

December 10, 2008

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

Comments on the Scoping Plan

Dear Mary,

This letter provides comments on the AB 32 Climate Change Proposed Scoping Plan dated October 2008. Our comments focus on the critical design elements of a cap and trade program.

CantorCO₂e offers these comments on behalf of itself and select clients that will be subject to the California Global Warming Solutions Act (AB 32). These clients operate manufacturing and production facilities in California and the west. Some have been here for decades, and others are recent arrivals. Some are considering establishing operations in the state. A number of clients have technologies that promise to remove greenhouse gas emissions in new and cost effective ways. These clients are all joined in a common objective – that California adopts a program that focuses on achieving cost-effective, certain, and expeditious greenhouse gas reductions in a fashion that is consistent with the requirements of AB 32.

CantorCO₂e is the world's oldest emissions trading brokerage firm. Established in 1992 by Cantor Fitzgerald, we have played key roles in the development, implementation, and refinement of nearly every important emissions trading program in the world. In addition to providing consulting and brokerage services our staff have testified before Congress, served or chaired a number of emissions trading related groups including the California Climate Change Advisory Committee (appointed by the California Energy Commission), the RECLAIM Three Year Audit Committee (appointed by the South Coast Air Quality Management District), the European Trading and Market Liquidity Group, the Emissions Trading Group (a think-tank that was instrumental in shaping the European Emissions trading), the Voluntary Carbon Standard (an international body drawn up under the Climate Group), and the International Emissions Trading Association.

Based on the experience gained through 26 years of serving in these markets we offer the following brief recommendations regarding the critical elements that should be included in a CARB implemented AB 32 market:

- 1. Ensure that demand for change comes from regulators, industry, and the public.** Absent this demand, which must be paired with a willingness to accept the potential costs and structural disruptions associated with this change, there's no sense in embarking on a costly program.

2. **Clearly state the goals of the emissions trading program.** Explicit and understandable goals establish the program's objective and define a baseline for effectiveness.
3. **Make the goal simple and singular...to reduce greenhouse gas emissions.** Layering on other goals will complicate the program design, result in higher costs, and result in program elements that are internally conflicted. Address non-climate change reduction goals through other complimentary programs.
4. **Ensure that sectors that contribute to the pollution problem are included in proportion to their contribution to the problem. Program designers must involve the sources that emit significant quantities of greenhouse gas emissions.** Failure to do so will place an unnecessary burden on and raise the compliance costs of those sources included in the program. Further, emissions from sources excluded from the program should be otherwise addressed through command and control rules or invited to participate as offset providers.
5. **Base the program on an emissions inventory that accurately represents all significant emissions sources.** Starting with an inaccurate emissions inventory (too high, too low or not inclusive of all sources) will frustrate efforts to evaluate the success of the program and, ultimately, derail emission reduction goals.
6. **Include a comprehensive permit system.** Sources must comply with source's operating obligations and regulators have the ability to withdraw the opportunity to operate within the if permit obligations are not observed. Likewise, sources must also understand that if they meet the appropriate standards (as defined within their permit) the regulator will not hinder their operation.
7. **Provide a meaningful feedback loop.** Sources must clearly understand that positive actions will be rewarded and negative actions penalized. Those who comply and make early reductions should be able to continue to operate and be able to sell surplus allowances. Those whose emissions exceed their allowances should suffer a meaningful enforcement penalty. This means that the financial penalties associated with noncompliance should be much more costly than cost of controls and allowances.
8. **Correlate profits with social good.** To the extent possible, program designers should design the program in a fashion that correlates participant profits with socially desirable goals. In particular, and to the extent feasible, safeguards should be included to minimize the chance that actions which produce profits also yield negative consequences for a large number of program participants and/or society.
9. **Make allowance allocations fair and consistent with the program goals.** Policymakers should make such distributions after considering historical emission levels, the effects of economic recessions, the magnitude and speed of the reduction expected of each participant and the effect that forthcoming rules would have if the trading program was not adopted.

10. **Reward (do not penalize) those who make voluntary early reductions.** Given the magnitude of the expected reduction (~30% by 2020 and >90% by 2050 as compared to business as usual), the value of early reductions, the penchant by some to favor locally created reductions, and the expected cost of compliance, policy makers should encourage the creation of real, surplus, quantifiable, and permanent reductions.
11. **Do not change the rules, allocations, or implementation of the program.** Compliance managers will make emission control decisions with multi-year horizons if they believe the rules (and allocations) governing the program will not change. The prospect of changing rules (and allocations) will shorten the investment horizon and cause managers to defer investments that rely upon anything but the most immediate paybacks.
12. **Start the program with scarcity of supply.** Regardless of how the allowances are distributed, the program should commence with a scarcity of supply. Over-allocation will result in a low allowance price and a sense of complacency amongst participating sources.
13. **Include an effective emissions banking process.** A bank simply is an administrative mechanism that allows sources to create, gain recognition for, and store air credits for later use or sale. Among other reasons, creating an emissions banking process allows companies to feel secure that once voluntarily created offsets have been “created”, air credits can be saved and stored away for future use or sale. The lack of a bank will cause managers to forgo emission controls that produce surplus reductions if such reductions cannot be used in a contemporaneous fashion.
14. **Make the program self-supporting.** A program that lacks the resources for its implementation (one that is not sustainable using program derived revenues to pay its operating costs) will fail, regardless of how elegant its design, well intentioned its regulators, or enthusiastic its industry users.
15. **Place under the control of a single regulatory entity the administration of both the command and control rules and the emissions trading program.** Multiple agencies with different levels of control can result in implementation of programs with conflicting goals, an unevenly applied permitting and offset program, or exemptions for significant air pollution contributors.
16. **Clearly define and carefully structure the mechanics of trading the product.** Trading will only occur if participants can reliably predict how trades will be processed and if transaction costs are minimized. The steps necessary to accomplish a trade should be simple, easy to understand and replicate, and be predictable.
17. **Regulators must resist the urge to adjust the market.** Air credit markets operate best if the regulator’s role is limited to registering the transactions, maintaining information about available credits, monitoring source activity, and enforcing penalties against non-compliers. Regulators should not seize upon price fluctuations as an excuse to step in and adjust the program, the allocations, or other attributes of the program.

18. **Designed to facilitate integration with other cap and trade programs.** States that go it alone are doing so in large part because they lack leadership from the Federal government. Nonetheless, each state or region – California, RGGI, etc., should be mindful they can only be successful if they adopt programs that can be integrated with other like programs, ultimately enabling policymakers to act in concert.
19. **Provide for the use of offsets.** High quality emission reductions (i.e., those that meet the stringent criteria imposed by the program administrators - including, but not limited to leakage, shifting demand, and post project enforcement and monitoring) derived from sources outside of the cap and trade program should be accommodated. Reductions that fail to meet the criteria should be rejected, no matter how close to the source using the credits. In opting to reject the use of high quality offsets, policy makers are choosing to require sources to incur higher costs. The rationale for doing so should be shared with stakeholders.
20. **Allocate, don't auction allowances. Or, if allowances are to be auctioned, do so in a way that ameliorates the below noted shortfalls.** The following points argue for using an allocation as the best way to distribute allowances:
 - Historically, successful emissions trading programs (i.e. the acid rain and lead phase down programs) have relied upon allowance distribution systems where a source is offered a declining emission checkbook without cost to the source for the initial allocation. We are unaware of any successful pure auction system (though the EPA's acid rain program initially employed a periodic auction process for a relatively small quantity of allowances) where existing and new sources secure their initial and ongoing allowances through an auction.
 - The free distribution allocation method puts tons into circulation, and rewards sources that discover they can benefit economically by reducing their allowance needs and selling their surplus. In contrast, an auction is another form of a carbon tax, one that delivers revenues to the government without the obligation to make prudent decisions regarding the use of such monies.
 - An allocation system gives sources their allocations well into the future (in some cases, indefinitely). In contrast, an auction forces participants to purchase near and long term allowances, begging the question as to how sources will recover these costs (of course, the ultimate bill is delivered to the customer who purchases the products).
 - Market liquidity and diversity, will be relatively higher under a free allocation system and lower under an auction system. Giving thirty years worth of allowances to covered sources will ensure that sources have a base amount of allowances which they can either use or sell. The availability of these allowances, especially at the outset of this program, allows sources to purchase on the spot market as well as execute puts, calls, leases, swaps, forward transactions for near term as well as future year allowances, all with variable terms and conditions and counter party credit quality. A government sponsored auction cannot hope to mimic or outperform a free allocation. Withholding such allowances, and making

them only available through government sponsored auctions will have an opposite impact on liquidity.

- An allocation system allows for the healthy participation of both sources and liquidity providers. Giving sources allocations at the outset gives them a base amount which can be relied upon at the outset of the program and throughout its phases. In contrast, distributing allowances through an auction mechanism gives speculators, especially those with deep pockets, the opportunity to shut less well funded naturals out of the market. In this fashion, speculators can exercise market power that would be denied them under an allocation scheme which would have an especially adverse effect on smaller sources.
- An auction severely disadvantages existing emitters with sunk costs and stranded assets over new sources. In an auction, new entrants have the choice of tailoring their purchases and facility designs in perfect synchronization. Existing polluters have plants designed for an environment where polluting is free, and new entrants design their plants for the new environment, so auction discriminates against existing polluters who have a higher cost-base.
- An auction drains cash from emitters, resulting in less available capital to invest in reducing emissions. Expecting companies to invest to reduce emissions, while at the same time paying out cash for allowances in an auction, creates a cash-crunch. The result is a reduction in investment in reducing emissions.
- An allocation gives sources the resources necessary to generate cash in the event that the holding source has found a way to reduce its greenhouse gas emissions beyond its compliance obligations. Invest in a pollution solution, use fewer allowances, and sell the surplus allowances to recoup the investment in pollution controls. In contrast, an auction simply puts sources in a cost minimization mode (they do what's necessary to acquire the least amount of allowances at the outset) rather than a profit maximization mode ('over-compliance' can free up allowances that can be sold) that comes with a free allocation.
- Under an allocation system, the market (rather than the state) chooses the winners. Those who can adjust their operations in a fashion that results in fewer emissions and those who elect to purchase allowances determine which solutions advance. This is preferable to the situation where a team of bureaucrats have the discretion to invest or otherwise spend money earned from an auction. A situation where there is no guarantee that the monies raised through an auction will be wisely invested to produce cost effective greenhouse gas reductions, or for that matter, not be diverted to pay for some other state priority (i.e. highways, schools, prisons, etc.).
- The ability to collect money from polluters and then redistribute the monies to deserving individuals is not a reason to support auctions. Under an auction scenario the government collects the monies and then is charged with the responsibility to redistribute that wealth. Though well intentioned, those doing the redistributing have very limited downsides if they guess wrong. Some say

that the state could also offset the economic impact of the program by using auction revenues to displace income taxes or other taxes that distort economic decisions. In this situation, the state chooses the winners and then redistributes the wealth collected through auctions. Perhaps it is better not to collect the money in the first place.

- Under a free allocation system, those who hold the allowances are incented to figure out ways in which they can emit less in order to sell surplus allowances. An emitting company can over comply by investing to reduce emissions, knowing that this investment can be immediately offset by sales of surplus allowances. If allocations are made for several years at one time, the emitter can potentially receive cash payment today to fund a substantial portion of its capital costs. If the company is given a forward allocation (i.e. for current AND future years) the company can sell forward at a known price, and fix a forward revenue stream and earn a return on his investment. By over-complying (i.e. emitting fewer tons than allowed and something that routinely occurs under the EPA SO₂ and NO_x allocation based cap and trade program) sources can both save money (by emitting less and consuming fewer allowances) and also make money by selling surplus allowances.
- Under an auction system sources are not similarly incented and have fewer resources to invest in clean air solutions. A source will buy only as much as it needs. As such, it will likely buy just enough allowances and have fewer resources available to invest to reduce emissions, since not only will it not receive an income from its investment (just an avoided cost), but it will actually have to pay cash out to the regulator at the same time as it is expected to pay for capital investment-creating a double drain on financial resources. The source's only incentive is to figure out how it can avoid costs (which costs will be passed onto customers/ratepayers). They will NOT have an ability to make money by selling surplus allowances (unless they buy too much in an earlier auction). What is worse, in a system of annual auctions, the company will be trying to invest without even knowing the forward cost of its avoided emissions. For companies with limited financial resources therefore (i.e. all of them), auction systems tend to encourage a lower level of investment in environmental reductions, compared with systems of free allocation. Further, under an auction scheme, the government is left with the obligation to figure out how to spend the collected tax revenues. And the environmental benefit is determined by well-meaning (though not omnipotent) government officials.
- Finally, it's worthy to note that the EU Emissions Trading Scheme (EU ETS) program does NOT justify the use of auctions. Many have commented that the EU ETS experience with free allocations, resulted in 'windfall profits.' Another criticism is that the oversupply of allowances resulted in very low prices. These findings are held up as an illustration of why free-allocation should be avoided. This is a misunderstanding of the situation in Europe and merits separate comment.

In Europe, there was a small amount of over-allocation to particular industrial sectors in a small number of Member States, particularly in Eastern Europe. This was because some individual Member States were playing a game of using the EU ETS as a way of providing indirect subsidies to local industry, to better enable them to compete with industry in other Member States. The European Commission caught most of these and slashed their allocations, but some slipped through. Windfall profits from over-allocation were not material however. The material windfall profits were made in the electricity industry - the industrial sector, in contrast, was universally under-allocated right across Europe.

Why was this? Many analysts say it was a demonstration of oligarchic market power in the European electricity industry, and a failure of electricity regulation. On average, European electricity generators received free allocations amounting to around 85% of their needs and had to buy the remaining 15% on the market. What they then did, according to analysts, was raise all of their electricity prices by 100% of the marginal purchase cost of the allowances acquired – i.e. more than six times the average cost of the allowances actually employed. So they used emissions trading as an excuse to increase prices by more than costs, and thus secure windfall profits.

How were they able to do this? Many observers say that this occurrence is the clearest demonstration in a number of years that competition in the European electricity sector is not as fierce as some generators have asserted. Thus windfall profits in the electricity sector are an issue for electricity regulation, not emissions trading. It is important to note that the ability to increase prices by more than costs is a function of regulation and competition, and independent of whether allowances are auctioned or allocated.

Thus, the possibility of windfall profits can be avoided (1) by ensuring that allocations are distributed in a fashion that starts sources short and (2) through legislative solutions that narrowly prescribe how allowance costs can be recovered from ratepayers. Public policy makers should be keenly interested in ensuring that profits CAN be secured by inventors, entrepreneurs, and gutsy sources who figure out a way to reduce their GHG emissions in such a way that allows them to over-comply and make profits (or reduce costs) by selling their unneeded surplus allowances.

Thank you for the opportunity to provide you with these comments. CantorCO2e looks forward to receiving your feedback on this letter and to participating in future discussions with the board, its members, and staff. Please do not hesitate to call us at 415-296-9359.

Respectfully,



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