

Business

Money and Technology



BRIAN DANTON/The Register-Guard

Thomas Brex, working to mount photovoltaic cells on the roof of a construction project in Eugene, is one of many people in Lane County working a job created by the need to be more energy efficient. The focus on renewable energy has created at least 50 new Lane County positions in the past five years.

GREEN GOES MAINSTREAM

Demand for workers schooled in renewable energy is booming in Lane County — and it's spreading



SOLARC Architecture and Interiors Inc.
Co-Motion Cycles was designed as an energy efficient building with a focus on creating a comfortable space for people.

Thomas Brex is on top of the world now that he's on the roof at a massive construction project at Goodpasture Island Road.

He sought a purposeful career in renewable energy.

He enrolled in the two-year energy program at Lane Community College and — bam — before he could finish his second term he was snapped up by Advanced Energy Systems, a commercial solar energy company that installs massive photo voltaic arrays.

"I was beyond lucky. I was incredibly lucky," Brex, 33, said this week while high atop Kendall Toyota's upcoming dealership and showroom building. "I've been really happy with my life lately and a lot of it has to do with this company."

Brex is a beneficiary of the great green job machine that's created at least 50 new positions in Lane County over the past five years.

They're the sort of green jobs — skilled, but without a four-year degree requirement — that the Democratic presidential candidates (and/or their spouses) are jawboning about in trips through Oregon.

GREEN JOBS

Check online for specialized listings:

- ◆ www.portlandonline.com/osd/index.cfm?a=bbahf&c=ebhf
- ◆ www.sustainableindustries.com/jobs
- ◆ www.sustainablebusiness.com/index.cfm/go/greendreamjobs.main

Sen. Hillary Clinton pledges \$500 million each year in investments to spur high-wage "green collar" jobs. Sen. Barack Obama says he'll go \$150 billion in a decade for 5 million new green energy sector jobs.

But Lane County businesses — spurred by state and local incentives — have got the ball rolling.

"Politicians are lagging a little behind, if anything," Brex said. "We're not waiting for politicians to get their act together. We're making it happen now."

Fueled by fuel prices

Solar and wind installations are proliferating in Oregon now because of the instability in traditional energy markets, said Sylvia Hayes, executive director of 3Estrategies, a Bend nonprofit agency that's spearheading Gov. Ted Kulongoski's Sustainable Oregon Workforce Initiative.

Oil and gas prices broke all-time records this winter. The price of coal and natural gas doubled in recent months, Hayes said.

While energy prices suck the life out of the economy, businesses that can stabilize their costs with solar voltaic systems or energy conservation measures outperform their competitors.

Suddenly, the demand for workers with renewable energy or energy efficiency skills is burgeoning here in Lane County:

◆ Eugene-based Advanced Energy Systems grew to 22 employees, up from one husband-and-wife team in 2002. The firm has 10 commercial solar power installations going, spokesman Eden Corbin said.

"We're seeing double the work on an annual basis for two or three years now," he said.

◆ The Eugene-based SOLARC Architecture and Engineering ballooned from eight employees five years ago to 25 today.

"Our goal would be to have a firm of about 40 people in, like, three years," said Galen Ohmart, principle architect with the green design firm.

The new hires are filling two new types of jobs: an energy analyst who uses sophisticated computer models to design

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Green: Young students flock to energy classes

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green buildings, and an expert who coordinates building systems to maximize energy use, such as making sure the lights dim and the fans drop to lower speeds when they aren't needed.

◆ Coburg-based Cascade Sierra Solutions has grown to a dozen employees in Lane County, up from just one worker 1½ years ago.

"We're all busy, too, trying to keep up with everything," CEO Sharon Banks said.

The nonprofit, three-state initiative retrofits tractor-trailer rigs to reduce fuel use and comply with tightening clean air requirements.

Renewed renewable interest

The spike in demand for skilled energy workers has brought Roger Ebbage, coordinator of Lane Community College's energy management programs for 16 years, his liveliest year ever.

The once-beleaguered program that was cut in 1997 from the school's general fund is producing graduates now who are in high demand.

"It's an exciting, vibrant green-collar job area," Ebbage said. "We haven't seen this before. It's mainstream. It's front page news."

The New York Times last week cited Ebbage's program as one of the promising green-collar educational initiatives nationally.

Ebbage is having a hard time keeping his 50 students in the classroom because — like Brex — they're hired before they finish their studies.

His students were once

mostly middle-age millworkers retraining after a layoff, but now the program is attracting students in their 20s.

"Renewables are very sexy," Ebbage said.

His students soon find themselves earning \$40,000 to \$45,000 annually, Ebbage said.

"I'm 60 and I can feel like I'm ready to retire, but boy you're going to have to drag me out of this chair," he said. "This is what I've been waiting for."

Filling the gap

A just-completed "gap analysis" comparing the work force needs of Oregon's clean energy companies with the state's capacity to produce them found "an economic opportunity of massive proportions," according to a draft.

The study, due out in two weeks, is called "An Analysis of Clean Energy Workforce Needs and Programs in Oregon."

Oregon is third in the nation for growth in wind-power installations — mostly along the blustery north border of the state.

Companies located there will need 600 wind turbine technicians during the next three years and will have to import them from out of state, according to the study.

But Columbia Gorge Community College kicked into gear and created a one-year turbine tech certificate program — though it's only producing 34 technicians a year.

The need for energy efficiency analysts — such as those from Ebbage's program — also is predicted to soar.

Eugene is way ahead in this area. Today, Eugene

"It's an exciting, vibrant green-collar job area. We haven't seen this before."

ROGER EBBAGE,
COORDINATOR OF LANE COMMUNITY COLLEGE'S
ENERGY MANAGEMENT PROGRAMS

Water & Electric Board employs 18 such experts who have conducted energy audits and made significant changes to buildings throughout the city, said Mathew Northway, who oversees EWEB's energy management department.

But expect a major push in cities to the north. Washington voters passed an initiative (I-937) that requires the state's electrical utilities to pursue "all low-cost energy conservation measures" they can with their customers and within their communities.

Since passage, utilities in Washington have started to hire away each other's energy efficiency managers, creating a spiraling pay scale, Northway said. Ebbage's students will be even more attractive.

In the end, education may be the bottleneck that limits this growth, said Joshua Skov, principle with the Eugene-based consulting firm Good Company (which is also growing).

"If we decided to go whole hog right now (with all existing technologies), the barrier would not be money; the barrier would not be the manufacturing equipment capacity," he said. "The barrier would actually be human capital. The barrier would be the knowledge to deploy these

things."

Fanning the spark

Kulongoski is among the politicians promising a green future.

Oregon spends \$10 billion a year on energy, Hayes said. And 85 percent of that leaves the state.

Renewables keep the cash at home, she said.

"In many ways, it's not just the salvation of our environment but of our economy," she said.

The state paid Hayes' organization \$49,000 to examine the clean energy sector's needs for employees.

Next, she'll get an additional \$75,000 to help craft bills for the 2009 legislature meant to spur growth of green collar jobs in the state.

Proponents of green economic growth typically favor using government regulations and incentives to force market development.

Last June, for instance, Oregon joined 27 other states that require utilities to provide 25 percent of their retail sales of electricity from clean, renewable sources of energy by 2025.

A national group called the Blue-Green Alliance figures that if a similar requirement were adopted nationally — 20 percent of electricity coming from renewables by 2020 — as many as 820,000 new jobs would emerge.

Some would be good jobs, Skov said.

"They'll be paid very, very well because they're going to help resolve issues of genuine scarcity. There's a strong value proposition for that sort of employment."