

## California's Clean Cars Program Stimulates the Economy and Generates Jobs

*California's Clean Cars Program is set to bring the next generation of clean, low-polluting cars and light trucks into the driveways of California's families. The California Air Resources Board will vote on important updates to the Clean Cars Program in January 2012.*

Californians don't have to choose between a robust economy and clean cars – they can enjoy both. The state's established success in the clean-tech sector provides a solid foundation for a promising clean cars industry, and new studies point to a bright economic future stimulated by strong standards.

### Supporting California Companies

- California is a global venture capital leader in electric vehicles, attracting 69 percent of the world's VC investment in the first half of 2011.
  - California took in \$467 million in global EV VC investment
  - California and Michigan are the top patent holders for new EV technology in the United States.<sup>i</sup>
- More than 200 California companies are active in the clean transportation sector.<sup>ii</sup>
- California is home to many of the largest electric vehicle charging service providers; hydrogen fueling station developers; emerging plug-in electric carmakers; advanced automotive designers; electric drive, battery and high efficiency fuel cell systems component suppliers; and developers of software and smart grid solutions.
- Tesla Motors has reopened a portion of the shuttered NUMMI automotive production plant in Fremont where it is building its Model S electric car. The company currently employs 1,400 worldwide, a figure expected to double by year's end 2012, and double again by year's end 2013.<sup>iii</sup>
- The Clean Cars Program will help ensure market certainty and foster market growth, enabling these innovative companies and others to flourish.

### California Clean Cars Program is Four Different Standards

1. Low Emission Vehicle-Smog (LEV III-Smog): This program will make sure new cars and light trucks produce fewer emissions that contribute to smog and harm public health. (The updated rules will apply to vehicles starting in 2014.)
2. Low Emission Vehicle-Greenhouse Gas (LEV III-GHG): This program will make sure new cars and light trucks produce fewer emissions that contribute to climate change. (The updated rules will apply to vehicles starting in 2017.)
3. Zero Emission Vehicle (ZEV): This program will make sure that the newest, gasoline-free, ultra-clean vehicle technologies – such as electric and hydrogen fuel cell cars – are brought to California. (The updated rules will apply to vehicles starting in 2015.)
4. Clean Fuels Outlet: This program will make sure we have the infrastructure – including hydrogen for fuel cells and public charging for electric vehicles – in place to support clean, alternative fuel cars.

## **Growing the Green Economy**

Clean transportation is a sub-sector of California's clean-tech economy.

- Our state's green economy, the bright spot in these challenging economic times, grew 56 percent from 1995 to 2009 even though total jobs expanded only 13 percent.<sup>iv</sup>
- From 2008 to 2009, green jobs continued to grow at three times the rate of overall job growth – 3 percent to 1 percent.<sup>v</sup>
- The California Air Resources Board estimates the proposed clean cars regulations would increase the state's economic output \$8 billion (0.2 percent) in 2025, and \$14 billion (0.3 percent) in 2030.<sup>vi</sup>

## **Benefits to All Californians**

The latest economic forecasts indicate policies that put cleaner, more fuel-efficient cars, trucks and SUVs on California's roads will drive consumer savings, spark job creation, and spur economic growth.

- The higher the standards the more positive the results in terms of job creation, household savings, Gross State Product, and emissions reductions.<sup>vii</sup> That's because, when families and businesses save money on cleaner cars, they spend the extra cash on goods and services, and that ultimately creates more jobs, including in-state jobs that cannot be outsourced.
- California's Clean Cars Program, together with federal emissions and fuel economy standards of 60 mpg, could lead to 167,000 new jobs in the state by 2025.<sup>viii</sup>

## **Strengthening California's Competitive Edge**

In addition to the state's thriving private sector contributions, its extraordinary academic institutions are also devoting resources to clean cars and clean-tech, creating an unrivaled intellectual ecosystem, infrastructure and test bed. Thanks to these partnerships and to innovative vehicle policies and standards, California could become an even bigger exporter of intellectual property and products, further strengthening our state's competitive advantage at a time of increasing international competition.

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<sup>i</sup> Next 10, December 2011, *Powering Innovation: California is Leading the Shift to Electric Vehicles from R&D to Early Adoption*, [http://next10.org/next10/publications/powering\\_innovation.html](http://next10.org/next10/publications/powering_innovation.html).

<sup>ii</sup> Hall, J., 2009, California's Clean Transportation Technology Industry, CALSTART, [http://www.calstart.org/Libraries/Policy\\_Documents/CA\\_Clean\\_Transportation\\_Technology\\_Industry\\_report\\_-\\_2009.sflb.ashx](http://www.calstart.org/Libraries/Policy_Documents/CA_Clean_Transportation_Technology_Industry_report_-_2009.sflb.ashx).

<sup>iii</sup> <http://www.sacbee.com/2012/01/06/4167335/tesla-accelerates-hiring-even.html#storylink=misearch>.

<sup>iv</sup> Henton, D., Next 10, *Many Shades of Green: Diversity and Distribution in California's Green Jobs*, [http://www.next10.org/next10/publications/green\\_jobs/2011.html](http://www.next10.org/next10/publications/green_jobs/2011.html).

<sup>v</sup> Ibid

<sup>vi</sup> California Air Resources Board, December 2011, *Initial Statement of Reasons for Proposed Rulemaking... [on Advanced Clean Cars]*, [http://www.arb.ca.gov/msprog/clean\\_cars/clean\\_cars.htm](http://www.arb.ca.gov/msprog/clean_cars/clean_cars.htm).

<sup>vii</sup> Roland-Holst, D., May 2011, *Driving California's Economy: How Fuel Economy and Emissions Standards Will Impact Economic Growth and Job Creation*, [http://next10.org/next10/publications/vehicle\\_efficiency.html](http://next10.org/next10/publications/vehicle_efficiency.html).

<sup>viii</sup> Calculated from Roland-Holst, D. May 2011, *Driving California's Economy: How Fuel Economy and Emissions Standards Will Impact Economic Growth and Job Creation*. [http://next10.org/next10/publications/vehicle\\_efficiency.html](http://next10.org/next10/publications/vehicle_efficiency.html)