

## Green jobs pay better as clean-tech sector booms

By [Scott Martin](#), USA TODAY

SAN FRANCISCO — The green jobs movement is putting more greenbacks in workers' pockets.



David Paul Morris, Bloomberg News

A Tesla Motors showroom in San Jose, Calif.

Clean-tech jobs offered median wages 20% higher across the United States in 2010, according to a report released today from researchers Brookings and Battelle. Such green jobs span industries ranging from solar-panel manufacturers to wind- and ocean-based energy production to electric-vehicle technologies.

The report on positions in 100 U.S. cities highlights a job boom in the sector that now counts 2.7 million jobs. The [Brookings Institution](#) figures the industry contributed exported goods and services valued at \$53.9 billion in 2009.

The report points to a growing industry of opportunities fueled by public and private backing of cleaner forms of energy that promise environmental benefits.

U.S. clean-tech jobs surged 8.3% per year, compared with 4.2% a year for other occupations during the 2003-2010 period studied.

"The clean-tech economy (is) growing twice as fast as the rest of the economy," said [Ron Pernick](#), co-founder of researcher [Clean Edge](#) and co-author of *The Clean Tech Revolution*.

Total jobs across the clean-tech sector now outpace those of the oil industry and are double those of the biosciences industry, according to the report.

## Top 10 'cleantech' metro areas

Rank/Metro area <sup>1</sup>	Clean tech jobs, 2010	Clean tech share
1. Albany-Schenectady-Troy, N.Y.	10,092	2.30%
2. Knoxville, Tenn.	8,184	2.50%
3. San Francisco-Oakland-Fremont, Calif.	13,917	0.70%
4. San Jose-Sunnyvale-Santa Clara, Calif.	6,192	0.70%
5. Greenville-Mauldin-Easley, S.C.	3,723	11.20%
6. Kansas City, Mo.-Kansas	3,932	0.40%
7. Toledo, Ohio	2,175	0.70%
8. Chicago-Joliet-Naperville, Ill.-Ind.-Wis.	7,642	0.20%
9. Charlotte-Gastonia-Rock Hill, N.C.-S.C.	2,309	0.30%
10. Cleveland-Elyria-Mentor, Ohio	2,396	0.20%

**1 - Overall rank is determined using an average of the jobs ranking and share ranking numbers**

**Source: Brookings-Battelle Clean Economy Database and Moody's Analytics**

Brookings broadly defines the "clean economy" and includes such industries as waste management and transportation but analyzed the data for USA TODAY to highlight clean-tech energy jobs specifically.

Blue-collar workers may want to trade for "green-collar" jobs. Median wages for clean-tech jobs were \$46,343, compared with \$38,616 for all other occupations across the country. The report says the clean industry offers better pay and more opportunities for those in middle-wage jobs such as construction, transportation and administrative roles. There are a variety of clean-tech occupations, including engineer, installation and information technology.

The [San Francisco](#) area offers the most clean-tech jobs. The San Francisco, Fremont and Oakland regions that were tracked also ranked well above the nation in pay: median annual wages were \$59,856.

Researchers at Brookings called on the federal government to implement:

- Strict tax policies on carbon emissions and pollution from energy production.
- National clean-energy standards for electricity.
- Uniform policy on clean-energy federal subsidies.

"As a country we need to decide how much we value the public good that the clean economy provides," Brookings analyst Jonathan Rothwell says. The Brookings report comes as the U.S. unemployment rate hit 9.2% for June, according to the Labor Department.

### **Hot jobs**

- Electric-vehicle maker Tesla Motors of Palo Alto, Calif., has 145 jobs available. Positions range from robotics to sales to vehicle test technician. Tesla went public last year on the promise of bringing electric vehicles to the U.S. market.
- [San Mateo](#), Calif.-based SolarCity, a solar panel installer, plans to add up to 400 employees to its staff of 1,300 by year's end.
- Oakland's BrightSource, which develops solar-related energy systems, has about 40 open jobs ranging construction and finance to marketing. The company attracted \$168 million in funding from Google in April to help build a solar power tower plant in the [Mojave Desert](#).
- Silver Spring Networks, which last week filed to go public, has 35 positions open. The Redwood, Calif., company makes components used in smart meters and related hardware and software. Smart meters are seen as key to lowering energy costs and improving energy management.

Eighty percent of energy-efficiency companies responding to a recent survey reported openings for jobs paying \$50,000 to \$100,000, according to the Association of Energy Services Professionals.

### **Cash calls**

Momentum in the green sector has been spurred by venture-capital investments. Worldwide, \$154 billion was pumped into renewable energies in 2010, a 650% increase from 2004, according to Brookings. But that's not enough, the researcher says.

The report says this area needs added funding if the U.S. is to stay competitive.

In 2004, according to Brookings, China trailed the U.S. in funding for clean-energy projects. But by 2010, China's investment in clean tech had more than doubled U.S. levels, notes Mark Muro, who co-wrote the Brookings report. The result: U.S. companies in the sector are losing market share worldwide.

"There's no existing U.S. institution that is willing to provide funding at the levels needed," Rothwell says. "Banks are the most appropriate lending institution for this, and few of them will take the risk."