

August 2, 2013

Hon. Mary Nichols, Chair
California Air Resources Board
1001 I Street,
Sacramento, CA 95814

Subject: **AB 32 Cap-and-Trade Program Amendments Related to Allowance Allocations**

Dear Chairwoman Nichols:

We thank the Air Resources Board (ARB) for the opportunity to comment on potential amendments to its cap-and-trade rule. The steps ARB has taken and is taking to develop a cap-and-trade system as a core element of its AB 32 Scoping Plan will determine whether California can achieve AB 32's ambitious 2020 greenhouse gas (GHG) targets and whether the State can do so in the most cost-effective manner possible. By developing a well-designed policy, ARB can provide needed national and international leadership on the role of market-based instruments in effective climate change policy. With many states, provinces, nations, and regions monitoring how California's climate policies balance environmental and economic outcomes, ARB's decisions are likely to influence the course of climate change policy outside its borders.

We understand that ARB is continuing to evaluate the rules that determine the initial allocation of emission allowances under the cap-and-trade program. In particular, allowances for industry assistance may be modified, depending upon research commissioned by ARB and further consideration of relevant issues, including the status of climate policies in other states and nations. As ARB considers these and other issues, we would like to raise several points for consideration. These points, briefly summarized below, are elaborated in much greater detail in the attached white paper that we have co-authored, "Using the Value of Allowances from California's GHG Cap-and-Trade System."

First of all, it is important to keep in mind that allowance allocation decisions *do not directly affect environmental outcomes*. Regardless of the allocation method chosen, aggregate emissions are limited by the emissions cap. However, allocation choices *can indirectly affect emissions*. Emissions leakage can arise if economic activity shifts to unregulated sources in an effort to avoid compliance costs. If California's carbon-intensive trade-exposed industries face carbon costs not born by competitors outside the state, production and its associated emissions could shift from California to other regions. If this occurs, emissions outside the state would increase, thus leading to leakage of both emissions and associated economic activity. With none of California's neighboring states committing to climate targets, emission leakage will continue as a potential risk to the program's environmental integrity.

The risk of emission leakage is greatest with auctions and free fixed allocations. By contrast, updating output-based allocations, which are used for allocations to producers in carbon intensive trade exposed industries, can reduce the risk of leakage. In practice, the extent to which such allowance allocations mitigate leakage and competitiveness impacts will depend upon the details of the allowance allocation formulas. In principle, allocations that fully offset carbon costs can eliminate the risk of leakage. Allocations that only partially offset carbon costs risk creating leakage, although the extent of such leakage would depend upon particular market conditions and the portion of carbon costs that are offset by the allocations.

Turning to the economic consequences of allowance allocations, it should first be recognized that allowance allocation options *do not directly affect the cost-effectiveness* of actions taken by emission sources to reduce their emissions. However, allowance allocations *can indirectly affect program costs and other economic outcomes*. In particular, the use of updating, output-based allocations, can lower costs seen by consumers, which can reduce their incentives to conserve, and thereby raise compliance costs. On the other hand, updating, output-based allocations can reduce or even avoid reductions in economic activity within the State, with associated distributional impacts. This approach to allocation is designed to achieve these in-state economic benefits without

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the windfall profits experienced in early phases of the EU-ETS, which relied on fixed allowance allocations. Furthermore, this allocation approach can thereby reduce the tendency for shifts of production to less efficient, more distant producers.

Any discussion of the allocation of allowances inevitably raises questions about the use of revenue from allowances that are auctioned (or otherwise sold) by the State. Decisions about how auction revenues are used can have profound consequences for the potential benefits of such auctioning. First, using revenues to reduce distortionary taxes (on investment and labor) would provide the greatest net economic benefit, by reducing the net social cost of the policy. However, California's unique legal context, as we understand it, precludes such uses of allowance auction revenue. Instead, revenue could be used to fund programs to address other market failures. For example, public funding of research and development activities can help overcome the disincentives for private investment in research and development created by information spillovers. In addition, funding specific, well-designed energy efficiency programs can mitigate the principal-agent problem that is thought to plague energy-efficiency investments in renter-occupied residences and commercial establishments. Likewise, revenue could be used to address the needs of disadvantaged communities.

A third possibility should be avoided: funding programs to subsidize or otherwise bring about emission reductions from sources that are already covered by the cap of the cap-and-trade system. When "complimentary policies" are nested under the cap of a cap-and-trade system, then one of two things can happen: either the nested policy can be non-binding and hence irrelevant; or the nested policy can be binding, in which case its effect can be three-fold: (1) allowance prices are suppressed because of the reduced demand for allowances; (2) cost-effectiveness is reduced relative to the presence of the cap-and-trade system operating on its own, because the nested ("complimentary") policy causes marginal costs no longer to be equated across sources and activities; and (3) there is no incremental reduction in targeted emissions, because any additional reductions brought about by the complementary measure are undone in some other sector or geographic location through trading activity. Such overlapping policies should be avoided.

We thank ARB for the opportunity to submit comments to the proposed AB 32 cap-and-trade rules.

Sincerely,



Robert N. Stavins¹



Todd Schatzki

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