



Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

California Air Resources Board
California Air Resources Board
1001 I Street
Sacramento, CA 95812

November 23, 2010

Chairman Nichols and Members of the Board:

The Union of Concerned Scientists congratulates you on the culmination of years of work to develop a regulation that puts in place the world's most comprehensive cap on global warming pollution. The cap and trade regulation currently before the Board is a major plank in a comprehensive package of policies that will enable our state to meet its global warming pollution reduction requirements while bolstering our booming clean energy economy, creating jobs, cleaning up smog-forming and cancer-causing air pollution, and maintaining strong economic growth statewide. Californians overwhelmingly support your efforts to enact policies like this to reduce global warming pollution and clean up our energy supply—as the recent election made very clear.

Scientists first noticed carbon dioxide buildup in the atmosphere and its effect on temperatures more than 100 years ago. Since then, the scientific foundation explaining why climate change is happening and what we can do to slow it down has been firmly established. Air bubbles trapped in polar ice cores show that over the last 10,000 years, carbon dioxide levels in the atmosphere were stable at around 255 to 285 parts per million. Starting with the industrial revolution, those levels began to rise and have climbed to more than 385 parts per million today. This carbon dioxide absorbs heat from the Earth's surface and re-radiates in all directions, including back to Earth. The excess trapped heat is now causing droughts and torrential rains, melting glaciers, triggering sea level rise and warming the oceans. If the burning of fossil fuels is not significantly decreased, continued global warming is expected to pose serious risks to California's snowpack and water supply, agriculture and tourism industries, coastal real estate, and public health, according to scientific analysis compiled by the California Climate Change Center.¹

This summer, 118 Ph.D. economists with expertise in climate and energy issues warned that the most expensive thing we can do is nothing. They urged the California Air Resources Board to proceed in implementing the AB 32 Scoping Plan, stating that “global warming gases will be best managed through a combination of policy approaches. Emissions caps combined with a range of regulatory and market-based implementation mechanisms offer a particularly potent strategy because

¹ *Our Changing Climate* is online at: http://www.ucsusa.org/assets/documents/global_warming/our-changing-climate-final.pdf



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they provide clear incentives for changes in business practices and the development of new technologies.”²

California leadership in developing and implementing a cap on global warming pollution will have ripple effects throughout the nation and the world. Because the California cap and trade program may become a model for other states and the federal government, it is important that the program is designed to cost-effectively maximize emission reductions in the capped sectors. We applaud CARB for the thorough public process that has led to the proposed regulation and the opportunity for our organization and other stakeholders to work with CARB staff as the regulation evolved to find optimal solutions to many complicated issues.

Strengths of the Program (as proposed to be adopted):

We are pleased to see that the proposed regulation contains several elements that we believe will make the program effective. These include:

- fully auctioning allowances in the transportation sector;
- a declining cap that starts at a level less than 2008 emissions and declines 2-3 percent per year to reach 1990 levels by 2020; and
- strong enforcement requiring a multiple of 4 allowances to be surrendered within 30 days for every allowance not surrendered on time plus monetary fines for further non-compliance.

Additionally, we support the possibility of crediting emission reductions from verifiable reductions of tropical forest destruction and degradation. The current placeholder language on sectoral crediting helps establish some of the fundamental principles that will be needed to ensure environmental and social integrity of this program. However, careful decisions on many more details, which staff are now considering, will be necessary before this program can be implemented.

We support the inclusion of the current placeholder language indicating that a voluntary renewable energy set-aside will be a part of California’s emission trading program. Such a mechanism will provide crucial support for the continued growth in voluntary purchases of renewable energy in California in the years ahead.

We believe that one of the program’s strongest features is the \$10 per allowance price floor, which escalates 5 percent plus inflation per year. This steady price signal will help businesses make long-term investments in strategies to reduce global warming pollution.

² Online at: ucsusa.org/ca-economist-letter



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Recommendations for Additional Strengthening:

There are several areas in which the program can be further strengthened. We urge you to strengthen the cap and trade regulation in the following ways:

Commit to maximize the use of auctioning as a method of allocating allowances.

The value of allowances CARB proposes to freely distribute to the industrial sector amounts to billions of dollars and will far exceed the amount needed to address potential emissions leakage from trade-exposed industries. The economic “dream team” that was assembled to advise CARB on cap and trade design, the Economic and Allocation Advisory Committee, stated in its report that “...relatively little allowance value would be needed under this mechanism to address leakage.”(p. 43). Many economic research reports from the US and Europe suggest that leakage risks can be accounted for through less than 20 percent free allocation. For example, Resources for the Future calculates that “...only about 15-20 percent of allowances are needed to compensate energy-intensive industries, for their loss of producer surplus, so the huge bulk of allowances could still be auctioned.”³ Stanford’s Professor Larry Goulder and colleagues find that “under a wide range of cap-and-trade designs, freely allocating less than 15 percent of the total allowances prevents profit losses to these most vulnerable industries. Allocating 100 percent of the allowances substantially overcompensates these industries, in many cases causing more than a doubling of profits.”⁴ UCLA Professor Matthew Kahn and Erin Mansur from Dartmouth College find that “energy prices are only a significant determinant of locational choice for a handful of manufacturing industries such as primary metals.”⁵ This provides further evidence that 100 percent free allocation is excessive.

The level of free allocation proposed in the draft cap and trade rule will result in a huge wealth transfer from California’s consumers to the industrial sector. In order to avoid this magnitude of corporate welfare, some part of this allowance value should be used to develop and promote low carbon-emitting industrial processes, as well as other societal benefits such as assistance transitioning for workers and small businesses.⁶

CARB should clearly state in the regulation that it intends to move toward 100 percent auctioning, and leave an opening to do so. One way to do this would be to build in an adaptive management process to assess the impact of free allocation on industries and leakage over time and adjust free allocation as needed.

³ Aldy et al, RFF Discussion Paper DP08-16, *Designing Climate Mitigation Policy*, May 2009, p 22. online at: <http://www.rff.org/RFF/Documents/RFF-DP-08-16.pdf>

⁴ *Impact of Alternative Emissions Allowance Allocation Methods Under a Federal Cap-and-Trade Program*, August 2009. online at: <http://www.nber.org/papers/w15293>

⁵ Matthew Kahn and Erin Mansur, *How Do Energy Prices, and Labor and Environmental Regulations Affect Local Manufacturing Employment Dynamics?*(p. 24). Online at: http://ei.haas.berkeley.edu/pdf/working_papers/WP209.pdf

⁶ see pages 2-6 and 2-7, <http://www.arb.ca.gov/cc/etaac/etaac.htm>



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Create Dynamic Product Output-Based Benchmarks That Reflect Best Practices in the Sector

The product benchmarks for industrial pollution sources should reflect sector-wide progress in attainment of the best practice technology and should reward early adopters. The current proposal leaves these benchmarks unchanged for the whole nine years and thus blunts incentives for adoption of innovative emission reduction technologies and leaves cost-effective emission reductions on the table. Setting aggressive targets pays dividends, as can be seen in the electric power industry where adoption of the Best Available Control Technology has achieved a 99 percent reduction in power plant NOx emissions.

More Clearly Define CARB's Role in Offset Decisions

We understand that there is a role for qualified third-party offset registries that are paid by offset developers to assist in managing the offset program used for compliance with the cap. However, because offset registries' profits are directly tied to the number of offsets that are verified and sold through their systems, this may create an incentive to make decisions that favor the offset developers they work with at the expense of the environmental integrity of the offset. Climate registries should not be put in the position of both promoting and selling offsets (their bread and butter) while at the same time regulating the offsets market.

CARB, as the regulatory authority in charge of ensuring that offsets represent real emission reductions, must have a clear role in key decisions regarding verification and offset acceptance or denial. For instance, in Section 95977(e)(2)(C)(xix)(a-c), solely the CARB Executive Officer should handle petitions from offset developers disputing Verification Statements, make decisions on whether the Offset Project Data report meets proper standards, and make final determinations on resolving disputes. Section 95980 should allow the CARB Executive Officer explicit authority to deny any offset proposals that the Executive Officer finds does not meet relevant offset criteria.

Ensure that Offsets Cannot Be Sold More than Once through Different Registries

CARB should devise a means of ensuring that the same offset project is not available for sale through multiple registries throughout North America and not sold more than once.

Lower the Offset Limit

UCS, along with dozens of environmental, public health, faith-based, environmental justice, and other organizations, continue to believe that the cap and trade program should require the vast majority of the emission reductions to occur in the state's heavily-polluting sectors that are regulated by the program. An over-reliance on offsets delays investment in transforming these sectors and denies California residents valuable co-benefits that come along with local emission reductions.



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Increase Transparency

The public should have access to the type and amount of compliance instruments surrendered by each entity each time the entity surrenders compliance instruments for compliance. There should be sufficient information that is publically available in a timely fashion to allow the public to review and check compliance, while keeping price and trade secrets confidential.

Require Allowance Value Allocated to Utilities to Benefit Ratepayers, Meet the Objectives of AB 32, and Facilitate Emission Reductions Above and Beyond BAU

UCS supports the requirement that all utility sector auction revenues be used for the benefit of ratepayers and to meet the goals of AB 32. If this benefit takes the form of rebates, the rebates should be limited to residential ratepayers and include all residential electricity customers within the utility's distribution service territory. If the benefit takes the form of clean energy investments, these investments should be made in accordance with the goals laid out in AB 32.⁷ We are concerned that the language in the draft regulations requiring that auction revenues simply be spent for the benefit of ratepayers "consistent with the goals of AB 32," affords utilities insufficient direction and puts allowance value at risk of predominately subsidizing business as usual (aka investments that are already required under existing law).

While we appreciate the oversight that the CPUC and local governing boards of the POUs can provide, we encourage CARB to provide additional guidance in the regulations to give utilities a better sense of where they should direct allowance value, and to ensure uniformity of purpose among the state's many utilities. We ask CARB to give clear guidance to the utilities, as well as the CPUC and local governing boards, that any allowance values not rebated to customers but spent on clean energy programs, should be limited to the following uses, described in more detail below.

Cost-Effective Energy Efficiency

Utilities that use allowance values for clean energy investments should be required to first invest in cost-effective energy efficiency.

California's loading order establishes all cost-effective energy efficiency as our first priority procurement resource. Under AB 32, cost-effectiveness is defined relative to the cost of achieving the emission reductions necessary to meet AB 32's goal of returning to 1990 emissions level by 2020.⁸ As long as energy efficiency can provide emission reductions at lower cost than other

⁷ AB 32 identifies many goals, including "not disproportionately impact low-income communities," complement "air quality standards and reduce toxic air contaminant emissions," and consider "overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health." Health & Safety Code §38562(b)

⁸ See Coalition Comments submitted to CARB re: AB 32 Cost-Effectiveness: General Framework (June 2, 2008).



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emission reduction strategies, it should be considered cost-effective. Significant energy efficiency potential remains in utility service territories that may not be cost-effective under a utility procurement framework, but is cost-effective under AB 32's framework; i.e., compared to other available emission reduction strategies that must be utilized to achieve our 2020 goal. To comply with AB 32's directive to achieve emission reductions at least cost, and to provide additional bill relief to utility customers, CARB should require utilities that receive allowance value to capture additional energy efficiency savings.

Renewable Electricity

If utilities are allowed to use allowance value to invest in renewable energy resources, CARB should establish general principles for such investments in accordance with the goals laid out in AB 32.⁹ New renewable projects that provide health and job benefits to Californians should be prioritized. For instance, local distributed generation, which typically does not require new transmission capacity and may provide jobs closer to load centers, should be prioritized. All investments using allowance values to procure renewable energy should be limited to projects that service the customers covered by the cap and trade program, and be limited to the procurement of contracts that will deliver renewable electricity directly into a California grid, in order to maximize the environmental and health co-benefits for those customers. Finally, renewable energy investments using allowance value should not count towards any cost cap that is established to limit the costs of achieving renewable energy procurement requirements that exist in law.

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Conclusion

UCS commends CARB on its hard work on a first-of-its kind economy-wide cap on global warming pollution. The program has made several important improvements to the program design relative to similar but less comprehensive cap and trade programs in the Northeast United States and Europe. We urge CARB to make some additional adjustments as outlined above to strengthen the program to make it even more effective.

We look forward to working with CARB staff and Board members on these issues in the coming weeks.

Sincerely,

Erin Rogers
Manager, Western States Climate and Energy Program
Union of Concerned Scientists