

Community colleges offer clean energy training as climate-related jobs expand across America

May 15 2024, by ALEXA ST. JOHN and MELINA WALLING



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On the south side of Chicago, students learn to work on Rivian electric pickup trucks and SUVs through a new technician program at Olive-

Harvey College.

About 150 miles (240 kilometers) south, students at Danville Area Community College in Illinois are taught to troubleshoot massive wind turbines dozens of meters tall, along with climbing and safety.

In Albuquerque, students train on wiring and fixing solar panel installations through Central New Mexico Community College's electrical trades courses.

And in Boston, students study how to [toughen homes and buildings](#) against extreme temperatures at Roxbury Community College's Center for Smart Building Technology. The focus is on automating and modernizing heating and air conditioning systems so they contribute less to [climate change](#).

All are examples of how students across the United States look to community colleges for up-to-date training for the increasing number of jobs in climate solutions—from electrification, to wind and solar, to [energy efficiency](#), weatherization, protecting water and farmland and more.

Kyle Johnson has long enjoyed working on gasoline-fueled cars. But automobiles are increasingly electric.

"When it came to EVs, I knew that the times are changing, and I didn't want to be left behind," said the 34-year-old, now enrolled at Olive-Harvey. "Climate change has a lot to do with my decision."

The warming planet is fueling the interest of many students like Johnson. The [job market](#) was already changing as more businesses sprang up to address climate change, and now legislation, including the 2022 Inflation Reduction Act, is adding more investment, meaning they'll have plenty

of jobs to pursue. Millions of clean energy workers are needed to meet ambitious targets that governments and companies have set to reduce their [greenhouse gas emissions](#), so many of these job opportunities are growing faster than [overall employment in the U.S.](#)

Instructor Brian Lovell has seen that firsthand.

"While the students are still in the program, they get employed because the demands of industry are so acute," he said of Roxbury. "We've seen an extreme uptick over the past few years."

Of course, job seekers can also pursue workforce training through local employers and [labor unions](#) to gain skills for clean energy trades. But community colleges, taking their cues directly from companies in their regions and from state [economic development](#) and labor departments, quickly tailor hands-on training, pairing it with academics, for jobs that are open.

"Over half of these jobs are going to require less than a bachelor's degree and more than a [high school diploma](#)," said Kate Kinder, executive director of the National Council for Workforce Education. "That's prime community college space."

The prospects draw in students like Tannar Pouilliard, who remembers a wind farm quickly popping up near his childhood home. He had thought he would become an automotive technician, but learning about opportunities in wind led him to enroll in Danville's wind energy technician courses.

"Turning wrenches and all that stuff, it's always kind of what I've wanted to do. It's just a broader opportunity," he said. "It really opens the door for people out here for jobs."

At the same time, the bigger picture for community colleges is that they have been losing students, not unlike the rest of higher education. Currently, more people are entering the workforce straight out of high school, and some community colleges haven't recovered from the dip in enrollment that happened during the pandemic. It's why some schools say investing in these programs is a balancing act between staying relevant and risking a bet on too-nascent technology.

"We feel the pressure," said Monica Brummer, director of the Pacific Northwest Center of Excellence for Clean Energy at Centralia College in Washington. "If we create curriculum today for, say, a hydrogen technician, it may not be the curriculum we need in two or three years, because the technology is changing so fast ... I say let's weave the technology in existing classes."

Some schools hope to adapt without shelling out for expensive new tools and specialized instructors, who can be hard to come by. Minnesota's Inver Hills Community College launched a [climate change certificate](#) in 2022, pulling from existing areas of study at the school and administrators are considering expanding that. Similarly, Cape Cod Community College recently shifted from specialized workforce training to a broader sustainable energy certificate that students across areas of study can pursue.

Other [community colleges](#) focus on helping students like Sarah Solis transfer to a four-year degree related to climate change.

The 1,000-acre Inglewood Oil Field, near West Los Angeles College, where she first enrolled, was what pushed Solis to pursue [environmental studies](#). She later switched to the school's climate change degree, which was new at the time. Its climate offerings have grown since then; it now hosts the California Center for Climate Change Education.

Solis transferred to the University of California, Davis, earning a degree in environmental science and management. But she credits her success today teaching urban farms how to sustainably adapt for a warming future—like adding cover crops or using compost—to her community college experience.

Many other students do, too.

"It was completely life changing," Solis said. "I would not be an environmental scientist right now if I hadn't gone to West."

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Citation: Community colleges offer clean energy training as climate-related jobs expand across America (2024, May 15) retrieved 17 July 2024 from <https://techxplore.com/news/2024-05-community-colleges-energy-climate-jobs.html>

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