

Scoping Plan Policy Comments

June 9, 2008

Emission Reduction Responsibility:

For any industry or sector that must reduce greenhouse emissions under a regulatory or cap-and-trade system, the requirements should be imposed and measured on a performance, or energy intensity, basis. For example, performance-based standards for a manufacturer would require reduced energy use per unit of output, down to a level deemed appropriate based on current technology. This approach will achieve the goal of reducing greenhouse gas emissions while allowing companies and jobs to grow. It encourages energy efficiency investments in process and equipment that will reduce greenhouse gas emissions and prevent leakage of jobs and productive activity outside of California. A regulatory approach that requires overall emission reductions without regard to performance measures would do just the opposite. Requiring an extremely efficient company to meet an unrealistic greenhouse gas reduction will make the company uncompetitive in global markets and hurt the California economy.

Market Mechanisms:

Key to the successful implementation of AB 32 will be the extent to which market-based compliance mechanisms such as a cap-and-trade system are embraced. The Market Advisory Committee and other experts agree that cap-and-trade programs not only lower costs, but are actually more effective at achieving environmental goals than traditional command and control regulations.

Well-designed cap-and-trade systems have been successfully used to phase out leaded gasoline and ozone depleting substances. The Clean Air Act's SO₂ Allowance Trading Program cut sulfur dioxide emissions in half with a savings of \$1 billion a year.

Market Design:

It is generally agreed that markets work best with many buyers and sellers, transparent prices and low transaction costs. Other market design elements are optional – not necessary for a successful market but to be considered to meet other social or environmental needs. An emission allowance auction, or up-front charge for companies subject to an emission cap is one such option. While some groups suggest an auction is necessary to ensure proper functioning of the market, no auction was imposed in the successful SO₂ trading program mentioned above. In an auction, the money extracted from companies subject to the cap would be distributed by government for purposes not yet determined. The auction would thus act like a multi-billion dollar tax on California companies and consumers – increasing costs to consumers and taxpayers and pushing jobs and investment away from California.

There is general consensus that the broader the carbon market is, the more efficient and less costly it is likely to be. That is why a critical element in market design is to make sure a California market is consistent and linked to regional, national and international cap-and-trade systems. We

won't know what these regional and national programs will be by the time the draft scoping report is unveiled in June and probably not by December when the Board must vote on the Scoping Plan. It makes sense for the Scoping Plan to support market mechanisms such as cap-and-trade but not create specific design elements until other programs are further along in development.

Another reason to defer market specifics is to avoid reflecting parochial California concerns and thus undermining California's goal of leading the nation towards global warming solutions. For example, CARB should resist efforts of the environmental justice advocates to include "co-benefits" in the calculation of emission reduction in a carbon trading system. If CARB is inclined to include the "co-benefits" component, California's cap-and-trade program could be in conflict with regional, national and international programs that don't have such provisions, making a transition from a state program to a broader program more problematic. The Board should instead consider a more direct approach to addressing correlated local pollutants. Attempting to address correlated local pollutants within the design of the cap-and-trade system or as the basis for additional direct controls will compromise the overall effectiveness of the state's climate change program while also failing to adequately address the correlated local pollutants.

Carbon Capture and Storage (CCS):

The Scoping Plan should rely on carbon capture and storage as a means to reduce GHG to meet the 2020 emission reduction goals of AB 32. AB 32 specifically directs the Scoping Plan to include carbon capture and storage as a key element of the state's strategy to meet the bill's greenhouse gas reduction goals. Carbon capture and storage also is being considered as a key element in federal and international strategies to reduce carbon in the atmosphere. In addition, international agencies have documented the value of using CCS. The Intergovernmental Panel on Climate Change (IPCC) estimates that CCS has the potential to abate 15-55% of CO₂ emissions by 2100.

According to the final report of the Economic and Technology Advancement Advisory Committee (ETAAC), California has the potential to store 5.2 gigatons of CO₂ in oil and natural gas fields. There is dramatically greater capacity (one to two orders of magnitude) for CO₂ storage in deep saline formations. In addition, California's forests have the potential for capturing and storing significant amounts of CO₂. The ETAAC report estimated that CCS demonstration projects could be in place by 2012 with potential for full commercialization by 2020. The component technologies of CCS exist today at an industrial scale. Indeed, carbon injection has been practiced for many years in the United States.

In addition to recommending CCS as a viable strategy to meet the 2020 GHG reduction goals, we recommend the Scoping Plan make a strong statement that CCS will be an important element in meeting longer-term GHG emission reduction goals. Specifically, the plan should identify opportunities for CCS, identify the permitting and regulatory barriers to CCS and offer specific remedies to remove these barriers.

Voluntary Early Actions:

AB 32 requires that the Scoping Plan provide a system for CARB to credit companies that voluntarily reduce greenhouse gas emissions. The Board passed a resolution expressing general support for the concept. However, there is continuing regulatory uncertainty for companies that have a desire to go forward with energy efficiency and other projects that reduce greenhouse gas

emissions. We recommend that CARB move forward to draw up protocols that will encourage companies to move forward with GHG reduction projects in advance of rule development.

We also urge your staff to consider providing incentives for voluntary early action projects in communities near industrial centers which are a concern for environmental justice organizations either through enhanced credits or pre-certification of energy efficiency projects.

Using Best Available Economic Modeling:

AB 32 requires that the best available economic modeling be used to evaluate the economic and impacts of potential measures to reduce greenhouse gases. We agree that using the best available tools is essential for avoiding economic leakage and achieving emission reduction goals of AB 32. Therefore, we are concerned that the current modeling process is not as robust or as far along as we hoped for at this stage of the Scoping Plan development. Specifically, we concur with comments submitted by the Coalition on Sustainable Cement Manufacturing that the models being employed by CARB were originally constructed from significantly different variable structures and different geographical coverage. These models suffer from limitations that will tend to minimize the economic impacts of the Scoping Plan regulations. Staff should revisit the CAT's assessment of the NRM-NEEM Model, and explore why one of the most sophisticated economic models now available was excluded from the results. In addition, we should conduct sensitivity analyses on the current models, understand how modeling results can inform the calculation of cost effectiveness, and finally, the models need to take into account the risk of leakage where California emission sources move elsewhere in a high cost regulatory scenario.

We urge CARB to immediately convene a team of the country's best economic modelers to review the analysis conducted to date and to recommend additional methodologies so that decision-makers will have the best available information about the benefits and real costs of the regulatory proposals they will be evaluating.

Cost- Effectiveness Criteria:

AB 32 requires that emission reduction measures maximize cost-effectiveness (cost per unit of reduced greenhouse gas emission). The Board "presumed" its early actions were cost-effective even though no criteria or methodology for making that determination was shared with the public. Without such information, Board Members had no reliable means to compare which regulations made sense and which did not. In a recent workshop, staff suggested a methodology for cost effectiveness that would include the value of environmental co-benefits, those impacts that go beyond the GHG reduction potential of the measure.

This approach raises concerns. One benefit of a cost-effectiveness standard for regulations is it helps ensure that companies will remain competitive in California. From the point of view of a company complying with AB 32, cost-effectiveness should consider the cost of the measure and the energy costs saved over a reasonable period of time. To avoid leakage, the competitive landscape for the company and its products, the prospect of technology improvements or transformations, and the cost of alternative emission reductions in the market should also be considered prior to adopting regulations. The cost-effectiveness equation should not include a calculation of co-benefits that do not accrue to the benefit of the company subjected to the regulation. It could make the most expensive control strategies appear "cost-effective," yet

significantly increase compliance costs, raising costs for consumers and encouraging companies and jobs to leave California.

We also urge CARB to subject its cost-effectiveness methodology to the same kind of scientific-peer review as suggested above.

Carbon Taxes:

CARB staff has indicated that imposing carbon fees is one of the options the agency may consider to reduce emissions to meet the 2020 goal. This is a relatively new idea, first being raised in the workshop on May 21. It is difficult at this time to comment on the suggestion, as there are many alternative tax schemes that could be employed. What would be the amount of the tax? Who would it be imposed on? What, if any, actual GHG emission reductions would result from a carbon tax? How high would a carbon tax have to be before consumers and business significantly reduced energy use? What would the impact of a carbon tax be on the California economy? Would California companies and jobs leave the state if this were a California-only carbon tax? At this time, we believe that a tax could have the same damaging effects on the economy as an auction in a cap-and-trade system. Policymakers should be wary of imposing new costs in an already high-tax state.

Climate change programs in local agencies:

AB 32 vested the Air Resources Board with broad authority to oversee the state's plan to reduce greenhouse gas emissions. Over the past several months, other state and local agencies have embarked on their own greenhouse gas reduction programs, promoting "regulatory leakage" away from CARB. Incorporating climate change analyses and mitigation measures as part of CEQA documentation has spawned litigation and legislation that has not yet resolved many complex issues. In addition, some local agencies have stated they are developing their own greenhouse gas emission policies. For example, the Bay Area Air Quality Management District has adopted a fee on greenhouse gas emissions that among other things will be used to develop its own mandatory reporting and inventory system and regional regulations to require greenhouse gas reductions. In the case of the mandatory reporting system, the air district's reporting requirements are different and inconsistent from those approved by CARB. These dueling reporting systems for greenhouse gas emissions are duplicative and increase compliance costs for companies and governments. We're concerned that this same kind of duplication and inconsistency will occur when the Bay Area district proposes its own set of greenhouse gas reduction rules. The City of San Francisco is now considering levying its own carbon tax.

Agencies enforcing their own adhoc climate change policies have the potential to create regulatory chaos and will only weaken CARB's statewide effort. California businesses already face great uncertainty as CARB works to develop a landmark climate change plan. This uncertainty should not be further compounded by the piecemeal policies now being developed by dozens of local and state agencies. To lead the nation and the world, California needs a comprehensive plan not a patchwork of district rules and litigation settlements.