



IMMEDIATE RELEASE

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Contacts: Roxanna Smith
415.453.0430

**Policy & clean tech innovation accelerate consumer demand
& spur additional economic growth**

*Regional data included - renewable energy, clean vehicles, energy efficiency
levels reach new highs*

SAN FRANCISCO —Driven by forward-looking policies and the resulting technology innovation, consumer demand for California’s clean technology sector products and services is expanding, according to new data in Next 10’s *2014 California Green Innovation Index* (www.next10.org).

“As consumers learn more about cost-effective new technologies, demand rises for products that save energy and dollars at home, on our highways, and at work,” said F. Noel Perry, businessman and founder of the nonpartisan nonprofit group Next 10, which released the report. “California success stories like Solar City, Nest, and others respond by developing more advanced technologies, innovative business models, and lowering prices. Economies of scale kick in which fuel still more consumer demand.”

This year’s edition is the sixth *California Green Innovation Index* (www.next10.org) tracking economic indicators as the state implements policies that help reduce greenhouse gas emissions. The *Index* finds California is among the most efficient, least carbon-intensive economies in the world, with per capita greenhouse gas emissions dropping by 17 percent since 1990. Due primarily to the shutdown of the San Onofre Nuclear Generating Station and a decrease in hydropower — both of which are emissions-free energy sources — the state saw a 1.7 percent uptick in emissions from 2011 to 2012. Meantime, California’s state electricity bill share of GDP was 0.47 percentage points less than Texas in 2012, which can be attributed to the state’s nation-leading energy efficiency profile. This level of efficiency equates to about \$9.5 billion that Californians did not spend on electricity when compared to the efficiency levels of Texas.

The *Index* also shows California’s overall renewable generation grew 56 percent between 2002 and 2012, with wind generation specifically jumping five-fold over the same ten years. On the solar front, the state generated three times more electricity from solar in 2012 than it did in 2002. Solar installations soared last year with 2.6 times more installed in 2013 than 2012. New wind installations in California meantime dropped significantly in 2013, due in large part to uncertainty around federal tax incentives.



“In 2013, California consumers offered a clear signal on solar, installing a record of more than 2,700 MW,” said Doug Henton, chairman and CEO of Collaborative Economics, which compiled the *Index* for Next 10. “Falling prices make renewable energy increasingly competitive with fossil fuels, and consumers are demanding more of it.”

The state reached a new high in its renewable electricity share in 2012 producing 15.4 percent of total electricity generation, about three times the percentage of the U.S. as a whole. California’s renewable electricity share increased 1.3 percentage points in the last year alone.

Consumers are also driving the rise of alternative fuel vehicles in California. Between 2011 and 2012, registrations of zero emission vehicles (ZEVs) increased 62 percent between 2011 and 2012 to a total of about 34,500. The subset of electric vehicles alone over the same time period rose by more than 20 percent (to total 24,000 vehicles).

Energy storage might well be the next growth area within California’s clean tech sector, and this year’s *California Green Innovation Index* includes a special feature highlighting this economic opportunity. California leads the nation with the most capacity installed and the highest number of small and large battery projects, but the market remains largely untapped. Following nationwide trends, investment in this sector dropped between 2012 and 2013, though the state leads the nation in this area and recent investments suggest that activity in this sector may be increasing. While California has a strong national foothold in the market, the state has notable global competition. In terms of innovation for example, if California were a country, the state would be the fourth ranking country in the world with respect to its battery patent registration (trailing Japan, the rest of the U.S. combined and South Korea).

California’s overall clean economy continues to create new jobs and business opportunities across diverse sectors, ranging from water efficiency and recycling to energy and battery technologies. At its center is the Core Clean Economy, which includes businesses that provide the cutting-edge products and services that use natural resources more efficiency and facilitate the transition away from fossil fuels.

Between January 2002 and January 2012, employment in California’s Core Clean Economy jumped 20 percent to reach nearly 196,000. During the same time period, jobs in the larger overall state economy grew by two percent. Employment in the Core Clean Economy continued its steady growth more recently, between January 2011 and January 2012 jobs grew by 1.1 percent, while the total economy continued its rebound from the recession with a 2.4 percent increase.



Since 2006, investors have put more than \$27 billion in venture capital and other types of investment into California clean tech companies. In 2013, \$1.6 billion flowed to the state's clean tech sector, including venture capital, public and private grants, and loans/debt. Venture capital dollars alone in 2013 totaled \$1.4 billion, down 47 percent from the previous year. Despite recent drops in clean tech investment, California continues to be the leader in clean technology innovation, with its clean tech companies receiving the most investment and ranking the highest in U.S. patent registrations.

Also included in the 2014 *Index* is a Regional Indicators Spotlight, which highlights the ways different parts of California are building on opportunities in the clean economy. For example:

- The San Francisco Bay Area is tops for clean economy jobs and patent registrations.
- The Sacramento Area had the fastest rate of clean economy job growth in 2011-2012, at five percent.
- The Los Angeles Area is the top region in hybrid systems patents and wind patents in 2012-2013, and the second highest overall in the state for clean technology patents (242). The Los Angeles region would rank sixth in the nation for patent registrations if it were a state.
- Orange County Area saw the fastest growth in plug-in hybrid vehicles, with nearly 13 times more registrations in 2012 than 2011. Zero emission vehicles increased 93 percent over the same time to reach a total of about 3,800 zero emissions vehicles in 2012.
- The San Diego Region experienced the second fastest growth in distributed solar installations through the California Solar Initiative (CSI) between 2012 and 2013 (+11%), and had a total of about 137 MW installed between 2007 and 2013.
- The Inland Empire saw the highest growth in clean economy employment over the last decade (+57% to 13,700), with the fastest growth in the Energy Infrastructure (+28%) sector between January 2011 and 2012.
- The San Joaquin Valley ranked second in total distributed solar installations through CSI in the state, with nearly 240 MW installed through 2013.

“Our latest data shows that California is making significant progress in decoupling our emissions output from our economic performance,” said Perry. “Moving up one spot from the previous year, California’s is the fourth least



carbon dependent economy in the nation. Continuing this trend in years to come will bring about a healthier economy and environment for Californians and the nation.”

About Next 10

Next 10 is an independent, nonpartisan organization that educates, engages and empowers Californians to improve the state’s future. With a focus on the intersection between the economy, the environment, and quality of life, Next 10 employs research from leading experts on complex state issues and creates a portfolio of nonpartisan educational materials to foster a deeper understanding of the critical issues affecting our state.

About Collaborative Economics,

Collaborative Economics (www.coecon.com), which compiled the data for the Green Innovation Index, is a Silicon Valley-based research and consulting organization. CoEcon works with businesses, foundations, government, education, and community sectors to do leading edge innovation and clean economy analysis for states and regions across the country.