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Cap-and-Trade Program: Key Component of California's Path to Clean Energy under AB 32

CALIFORNIA'S GLOBAL WARMING SOLUTIONS ACT (AB 32)

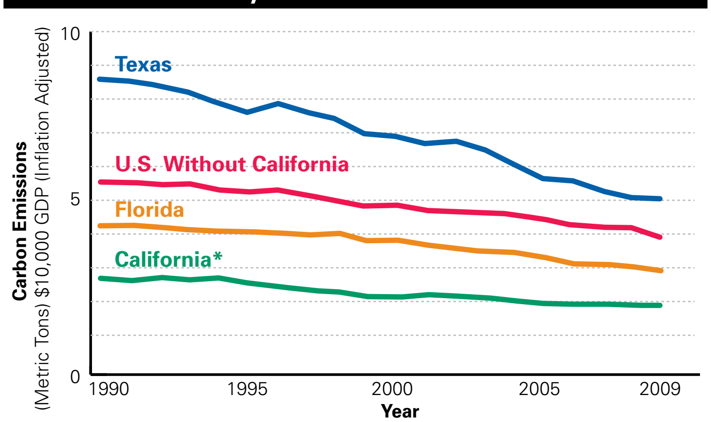
Recognizing that California's economic well-being, public health, and natural resources are threatened by climate change, the state Legislature passed Assembly Bill (AB 32) in 2006 to commit California to reducing greenhouse gas emissions to 1990 levels by 2020—roughly a 20 percent reduction. AB 32 directed the California Air Resources Board (ARB), a regulatory agency within the state's Environmental Protection Agency, to develop a blueprint—known as the Scoping Plan—for achieving AB 32's goal of reducing carbon pollution statewide. Released in 2008, the Scoping Plan lays out a comprehensive suite of direct emission reduction measures across all sectors of the economy, backed up by a hard cap to ensure compliance. California is on pace to meet AB 32's reduction target, but policymakers must remain diligent as new measures come into effect and opponents step up their attacks, which aim to eliminate some AB 32 programs (such as the low carbon fuel standard) and weaken others (such as cap-and-trade).

AB 32 DELIVERS ENVIRONMENTAL, ECONOMIC, AND PUBLIC HEALTH BENEFITS

California has a track record of implementing pioneering clean energy policies that provide direct economic and public health benefits to the state's residents. In fact, as a result of energy efficiency policies stretching back to the 1970s, California produces twice as much economic output per kilowatt hour (kWh) and pays 25 percent less on electric bills than the rest of the country—freeing up more money for businesses and consumers to spend on other goods and services.

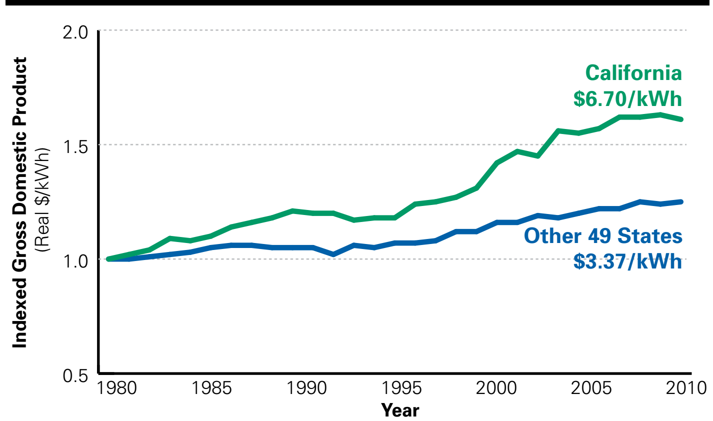
ARB's peer-reviewed economic analysis of the Scoping Plan confirms that AB 32 will continue this historic legacy. Achieving AB 32's goals will not only have *no negative effect* on California's economy in 2020, but it will actually *save consumers money* by diversifying fuel choices and increasing energy efficiency throughout the economy.[1] Meeting AB 32's targets will also provide critical public health benefits by reducing the state's dependence on burning fossil fuels, which produce nitrogen oxides and particulate matter that contribute to thousands of premature deaths and hospitalizations each year, making California home to some of the worst air pollution in the nation.[2]

The Carbon Economy in California and Other States



Source: The Cleantech Group (2011); Next 10, "California Green Innovation Index" (2012), "Many Shades of Green," (2012).
*GHG emissions data that allows for state-level comparison is from the Energy Information Administration and is limited to carbon emissions (fossil fuel combustion). Therefore, data represented here differs from analyses represented in other charts of total GHG emissions for California. Data source: Energy Information Administration, U.S. Department of Energy; Bureau of Economic Analysis, U.S. Department of Commerce. Analysis: Collaborative Economics.

California's Gross Domestic Product per Kilowatt Hour (kWh) Compared to Other States



Source: EIA State Energy Data System (SEDS): 1960-2010.

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CAP-AND-TRADE PROGRAM: AN INTEGRAL PIECE OF CALIFORNIA'S CLEAN ENERGY BLUEPRINT

The Scoping Plan calls for a range of greenhouse gas reduction strategies, including a cap-and-trade program designed to limit overall emissions while also controlling the costs of reductions. California's cap-and-trade program will limit greenhouse gas emissions from California's major emitters (small businesses are not directly regulated under the program) and require polluters to obtain permits (called "allowances") for emissions beginning in 2013. By putting a price on pollution, the program creates an incentive for companies to adopt cleaner technologies and move the California economy away from high-greenhouse gas emitting activities. Fostering competition to produce energy as clean and efficiently as possible will drive innovation, and draw investment and new companies to California, which already captures more cleantech investment than the rest of North America combined, and has made the clean energy sector the fastest growing source of employment in California (growing ten-times the statewide average).[3]

FLEXIBLE PROGRAM DESIGN MINIMIZES COSTS AND FREES UP REVENUES TO SMOOTH TRANSITION

The cap-and-trade program has been praised as the best designed program of its kind anywhere in the world.[4] The program adheres to AB 32's requirements to encourage early action and maximize benefits to California while mitigating leakage risk: the possibility that businesses will be driven out of business by competition with out-of-state businesses that do not face the same emissions requirements. To guard against the risk of leakage, the program allocates emission allowances to industries on an output-based, updating basis, which rewards facilities with free allowances only if they keep production in-state. The proportion of allowances allocated freely to industrial sources ramps down gradually over the course of the program to provide sufficient transition time for sources to adjust to carbon pricing and implement energy- and carbon-saving strategies. The program also provides protection for businesses and consumers by building in multiple cost-containment mechanisms that help ensure allowance prices remain at reasonable levels while maintaining the environmental integrity of the program.[5]

ARB will also auction a portion of emission allowances. Auctions will take place quarterly, and emitters as well as voluntary participants may place bids to buy allowances. This gives participants regular opportunities to make sure they have enough allowances to cover their emissions, and it ensures a transparent price signal as each quarterly auction lets both participants and consumers know the current price for allowances.[6] Allowances are equally valuable whether they are bought on the market, in an auction, or received for free. Auctioning ensures that emitters have to pay for their allowances, thus preventing industries from getting an unfair windfall by passing through to consumers the costs of allowances that they actually received for free, as happened in the European Union. This and other lessons learned from other cap-and-trade programs, including the European Union's Emission Trading System (EU ETS) and the Northeast's Regional Greenhouse Gas Initiative (RGGI), have shown auctioning is vital to a well-functioning market and to ensure revenues are available to mitigate costs where they arise. In the electricity sector, allowance value credited back to retail customers can offset *all* of the costs from transitioning to cleaner sources of electricity as a result of the cap-and-trade program.[7]

AUCTION REVENUES PROVIDE CRITICAL OPPORTUNITY TO ADVANCE SUCCESS OF AB 32

Revenues generated from the sale of emission allowances provide a critical opportunity to demonstrate smart climate policy can be achieved without detriment to the economy. Depending on allowance prices, auction revenues may range anywhere from $500 million to more than $1 billion in the first year of the program. Legal restrictions will require that revenues be spent only on reducing greenhouse gas emissions and advancing the purposes of AB 32. Within those bounds, auction proceeds will help make the benefits of clean energy available to all Californians, facilitate compliance strategies for in-state businesses, and keep California on the path to achieve its long-term climate objectives.

In the RGGI states, auction revenues have already generated more than $1 billion in energy savings for customers by financing increased investments in efficiency and contributed $1.6 billion to economic growth in the region.[8] The same opportunity is available here in California. Ensuring the success of the first auction, ensuring the auction revenue is wisely spent, and defending the goals of AB 32 will keep California on track to reduce carbon emissions, to improve our state's air quality and protect public health, and to maintain California's position as a global leader in the development and realization of solutions to climate change.

1 The Cleantech Group 2011; Next 10, "California Green Innovation Index" (2012), "Many Shades of Green," 2012.
2 American Lung Association in California, 2010, http://www.lung.org/associations/states/california/assets/pdfs/2010-american-lung.pdf.
3 ARB, "Updated Economic Analysis of California's Climate Change Scoping Plan," 2010.
4 Dallas Burtraw, "A Primer on the Use of Allowance Value," 2012.
5 CARB Workshop to Discuss Cost Containment and Offsets presentation, "Cost Containment Options in a California Cap-and-Trade Program,"June 22, 2010.
6 CARB Auction Notice: California Cap-and-Trade Program Greenhouse Gas Allowance Auction on November 14, 2012, issued on September 14, 2012.
7 Dallas Burtraw and Mary Jo Szambelan, "For the Benefit of California Electricity Ratepayers," 2012.
8 Analysis Group, "Economic Impacts of RGGI on Ten Northeast and Mid-Atlantic States," 2011.