



AB 32 and You: How California's Global Warming Solutions Act Delivers Smart Solutions for Californians

California is leading the country in its effort to curb global warming with the implementation of the Global Warming Solutions Act of 2006 (AB 32). In December 2008, the California Air Resources Board unanimously adopted the state's plan outlining steps to a cleaner and more prosperous future. This visionary plan, the most comprehensive of its kind, will recharge California's economy, improve public health and air quality, help Californians use energy more efficiently, and make the state the hub of clean energy technology development—all while curbing global warming.

For more information, please contact **Audrey Chang** or **Kristin Grenfell** at (415) 875-6100.

Avoiding the High Cost of Inaction

Putting California's plan to curb global warming into action is far cheaper than the cost of doing nothing. We are already feeling the impacts of global warming, which left unabated could cost California as much as \$47 billion every year in direct damages, putting at risk trillions of dollars of real estate, infrastructure, and other assets if no action is taken.¹ AB 32 requires reducing California's global warming pollution by about 30 percent from business-as-usual forecasted levels in 2020, and approximately 15 percent from today's levels, reflecting a reduction in annual average emissions per person from about 14 tons today to about 10 tons in 2020.²

Investments in Clean Energy Will Strengthen California's Economy

Investments in California's clean technology industry will create new jobs and recharge the state's economy. California already attracts more than half of the nation's clean technology venture capital investment, which increased from \$484 million in 2005 to \$3.3 billion in 2008.³

Investments in energy efficiency and renewable energy provide up to four times as many jobs as investments in fossil fuel-fired power plants or oil resources.⁴ For every \$100 million invested in clean tech, 2,700 jobs are created.⁵ In total, California's efforts to cut global warming pollution will add approximately 123,000 jobs by 2020.⁶

The average Californian household sends more than \$2,500 out of the state each year to buy fossil fuels, the primary cause of global warming pollution. By curbing our reliance on fossil fuels through increased deployment of energy efficient technologies and a shift to clean energy sources, we can bring home a portion of that \$30 billion and invest it in California businesses.

Greener Homes and Offices Will Save Money

■ **Greater efficiency will lower energy bills.** Improvements in energy efficiency during the past 35 years have already saved Californians approximately \$1,000 per person.⁷ Additional investments in energy efficiency will further reduce energy use and help lower energy costs by about



www.nrdc.org/policy

April 2009

© Natural Resources Defense Council

Investments in energy efficiency and renewable energy provide up to four times as many jobs as investments in fossil fuel-fired power plants or oil resources.

AB 32 and You: How California's Global Warming Solutions Act Delivers Smart Solutions for Californians

\$400 to \$500 annually for the average household by 2020.⁸ And customers can receive rebates from their local utility of as much as \$600 for more efficient appliances, lights, furnaces, and air conditioners.

■ **Increased conservation efforts will reduce water utility bills.** California could invest \$100 million to \$500 million annually in water efficiency and conservation to further improve water quality and supply reliability and lower Californians' water and energy bills.

■ **More renewable energy will be used to power our homes and businesses.** California's plan calls for one-third of the state's electricity to come from renewable sources by 2020. Rebates for residential solar panels will help homeowners generate clean electricity or hot water without burning fossil fuels.

■ **Greener buildings will improve health and pay for themselves.** Many of the same design features that increase building energy efficiency, such as natural lighting and improved airflow, also contribute to better air quality and health, reducing sick days, increasing worker productivity, and improving student test scores. Because the average green building can achieve water and energy savings of more than 30 percent when compared to a conventional building, green buildings more than pay for themselves over their lifetimes.⁹

Creating Sustainable Communities and Expanded Transportation Choice Will Improve Californians' Quality of Life

Policies that encourage more housing choices near public transportation and jobs through new mixed-use development—and the smart redevelopment of existing neighborhoods—will reduce the distance Californians must travel for work and to access basic needs such as groceries and childcare. Increased funding for public transportation and better coordination of carpooling, car-sharing, and telecommuting will bring more reliable and convenient travel options. Programs such as pay-as-you-drive insurance could provide opportunities for Californians who choose to reduce their driving to save even more money.

In addition, a new high-speed rail system will connect Northern and Southern California with a world-class, low-emissions travel option.

Californians will also have greater options when choosing new cars and trucks and the fuels to run them. Low-carbon fuels such as biofuels and electricity will help reduce oil dependence and the risks related to fossil fuel supply disruptions and price shocks. The next generation of alternative-fuel and fuel efficient vehicles will cost less to own and save Californian drivers more than \$12 billion in 2020 through lower operating costs. The average buyer of a new, fuel-efficient vehicle will save \$360 per year.¹⁰

Innovative Regulations Will Improve Air Quality and Public Health

Strategies to cut global warming pollution will improve both California's environment and public health by stimulating development of new technologies and processes for reducing pollution. Policies in California's plan to curb global warming that also reduce air pollution, smog, and toxic pollutants will prevent an estimated 780 premature deaths and thousands of other negative health impacts, saving \$2.2 billion in health costs in the year 2020.¹¹

Roadmap for a Stronger, Safer, and Healthier California

California's plan for implementing AB 32 offers cutting-edge solutions to the challenges of global warming and fossil fuel dependence and serves as a model for the rest of the nation. The state's vision for a green energy economy will boost our state's economy while providing residents with well-paying jobs in important industries. Our businesses will produce the best and most innovative clean energy technologies in the world. Our residents will enjoy lower energy bills and better health in greener homes and offices, with more affordable and flexible choices in their daily lives. California's plan offers excellent solutions to curbing global warming while making California an even better place to live.

For more complete details on the AB 32 Scoping Plan, visit <http://www.arb.ca.gov/cc/cc.htm>.

¹ Kahrl, F. and D. Roland-Holst, November 2008, *California Climate Risk and Response*, p. 5.

^{2, 6, 8, 10, 11} California Air Resources Board (CARB), December 2008, *AB 32 Scoping Plan*.

³ Cleantech Group, 2009, *Cleantech Investment Monitor: 2008 Annual Review and 4Q08 Quarterly*, p. 48.

⁴ Center for American Progress and Political Economy Research Institute, September 2008, *Green Recovery: A Program to Create Good Jobs and Start Building a Low-Carbon Economy*, p. 11; and The Institute for America's Future and The Center on Wisconsin Strategy, January 2004, *New Energy for America: The Apollo Jobs Report: For Good Jobs & Energy Independence*, p. 8.

⁵ Environmental Entrepreneurs and Cleantech Venture Network, May 2006, *Creating Cleantech Clusters: 2006 Update; How Innovation and Investment Can Promote Job Growth and a Healthy Environment*, p. 10, available at <http://www.e2.org/jsp/controller?docId=17584>.

⁷ RAND, 2000, *The Public Benefit of California's Investment in Energy Efficiency*, 2000, p. xiv.

⁹ Kats, G., October 2003, *The Costs and Financial Benefits of Green Buildings: A Report to California's Sustainable Building Task Force*.

