

Toward a New Climate Network

Transatlantic Solutions for a Low Carbon Economy

Transatlantic Climate Policy Group



Edited by the Heinrich Böll Stiftung
Washington, September 2009
© All rights reserved

Editor: Till Kötter. For questions or comments, contact till@boell.org
Design: Ines Hilde
Print: Todd Allen Printing

For more information on the Transatlantic Climate Policy Group,
please visit our web site: www.boell.de/climate-transatlantic/

Heinrich Böll Stiftung

Washington D.C. Office

1638 R Street, NW
Washington, DC 20009
United States
T +1 202 462 7512 **F** +1 202 462 5230
www.hbfus.org

Berlin Office

Schumannstr. 8
10117 Berlin
Germany
T +30 285 34 0 **F** +30 285 34 109
www.boell.de

Brussels Office

Rue d'Arlon 15
B-1050 Brussels
Belgium
T +32 2 743 41 00 **F** +32 2 743 41 09
www.boell.eu



This program has been made possible by funding from the European Commission.
The European Commission is not responsible for the content of the program.

California's Climate Plan

A Blueprint for International Action

MARY NICHOLS
CHAIRMAN OF THE CALIFORNIA AIR RESOURCES BOARD

“California has worked with partners to forge a new path in the international realm for states, provinces, and regions [...] to play an increasingly important role as innovators, drivers, and implementers of climate policies.”

On May 19, 2009 America took a historic step when President Obama stepped up to the podium in the Rose Garden at the White House and announced that “for the first time in history, we have set in motion a national policy aimed at both increasing gas mileage and decreasing greenhouse gas pollution for all new trucks and cars sold in the United States of America.” The U.S. national standards, which require a reduction in greenhouse gas (GHG) emissions of 30% from passenger vehicles by 2016, reflected regulations that California had passed in 2005. President Obama acknowledged the role the Golden State had played in shaping national policy. “California,” he declared, “has led the way on this as they have in so many other efforts to protect our environment.”¹

California’s leadership is born of nearly 50 years of developing and implementing policies and strategies aimed at creating a healthier environment while growing a healthy economy. Throughout the 1960s and 70s, California pioneered environmental policy to clean up smog and other air pollution from vehicle and industrial facilities, policies that were eventually adopted nationally. As a result of cost-effective efficiency standards for appliances and buildings, and by decoupling utility

1 http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-national-fuel-efficiency-standards/

profits from sales so that utilities would have a financial incentive to invest in energy efficiency, California has kept per capita electricity consumption flat for nearly 30 years while that of the rest of the country has increased by 70%. California's energy productivity is also 68% higher than that of the rest of the country.² Now as the United States, and the world, move forward to tackle the challenge of climate change, California continues to play a significant leadership role in developing and implementing the policies and strategies to cost-effectively and efficiently reduce greenhouse gas emissions.

The confluence of these defining conditions is expressed in California's comprehensive and innovative Climate Change Scoping Plan that incorporates both market mechanisms and other regulatory measures. The approach itself and many of the specific measures are easily transferable to other states, to the nation as a whole, as well as into the international sphere.

Evaluation

A comprehensive plan

To appreciate what California has to offer, it is necessary to first understand the plan it developed under the pioneering legislation signed by Governor Schwarzenegger in 2006. Known as the Global Warming Solutions Act of 2006 (or "AB 32", its legislative name), the law requires the California Air Resources Board (ARB), working with other relevant California state agencies, to develop a comprehensive "scoping plan" to serve as the roadmap for the achievement of its goals: the reduction of greenhouse gas emissions to 1990 levels by 2020.³ That plan, the product of scores of public meetings and thousands of public comments, was adopted by the Air Resources Board in December 2008. To develop the scoping plan, California agencies worked closely with the public, non-governmental organizations, the business sector, academia, and local governments to find solutions which would effectively and cost-efficiently reduce GHGs across the state economy. California drew upon experience from its long history of cleaning up the air with well-crafted performance standards that had made California's vehicles and industry the cleanest in the nation and cleared the skies of its infamous smog. California also looked to successfully implemented cap-and-trade programs, such as the USEPA Acid Rain Program in the northeastern United States, the emerging Regional Greenhouse Gas Initiative (RGGI), and the European Emissions Trading System, and established a Market Advisory Committee to provide recommendations on the design of such a program.⁴ The conclusion of this investigation was that traditional programs and regulations could work in a complementary fashion within and beside a cap-and-trade program, providing a new paradigm for a comprehensive economy-wide program to reduce GHGs.

The result is an innovative approach to sector-wide GHG emission reductions. The cap-and-trade program establishes an enforceable limit on overall emissions, a declining cap that ensures continued reductions, and provides a price signal for current and future investment. The program is complemented with sector-specific measures such as mandated use of renewable sources for electricity generation and low carbon fuels for transportation. These sector-specific regulations are designed to achieve GHG reductions and provide the incentives for efficiency and clean energy where a price signal alone from cap-and-trade may not be sufficient to overcome market failures. In order to provide a snapshot of California's policy approach, we will highlight three measures that California is adopting for the transportation sector, which currently accounts for 40% of California's greenhouse gas emissions.

2 Measured as the ratio of energy consumed (inputs) to GDP (economic output), growth in energy productivity equates to more dollars of GDP generated per unit of energy consumed. (page 21, http://www.next10.org/pdf/GII/Next10_GII_2009.pdf)

3 <http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>

4 <http://www.energy.ca.gov/2007publications/ARB-1000-2007-007/ARB-1000-2007-007.PDF>

California's Clean Car law

The first is California's Clean Car law. Passed in 2002, it contains regulations passed by the board in 2005 and has now become the basis for the national standards announced by President Obama in May of this year. By 2016 automakers will achieve a 30% reduction in GHGs largely through evolutionary improvements in conventional technology, many of which are already incorporated in cars sold in the U.S. and Europe today. To achieve the 2020 goals of reducing GHG emissions to 1990 levels, automakers will need to sell an increasing quantity of advanced vehicles, including advanced hybrids, plug-in hybrids, and fuel cell and battery-electric vehicles. The scoping plan also identifies measures to reduce GHGs from the transportation sector by addressing emissions associated with goods movement, including medium and heavy duty trucks and port operations.

LCFS: A performance standard for fuels

California's Clean Car Law works hand in hand with the nation's first Low Carbon Fuel Standard (LCFS). The LCFS requires all fuel providers who sell in the state to reduce the average life-cycle carbon intensity⁵ of their fuel supply by 10% by 2020. Fuel providers can meet the standard by 1) reducing the carbon intensity of their current fuel supplies, 2) increasing the quantity of low carbon fuels in their product mix, and/or 3) buying credits from other sellers of low carbon fuels. Based on scenarios conducted by ARB, we expect that the standard will be met initially by blending increasing quantities of low carbon liquid biofuels and then, as plug-in and hydrogen vehicles become available, by an increasing quantity of electricity and hydrogen within the vehicle fleet as a whole.

In addition to the GHG benefits, the LCFS takes a firm step to break our economy's dependence on petroleum. By establishing a flexible performance standard, the LCFS provides an incentive to industry to invest in the low carbon fuels they estimate to be most successful. Coupled with other policies supporting advanced vehicle technologies, the standard sends a clear signal that there will be a durable and increasing demand for low carbon fuels. As a result, makers and distributors of electric, flex-fuel, hydrogen, and other alternative cars and fuels will no longer have to worry that volatile oil prices will pull the economic rug out from under their investments, dooming us to a continued and even greater dependency on oil. The LCFS was designed in such a way that it can be easily transferred to other state and national jurisdictions. In fact, it is already being considered for adoption by twelve other U.S. states and two Canadian provinces. California is also working with policymakers in Europe who are implementing the European Fuel Quality Directive, a law with similar requirements for reduced life-cycle GHGs.

A smart vision for growth with SB 375

Even with cleaner cars and fuels, the prospect of continued growth in vehicle travel threatens to erode most of the gains that we can achieve through technology alone. Therefore California is also pursuing strategies that enhance mobility and reduce the need for travel through better transportation and land use planning. For more than half a century, California has evolved similarly to the rest of the country, with housing built far from jobs and services, inquiring a growing dependence on vehicle travel and its concomitant pollution, congestion, and petroleum consumption. To address this challenge all the while preserving personal choice, California's policymakers realized that they had to realign the incentives of the current system, which effectively encourages "sprawl," to one that encourages well-designed communities that place housing, jobs, services, and recreation nearby and that offers transportation choices including transit, biking, and walking so that people can choose to drive less.

5 The life cycle for biofuels, for example, requires that we take full account of all emissions associated with land use change, cultivation, harvesting, conversion, and transport.

Changing the sprawl paradigm was precisely the goal of SB 375, a new law signed into effect by Governor Schwarzenegger in 2008 that directs ARB to set regional GHG targets for metropolitan planning organizations (MPOs) and that implements a coordinated approach to transportation and land use planning as well as incentives for local developers. An ARB-appointed committee of experts is currently working on a report, due later this year, that will provide guidance on setting regional targets, including policies and strategies that could be implemented at the regional and local level to meet the targets.

SB 375 not only promises a new way of doing business for regional and local planning agencies, it will also result in greater mobility options and more livable, walkable towns and cities. Using regional greenhouse gas targets and strategies has applications outside of California, including in other states and in nations where the expansion of vehicle travel and sprawl now go hand-in-hand.

Challenges

Expanding benefits with regional and federal collaboration

The Clean Cars Law, LCFS, and SB 375 are all examples of how California is approaching the challenge of climate change. In addition to action at home, California is collaborating with our counterparts in other states, at the federal level, and internationally. California's collaboration with other U.S. states and international partners includes its participation in the Western Climate Initiative (WCI), a distinctive approach to regional coordination. The WCI is a collaboration of seven U.S. States and four Canadian provinces which have committed to identify, evaluate, and implement policies to tackle climate change at the regional level.⁶ The WCI partners are pursuing an economy-wide cap-and-trade program to reduce GHG pollution, spur growth in new green technologies, help build a strong clean-energy economy, and reduce dependence on foreign oil. This

“[A]s the United States, and the world, move forward to tackle the challenge of climate change, California continues to play a significant leadership role in developing and implementing the policies and strategies to cost-effectively and efficiently reduce greenhouse gas emissions.”

regional multi-sector cap-and-trade program is an important component of WCI's comprehensive regional effort to reduce GHG emissions by 15% below 2005 levels by 2020. It is the most comprehensive GHG-reduction strategy within the United States to date. When fully implemented in 2015, it will cover nearly 90% of greenhouse gas emissions in WCI partner states and provinces, including those from electrical power corporations, industry, transportation, and residential and commercial fuel use.

Founded on the extensive study of existing programs, economic analyses, and stakeholder consultations, the WCI cap-and-trade program is designed to lower the cost of achieving emission reductions and mitigate the economic impact on consumers and businesses. It will also spur growth in new green technologies, help build a strong clean-energy economy, and enhance North American energy security. This program is designed to stand alone, provide a model for, be integrated into, or be implemented in conjunction with programs that might ultimately emerge from the federal governments of the United States and Canada.

Action at the U.S. federal level is picking up and California is directly engaged with the U.S. Congress to provide input into the legislative process. The climate legislation recently passed by the

⁶ Other U.S. states, Canadian provinces, and Mexican states and tribes that are interested in collaborating to combat climate change at a regional level are participating in the WCI as observers.

U.S. House of Representatives—the American Clean Energy and Security Act of 2009—largely mirrors California’s approach of market mechanisms such as cap-and-trade combined with other complementary regulatory measures.⁷ Under this law, California and other states would be able to continue to develop and implement policies and programs that achieve further emissions reductions within their states.

Recommendations

International activity and opportunities

California’s involvement in the international arena extends to its charter membership in the International Carbon Action Partnership (ICAP), an organization comprised of public authorities and governments that have established or are actively pursuing carbon markets through mandatory cap-and-trade systems. ICAP provides a forum to share experiences and knowledge and will enhance the design of other schemes by sharing lessons-learned and working together to design future trading programs.

California has worked with partners to forge a new path in the international realm for states, provinces, and regions (i.e., sub-national governments) to play an increasingly important role as innovators, drivers, and implementers of climate policies. Starting in 2006 with an agreement between California and the United Kingdom, and progressing through other arrangements with states in China, Indonesia, Brazil, and Australia, California has developed and refined a specific role for these sub-national governments. This role particularly concerns areas that are uniquely suited for state and regional government implementation, such as energy efficiency, renewable energy, sustainable mobility, sustainable land use, low carbon technology deployment, and a range of mitigation policies including reduced emissions from deforestation.

In recognition of the fact that many of the most effective mitigation and adaptation policies will occur at the sub-national and local levels, California, with the cooperation of UNDP, The Climate Group, and other sub-national governments, have developed language regarding the recognition of the role of sub-national entities that is now part of the negotiating text to be discussed at the UNFCCC Conference of Parties (COP) in Copenhagen in December 2009.

In November 2008, Governor Schwarzenegger convened leaders from more than 50 states, provinces, and countries for the Governors Global Climate Summit⁸ to develop cooperative partnerships and promote collaborative actions needed to combat climate change. This forum provided the opportunity for states and provinces to partner to reduce emissions, grow their green economies, and influence the position their national governments take in the next global agreement on climate change. The summit resulted in a declaration committing the sub-national leaders to work together on policies to combat climate change as well as a memorandum of understanding between U.S., Indonesian, and Brazilian states to reduce emissions from deforestation. This year California will again host the summit, to be held in Los Angeles in late September and early October, where we will continue to expand on our network of sub-national collaboration to stimulate economic growth, reduce our dependence on fossil fuels, create green jobs, promote clean energy solutions, and reduce GHG pollution.

7 http://energyccommerce.house.gov/index.php?option=com_content&view=article&id=1697:house-passes-historic-waxman-markey-clean-energy-bill&catid=155:statements&Itemid=55

8 <http://site.governorsglobalclimatesummit.org/>

Conclusion

California, based on past experience and lessons from other states and countries, is pursuing a range of policies and programs to reduce greenhouse gas emissions in ways that are cost-effective and that transform our economy toward greater efficiency and cleaner energy technologies. To gain the full benefit of these policies, California will constantly look for ways to learn from and share these policies with other partners around the world. Our ability to solve the challenge of climate change will require that we all work together, collectively and collaboratively. In that effort, California looks forward to being a strong partner with Europe.



Mary D. Nichols

Chairman of the California Air Resources Board

Biography

Mary D. Nichols is Chairman of the California Air Resources Board. Appointed to this position by Governor Arnold Schwarzenegger in July 2007, she returns to the Air Board after having served 30 years as its Chairman under governor Jerry brown from 1978 to 1983. Nichols has devoted her entire career in public and private, not-for-profit service advocating for and developing sound policy to protect the environment and public health. In addition to her work at the Air Board, she has held a number of positions, including: Assistant Administrator for the U.S. Environmental Protection Agency's Air and Radiation program under the Clinton Administration, Secretary for California's Resources Agency from 1999 to 2003, and Director of the University of California, Los Angeles Institute of the Environment. Nichols holds a Juris Doctorate degree from Yale Law School and a Bachelor of Arts degree from Cornell University.



Heinrich-Böll-Stiftung
The Green Political Foundation

Berlin
www.boell.de

Brussels
www.boell.eu

Washington
www.hbfus.org

