



Who's growing and who's hiring?

By Lisa Bicker, Cindy Gompper-Graves & Debra Rosen

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The [San Diego](#) region is leading the way in building a [clean tech](#) economy. Close to 800 clean tech companies call the San Diego region home, demonstrating that the innovation economy is alive and thriving. The economic opportunity is there for the taking and it is touching all corners of our region from north to south – CleanTECH San Diego's database shows more than 60 clean tech companies in Carlsbad, another 30 in Escondido and 40 or more companies in [Chula Vista](#). The clean tech economy is here.

To create sustainable benefits that flow to all sectors of our society, we need to marry our proven ability to use technology to solve problems with creative and effective training programs so that the promise of [green jobs](#) becomes the reality for San Diegans. We also need to protect and grow our manufacturing base and more effectively use renewable resources to generate clean and secure power and create economic opportunity.

For graduates and skilled workers wondering where the jobs of the future will be in San Diego, the answer is in the economic sectors that are expected to grow. To be sure, the hospitality, biomedical and military/military research sectors are major economic engines and have bright outlooks.

Less well known are the region's involvement in clean tech manufacturing, including the making of solar and wind power components and biofuel research. The good news for those seeking jobs is that industry-led workforce training is the norm.

The San Diego region's biofuels industry currently employs over 400 people at 30 companies including Synthetic Genomics, SG Biofuels, Sapphire Energy, Kai BioEnergy and General Atomics. According to a recent study by the [San Diego Association of Governments](#), additional venture capital invested into biofuel research could generate additional impact to the regional economy, which in turn means additional jobs.

To prepare for the anticipated growth of this industry, CleanTECH San Diego partnered with the San Diego Center for Algae Biotechnology,

BIOCOM, the San Diego Regional EDC, and the San Diego Workforce Partnership to secure a grant from the state to create workforce training programs.

The EDGE Initiative (Educating and Developing Workers for the [Green Economy](#)) is an industry-led approach to workforce training for the clean tech sector. The approach is simple – let industry direct the creation of training programs since they will be hiring those that graduate from the programs.

To date the program is already a success, with classes under way at UC San Diego Extension, and more to become available soon. For the San Diego region to remain a leader in the biofuels sector, we must have the workforce needed to support its growth. And that can only be accomplished by working closely with the private sector to address workforce needs.

In the South County, planning continues for a long-sought university and a technology-based business park to accompany it. The theme is to create jobs that are key to communities being sustainable. Preliminary studies indicate that a Chula Vista university would create 6,000 jobs, consisting of 1,000 retail, 4,000 office and 1,700 research and development positions. The accompanying tech park would result in 2,000 tech-based jobs.

While efficient “green jobs” to date have been mostly concentrated on solar power, tomorrow’s economy will require engineers, chemists, biologists and more as biomimicry – a field that tries to replicate nature’s best ideas to solve human problems – takes center stage in our quest to become more efficient.

The San Diego region already has close to 200 high-tech manufacturers. The [North County](#), in particular has a dominant industrial base. So it’s a natural for the region to tap its educated workforce, strong business base and educational institutions to expand its manufacturing presence to land new clean technology businesses. As just one potent example, SOITEC Solar recently announced it plans to locate a new 500-person manufacturing facility in the greater San Diego region so that it can tap into San Diego’s high-tech manufacturing labor pool. [Kyocera Solar](#), which has made a strong commitment to the region, is hiring a third shift for its local solar manufacturing facility to keep pace with demand.

In just one hour, the Earth receives more energy from the sun than the entire world uses in a year. The sun drives our transition to our cleaner future and a stronger economy. More than 180 solar companies call San Diego home. These companies employ workers and contribute to our economy. UC San Diego just awarded a contract to Sullivan Solar to install 900 kilowatts of solar power on campus. Among the tasks for this new array will be powering electric vehicle charging stations. Sullivan, a local company, has pledged to use American-made panels and pay workers living wages.

Opportunities do not stop when the sun is hidden by clouds. Wind can provide 10 times the amount of electricity that Americans can consume each year. Companies like Enel, Invenenergy, Iberdrola and a host of others are working on bringing more clean power and more jobs here to San Diego County.

Through collaboration and leadership, the San Diego region has achieved significant milestones in clean tech and is among the pacesetters worldwide. By leveraging its robust clean tech assets, San Diego can continue to develop a strong clean tech cluster and create sustainable benefits that extend to all sectors.

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