



The Business Council For Sustainable Energy

An Energy Agenda for the 21st Century

May 9, 2007

To: **Winston Hickox**
Chairman, Cal EPA Market Advisory Committee

Lawrence H. Goulder
Vice Chair, Cal EPA Market Advisory Committee

Regarding: **BCSE Recommendations on Market-Based Design Elements for AB 32 and Invitation to Host Industry Issue Forum on Market-Based Design Elements for Implementation of AB 32**

Submitted Via Email: **climatechange@calepa.ca.gov**

On behalf of the members of the Business Council for Sustainable Energy (the Council), we appreciate the opportunity to provide recommendations to the Market Advisory Committee (MAC) on market-based design elements for implementation of California Assembly Bill (AB) 32. The Council is pleased to submit the following recommendations for consideration by the MAC as you work to develop recommendations for the California Air Resources Board (CARB) by June 30, 2007.

We request the opportunity to meet with MAC members in Sacramento in early June to share our views in greater detail, as well as the opportunity to participate in any future Committee-sponsored hearings or conferences on this topic.

In addition, the Council would like to offer to host an **Issue Forum on Market-Based Design Elements for AB 32 Implementation later this year**, in cooperation with the MAC, to encourage broader industry and stakeholder dialogue on these issues. The Council has held similar successful Issue Forums in collaboration with states participating in the Northeast/Mid-Atlantic Regional Greenhouse Gas Initiative (RGGI) focused on opportunities to accelerate clean energy and energy efficiency investments through RGGI cap-and-trade allocation and set-aside policies. Our most recent event was held with the Maryland Department of Environment and the Alliance to Save Energy in early May.

Introduction

The Business Council for Sustainable Energy is a broad-based industry coalition of energy efficiency, natural gas and renewable energy interests that advocates energy and environmental policies that promote markets for clean, efficient and sustainable energy products and services. The Council's coalition includes power developers, equipment manufacturers, independent generators, green power marketers, and gas and electric utilities, as well as several of the primary trade associations in these sectors. We have several members who are based in California as well as others that are very active in the state's markets and clean energy activities including Sempra Energy, PG&E, PPM Energy, SMUD, First Environment, GE Wind, Calpine, 3 Phases Energy Services, Enel North America, and Solar Turbines.

The Council and its members have been working for many years with state, federal and international policymakers on market-based measures to reduce greenhouse gas emissions. The Council was the first industry coalition to support a binding multi-lateral regime to address climate change. The coalition supports the establishment of market-based programs for clean energy technology innovation, economic efficiency and enhanced energy security. We view AB 32 as an important vehicle to reduce greenhouse gas emissions and create a workable market-based program in California.

The following market-based recommendations are consistent with our work on RGGI in the Northeast as well as our views on federal climate change policy. We look forward to working with the MAC as you consider design elements for AB 32's implementation.

Importance of Market-Based Programs

Market-based approaches to reduce greenhouse gas emissions – such as green pricing programs, allowance trading, and emissions or renewable energy credit trading – consist of voluntary or mandatory efforts that affect demand and supply for environmental commodities through price, regulation or information.¹ In contrast to traditional regulatory models that mandate specific control technology for compliance, market-based programs internalize the environmental costs of a given activity and create a financial value for compliance. Market-based programs take advantage of economic efficiencies and provide flexibility that permits entities to choose the best control option to achieve results – in many cases at a lower cost than traditional methods. Further, market-based programs often create financial incentives for over-performance, which can lead to technological innovation.

Since the creation of the U.S. Acid Rain Program in 1990, which employed an allowance trading program to reduce SO₂ emissions, a range of market-based programs have been experimented with in U.S. Examples include closed allowance trading or “cap-and-trade” programs to improve air and water quality, open credit trading to increase renewable energy generation and voluntary emissions trading in to reduce greenhouse gas emissions. The proliferation of market-based initiatives at the state, federal and international level demonstrate the growing comfort with these types of programs and a recognition of their ability to deliver lower-cost results than traditional “command and control” regulatory models.

The Council's Views on Market-Based Design Elements for Implementation of AB 32

The Business Council for Sustainable Energy supports market-based design elements for implementation of AB 32 that provide consistent and long-term market signals for clean energy deployment and energy efficiency. From an industry perspective, it is essential to have regulatory certainty and consistency to effectively tackle the challenge presented by global climate change.

To be most effective, AB 32 implementation measures should integrate energy and environmental policy to maximize energy sector and emission reduction investments. Further, the Council believes that use of market-based design elements for implementation of AB 32 should place existing clean energy technologies at the center of compliance strategies. This will reduce compliance costs, mitigate fuel price increases and achieve the complementary objective of enhanced energy security. Further, design of specific elements and economic relief mechanisms will have a significant impact on market signals and need to be evaluated in a holistic rather than an isolated manner.

More specifically, the Council supports the use of market-based design elements for implementation of AB 32 that:

- 1) **Expand alternative energy resources from clean energy technologies** including wind, solar, hydropower, biomass, geothermal, fuel cells, advanced battery systems, and natural gas.
- 2) **Expand the development and use of energy efficiency and natural gas technologies**, including the direct use of natural gas, on-site generation from combined heat and power, and energy efficiency for demand reduction.
- 3) **Recognize improvements in energy efficiency**. AB 32 implementation measures should reward energy efficiency in existing and replacement energy infrastructure to fully maximize market-driven incentives for energy and environmental improvements.
- 4) **Incorporate compliance flexibility**. Implementation of AB 32 should include design measures such as a cap-and-trade and a project-based approach that efficiently achieve both energy and climate objectives. These types of approaches provide long-term signals to the economy and also offer compliance flexibility.
- 5) **Establish near-term and long-term targets** that are consistent with investment cycles to signal the marketplace and drive technology investment and innovation.
- 6) **Promote compatibility with voluntary renewable energy, energy efficiency, and greenhouse gas markets** so non-capped businesses and households can continue to support markets that result in actions that are above and beyond mandatory obligations.

¹ For more information on experience with market-based environmental programs, see “Expanding Markets for Clean Energy: The Role of Regional Market-Based Mechanisms in North America,” Business Council for Sustainable Energy, May 2004, p. 9-10, at http://www.bcse.org/publications/special_reports/Expanding_Markets_for_Clean_Energy.pdf.

- 7) **Establish linkages with state and international programs.** AB 32 implementation measures should establish linkages with other state and international greenhouse gas initiatives at the outset of the program. These linkages should demonstrate comparability, and should be verifiable and transparent. The program should be designed to permit trading with compatible cap-and-trade programs and project-based initiatives elsewhere in the U.S. at the state or federal level, as well as in other parts of the world.

Recommendations on Cap-and-Trade Policy

Consider market-based design elements holistically: The Council's primary recommendation to lower the costs of AB 32 implementation (as well as other state programs or a future federal program) is to design implementation measures in a manner that deploy clean energy technologies. As previously stated, the Council believes that looking at individual features of AB 32 in isolation does not effectively demonstrate overall program impacts on a broader scale. Design of market-based elements – such as specific caps, timetables, safety valves and other economic relief mechanisms – will have a significant impact on market signals and must be developed and evaluated in a holistic manner, as well as in terms of their relation to, and interactions with, other existing state and federal energy programs.

Promote clean generation and energy efficiency through allocation policy: Should a cap-and-trade program be adopted for AB 32 implementation, successful design of allocation policy will drive clean energy investments and promote cost-effective emissions reductions. If a cap-and-trade program is pursued, the Council recommends the following criteria for allocation policy decisionmaking:

1. Allowance allocation should reduce the carbon intensity of electric generation;
2. Allowance allocation should reduce energy demand;
3. Allowance allocation should provide benefit to the economy; and
4. Allowance allocation should promote private investment through partial funding of investments.

In addition to direct allowance allocation to covered sources under a cap-and-trade program, allowance value can be directed to clean energy generation and energy efficiency through an auction of emissions allowances and/or the establishment of set-aside allowance pools.

Decisions about allocation policies should take into account and support existing energy priorities, existing clean energy programs and environmental regulations and objectives. The Council's preferred use of allowance value derived from set-aside pools or an auction would be for deployment via direct allocation or funding to clean generators, as well as for investors/investments in clean energy technology and energy efficiency projects.

Adopt updating, output-based allocation policy: If a cap-and-trade program is pursued for AB 32 implementation, the Council recommends that any allowances distributed directly to sources under such a program be allocated via an output-based methodology. An output-based approach would distribute allowances based on the amount of electricity generated, not on the amount of fuel used or a facility's historic emissions. With this focus on output over emissions, energy efficiency, carbon efficiency and cleaner generation sources – including renewable energy – are directly encouraged. The Council recommends a fuel-neutral, updating, output-based allocation. Output-based policies send a clear signal to the marketplace – lower-carbon emitting energy options receive direct, clear, consistent and bankable value.

In addition, output-based allowance allocation accommodates the carbon dioxide emission reduction claims associated with renewable energy generation, allowing the AB 32 program to further encourage voluntary markets for renewable energy. Given the strength of the voluntary renewable energy credit market and its significant potential for growth, the Council recommends that AB 32 adopt an approach that allows the voluntary market to continue to create surplus emission reductions and meet consumer demand. This can be achieved through the output-based allocation approach, which would allow renewable generators to transfer or retire allocated allowances to or on behalf of their end-use customers to enable those customers to make surplus emission reductions. If emissions allowances are not distributed to

covered sources under AB 32, there are other approaches that can make a cap-and-trade system compatible with voluntary markets.^{2 and 3}

Establish set-aside allowance pools for small and clean generators, energy efficiency projects and new entrants:

Set-aside allowance pools can provide a means to allocate allowances directly to clean generation and energy efficiency that would otherwise not be included under the primary source allocation. In the RGGI context, the Council has encouraged set-aside pools for small, clean generation (under 25MW). This would provide a direct incentive for clean generation that would otherwise not receive allowances under the program. Further, the Council supports the use of set-aside programs to allow for competition and ensure a level playing field for new entrants. New entrants in the marketplace should be eligible to receive allowances so they are not put in a position of competitive disadvantage.⁴

Use auction revenue to reduce program costs by driving clean energy technology investment: To the extent an auction approach is adopted, the Council supports using potential auction revenue to drive clean energy technology investments, which will contribute to keeping program compliance costs low. For example, the Council is actively working with the RGGI states to direct public benefit allocation resources to investments in renewable energy, clean generation and energy efficiency in the cap-and trade program. A minimum 25 percent public benefit allocation provision that can be used to support clean energy technologies was included in the RGGI Memorandum of Understanding and the RGGI Draft Model Rule. In addition, several RGGI states are now considering expanded public benefit allocation provisions in their respective pre-proposals.⁵

Proposed Auction Revenue Guidelines: Council members believe that any auction revenue should be directed toward expanding renewable energy generation and energy efficiency. This is why criteria for the use of auction revenue under AB 32 implementation are of great importance. The Council believes that auction revenue should:

1. Reduce the carbon intensity of electric generation
2. Reduce energy demand
3. Provide benefit to California's economy
4. Promote private investment through partial funding of investments
5. Enhance complementary energy program benefits
6. Help establish new energy programs
7. Increase the market potential of new technologies

Avoid undue economic hardship on affected sources through allocation decisions: The Council recognizes that several states developing stand-alone or regional climate change programs are considering large-scale auctions as a means of distributing emissions allowances under cap-and-trade programs -- such as New York's RGGI Pre-Proposal, which suggests a 100 percent auction of allowances and Connecticut's pre-proposal, which suggests up to 100 percent auction of allowances. When considering the use of auctions, the Council encourages the MAC to consider the possible dramatic economic impacts that a large-scale auction approach might have on affected sources in the initial phases of the program. If an auction is considered, we suggest a phase-in period to minimize such possible impacts.

Credit for early action: The Council believes early investments in greenhouse gas reductions should be recognized under AB 32. Rewarding emission reductions that occur in advance of the enactment of the program has the potential to generate economic and environmental benefits, as well as hasten clean-energy technology deployment. To ensure robust participation by interested companies, the Council believes that an early reduction credit program should be simple and transparent.

Include offsets for compliance flexibility: The Council supports establishing an emissions offset program for AB 32 implementation. Offsets offer the possibility of lower compliance costs and encouragement of technology innovation and

² For example, 1) Allowances can be retired on behalf of the voluntary renewable energy credit market, the approach adopted by the RGGI Model Rule; and, 2) Set-aside allocations can also be made to renewable generators based on a percentage of the total allowances, (i.e., 5-10 percent).

³ For example, a Voluntary Renewable Energy Credit Set-Aside Allocation could follow recommendations outlined on pages 47-50 of the RGGI Model Rule at: http://www.rggi.org/docs/model_rule_corrected_1_5_07.pdf.

⁴ For example, the federal set-aside program under the Clean Air Planning Act introduced by Senator Thomas Carper (D-Delaware) was included to avoid the situation where a generator of new, clean and efficient energy would have to purchase allowances from an existing competitor.

⁵ Many RGGI states are considering auctioning large portions of their set-aside allocation and using the auction revenue to support clean energy technology deployment, among other objectives.

deployment. Ensuring the environmental integrity of an offset program is essential. Therefore, eligible offsets should be real, surplus, and verifiable.

In the Council's recommendations to RGGI and the Kyoto Protocol's Clean Development Mechanism (CDM), it has urged broad use of offsets as a compliance tool and the establishment of objective and standardized eligibility criteria for offset projects.

The Council is concerned about the efficiency and consistency of the case law approach adopted by the CDM that looks at each project individually or on a project-by-project manner.⁶ Overall, however, it may be too optimistic to expect establishment of sector-by-sector performance standards (the Council's preferred approach) in a timely fashion and commensurate with the urgent need for action. Therefore, if an offsets program is considered for AB 32 implementation, the Council supports a case-by-case program that builds on the experience of the CDM Executive Board and processes, while at the same time devoting resources to eventual establishment of technical performance standards for key offset sectors. If an AB 32 offset program is executed, standardized mechanisms/methods, such as performance standards or benchmarks, can be integrated into the case-by-case project approach.

The creation of an offset program will have a secondary benefit by creating a standardized currency for voluntary greenhouse gas credit trading. Non-capped sectors will have the opportunity to participate in creating additional reductions beyond levels set by AB 32.

The Council cautions against the use of pure financial additionality tests in determining offset project eligibility. Financial additionality can be part of a range of factors, but it should not be the only way of proving additionality, nor should it be weighted more than other additionality tests. In our experience, financial additionality tests alone deter good projects and weaken the credibility and market power of offset programs. Further, financial additionality tests are subject to gaming and cannot reasonably account for market behavior. Instead, we recommend practical application of a number of "barriers tests," as is recommended by the World Resource Institute's Greenhouse Gas Protocol for Project Accounting.⁷

Create links between trading systems: If California pursues a cap-and-trade program under AB 32, it should be designed to permit trading among other credible state and international greenhouse gas cap-and-trade programs to ensure lowest-cost compliance. Linkages should be based on a comparable environmental commodity, and based on allowance transactions that are transparent and verifiable. Appropriate accounting systems and enforcement mechanisms will be required to facilitate the transfer of credible allowances, offsets and other greenhouse gas-related commodities. U.S. experience with Clean Air Act emissions markets, U.S. energy disclosure requirements and other environmental commodity trading markets offer the foundation for an accounting system that would be able to link with non-U.S. trading programs.

Support complementary energy policies that expand alternative energy technologies: The Council supports regulatory flexibility and market drivers that would allow maximum inclusion of clean, alternative energy technologies in California and the Western region's infrastructure. This includes demand-side and supply-side rates, rate decoupling, power purchase contracts between utilities and on-site generation, direct allocation to generators of clean generation, a level playing field for new market entrants and set-aside provisions to directly support clean energy technologies. As previously stated, when designing any market-based elements for AB 32 implementation, a holistic approach that considers other state and federal energy programs, such as renewable and energy efficiency portfolio standards, and tax incentives, among others, should be taken into account.

Conclusion

Thank you again for the opportunity to provide input toward the Market Advisory Committee's recommendations on market-based design elements for implementation of AB 32. As businesses representing available technologies that offer vastly deployable solutions to climate change, the Council's members strongly support the MAC's efforts to identify design elements for AB 32 implementation that will spur greater clean energy technology innovation, economic efficiency and enhance energy security in California. To that end, the Council and its members would like to meet with members of the

⁶ Of particular concern are post-facto changes to previous "final" regulatory decisions, which have occurred in a few cases reviewed by the CDM Executive Board. An ability to change regulatory rulings creates direct and intolerable risk to investment decisions.

⁷ See the WRI Greenhouse Gas Protocol for Project Accounting at:

http://www.ghgprotocol.org/DocRoot/m1Tv5InUuFTjYZx3x1ev/GHG_Project_Protocol.pdf

MAC in Sacramento in early summer to discuss these issues in greater detail. We also hope the MAC will consider working with the Council to organize an Industry Issue Forum on Market-Based Design Elements for Implementation of AB 32 in the fall of 2007 for the broader California industry community.

We will be in touch with you in the coming week to schedule a meeting to follow up on our recommendations and to identify opportunities to work together on the Issue Forum. In the meantime, if you have any questions or comments please feel free to contact me at (202) 785-0507 or via email at ljacobson@bcse.org.

Sincerely,



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