

Oregon Studies Economic Impacts of California AB32 Cap and Invest Policy

Lessons from a jurisdiction with experience
PolicyInteractive Research (updated January 29, 2016)

Why should Oregon look at California's Cap and Trade Climate Stability Act? *Because some business entities are claiming that SB1574, modeled after California's AB32, will negatively affect Oregon's job and economic picture. When California passed AB32 into law, major business interests similarly objected, claiming it would destroy the California's economy. Even before AB32 was brought into implementation the California Chamber of Commerce paid to collect signatures to repeal AB32; that initiative was rejected by California citizens by a 24% margin, allowing AB32 to be implemented. Contemporary results show the naysayers were wrong.*

Overview of California Economic performance under AB32 Cap and Trade policy law. (Primary sources: CAdelivers - Jobs Fact Sheet Final4915pdf (2015), CAdelivers - Business Fact Sheet Final33115pdf (2015) and California Business Alliance, The Economic Case for AB32, March 2015. All citations were double checked for accuracy.

Labor Perspective: California leads the nation in job growth

- California had a job growth rate of 3.1% in 2014 – adding jobs faster than the overall national rate of 2.3% in the same period.¹
- California's jobless rate fell more than any other states in the 24-month period ending in September 2014.
- California has created more than 15,000 job years with pay scale above \$70,000 over the past five years in the utility-scale solar sector alone.²
- California's 35 year history with energy efficiency shows that 50 new jobs are created for every job foregone in the oil, gas and central electric power sector.³
- In 2014, California's advanced energy sector employs 431,800 Californians – an increase of 5 percent over 2013, about three times the national job growth rate of 1.6 percent. Growth in the sector is estimated at 17% for 2015⁴
- In 2014, the California **solar industry grew 15.8%, adding nearly 7,500 new jobs**. And this year, it's expected to produce an even higher number of jobs—some **9,400 solar workers**.⁵
- California surpassed Texas in job growth in 2014, adding **498,000 jobs** between January 2014 and January 2015, **creating more positions than any other state in the nation**.⁶
- California has the **largest advanced energy industry in the United States** – and it just keeps growing⁷, set to reach **500,000 workers across 40,000 companies** in 2015.⁸
- AB 32 creates **quality jobs through the investment of cap and trade proceeds**, spurring growth in clean energy and contributing to:
 - o More affordable housing, facilitating construction jobs across the state, as well as affordable living opportunities for working families.
 - o Inter-city and high-speed rail that creates demand for well-trained, high-skill union workers, beginning in the Central Valley where unemployment remains high.
 - o Increased recycling and composting facilities that create more jobs and reduce pollution.
 - o Better public transit and more frequent bus services, providing ways for Californians to get to work without relying on personal vehicles.
 - o California is reshaping and expanding our existing jobs to be cleaner and greener. Jobs in **building maintenance and transit services** are key players in reducing greenhouse gas and other pollutants that impact communities.⁹

“CA's pioneering policies have added up to opportunity – opportunity that didn't happen by accident.”
Mike Mielke, Silicon Valley Leadership Group

Economic Growth Performance While Lowering GHG Emissions:

California's pioneering clean energy and climate law (AB 32) is advancing a strong economy and healthy environment – proof that a thriving, low-carbon economy can work together. AB 32 encompasses the state's collective efforts to reduce carbon pollution and transition to a clean, efficient economy. After nearly a decade in effect, it's a powerful engine of innovation, creating a vibrant clean economy, growing efficiency savings for business, and leveling the playing field for renewable energy to compete fairly with polluting sources of energy.

AB 32 is helping make California's economy more productive

- California's GDP has increased at a much faster rate than its energy use over the past 20 years and **energy productivity has increased 36% since 1990**.¹⁰
- California produces **1.7 times as much economic activity** as the rest of the U.S. from the same amount of energy.¹¹
- California's economy is the **world's seventh largest** and continues to grow – expanding in 2014 by almost every measure.¹²
- Contrary to fears that AB 32 would stifle manufacturing – **California leads the nation with the highest total manufacturing output of any state**¹³, producing \$239 billion.¹⁴
- Prior to 2010, before AB 32 began having positive economic impacts, the manufacturing sector was in a state of decline for a decade.¹⁵
- The U.S. has a **15% share of the trillion-dollar global clean energy market**¹⁶ and California is the epicenter of the U.S. clean tech market.
- California **dominates every clean tech index category**, including clean electricity generation, electric/hybrid vehicle adoption, green buildings, policy outlook, solar power capacity, and venture capital.¹⁷
- California continues to lead in both solar employment and installed solar capacity. Of the 54,690 solar workers in the state, nearly 60% are found in the installation sector. By the end of 2015, California is expected to account for just over 64,000 solar workers.¹⁸
- Analysts forecast a **70% gain for California clean tech companies** in the next 12 months.¹⁹
- California's commitment to clean technology is resulting in more jobs, with a **median rate of employee growth in clean tech jobs of 7.5%** in the past two years, **compared with 2.3%** for similar U.S. companies.²⁰
- **\$27 billion of venture capital** and other financing has flowed into California clean technology companies since 2006 – in part because policies like AB 32 are driving demand for renewable energy and energy efficiency, shifting the emphasis of corporate investors.²¹
- California clean tech companies account for the **most venture capital of any state**, with **\$1.6 billion** flowing into the sector in 2013 alone, the same year AB32 auctions began yielding revenues from auctions, suggesting AB32 leveraging effect.

AB32 Investments for CA

- 2014-15 = \$832 million
- 2015-16 = more \$1.7 billion
- Min. 25% to disadvantaged

Energy efficiency brings savings to small business

- AB 32 has resulted in energy efficiency measures that **save California consumers and businesses billions** on utility bills.
- Small businesses especially benefit from energy efficiency policies with rebates, incentives and other programs that allow them to **lower their energy costs significantly**.²²
- California state economists suggest small service businesses – half of all small businesses in the state – will see **\$4.6 billion in increased revenues from efficiency**. That's an extra **\$1,115 per employee** for California small service businesses.²³

The economic advantage of carbon markets

- Business knows best how to adapt and be competitive, so AB 32's cap and trade program is an excellent **free market tool** to let businesses do what they do best, reducing carbon emissions at the least cost.
- By putting a price on carbon, AB 32 effectively prices inefficiency and waste, **incentivizing conservation and efficiency**. As a result, California businesses are more efficient and innovative.
- A carbon market helps **drive economic activity** including hundreds of millions of dollars in private investment in California.

The next industrial revolution – fueled by thoughtful investments from a cap and trade program – can **transform our energy system** to one that’s efficient, innovative, affordable, and diverse.

Where is Oregon? Will we choose to move into the future or be stuck in the past?

AB32 is endorsed by labor organizations such as:

Richard Barrera, Secretary-Treasurer, San Diego and Imperial Counties Labor Council, AFL-CIO
BlueGreen Alliance
Communications Workers of America (CWA) – District 9
Communications Workers of America (CWA) – Local 9003
Benigno Delgado, Associate Director, Homecare Division, SEIU UHW
IBEW Local 569
United Food and Commercial Workers Western States Council
Utility Workers Union of America, AFL-CIO (UWUA)

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- ² “Environmental and economic benefits of building solar in California,” Peter Philips, November 10, 2014, Donald Vial Center on Employment in the Green Economy, Institute for Research on Labor and Employment, University of California, Berkeley, <http://www.irl.berkeley.edu/vial/publications/building-solar-ca14.pdf> (pp. 31,32)
- ³ Energy Efficiency, Innovation, and Job Creation in California. David Roland-Holst, 2008. http://are.berkeley.edu/~dwrh/CERES_Web/Docs/UCB%20Energy%20Innovation%20and%20Job%20Creation%2010-20-08.pdf (p.5)
- ⁴ AEE News, Dec 4, 2014 <https://www.aee.net/articles/california-has-largest-advanced-energy-industry-in-u-s-with-over-430-000-workers-according-to-first-ever-state-employment-survey>.
- ⁵ California Advanced Energy Survey, Advanced Energy Economy Institute, Dec 2014. <http://info.aee.net/ca-jobs-report-14>
- ⁶ Chris Jennewein, Times of San Diego, March 17, 2015.
- ⁷ Aee Institute, Dec 4, 2014. <http://www.prnewswire.com/news-releases/california-has-largest-advanced-energy-industry-in-us-with-over-430000-workers-according-to-first-ever-state-employment-survey-300004990.html>
- ⁸ Ibid
- ⁹ CAdelivers Jobs Fact Sheet Final 4915pdf, 2015. <http://www.cadelivers.org/wp-content/uploads/2014/11/CAdelivers-JobsFactSheet-Final4915.pdf>
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- ¹¹ Ibid p13..
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- ¹⁴ “Best State for Business? Yes, California”. Matthew A. Winkler, Bloomberg View. 12 March, 2015. <http://www.bloombergsview.com/articles/2015-03-12/best-state-for-business-yes-california>
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- ¹⁶ “Governors Wind Energy Coalition, Umair Irfan, March 11, 2015. <http://www.governorswindenergycoalition.org/?p=12084>
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- ²⁰ <http://www.bloombergsview.com/articles/2015-03-12/best-state-for-business-yes-california>
- ²¹ <http://next10.org/sites/next10.huang.radicaldesigns.org/files/2014%20Green%20Innovation%20Index.pdf>
- ²² “The Economic Impact of AB 32 on Small Business: An Update,” The Brattle Group, October 2010
- ²³ Economic Opportunity for Small Business Under AB 32. http://www.smallbusinessmajority.org/energy/index_CA_AB-32.php