

advertisement

**DONATE YOUR CAR!**  
Call Today **1-877-821-5493**

100% Tax Deductible  
Free Pick-Up Anywhere  
We're Available 7 Days a Week



The Breast Cancer Research Foundation is a classified 501 (c)(3) charity.

 **msnbc.com**

## Government funding spurs a new green rush

Clean-tech training programs are popping up across the nation



© Teri Fotheringham Photography 2011  
In Colorado, a new two-year college called the EcoTech Institute trains 250 students for solar and wind jobs and soon, for sustainable interior design and environmental paralegal jobs.

**By Jennifer Alsever**

msnbc.com contributor

msnbc.com contributor

Looking for a job? Hitting the books may be a good bet if you want employment in the green energy sector, one of the brighter spots in the resurrecting job market.

Clean-technology industries — such as solar, wind and energy efficiency — are on the rise, but new jobs will likely require a brand new set of skills.

And the promised growth may set off a green rush of sorts as universities and community colleges hurry to incorporate curriculum that will satisfy the demands for those employers

now hiring.

The good news for jobseekers: Training programs are popping up across the nation to help.

- In Texas, there are training programs for wind technicians.
- In Pennsylvania, steelworkers are getting trained for jobs in electric-vehicle battery plants.
- In Colorado, a new two-year college called the EcoTech Institute trains 250 students for solar and wind jobs and soon, for sustainable interior design and environmental paralegal jobs.
- And in California, scientists are getting schooled on the burgeoning biofuel sector.

Many of these kinds of programs are getting hundreds of millions of dollars from federal and state governments.

The U.S. Department of Energy gave a \$995,000 grant to the University of Nevada to start the National Geothermal Academy, which will provide eight-week training courses next month to teach scientists, engineers, plant operators and policymakers the intricacies of

everything from geothermal power plant construction to heat pumps.

"The Recovery Act spurred \$450 million in new exploration and drilling projects," says Wendy Calvin, the academy's coordinator. "But the projects are little bit short staffed. So we're trying to train the next generation of experts."

Green energy is at the top of the agenda at companies across the country. General Electric launched a \$200 million innovation contest for smart grid technology, while Samsung said it would invest \$21 billion into clean tech over the next decade.

Chinese wind-turbine maker Shenyang Power Group said it would employ 1,000 workers at a new wind turbine factory in Nevada, while Abound Solar plans to hire 1,000 people at a solar photovoltaic plant in Indiana.

Meanwhile, nine electric-vehicle battery plants have opened in the U.S., and Ford Motor Co. announced it would invest \$135 million and add 220 electric car jobs at two of its Detroit area plants.

The sector devoted to energy efficiency is estimated to grow as much as fourfold in the next decade to about 1.3 million workers, according to a 2010 report by the Lawrence Berkeley National Laboratory.

Universities and community colleges see this as a huge growth opportunity.

"I get more e-mail from friends at universities who want to replicate our certification program," says Steve Mayfield, a molecular biology professor at University of California at San Diego, who worked with local companies to start the EDGE bioenergy certificate

program this spring. "It's obvious to anyone who is smart and has their eyes open that this is the future."

The EDGE coursework is done through University of California, San Diego and at the local MicaCosta College. The curriculum covers the economics, ecology and production of algae biofuels and offers internships with local bioenergy companies. The California Department of Labor will cover the costs of the first 200 students in the six-month program, and eventually the program will be rolled out to schools statewide. It will cost about \$5,000 to \$6,000 per student.

Ayman Aziz, 49, enrolled as a student in that biofuels program in March after hearing a story about the training on the radio. After years of doing business development in the oil and gas industry in the Middle East, Aziz's last contract ended in October and he was ready to do something more sustainable.

He says he wants to be a part of a shift in thinking about energy and the earth's finite natural resources. "We need to start acting now," he says.

Plus, with a young family in San Diego, he hopes to get skills that get him a job near home. The biofuel industry has become Southern California's top job-producing sector, adding 500 jobs in the past two years.

The biggest challenge for people like Aziz is timing. Employers need trained workers to grow, but ensuring the jobs are ready when people finished training is tricky. Professor Mayfield says he's not sure that the first 200 people in the EDGE biofuels program will get jobs right away. "Jobs just started to show up this year," he says.

The same goes for students in the CleanTech Institute, a Fremont, Calif., scientific-training program for jobs in electric **vehicles** and solar power. The institute, which was financed by a \$1.5 million grant from the U.S. Department of Labor, only has 60 students right now.

"We wish we had more people, but the industry is still recovering from the depression," says Lloyd Tran, the institute's director. "It takes time to build the work force."

© 2011 msnbc.com. *Reprints*



Share

Sponsored links