California Top State in School Solar

Source: The Journal, Dian Schaffhauser 09/15/20 https://thejournal.com/articles/2020/09/15/california-top-state-in-school-solar.aspx

A new study ranked California first among states for installed solar capacity at K-12 schools. The project was undertaken by <u>Generation180</u>, a nonprofit that addresses clean energy and which is currently running a "<u>Solar for All Schools</u>" campaign to advance clean energy usage in K-12 facilities. According to the organization, energy is the second largest individual expense for U.S. schools after personnel.



California ranked number one in three categories:

Sebastopol, CA

- First in installed solar capacity at 616 megawatts, an increase of 41 percent since 2017;
- First in the number of "solar" schools at 2,430, a jump of 25 percent since 2017; and
- First in the number of students attending a solar school, 2.03 million students.

Those installations in California schools contributed to a 139 percent increase for the entire country of solar installations at schools since 2014. The state is home to a third of solar schools and 45 percent of the installed capacity.

West County HS. Sebastopol, CA

New Jersey came in second across the board, with 182 megawatts in 621 schools, educating 408,000 students.

Some 7,332 schools in 2,231 districts run solar, representing 5.5 percent of all K-12 public and private schools in the United States. Over the last five years, K-12 solar capacity has grown by 139 percent. The number of schools with solar grew by 81 percent. The top five states for those installations were, in ranked order: California, New Jersey, Arizona, Massachusetts and Indiana.

Three states with the fastest growing installed capacity were Indiana, Virginia and Illinois; each moved from the bottom half of Generation180's 2014 list to the top 10 in 2019.

Hawaii was the top state in terms of the percentage of schools with solar (29 percent); District of Columbia came in second (23 percent of schools have solar); and Nevada came in third (20 percent).

At the bottom of the ranking were eight states, each of which has five or fewer solar schools and one (South Dakota) that has no solar schools whatsoever.

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- Wyoming
- Alaska
- Alabama
- Mississippi
- North Dakota
- Oklahoma
- South Dakota

Four of these states (Wyoming, Alaska, North Dakota and Oklahoma) are also among the top oil producers in the country.

The survey and a report of the findings was developed in partnership with <u>the Solar Foundation</u>, a nonprofit that advances the use of solar and related technologies worldwide, and industry organization <u>Solar Energy Industries Association</u>.

The study found that most schools install solar with minimal to no upfront capital costs. Nearly eight in 10 installations (79 percent) were financed by a third party. The report noted that California is one of 28 states that allows for third-party financing of solar projects. Another 14 percent are owned outright by the districts that have used bonds, loans, cash or other sources for funding and seven percent have direct ownership through grants and donations.

The authors reported that schools were capitalizing on solar projects not just to reduce fossil fuel usage, but also to provide students with STEM learning opportunities, job training and internships. An increasing number of schools were able to position their solar and battery storage for usage in emergency situations, to provide backup power during grid outages.

For example, the <u>Santa Barbara Unified School District</u> intends to install 4.5 MW of solar shade canopies on 14 sites, providing up to 94 percent of the district's energy needs. Six of those sites will have solar-powered microgrids that can provide backup power when the grid is down, an important consideration in a state where planned and emergency power outages due to wildfire risks is a more frequent event. Those measures are just one of several environment and sustainability initiatives being undertaken by the district.

"Solar is absolutely attainable for all schools--regardless of how sunny or wealthy it is where you live. Too few schools realize that solar is something they can take advantage of to save money and benefit students today," said Wendy Philleo, executive director of Generation180, in a statement. "Schools that switch to solar can put energy cost savings toward return-to-school preparations, such as installing ventilation systems, or toward retaining teachers and preserving essential programs."

The report is available with registration through the Solar for All Schools website.