

August 11, 2011

Chairman Mary Nichols and Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95812

RE: Transportation fuels issues related to cap and trade

Dear Chairman Nichols and Members of the Board

The undersigned organizations appreciate the opportunity to provide comments to the Air Resources Board regarding the proposed July 2011 revisions to the California cap and trade program.

First, we strongly recommend that CARB make a clear commitment to reevaluate the transportation biofuels exemption in the near future. This process should occur in time to make all necessary revisions prior to the implementation of cap and trade phase II, when surface transportation combustion emissions will be included. Below is an attachment with suggested language to include in your report to the Board on this item and in the Final Statement of Reasons for the cap and trade program.

This is important for a number of reasons. It is well understood, for example, that CO₂ emissions as a result of using ethanol vary dramatically depending on how the ethanol is produced. This exemption effectively assigns all transportation biofuels zero GHG emissions, creating an implicit subsidy, regardless of their actual GHG profile. This is also the case for other types of biofuels. The blanket exemption for biofuels would create leakage as transportation biofuels increase, and disadvantage advanced technologies such as hybrid, plug-in, and fuel cells.

While ARB's analysis shows that both biodiesel and renewable diesel derived from soybeans provide small reductions in emissions, biomass-based diesel alternatives derived from sources such as palm oil grown on former tropical forest or peatland could substantially increase emissions.¹ As a consequence, exempting all ethanol and biodiesel from carbon allowance obligations could have the perverse effect of incentivizing the greater use of ethanol and biodiesel, regardless of whether they can contribute to reduced GHG emissions or not.

In addition, ARB's projected baseline emissions inventories do not appear to account for the expected shift from petroleum transportation fuels to biofuels in the future (see ethanol line,

¹ Eg, Searchinger, 2010. Biofuels and the need for additional carbon., Environ. Res. Lett. 5 (April-June 2010) 024007 doi:10.1088/1748-9326/5/2/024007; Butler et al, 2009. REDD in the red: palm oil could undermine carbon payment schemes. Conservation Letters., 2(2):67-73; Wicke et al, 2008., Different palm oil production systems for energy purposes and their greenhouse gas implication., Biomass Bioenergy 32:1322-1337; Holly K Gibbs, et al, 2008. Carbon payback times for crop-based biofuel expansion in the tropics: the effects of changing yield and technology., Environ. Res. Lett. 3 034001; Beer et. al., 2007. The greenhouse and air quality emissions of biodiesel blends in Australia., CSIRO Report Number KS54C/1/F2.27. August 2007.

http://www.arb.ca.gov/cc/inventory/data/tables/2020_ghg_emissions_forecast_2010-10-28.pdf). While some of this increase may be accomplished with lower carbon biofuels, this shift would set back ARB's efforts to achieve 2020 GHG goals unless transportation biofuels are included in cap and trade or the overall level of the cap and trade is reduced to account for leakage due to expected increasing levels of transportation biofuels.

Suppliers of biofuels should be able to apply for credits for certain fuels using an emission crediting system consistent with adopted emission factors, the best science, and verifiable methodologies. ARB's Low Carbon Fuel Standard (LCFS) is a good example of how to determine that emissions profile of low-carbon fuels. Treating all transportation biofuels as zero emissions is not supported by the best science and the ARB's own LCFS studies. It is critical to the integrity of the AB 32 program that ARB not create an emissions loophole for transportation biofuels.

Second, we also recommend establishing a separate benchmark for transportation hydrogen production to recognize both the displaced GHG emissions due to fuel cell vehicles and the absence of a cap on surface transportation petroleum combustion GHG emissions initially. This benchmark should be based on the displaced CO₂ from petroleum, using LCFS values and recognizing the improved efficiency of fuel cell vehicles compared to petroleum fueled vehicles as established in the LCFS. ARB should establish a straight-forward allowance application process in conjunction with the LCFS, recognizing that a number of potential hydrogen fuel suppliers are small businesses without the resource to "opt-in" the cap and trade.

Thank you for considering our comments.

Sincerely,

Brian Nowicki
Center for Biological Diversity

Tyson Eckerle
Energy Independence Now

Jim Metropulos
Sierra Club California

Attachment: Transportation biofuels language

We recommend the following language be included in the final Statement of Reasons and is incorporated in the report to the Board.

- A blanket exemption would allow leakage from the cap due to increasing uncapped biofuels consumption from increased consumption of E10, potentially E15, and also E85;
- A blanket exemption would remove the conservation incentive created by cap and trade for a sub-set of fuels;
- A blanket exemption would treat all biofuels equally regardless of whether they are less carbon intensive than petroleum fuels and disadvantage advanced technologies such as hybrids, plug-in vehicles, and fuel cell vehicles.

Several options will be evaluated in 2012 for consideration prior to implementation of cap and trade phase II. First, ARB could remove the exemption. Fuel suppliers could either treat transportation biofuels the same as other surface transportation fuels, or use LCFS accounting methods to justify reduced allowance obligations. Second, ARB could retain an exemption as either a blanket exemption regardless of emissions, or with emissions thresholds such as 50% or 60% reduction from conventional fuels similar to federal benchmarks for advanced biofuels and cellulosic biofuel.

The evaluation will consider a number of factors such as: the extent to which upstream transportation biofuels production emissions are captured under other cap and trade systems of similar stringency to California; the amount of leakage that would occur under a blanket exemption; and the availability of LCFS accounting tools; and effect on incentives for the lowest carbon advanced transportation technologies.