August 30, 2012

The Honorable Mary Nichols
Chairman, California Air Resources Board
1001 "I" Street
Sacramento, CA, 95812

Re: Comments on Cap-and-Trade Program: Emissions Leakage Research and Monitoring.

Dear Chairman Nichols:

We, representatives of the undersigned groups and associations, submit the following comments on staff's proposals presented at the public workshop on Emissions Leakage Research and Monitoring, July 30, 2012.

We commend staff for the informative presentations and for the open forum provided by the workshop, and we strongly support the proposed analyses and research agenda. Leakage is an important issue, and the California Air Resources Board (CARB) in Resolution 11-32, October 20th 2011 directed further analysis of this issue. Specifically the Board stated on page 11, Resolution 11-32: *BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue to review information concerning the emissions intensity, trade exposure, and in-State competition of industries in California, and to recommend to the Board changes to the leakage risk determinations and allowance allocation approach,* ***if needed****, prior to the initial allocation of allowances for the first or second compliance period,* ***as appropriate****, for industries identified in Table 8-1 of the cap-and-trade regulation, including refineries and glass manufacturers* (emphasis added).

At the workshop comments were specifically requested for (1) the potential increase in assistance factors (AF) for medium and low leakage risk categories; and (2) proposals to collect facility-level economic data as a major means by which to monitor leakage, especially in collecting data through the Mandatory Reporting Regulation (MRR), and suggestions for additional data to collect.

1. CARB Should Not Prejudge the Outcome of Supplemental Leakage Research and Monitoring By Increasing Assistance Factors in Later Compliance Periods

There is a threshold issue in that the workshop request for comments appears not to reflect the intent of the directive issued by the Board in resolution 11-32. The resolution does not limit the review of assistance only to a consideration of increases versus the status quo, but rather directs review and recommends changes "if needed" and "as appropriate".

We strongly urge CARB to allow the proposed research presented at the workshop to proceed before determining whether assistance factors should be increased. CARB should base its policy response on the results of the research without prejudging an outcome in one direction. Depending on what the research reveals, CARB should consider the full range of options, including whether leakage assistance factors should be increased, decreased, left unchanged, and whether leakage categories should be adjusted, or whether other leakage mitigation strategies are more appropriate to address concerns.

Current regulations assign all industry categories a leakage risk assistance factor of 100%. For the second compliance period, current regulations assign leakage assistance factors of 75% and 50% to medium and low leakage risk categories, respectively. These change to 50% and 30% in the third compliance period. While we support CARB's commitment to undertaking a more thorough leakage assessment, there is no economic justification for increasing assistance factors above 100%. Nor should CARB consider increasing overall free allocations by weakening or eliminating industry benchmarks in lieu of or in addition to raising assistance factors. Unlike assistance factors, benchmarks differentiate between the best and worst performers within an industry, rewarding the cleanest and most efficient producers

Whether CARB's transition assistance will appropriately mitigate leakage without overcompensating producers depends on the extent to which the higher input prices resulting from pricing harmful emissions will cause California firms to become competitively disadvantaged.[1] Leakage can occur if firms try to avoid pollution costs by moving production out of state to avoid higher production costs. On the basis of the research proposals outlined at the workshop from researchers at UC Berkeley and Resources for the Future, CARB has commissioned good analysis to ensure it has the appropriate information and tools at its disposal to assess the extent and nature of leakage. The supplemental analysis CARB is overseeing will provide estimates of statewide leakage likely to result from carbon pricing and will also yield predictions of how plant level output is likely to respond to carbon pricing.[2]

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[1] For example, refineries will obtain free allowances worth over two billion dollars under the current set of regulations. The research question is whether this level of financial assistance is excessive or just adequate compensation for refineries paying for their pollution emissions. The economic "dream team" that was assembled to advise CARB on cap and trade design, the Economic and Allocation Advisory Committee, stated in its report that "…relatively little allowance value would be needed under this mechanism to address leakage."(p. 43). Many economic research reports from the US and Europe suggest that leakage risks can be accounted for through less than 20 percent free allocation. For example, Resources for the Future calculates that "…only about 15-20 percent of allowances are needed to compensate energy-intensive industries, for their loss of producer surplus, so the huge bulk of allowances could still be auctioned."(Aldy et al, RFF Discussion Paper DP08-16, *Designing Climate Mitigation Policy*, May 2009, p 22. online at: http://www.rff.org/RFF/Documents/RFF-DP-08-16.pdf). Stanford's Professor Larry Goulder and colleagues find that "under a wide range of cap-and-trade designs, freely allocating less than 15 percent of the total allowances prevent profit losses to these most vulnerable industries. Allocating 100 percent of the allowances substantially overcompensates these industries, in many cases causing more than a doubling of profits."(*Impact of Alternative Emissions Allowance Allocation Methods under a Federal Cap-and-Trade Program*, August 2009. online at: http://www.nber.org/papers/w15293).

[2] The extent to which emissions leakage follows from economic leakage depends on the comparative emissions intensity of the domestic and non-domestic plants. It is unclear if the research will examine the relative emission intensities of plants.

Since these important results are still pending, it is premature to consider only increases in transition assistance. The research results may instead support a policy change in the opposite direction. Suppose the research finds little or no leakage in the past. Then, transition assistance should be reduced, not increased. To do otherwise would be to continue providing valuable assistance (in the form of free allowances) for something that is not occurring when these funds could be directed to more deserving and productive uses, such as assistance to disproportionately impacted communities and households or investments in clean energy and energy efficiency strategies with broad spillover benefits throughout the economy .[3]

In addition, we urge CARB to evaluate carefully the competing claims for allowance allocations. Allowances are equally valuable whether they are bought on the market, at auction, or given away for free (in which case the cost of using an allowance for compliance takes the form of an opportunity cost). It is California output-based free allocations that provide the incentive to keep production in-state. Absent real leakage exposure, firms have every incentive and opportunity to pass through compliance costs and retain the value provided by free allocations, resulting in windfall profits. Decisions on allowance distribution must therefore consider who is ultimately bearing the costs of carbon pricing and who is most deserving of the benefits of allowance value, which will flow back into the economy.

Providing free allowances assigns that value to the private sector, with commensurate opportunity costs in forgone investments for other public uses. Unlike free allocation, auctioning of allowances generates critical funds that can be used to lower the costs of AB 32 for all sectors. While minimizing leakage is critical to the success of the program, increasing free allocations beyond the level necessary to address leakage exposure presents equal risks and costs that need to be taken into account by CARB.

2. <u>Industry Should Provide the Data ARB Needs to Conduct a Thorough Assessment of Leakage Exposure.</u>

We support and agree that CARB should collect facility-level economic data through the Mandatory Reporting Rule (MRR) as opposed to a voluntary survey or other opt-in arrangement. For the data to be useful in assessing leakage exposure and informing future program refinement, CARB must have access to data at a disaggregated level (e.g. the 6-digit NAICS code) to accurately assess state-level leakage exposure. As outlined at the workshop, state and federal agencies currently collect data indicative of leakage risk only at highly aggregated levels. *CARB erred on the side of the caution by classifying all industry sectors as high leakage risk at the start of the program to afford time for a more thorough assessment. Industry now needs to do its part by providing the relevant economic data CARB is requesting.* We fully expect that CARB's longstanding practice and commitment to maintaining the confidentiality of all non-emissions industry data will assuage any disclosure concerns.

[3] For petroleum refining, the Economic and Allocation Advisory Committee (EAAC) report suggests leakage concerns are very unlikely to occur unless carbon prices reach over $50/ton. (EAAC report, March 2010, page 46, footnote 47) In addition, subsidies (via free allocations) for carbon intensive products and processes are a barrier to cleaner alternatives. (ETAAC report, December 2010, p1-10)

3. Additional Leakage Monitoring Data and Research Requests

Suggestions for additional data collection:

a) We recommend collecting data by facility on the value of product shipped for the export and domestic markets. These data will help with the overall assessment of the economic impact of AB 32 on facilities.
b) We recommend that CARB require refineries to report on the quality of crude oil processed at their facilities (including criteria such as density and sulfur content) for both domestic and imported crude feedstock. This data is required to assess the quality of crude feedstocks which correlate with emissions intensity.
c) We recommend that CARB consider alternative measures of leakage for oil extraction as this sector is unlike manufacturing activities since extraction activities "have to be located where the reserve is". (CARB, ISOR, Appendix K-26, "Leakage Analysis") Alternative factors to consider for assessing leakage in this case, would be to look at whether the cost of greenhouse gas allowances makes production from California's declining reserves economically infeasible. For instance, ICCT's June 6, 2011 comments show that crude oil prices have increased substantially over the last decade, and that so cost increases from allowance prices would not significantly affect the incentive to continue producing and depleting California's reserves.

4. Additional Research on Alternative Leakage Mitigation Strategies

There are alternatives to free allocations such as border adjustments and we strongly urge CARB to include research into these alternatives as a key part of the research agenda on leakage mitigation strategies.

We appreciate the opportunity to provide comments on staff's proposal and we thank staff for all their work on these important issues. We look forward to working with staff on an ongoing basis.

Sincerely,

Jasmin Ansar, UCS
Alex Jackson, NRDC
Paul Mason, Pacific Forest Trust
Timothy O'Connor, EDF
Michelle Passero, The Nature Conservancy
Ryan Young, Greenlining Institute

cc
James Goldstene
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CARB Board members