



EMBARGOED UNTIL MARCH 18, 2013 at 10 p.m. PST

Contact: Roxanna Smith
510.326.0390
415.453.0430

CA's Clean Technology Sector Diversifying, Advancing

Clean energy patents, renewable energy, energy efficiency, carbon intensity & clean jobs improve, now a staple of Golden State economy

(San Francisco)- Often described as “emerging,” California’s clean energy sector is now diversifying and advancing, according to the *2013 California Green Innovation Index* (www.next10.org). The annual report shows that clean technology patent registrations and energy productivity are growing, clean economy jobs continue their post-recession recovery, and the state’s carbon intensity - the amount of greenhouse gases emitted to produce each dollar of goods - continues to drop. At the same time, the new research shows that while overall investments in clean companies have fallen, financing models are changing with the rise of strategic corporate investors, and investments in some sectors continue to grow.

“California has shown it can reduce emissions while innovating and expanding its economy,” said F. Noel Perry, businessman and founder of Next 10. “Emissions per capita in California continued their downward trend in 2010, and at the same time the state saw a rise in per capita GDP.”

The *2013 California Green Innovation Index* (greeninnovationindex.org), released today by the nonpartisan nonprofit group [Next 10](http://Next10.org) and compiled by [Collaborative Economics](http://CollaborativeEconomics.org), is the fifth edition of the report. It tracks economic indicators as the state implements and adopts policies that help reduce greenhouse gas emissions in California. Included in the Index is a policy timeline tracking California’s history of innovative policymaking back to 1947.

Top findings include:

- Per capita emissions continued to fall in 2010, tracking a 17 percent drop since 1990 and a two percent decline from 2009 to 2010.
- Between 2010 and 2011, clean technology patent registrations in California increased by 26 percent, outpacing the growth rate of clean patents throughout the United States (10 percent) and in the rest of the world (5 percent).
- Between the two year periods of 2008-2009 and 2010-2011 California’s solar patents more than tripled, securing the state’s position as the

EMBARGOED UNTIL MARCH 18, 2013 at 10 p.m. PST



undisputed leader in solar patents in the U.S. In the most recent 2010-2011 period, the next eight highest states' solar patents combined add up to the level of California's photovoltaic patents alone. California is also the top state for patent registrations in the water, batteries, and energy infrastructure sectors.

- Renewable electricity generation grew 28 percent between 2007 and 2011, surpassing 41,000 gigawatt hours (GWh) in 2011. The majority of this overall jump can be attributed to the wind generation, which doubled over the same time period.
- Energy productivity (GDP produced for each unit of energy consumed) increased by nearly two percent from 2009 to 2010, even as the same measure declined by about one percent for the rest of the United States.
- Overall public and private investment in clean technology dropped 42 percent to \$3.75 billion in 2012, returning to 2008 levels, due to factors including market uncertainty, changes in national policy, and the maturation and consolidation of companies in the sector. At the same time, some sectors, including clean transportation, received large increases in funding. Investment in that segment grew 44 percent from 2011 to 2012, reaching nearly \$1 billion.
- Silicon Valley continues to attract the most clean technology venture capital in California, with 43 percent (\$1.1 billion) of the total (\$2.6 billion) in 2012.
- Orange County surpassed the San Francisco Region (without Silicon Valley) in 2012, with 22 percent (\$570 million) of clean technology venture capital investments in California.
- The San Diego Region received \$340 million in venture capital in 2012, an 80 percent increase from 2011.

"Market uncertainty and low natural gas prices caused some skittishness with investors last year," said Dan Adler, advisor to Next 10, and President of CalCEF Ventures, a venture capital fund created to accelerate investment in California's clean energy economy. "Despite one tough year, California's clean economy businesses are resilient. They are tapping new financing sources and will continue to be top national and international draws for investment."

"Patent registration data is an early indication of the direction markets are heading," said Doug Henton, Chairman and Chief Executive Officer of Collaborative Economics, which authored the report. "Hybrid systems, fuel cells, wind energy and solar energy patent registrations each more than doubled over the examined time period. This data signals a strong potential for healthy economic activity in these sectors in California in the years to come."

This year, as a special feature, the *Index* examines the growth of Core Clean Economy employment, jobs created by businesses that provide products and

EMBARGOED UNTIL MARCH 18, 2013 at 10 p.m. PST



services that allow the entire economy to transition away from fossil fuels and improve efficiencies in the use of all natural resources.

Top clean economy jobs findings include:

- Through January 2011, jobs in the Core Clean Economy expanded nearly three percent from pre-recession (January 2008) levels, whereas overall economy jobs were still down about two percent compared to pre-recession levels.
- More recently, jobs in the Core Clean Economy increased at a rate of 1.2 percent while total statewide employment expanded by 2.2 percent between January 2010 and January 2011 (the most recent observable period).
- Over ten years, from January 2001 to January 2011, jobs in the Core Clean Economy grew four times faster than the total state economy.
- The Bay Area, including Silicon Valley, boasts the highest share of California clean economy jobs as of January 2011, with 30 percent (52,555) of the state's total (176,000), along with the highest concentration of jobs in the Energy Generation, Energy Infrastructure, Green Building and Advanced Materials segments.
- Core Clean Economy jobs in the Inland Empire and San Joaquin Valley regions grew fastest when compared to other regions between January 2001 and January 2011 (59 percent and 57 percent respectively).
- Jobs in the Sacramento Core Clean Economy grew the fastest overall more recently (January 2010 to January 2011). Jobs rose ten percent, with jumps in Advanced Materials and Air & Environment segments.

“California is working on parallel tracks that are bringing significant short and long term economic and environmental benefits. We are producing more while using less energy and also inventing, developing and deploying innovative clean technologies,” said Perry. “These activities stimulate our economy by driving innovation, encouraging investment and supporting jobs.”

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, which compiled the data for the Green Innovation Index, is a

EMBARGOED UNTIL MARCH 18, 2013 at 10 p.m. PST



San Mateo, California-based research and consulting organization specializing in economic and environmental research. CE works with senior executives from business, foundations, government, education, and community sectors to identify economic, environmental, and social trends and promote regional innovation. For more than a decade, Collaborative Economics has prepared the annual Index of Silicon Valley for Joint Venture: Silicon Valley Network and has broken new ground in the study of the emerging green economy.

-End-

EMBARGOED

EMBARGOED UNTIL MARCH 18, 2013 at 10 p.m. PST