



Lighting the Way

The Top States that Helped Drive America's Solar Energy Boom in 2015

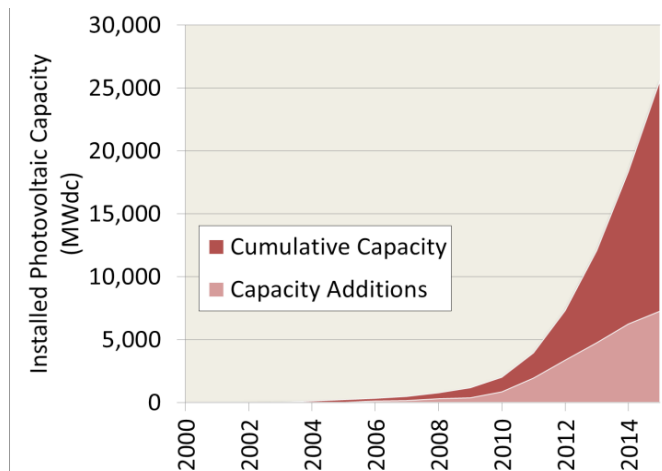
America's states with the most solar capacity are not necessarily those with the most sunlight, but those with the strongest policy support.

10 states are leading America's solar boom

Hundreds of thousands more Americans each year are experiencing the environmental and consumer benefits of clean energy from the sun, often generated right on the rooftops of their homes or places of business. The solar boom is being led by the states that have opened the door for solar energy through the adoption of strong public policies.

The 10 states with the most solar capacity per capita – Nevada, Hawaii, California, Arizona, North Carolina, New Jersey, Vermont, New Mexico, Massachusetts and Colorado – have a track record of strong public policies that are enabling increasing numbers of homeowners, businesses, communities and utilities to “go solar.” **The top 10 solar states account for 88 percent of America's solar energy capacity, but only 26 percent of America's population.**

American solar energy is booming, and capacity doubled from 2013 to 2015.



Critical policies are driving solar adoption

To drive solar adoption, the top 10 solar states are employing policies including **net metering**, which guarantees owners of solar power systems a fair return for the excess electricity they supply to the grid; **interconnection standards**, to simplify the process of connecting solar panels to the grid; **third-party ownership**, to let solar owners avoid the up-front cost associated with “going solar;” and **renewable electricity standards**, which set minimum renewable energy requirements for utilities, sometimes with a specific requirement for solar energy.

Of the 10 states with the most solar capacity per person: Nine have strong interconnection policies; nine allow third-party ownership of solar panels; all have renewable electricity standards; and nine had strong net metering policies at the beginning of 2015 (though only seven retain strong net metering policies today following the elimination of retail net metering in Nevada and Hawaii during 2015).

America's solar potential is virtually endless

America, including the top 10 states, has only just begun to tap into its virtually endless solar energy potential, which could power the nation many times over. An analysis by researchers with the National Renewable Energy Laboratory (NREL) estimated that the U.S. has the potential to use photovoltaic panels to generate 76 times as much as electricity as is used in the United States each year. Solar energy potential is not distributed evenly across the United States, but every one of the 50 states has the technical potential to generate more electricity from the sun than it uses in an average year.

Key policies for driving solar adoption

Strong public policies at every level of government can help unlock America's potential for solar energy. State governments should encourage adoption of solar energy by ensuring that "going solar" is easy and financially rewarding, as well as through ambitious requirements for utilities to obtain energy from renewable sources. By encouraging solar power, states can bring about environmental and consumer benefits to their residents, while driving forward America's transition to a clean energy economy.

Meanwhile, policymakers should resist efforts to roll back existing policies in ways that would stymie future solar energy growth. North Carolina allowed one of the best solar tax credits in the nation to expire at the end of 2015, while some Arizona utilities have implemented or proposed high charges for solar customers.

By following the actions of leading states, and avoiding missteps, the United States can continue to experience dramatic growth in solar energy – resulting in cleaner air, more local jobs and reduced emissions of pollutants that cause global warming, and putting America on track to a future in which our economy is powered by 100 percent clean, renewable energy.

Photo credits: (Top to bottom) – Seth Finch; U.S. Department of Energy

America's top 10 solar states

State	Rank	Cumulative Solar Electric Capacity per Capita 2015 (watts/person)
Nevada	1	421
Hawaii	2	394
California	3	338
Arizona	4	337
North Carolina	5	208
New Jersey	6	182
Vermont	7	181
New Mexico	8	175
Massachusetts	9	153
Colorado	10	99

2015 highlights

- California, which recently extended its net metering policy, added more than 3 gigawatts of solar electricity capacity in 2015 – more than the cumulative solar capacity of any other state.
- Although not yet a top 10 state, Utah's solar capacity grew 14-fold from 2014 to 2015, with the addition of from 11 new utility-scale solar plants.
- Backed by strong solar policies, two small northeastern states, New Jersey and Massachusetts, now rank fourth and sixth respectively for cumulative state solar capacity.

America's endless solar potential: The U.S. has access to enough sunlight to generate 76 times as much as electricity as it uses each year.

For more information and the full report, please visit www.EnvironmentCalifornia.org



FRONTIER GROUP

