2050?"

Provided by Stanford University

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