



BP America, Inc

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**Via Email**

Dr. Larry Goulder  
Chair, Economic and Allocation Advisory Committee (EAAC)  
California Air Resources Board (CARB)  
1001 I Street, P.O. Box 2815  
Sacramento, CA 95812

Dear Dr. Goulder:

BP America, Inc. submits these comments in support of the EAAC's role as advisors to the development of the AB32 Scoping Plan. We believe the work of the EAAC is vital to the development of a Scoping Plan that effectively reduces greenhouse gas emissions (GHG) in a cost effective manner.

Our key recommendations to your committee can be summarized as follows:

- Recommend an allocation approach that takes account of the real and substantial potential for the trade exposure of California Industry to competitors who are not similarly regulated.
- Recommend only uses of auction revenue that support the environmental objective of AB32.
- Provide CARB with recommendations on revisions to the Scoping Plan in the eventuality of a federal GHG program.
- Provide recommendations on the impact of limiting offsets in a cap and trade program and on the economic benefits of the broad use of offsets.
- Provide recommendations for how to design a cost effective GHG program that also addresses the environmental justice and co-benefits requirements of AB32.
- Take the time necessary to fully utilize the qualifications and expertise of your esteemed committee in developing recommendations to CARB.

**Allowance Allocation**

A critical design component of California's AB32 cap and trade program will be method by which emissions allowances are allocated. Unwise allocation policy could create

competitive pressures on California industry, emissions and economic leakage, and could materially increase the societal cost of climate change mitigation.

In the absence of comparable climate change measures in other jurisdictions, certain allocation methods could expose regulated businesses in California to significant competitive pressure from businesses that are not similarly regulated – increasing the potential for leakage. Competitive pressure resulting from trade exposure to unregulated parties can be especially acute in state or regional programs in the form of both neighboring states and international competition – particularly in coastal states such as California where there is ready access to international trade infrastructure like the California Ports facilities.

BP is concerned that EAAC deliberations have not focused on this potential for leakage potentially caused by allocation policy. In fact, some EAAC members have openly dismissed the need to use the allocation of allowances to maintain the competitiveness of California industry. A recent study<sup>1</sup> carried out by EnSys Energy for the America Petroleum Institute on the impact on the U.S. Refining sector of the Waxman-Markey (H.R. 2454) American Clean Energy and Security Act of 2009 (WM) demonstrates that the potential for leakage is real and substantial.

As you are aware, WM allocates to the refining sector 2.25% of total allowances, with 0.25% allocated specifically to small refiners. As WM requires refiners to be responsible for holding approximately 43% of total allowances, this free allocation of 2.25% represents approximately 5% of refiners total emission obligations and approximately 40% of direct emission obligations.

The EnSys study concludes that because this sector operates as part of and interacts within the global refining industry, “the impacts of WM on US refining and US petroleum imports dependency would be substantial” and that it “delevels” the playing field in the global refining sector. The study concludes that “the underlying reason the potential impact on US refining is so severe is that the bill, as written, substantially raises operating – and also capital costs of US refineries, rendering them less competitive versus non-US refiners in regions that do not bear any carbon costs. The impact on coastal refineries, such as those in California, is especially pronounced.

Results of the study include:

- reduced throughputs at US refineries of 1 to 2 million barrels per day by 2015 and 1.5 to 4.4 mbpd by 2030. Falling US throughput would be largely offset by increased refining activity in the rest of the world.
- US import of refined product would increase from approximately 14% in the baseline case to 18% to 20% in 2015 and from about 10% in the 2030 baseline case to between 14% and 19% (a near doubling).
- Increase in US refinery’s variable operating costs of 20% to 50% in 2015 and 100% to approaching 300% in 2030.

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<sup>1</sup> EnSys Energy, Waxman-Markey (H.R. 2454) Refining Sector Impact Assessment, October 2009

- Consequently, while WM would reduce US refinery CO<sub>2</sub> emissions by 12 to 36 million tonnes CO<sub>2</sub>e (5 to 15%) by 2015 and by 57 to 118 million tonnes by 2030 (20 to 41%), these reductions would be largely offset by increased emissions from non US refineries, resulting in net global refining emission reductions of 0.4% in 2015 and 3% in 2030.

The potential impact of allocation design on the competitiveness of California industry is real and substantial – and especially given the economic situation in the state – needs to be accounted for in allocation design. Energy Secretary Steven Chu acknowledged this potential impact during recent testimony before a House science panel, when he said “If other countries don’t impose a cost on carbon, then we will be at a disadvantage.”<sup>2</sup> In California, this disadvantage will apply not only to competitors in other countries, but also to competitors in neighboring states. Fortunately, it is possible to significantly mitigate this trade exposure and reduce both emissions and economic leakage by designing an allocation approach that allocates free allowances where this trade exposure can be demonstrated. We believe that trade exposure of the California and US refining sector has been well documented.

As for the use of revenues potentially generated in an allocation approach, in general, auction revenue should only be used in ways that directly benefit the intended environmental outcome of AB32. One example of using funds in this manner would be to recycle revenue to incentivize the development and deployment of GHG-reducing technologies. Another example would be to lower the societal cost of the program by using auction revenue to reduce distortionary tax rates or to provide per capita rebates unrelated to energy consumption.

We are sensitive to the cost to consumers that will arise from policies designed to reduce GHG emissions. We believe the control of these costs, in a way that does not affect the ability to reach emission reduction goals, should be an overriding objective of policy design. Cost containment, in a way that maintains the environmental integrity of the program, is a primary benefit of the use of a market mechanism and of design elements such as offsets.

However, the use of auction revenue, or the allocation process generally, to directly reduce price signals to consumers would, in effect, subsidize consumers use of energy, and distort the effect of decisions that influence energy consumption. Dampening the price signal on energy consumption would result in more carbon emissions, resulting in the need for policy makers to require additional action – or regulated parties to find additional, more costly ways to meet emission reduction goals. Ultimately, therefore, the cost to consumers is not mitigated, but only delayed, and likely increased in the end. These additional regulatory requirements dictated by policy makers or additional activities undertaken by regulated entities will come at a cost to society – and to consumers.

In extreme cases, an acceptable use of some portion of auction revenue would be to mitigate severe, unintended or particularly disproportionate effects on impacted

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<sup>2</sup> Wall Street Journal online, March 18, 2009

communities. In these cases such mitigation should be transparent, targeted and transitional.

### **Integration into a Federal GHG Program**

EAAC should not provide recommendations to CARB that only assume the California's GHG reduction program will operate in the absence of a federal program. Certainly, given the mandate of AB32 and the progression of the California program, it is wise to develop and submit comments aimed at the design of a California system. However, given what BP believes to be the inevitability of a federal program (be it this year, next year or in coming years), we believe it would be unwise and a huge missed opportunity for the EAAC to fail to provide comments on the design of a California program in the presence of a federal GHG program.

These EAAC recommendations should weigh in on the benefits of a broad, national program versus the limitation of a state or regional program, how the California program should be revised to best integrate into a federal program, the effect of state regulations on entities under a federal cap, and the potential impact to California industry of operating under both state and federal programs.

### **Offsets**

The EAAC should provide to CARB analysis and recommendations responsive to the Board's request for information on the effect of limits on the use of offsets contained in the Board Resolution of December 11, 2008. In this document, adopted by the Board at the time of the adoption of the Scoping Plan, the Board asked for an analysis of "the economic and co-benefit effects of limits on the use of offsets". We believe the EAAC is well positioned to weigh in on this important request.

Aside from the decision to implement a broad, well-designed market-based approach to address climate change in California, CARB's approach to the use of offsets is one of the most important decisions to be made in implementing a program that both meets the environmental goal of AB32 - and that is cost effective. Given the unquieting concerns about the potential economic impact of AB32, we believe it is more important than ever for CARB to incorporate the maximum use of design elements that control costs while maintaining the environmental integrity of the emission reduction goal. The broad use of offsets is just such a design element.

The use of offsets that are real, additional, permanent and verifiable is a win-win-win for California consumers, for environmental integrity, and for the potential to position California to meet its challenging, longer term, emission reduction goals. Offsets are a win for consumers because they can provide lower cost emission reductions, thereby reducing impact on consumer prices. Offsets are a win for environmental integrity because while offsets can be viewed as a cost containment mechanism, they do so while maintaining the environmental integrity of the emissions reductions target. Every offset, so long as it meets rigorous standards, results in a quantifiable, equivalent reduction of GHG emissions. In this way, the use of offsets is vastly preferable to other cost control mechanisms (for example, a safety valve) where the environmental integrity of the system is more difficult

to uphold. Lastly, as the public's acceptance of the cost of the program will likely be the factor that determines California's ability to meet the goals of AB32 (as well as longer term goals), the ability of offsets to reduce program costs will contribute to the potential of meeting longer term emission reduction goals.

BP's recommendations on the broad use of offsets are consistent with those offered by the Market Advisory Committee (MAC) of the California Air Resources Board – a blue ribbon committee of experts assembled to advise California policy makers on the design of a market-based GHG-reduction program. The MAC concluded that “*offsets should be allowed as part of the overall cap-and-trade program*” and that such a program “*should reject geographic or quantitative limitations on offset credits so as to maximize the opportunity to reduce GHG emissions at the lowest cost*”<sup>3</sup>.

The economic benefits of the broad use of offsets are substantial and real. In an analysis of the Lieberman-Warner Climate Security Act of 2008, the U.S. EPA concluded that the unlimited use of offsets results in a reduction in the cost of emission allowances of 71%. Conversely, USEPA concluded that if offsets are not allowed, the cost of emission allowances would increase some 93%<sup>4</sup>. More recent U.S. EPA analysis of the Waxman-Markey American Clean Energy and Security Act of 2009, concluded that “the availability of offsets under the WM-Draft significantly influences the allowance price”, and that “without international offsets, the allowance price would increase 96 percent”<sup>5</sup>. Charles River Associates (CRA) performed a peer-reviewed analysis of the role of offsets in implementing AB32. CRA concluded that the broad use of offsets in California could reduce program costs by 80%, minimize economic loss to the state by up to \$40 billion/year by 2035, and prevent the loss of over 300,000 jobs resulting from leakage<sup>6</sup>.

These studies show that there are significant and actual economic consequences to limiting offsets. Limiting offsets does not increase emission reductions. In fact, a strong argument can be made that limitations on offsets will reduce California's ability to reach longer term emission reduction goals. Reaching the challenging post-2020 goals will simply not allow us to take off the table any valid, verifiable emission reduction opportunity.

Industries, consumers and policymakers in California should be particularly concerned about the competitive issues surrounding limits placed on the use of offsets in the implementation of AB32. Jurisdictions such as California, with a very efficient energy production portfolio and the high proportion of emissions from the transportation sector, will benefit most from a broad offset policy. California's efficient production of energy

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<sup>3</sup> Recommendations for Designing a Greenhouse Gas Cap and Trade System for California, Recommendations of the Market Advisory Committee to the California Air Resources Board, June 30, 2007

<sup>4</sup> EPA Analysis of the Lieberman-Warner Climate Security Act of 2008  
***S. 2191 in 110th Congress***  
March 14, 2008

<sup>5</sup> EPA Preliminary Analysis of the Waxman-Markey Discussion Draft The American Clean Energy and Security Act of 2009 in the 111th Congress 4/20/09

<sup>6</sup> The Role of Offsets in Enhancing the Cost-Effectiveness of AB32, April, 2008

means there will be fewer short-term opportunities to achieve cost effective emission reductions from these sources than will be available from less efficient production in other states and countries. In the transportation sector, it is a widely held view that material emission reductions in this sector are more challenging and expensive to come by in the short term. Moreover, as has been pointed out by many analyses, the cost of doing business in California is significantly higher than in other states, so California will benefit from the use of offsets produced outside of the state. California's Economic and Technology Advancement Advisory Committee (ETAAC) concluded that the cost of doing business in California is 23 percent more expensive than the national average and that these extra costs come on top of the 32 percent higher cost burden U.S. manufacturers face when competing internationally<sup>7</sup>. For these reasons, California will benefit from a higher short- to mid-term reliance on the use of offsets while the market works to further transform our energy systems.

The Scoping Plan's current limit on the use of offsets defined by 49% of required reductions, we believe, is a severe and unreasonable limit on its own – and will result in specific consequences for the state. Unfortunately, we believe that CARB staff have exacerbated the severity and consequences of this limit by their very troubling interpretation of this 49% limit – an interpretation which essentially cuts in half what was already, we believe, an unreasonable limit.

The Scoping Plan already directs how 80% of emission reductions will occur. These 80% of emission reductions will occur through the use of direct measures. We are assuming that the use of offsets as a replacement for these direct measure will not be allowed. We are also assuming that the use of offsets will be limited to circumstances where emission reductions are left to the market (some 20% of the required reductions from the Scoping Plan) or where direct regulations do not deliver the expected quantity of emission reductions - ie where regulated parties are required to look to other means to meet their allowance requirement.

In deciding how to limit the use of offsets, CARB appears to attempt to harmonize with the Western Climate Initiative by limiting the use of offsets to no more than “49 percent of the required emission reductions”. It is our understanding that the justification for a 49% limit on the use of offsets was to ensure that the majority of emission reductions occur in-state at regulated facilities. However, this apparent justification, we believe, mistakenly presumes that if the use of offsets in California is not limited, then somehow all the emission reductions can or will take place out of state. In fact, we know this not to be the case as the direct regulations that dictate how 80% of emission reductions will occur will essentially require that 80% of emission reductions occur in-state – regardless of what quantitative limit is placed on the use of offsets. Placing a quantitative limit on the use of offsets, therefore essentially only determines how and where the remaining 20% of emission reductions will occur.

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<sup>7</sup> Economic and Technology Advancement Advisory Committee, Technologies and Policies to Consider for Reducing Greenhouse Gas Emissions in California, A Report to the California Air Resources Board, February 2008

The EAAC must weigh in on the effect of the broad use of offsets in a well-designed cap and trade system and on the economic impact of offset limits.

### **Environmental Justice and Co-benefits**

Many of the activities undertaken to comply with AB32 will likely result in co-benefits of various kinds. These co-benefits will come in the form of reduced air emissions of traditional pollutants, new jobs, savings from energy efficiency as well as other types of co-benefits. It is important that, as a state, we acknowledge, measure and document these co-benefits – and where possible and consistent with the most cost effective GHG reduction solution – seek to maximize these benefits. However, we can not, nor should we, let the achievement of these co-benefits drive GHG policy design.

Addressing climate change will be one of the most complex and difficult challenges that our state, and ultimately our nation, will face. The problem is solvable, but will not be easy to solve. It will require not only great advances in technological innovation, but also strict focus on effective policy, and resolve on the part of the public to accept the cost and lifestyle adjustments that will be necessary. Addressing climate change will require a single-minded focus on this century-scale problem. Viewing climate change policy development as an opportunity to expand additional environmental or social regulation will greatly increase the potential for the program to be both expensive and unsuccessful.

For certain co-benefits, there appears to be a mission creep, where CARB is going beyond the legislation's requirement that market based strategies "prevent any increase" in conventional pollutants. CARB now appears set upon designing a system that tries to ensure *decreases* in conventional pollutants – and at additional cost to the program - while considering a redefinition of the statutory definition of cost effectiveness in a way that essentially "nets out" what CARB perceives as the value of co-benefits.

The legislation clearly defines "cost-effective" or "cost effectiveness" as the "cost per unit of reduced emissions of greenhouse gases adjusted for its global warming potential." The legislation did not mention a "net" cost of reduced emissions of greenhouse gases or the cost of GHG reduction adjusted for the value of the expected co-benefits. CARB should not confuse the concepts of cost effectiveness and cost-benefit analyses. Evaluation of cost effectiveness should be used to evaluate the relative costs of various approaches to achieve a given objective (i.e. GHG reduction). Cost benefit analysis will help determine whether there is sufficient societal value in undertaking an approach that is deemed to be "cost effective." AB32 requires an analysis of cost effectiveness.

We understand and agree with the desire to maximize co-benefits and to avoid impacts to communities. The challenge is to address environmental justice and co-benefit requirements in a way that does not encumber or significantly reduce the efficiency or cost effectiveness of the entire GHG reduction program. We believe such a solution would involve separate, focused approaches, both potentially funded by AB32 revenues and urge the EAAC to provide recommendations on this important issue.

**Take the Time Needed for Full Recommendations**

CARB should be commended for assembling an eminently qualified group of experts in the EAAC participants. There is much that this committee can do for CARB and for the AB32 process that would bring substantial value to the process and to the final product. We hope that the committee will take the time they need and that CARB will be supportive of extending the committee's time should that be demonstrated to be useful and necessary.

Please feel free to contact should you wish to discuss these comments in more detail.

Sincerely,

Ralph J. Moran  
Director, West Coast Climate Change Issues  
BP America, Inc.

cc (via email) Mary Nichols  
Linda Adams  
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Kevin Kennedy