

## **CLEANTECH AS AN ENGINE FOR JOB CREATION**

**“Report’s Perspective on CleanTech Here: Small But Growing Job Gains during recession; government incentives key”**

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**Clean technology jobs grew in Orange County through the recession and continue to outpace the overall economy as a recovery takes hold, according to recent data and a report from Next 10, a nonprofit advocacy group in San Francisco.**

**Clean tech is a broad sector, including alternative energy, pollution control, recycling, green vehicles, energy-efficient lighting and other products and services.**

**The Next 10 report analyzed public and private data and found the county in a strong position, particularly in the energy production, alternative fuels and transportation segments.**

**The county added about 1,200 clean tech jobs from 2007 to 2009, posting a 7% gain through the teeth of the recession.**

**The county’s overall economy shed about 102,000 jobs in the same period, a decline of more than 6%.**

**Clean tech employment appeared to continue to outpace the overall economy in 2010, based on preliminary data. The sector looks set to do the same this year, as hiring in other segments revs up slowly.**

**The county now is home to nearly 300 clean tech companies that employ about 20,000 people, according to the Orange County Business Council and trade group CleanTech OC.**

**That's about 1.5% of the county's 1.37 million nonfarm workers, on par with the nursing and state education sectors, according to the latest figures at the state Employment Development Department.**

**Clean tech has been spurred locally and nationally by public subsidies and private investment.**

**Venture capitalists in 2010 put more than \$150 million in the county's clean tech companies.**

**Tax breaks, government loans and other incentives for companies that make clean tech products and services, as well as consumers who use them, have helped.**

**"Orange County is an impressive region," said Tracey Grose, vice president and director of research and strategic development at Collaborative Economics, a San Mateo-based consultancy that developed the report for Next 10. "They are at the forefront of what's going on in California."**

**Big job creators here include Irvine's Fisker Automotive Inc., Seal Beach-based Amonix Inc., Verengo Solar Plus of Orange, and Quantum Fuel Systems Technologies Worldwide Inc. in Irvine, among others.**

**Fisker, a maker of luxury hybrid automobiles, is among the county's most watched startups.**

**The company has about 150 local employees and plans to double in size this year as it moves its headquarters from Irvine to a 156,135-square-foot office building in Anaheim.**

**Fisker has raised \$320 million from private investors and gotten \$528.7 million in low-interest loans from the Department of Energy for development of luxury cars powered by rechargeable batteries with backup gas engines.**

**Verengo, an installer of solar panels, expects to add nearly 200 workers this year in hopes that homeowners looking to save money on energy bills will invest in solar energy.**

**Solar panel maker Amonix Inc. has hired more than 200 people locally in the last year and is planning to build a \$20 million factory in Nevada where it's set to employ about 280 people.**

**Quantum, which makes hybrid powertrains for the military and automakers, including Fisker, also is jumping on the solar bandwagon.**

**The company is gutting its Irvine headquarters and converting it into a plant for producing solar panels. It expects to produce enough panels per year to generate 45 megawatts of electricity, which can power 20,000 to 40,000 homes.**

### **Small Slice**

**Clean tech remains a relatively small slice of local employment even as backers tout the sector's potential.**

**"It's a small base," said David Walrod, vice president of economic development at the Orange County Business Council. "But it is growing faster than the rest of the economy."**

**There also are concerns about the staying power of clean tech, which eventually will have to transition to the marketplace without tax breaks and other incentives coming from the government.**

**The public help is a competitive advantage now, but also a cause for concern looking forward, some experts contend.**

**California has the most progressive energy mandate in the country, requiring 33% of energy supplied by utilities to come from renewable sources by 2020.**

**"A lot of the activity in this sector is being generated by government mandates," said Walrod. "That's something for us to keep an eye on. Typically it's the market that decides if a new technology succeeds or fails."**

**Clean tech remains a lure for investors with an appetite for risk.**

**The most active clean tech investor here arguably is Irvine-based *SAIL* Venture Partners, which has invested some \$50 million in local clean tech companies, according to managing partner Walter Schindler.**

**“Cleantech is the world’s fastest growing investment category,” he said in an earlier interview with the Business Journal. “We continue to see more and more opportunities.”**