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Green collar jobs



KIRSTINA SANGSAHACHART — MERCURY NEWS PHOTOGRAPHS

Matt Welch, a solar instructor at San Jose City College, helps student Jeannie Ting of San Jose wire a solar panel on a demonstration roof.

Classes on nuts, volts of solar trade filling up

STILL, BOOMING INDUSTRY SHORT ON QUALIFIED ENTRY-LEVEL EMPLOYEES

By Matt Nauman
Mercury News

Hoping to capitalize on an industry desperate for trained workers, students are flocking to places like San Jose City College to learn a new trade in the up-and-coming solar-energy field.

Their timing couldn't be better. According to a recent report by researchers at West Valley College in Saratoga and City College of San Francisco, the Bay Area's solar industry could add 1,900 jobs this year, many of them as solar-panel installers.

Nationwide, a study by Navigant Consulting said, the solar photovoltaic industry could add nearly 70,000 jobs in the United States by the end of 2009.

But finding workers is a problem.

In their report "Environment Scan: Solar Industry," Bay Area authors Jennifer Oliver and John Carrese talked to 77 solar companies in the 10-county region.

"Three out of four employers expressed at least some difficulty in finding qualified entry-level employees, and four out of five are encountering difficulty in finding employees with experience," the report said.

The need for photovoltaic installers, the people who put solar systems on roofs, is the most critical, the researchers found.

That's probably why the summer session of "Solar 102: Intro to PV Installation" at San Jose City College had such a long waiting list, and why the fall semester class, which starts Sept. 2, is double-booked. Kathy Werle, dean of the college's applied science program, said two dozen students are enrolled and another 24 are on a waiting list.

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Top: Ting, who wants to install solar panels on her own home, bolts down panels during class. Above: Many hands make light work for the City College students. Hot weather, heavy materials and confusing terminology are just some of the factors that make the 10-week course tough, Ting says.

FAST FACTS ON SAN JOSE CITY COLLEGE'S SOLAR CLASS

The next session of "Solar 102: Intro to PV Installation" starts with the college's fall semester Sept. 2. But Kathy Werle, dean of applied sciences, said it's full with 24 students already enrolled and another 24 on the waiting list.

Beginning with the fall session, the solar class will be taught in the college's new Construction Technology Building. Staff moves in today.

Cost of the class is about \$80, plus parking and other fees.

For more information, go to www.sjcc.edu or call (408) 288-3781.

Source: Mercury News reporting

SOLAR Classes prepare entry-level workers

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Other local schools, including Cabrillo College in Aptos, De Anza College in Cupertino, Ohlone College in Fremont and Skyline in San Bruno, either offer solar courses now, or are planning to add them before year's end.

By the end of 2009, programs at those schools and other community colleges in Hayward, Napa Valley and Pleasant Hill will have trained more than 740 solar installers, according to Oliver and Carrese.

None of this surprises Matt Welch. By day, Welch sweats on rooftops, installing solar panels on Silicon Valley homes and businesses for Renewable Power Solutions of San Jose.

But two nights a week and on Saturdays, he teaches his craft at San Jose City College.

A former kitchen-and-bath remodeler with just two years of solar experience, Welch tries to cram in as much information as he can during the 10-week course.

"There's a lot to learn," he said. And his students are eager to learn it.

On a recent Saturday, more than a dozen of his students worked with hammers and power screwdrivers as they built a solar array (a fake wall with 20 solar panels) outside their classroom at City College. It looked a bit like a jigsaw puzzle, but the potential to make a career in solar energy is anything but a rainy-day pastime.

In their study, Oliver and Car-

rese found that:

■ One-third of California's 772 solar companies are in the Bay Area.

■ Solar companies employ 16,500 to 17,500 people in California. Companies in the 10-county bay region have 6,900 to 8,000 workers.

■ Over the next year, the industry will add about 5,000 new jobs in California, almost half in the Bay Area.

The study looked at five types of jobs: photovoltaic solar installers; solar thermal installers; solar sales representatives; solar system designers and engineers; solar installation foremen and project managers.

This spring, after Welch's first semester as a solar instructor, five of his 17 students passed the national solar-installer certification test. Four or five of his students are now installers, he said, including 23-year-old Daniel Field of San Jose.

"My goal is to make more people aware of the impact alternative energy can have on the world," said Field, who was just hired by Solar City, a solar panel installer based in Foster City.

"This class gave me an avenue without having to go through four years of college and getting a degree."

Another of Welch's summer-term students, Jeannie Ting of San Jose, said she's taking the solar installation class at City College because she's adding a second-story addition to her home

and wants to include a solar system she'll install herself with friends.

"It would be a good investment to add some solar panels," she said, "to utilize the sun's natural energy, save money in the long run and add value to my house."

Ting has taken other construction classes, and she hopes to buy fixer-uppers, improve them, add solar panels and then sell them at a profit once the real-estate market improves.

Still, she said, the class has been difficult. Some students, including the only other female class member, have dropped out.

Challenges, she said, include "too much material," "new and confusing terminology," and the notion of toting heavy solar panels, wires, metal racks and such to rooftops in 100-degree heat.

At San Jose City College, dean Werle said the school's solar class has drawn a cross-section of students. Some already work in construction. Others are looking to leave dot-com or real estate jobs, and seek a new profession in a field that seems assured of growth.

Still, Werle said, the solar-installation class is "just a piece of the puzzle." Other solar jobs in sales and service will require training, too. She plans to expand City College's solar offerings once she knows that trained students can get jobs.

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