



CONCEPT PAPER

AB 32 COMMUNITY BENEFITS FUND TO REDUCE CUMULATIVE AND DISPROPORTIONATE IMPACTS

The nationally heralded California law to curb greenhouse gases is now approaching its implementation phase. AB 32 – the California Global Warming Solutions Act of 2006 - requires the California Air Resources Board (CARB) to prepare and approve a Scoping Plan on or before January 1, 2009. The plan should identify and make recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms and potential monetary and non-monetary incentives for green house gas emission sources and categories of sources that CARB finds are necessary. The Market Advisory Committee (MAC) and the Economic and Technology Advancement Advisory Committee (ETAAC), along with some environmental, business and industry groups favor a market-mechanism inclusion in the suite of measures to be included in the Scoping Plan.

In addition, the West Coast Initiative supports a market-based concept with a belief that the participant states and Canada will be able to reduce emissions more cost-effectively. A similar approach is advocated on the national scene by a number of bills currently introduced in Congress. In this context, it appears CARB is poised to adopt a market-based mechanism as one component of its overall strategy for reducing greenhouse gas emissions to 1990 levels by 2020.

In designing a market-based system (as stated by Professor Kaswan in her paper submitted to CARB), the CARB must remain cognizant that such a market-based system, if created, is a means to an end, not an end in itself. Focusing exclusively on market-related parameters for success, such as generating the most trades, or the lowest costs, or the easiest system to administer, could undermine the state's achievement of other key goals, including:

- effectively and realistically achieving emission reduction targets;
- incentivizing new reductions and methodologies for achieving them;
- protecting already-burdened communities from additional pollution;
- achieving environmental co-benefits through co-pollutant reductions; and
- providing the state with other economic and environmental benefits.

To achieve these objectives and the requirements as well as the intent of the law (AB32), the Coalition for Clean Air (CCA) proposes that CARB should include in the Scoping Plan: a) cumulative and disproportionate impacts assessment to identify the geographic areas that bear a higher air pollution burden; b) limitations on facilities located in these areas to participate in any market-based approach; and c) dedicate a portion of the revenue generated from any market-based approach to reduce climate or air pollution impacts in the identified areas. We believe these elements should be included whether California ultimately uses a carbon tax, an auction, a Cap and Trade, any other fee mechanism, or any combination of these approaches. The reasoning and details are given below.

Background

Disproportionate Impacts

The magnitude of climate change impacts (acute, chronic, direct and indirect) continues to be higher for low-income communities in all parts of the world. On a global scale, the harmful effects of climate change include extreme heat, water shortages, flooding, more violent weather, and increased incidence and spread of disease. The higher incidence of mortality among elderly and lower income groups have been well documented during the heat episodes observed in Chicago and France in recent years. Similar higher magnitude impacts are expected as a result of more violent weather and biological effects as evidenced during recent hurricanes and some disease outbreaks in Europe. In addition, the lower income population is handicapped in:

a) allocating necessary resources to prepare their homes and themselves to avoid acute impacts of climate change; and b) recovering from the aftermath of acute episodes because of lack of resources necessary to recuperate themselves and repair or rebuild their homes.

Localized Impacts

Irrespective of the market-based approaches taken to reduce greenhouse gases (GHGs), the common concern is that a source participating in an emission trading system or any kind of an offset-based program would continue its emissions at current levels—or may even increase them. Thus, a community near such a source would continue to bear a higher burden of pollution exposure and would not receive associated co-benefits.¹ A similar outcome would be expected under a carbon-tax scenario whereby sources that are willing to pay a higher amount of carbon-tax simply pass on the added cost to their customers instead of reducing emissions at the source.

In addition, one must recognize that the pollution impacts from freeways, rail yards, and distribution centers are very similar to a continuously emitting stationary source like a power plant or a refinery. Hence, allowing a freeway or rail yard expansion with offsets from a different source in a distant area is similar to allowing a power plant to be built with offsets from a different geographical area.

Some argue that the Kyoto list of pollutants (carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons, and sulfur hexafluoride) has few localized impacts and that mobile source pollution (a major source of some Kyoto GHGs) primarily affects regional air quality. It is implicit in this argument that reduction of GHG emissions from a source (via technology changes or activity modifications) will not simultaneously influence the emission rates or quantity of criteria pollutants or toxics. This is not supported by scientific findings or consensus. In contrast, most experts agree that approaches and technologies currently available and those under consideration for reducing GHGs² will also simultaneously reduce other pollutant emissions, thus providing co-benefits to nearby communities and the region.

¹ The co-benefits are derived because a majority of the approaches and technologies currently available and those under consideration would simultaneously reduce other pollutant emissions.

²These include product substitution, improving combustion and energy efficiency or capture emissions.

Concerns and Challenges

Recognizing the likelihood of increasing disproportionate or cumulative impacts in some communities as a result of greenhouse gas emission reduction efforts, the Global Warming Solutions Act [AB 32] included the following language:

- a) the greenhouse gas emission reduction rules, regulations, programs, mechanisms, and incentives under its jurisdiction, where applicable and to the extent feasible, direct public and private investment toward the most disadvantaged communities in California and provide an opportunity for small businesses, schools, affordable housing associations, and other community institutions to participate in and benefit from the statewide efforts;
- b) the activities undertaken to comply with the regulations do not disproportionately impact low-income communities; and
- c) ARB when designing any market-based compliance mechanism and regulations consider the potential for direct, indirect, and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution, as well as prevent any increase in the emissions of toxic air contaminants or criteria air pollutants.

The Act also authorizes the CARB to adopt market-based compliance mechanisms. The MAC with national and international experts convened per Governor Schwarzenegger's 2007 Executive Order made recommendations to ARB on the design of a market-based compliance program that permits trading with the European Union, the Regional Greenhouse Gas Initiative and other jurisdictions. The MAC recommended that a "Cap and Trade Program" be considered as the primary market mechanism and acknowledged that: a) "Carbon-tax" can also achieve similar results; and b) environmental justice concerns raised by many committee members and members of the public are true and need to be addressed in the design phase of a market based program.

The ETAAC in its recent report recognized the need to develop solutions that avoid imposing undue burdens on disadvantaged communities suffering from historically higher pollution levels. The ETAAC also suggests establishing a clear market price on carbon to provide incentives for business and consumers to reduce their carbon emissions efficiently and dedicate a portion of any resulting auction or fee revenues to projects based on cumulative impacts, geographic location, demographics, and/or associated co-benefits. ARB staff have stated that they would evaluate direct regulations, voluntary actions, market-based mechanisms that include cap and trade as well as offsets, and other approaches such as incentives, feebates, carbon fee and intensity standards in developing the AB 32 Scoping Plan.

Uncertainty

While it makes sense, then, to determine what co-benefits GHG reductions can have on criteria pollutants and other community impacts, there are methodological limitations and uncertainties associated with such an exercise. For example, localized or community level exposures or risks may be difficult to estimate accurately because of wide variation in the emission inventory, limitations in modeling capabilities, difficulty in assessing cumulative risks of criteria and toxic pollutants at a community level.

In order to address these issues CARB and the California Energy Commission jointly funded a multimillion dollar study to develop a Cumulative Impacts Screening Tool that is nearing its completion. The preliminary results clearly indicate that a Screening Tool has been developed and can be applied at an air basin's level to identify areas having disproportionate impacts.

Public Skepticism

There is widespread and long-standing skepticism, including but not limited to environmental, environmental justice and community advocates, about pollution trading. CCA itself has long been a critic of proposals that would emphasize pollution trading over command and control regulations. Failures in other programs, such as the South Coast Air Quality Management District's RECLAIM program and the European Trading System, have only validated these concerns. CCA and many others are very concerned that, with millions of dollars at stake for polluting industries, public input will be overwhelmed by the well-heeled stakeholders in a market-based system. We are also concerned that allowing pollution trading will reflect a willingness of society to trade the well-being of one segment of the population for the prosperity of another. In addition, the general public's lack of knowledge on the pros and cons of trading emissions and lack of active participation in the decision-making process could harm already over-burdened communities.

Hence, it is incumbent on any GHG emissions reduction program to ensure that the communities continuing to bear the higher pollution burden will participate in and benefit from these GHG reduction efforts. In order to protect the interests of these communities, CARB needs to quantify the potential for direct, indirect, and cumulative near-source emission impacts. With or without precise quantification, however, protections must be built in to the design and implementation of any market-based approach to reduce GHGs.

Potential Solutions

Different groups have put forth a number of different concepts and specific suggestions regarding the scope and design of a market-based mechanism for reducing greenhouse gas emissions. The Coalition for Clean Air's (CCA) recommendation focuses on providing health and resource benefits to those communities that face a higher magnitude of climate change impacts and have a disproportionately higher air pollution burden in an air basin. To accomplish this objective ARB should consider:

- (i) limiting the geographical and/or sectoral scope of any market-based program that allows for trading allowances and purchasing offsets;
- (ii) using cumulative impacts screening to identify areas that require special protection;
- (iii) dedicating a fixed percentage of revenues generated from any market-based approach (revenue from fees, tax or auction) to benefit these communities; and
- (iv) requiring entities that purchase offsets or allowances (credits) to contribute to a community benefits fund.

Cumulative Impacts Assessment³ and Associated Trading Limitations

In order to protect disproportionately impacted communities from a potential increase in their pollution burden and to decrease emissions in such communities, ARB should ensure a structured consideration of cumulative emissions and impacts. To achieve this goal, the Cumulative Impacts Screening methodology currently being developed in a research project sponsored by ARB should be finalized and approved by the ARB as a common screening tool. This Cumulative Impacts Screening Tool can be used to identify communities or geographical areas that already have higher pollution levels.

One approach to protect these highly impacted communities would be to preclude all sources in these heavily polluted areas from participating in any pollution trading system. This ensures incremental reduction in emissions resulting in incremental benefits and co-benefits to the most vulnerable population.

Another approach could be to allow a pollution source in such a community to temporarily participate in a pollution trading system, but require it to meet additional criteria such as:

a) assuming that all facilities purchasing allowances or offsets must pay a fee, require facilities in highly impacted communities to contribute twice the amount of fee towards community benefits fund; b) work with the community or communities potentially affected, the city, residents and the local air district to develop a community benefits agreement that can be implemented and enforced; c) meet a certain level of actual reductions before being allowed to continue to purchase(after the first time) pollution credits or offsets.

Community Benefits Fund

A funding stream should be created and earmarked for community benefits to address existing disproportional impacts, mitigate localized impacts, improve energy efficiency, or provide for rebates or adaptation for climate change impacts. The size of this fund should be proportional to reflect the level of disproportional impacts. ARB should consider the range of uncertainties and disproportionate impacts due to cumulative emissions under different scenarios and establish a percentage that all sources must contribute to the Community Benefits fund when they purchase allowances, credits or offsets.

This fund should also receive an initial allocation of revenues generated from the auction of allowances, carbon tax or fee as recommended by the ETAAC. In addition, the fee charged to a facility participating in any trading or offset program would be dependent on its location as explained earlier. The latter can act both as a deterrent to emitting GHGs and copollutants and an incentive to invest in control measures for reducing emissions.

³ Cal/EPA's definition for Cumulative Impacts - means exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available.

Accountability

The Community Benefits Fund created by a market mechanism must not be viewed as cash vouchers for individuals in a specified geographic area, but as a resource for taking action within the area to reduce exposures or risks related to climate change and air pollution, e.g. community based programs focused on improving energy efficiency at homes, schools, etc.; or even relocation of emission sources or receptors. While statewide parameters should be established, a public process should ensure that the community plays an active role in determining how the fund will be utilized and what type of projects will be funded.

Conclusion

By incorporating these concepts into the Scoping Plan and subsequently in the implementation phase of AB32, California can:

- treat communities as partners in a market-based approach;
- acknowledge that the risk of pollution trading could result in cumulative and incremental increases in exposure burden in already over-polluted communities;
- accept the responsibility to prevent or minimize the impacts at a community level;
- follow the requirements as well as the intent of the law; and
- provide assurance that any market approach results in cleaner air and not just profits to a few;
- lead the shaping of greenhouse gas emission reduction programs under the West Coast Initiative and on the national scene.

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