THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION

December 14, 2010

Kevin Kennedy
Assistant Executive Officer
California Air Resources Board
1001 I Street
Sacramento, California 95812

Subject: Proposed Greenhouse Gas Cap and Trade Regulation

Dear Mr. Kennedy:

The International Council on Clean Transportation (ICCT) recognizes and supports the important national and international precedent set by California Air Resources Board (CARB) in their pioneering greenhouse gas (GHG) program for transportation and other sectors. CARB has adopted world-class standards to reduce transportation sector GHG emissions and has complimented these standards with incentives and price signals also necessary to accomplish 2020 and 2050 GHG goals. We appreciate the opportunity to comment on CARB's October 28, 2010 proposed cap & trade regulation.

Our primary concern with the current proposal is the exemption for transportation biofuels from the cap & trade system. This exemption effectively assigns all transportation biofuels as zero GHG emissions, giving them an implicit subsidy, regardless of their actual GHG profile. The proposed cap & trade system will be most effective in ensuring GHG reductions if designed consistently with another important and pioneering CARB policy, the Low Carbon Fuel Standard (LCFS).

We support CARB's proposal to auction all allowances needed for the physical carbon content of petroleum-based transportation fuels in 2015. We would suggest that a much higher portion of the allowances for refineries and oil productions be auctioned as well. This would provide a greater incentive to adopt more efficient production techniques, help capture the full price of transportation fuels, and allow for potential use of auction revenues to support further action to meet California's ambitious GHG goals, with associated environmental and economic benefits.

Please see our attached detailed comments for additional information. If you have questions please feel free to contact me at alloyd@theicct.org or Ed Pike at ed@theicct.org.

Sincerely,

Alan C Lloyd

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President, International Council on Clean Transportation

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ICCT Comments on Proposal for Cap and Trade Regulation, October 28, 2010

1) Proposed Cap & Trade Surface Transportation Biofuels Exemption

Avoiding Perverse Subsidies

CARB's Low Carbon Fuel Standard (LCFS) establishes a global best practice for accounting for the GHG intensity of fuels. Through the development of the LCFS, the world has learned that biofuels can have greatly varying lifecycle carbon emissions, including important impacts related to land-use changes. Linking the cap & trade system to the LCFS to account for the carbon content of transportation fuels would support the goals and successful outcomes of both policies. Certain investigations within the LCFS are still ongoing, such as the Expert Workgroup on food versus fuel issues, and should be reviewed before any such exemptions are finalized.

We recommend allowing fuel providers the flexibility to choose between two options: 1) require allowances to cover the carbon content of the fuel, as proposed for other liquid transportation fuels; or 2) allow use LCFS accounting tools to determine the GHG burden of the fuel in order to adjust the compliance obligation.[1]

The currently proposed exemption provides an implicit subsidy for surface transportation biofuels, regardless of their GHG profile. For example, a $20/ton GHG allowance price translates into a price advantage for conventional ethanol (on top of existing federal subsidies) equivalent to about $0.16-$0.20 per gallon of gasoline-equivalent. Conventional ethanol would also receive a competitive advantage over lower carbon alternatives, such as advanced biofuels that are a focus of in-state research and development investments and electricity and hydrogen meeting the 33% renewable portfolio standard.

Emissions Inventory and AB 32 GHG Targets

In support of the ambitious goal of AB 32 to reduce California's GHG emissions to 1990 levels by 2020, CARB has estimated that ethanol emissions, as currently exempted from the cap & trade proposal, would hold steady at about 5 million metric tons per year from 2008 to 2020.[2]

There are many reasons why sales from ethanol and other transportation biofuels (not covered by the proposed cap) will likely grow in coming years: 1) ethanol blend levels in typical gasoline are increasing, currently to E10 (i.e. 10% ethanol from just under 6%) and potentially to E15 in

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[1] The cap & trade system may cover some of the upstream emissions through coverage of other sectors, however procedures could be put in place to avoid double counting.

[2] Inventory for sources under the cap & trade system and not under the cap & trade system (these estimates generally do not include AB32 measures)
http://www.arb.ca.gov/cc/inventory/data/tables/2020_ghg_emissions_forecast_2010-10-28.pdf
Inventory for reductions at sources both under the cap & trade system and not covered by cap & trade:
http://www.arb.ca.gov/cc/inventory/data/tables/reductions_from_scoping_plan_measures_2010-10-28.pdf

the future; 2) the national Renewable Fuels Standard will more than double the amount of biofuels nationally; and 3) California is investing heavily in E85 infrastructure. While the effect of increasing sales volumes on GHG emissions depends in part on how these biofuels are produced, well-aligned regulatory programs are needed to ensure that the sales mix includes a rapidly increasing share of the lowest GHG biofuels. CARB's ambitious plan to meet AB32 goals leaves no room for growth in emissions outside the cap, as might be expected from expansion in biofuels.

2) Petroleum Fuels Applicability Clarification

We support the inclusion of the carbon content of transportation fuels within cap and trade as a complimentary measure to vehicle standards, the LCFS, and policies to reduce vehicle miles traveled.

While the proposed transportation fuels applicability section (section 95852(d)) could be read to include domestic production, we suggest making this more explicit—similar to language for natural gas in sections 95852(c)&(e). The following revision would help avoid any potential misunderstanding or attempt to avoid compliance: "A supplier of petroleum products covered under section 95811(d) or 95812(d) has a compliance obligation ~~from~~ for every metric ton CO2e of GHG emissions that would result from full combustion or oxidation of the quantities of the following fuels that are imported and/or delivered to California, produced in California, or otherwise delivered to end users in California"

3) GHG Allowance Allocations

Supporting Transition Assistance

The use of GHG allowances can play an important role in meeting California's ambitious 2020 GHG goals and setting us on the path to meet ambitious long-term 2050 GHG goals. Industrial sector allowances could support further action to meet AB32's GHG reduction goals and associated environmental and economic benefits. For instance, the Economic and Technology Advancement Advisory Committee (ETAAC) Advanced Technology Development sub-group report recommended options for using the value of GHG allowances to help end-users and producers transition California to a cleaner and more efficient economy. These options can help both small businesses as well as large GHG intensive producers (page 2-6 and 2-7).

On the other hand, the Advanced Technology Development report notes that subsidizing GHG intensive products through GHG allowance allocations can create a barrier to this transition (see page 1-10). The Economic and Allocations Advisory Committee found that the need for free allowances to address leakage is small.[3]

[3] Economic and Allocations Advisory Committee report, "Allocating Emissions Allowances Under a California Cap-and-Trade Program", March 2010 Executive Summary page 3.

We agree with CARB's proposal to auction allowances required for the carbon content of transportation fuels delivered to end-users when they are brought into the cap in 2015. We also believe that the proposed regulation relies too heavily on giving producers such as refineries and oil productions free allowances based on the amount of petroleum they produce or refine (i.e. the higher the level of production, the higher the level of subsidy) as discussed further below. We recommend focusing more on assistance to both producers and end-users who take action to help meet California's ambitious GHG goals and provide associated environmental and economic benefits. We believe that cleaner and more efficient vehicles, fuels, and transportation systems are important examples of these opportunities.

Proposed Oil Production Subsidies

The currently proposed rule would create a 100% free allowance allocation factor for the oil extraction industry from 2012 to 2020.[4] We recommend that CARB auction a greater portion of allowances for this sector. The cap & trade system will set national and international precedents that should be consistent with AB 32 and LCFS goals of reducing lifecycle GHG emissions. If free allocations are given for oil production, they should be based on the most efficient producer to provide an incentive to switch from energy intensive processes such as steam injection to carbon dioxide injection and other less GHG intensive oil production processes. The current proposal could set a precedent could also be applied in other regions to provide allocation subsidies to highly GHG intensity transportation fuels such as tar sands.

We agree with CARB staff that additional analysis is warranted (Appendix K-26 and 27) regarding potential leakage risk for domestic captive producers such as oil production facilities. CARB has determined that some allocation decisions (i.e. cogeneration) require further analysis before making any final decisions, and further analysis of domestic captive producers should also precede adoption of any free allocation factors for these sources.[5]

Examination of published California Department of Oil, Gas, and Geothermal Resources data[6] show that California domestic captive oil production is not sensitive to leakage at the carbon prices expected under the California cap & trade program ($15-$30 projected in 2020, according to CARB's staff report). As demonstrated in Figure 1, oil production has been on a steady decline over the past decade, and fuel price has had no perceptible impact on production, even with a five-fold crude oil price increase. Adding a carbon price, for example $20/ton, is likely to

[4] Allocation factors may not exactly match the actual amount of free allocations due to a moderate annual declining factor of between 1 and 2%.

[5] We encourage CARB to also re-evaluate the proposed leakage assessment for other domestic captive producers including gas production, soda ash production, and potentially also cement based on their close connection with mining California limestone deposits.

[6] See ftp://ftp.consrv.ca.gov/pub/oil/annual_reports/2009/PR03_PreAnnual_2009.pdf and http://www.consrv.ca.gov/dog/geothermal/Pages/Index.aspx. Chevron on-line price bulletins back to 2000 were consulted to add precision to the DOGGR graph and prior years were estimated from the graph.

change the net price received for crude oil production by about one percent at recent oil prices, even if producers pay for 100% of their GHG allowances.[7]

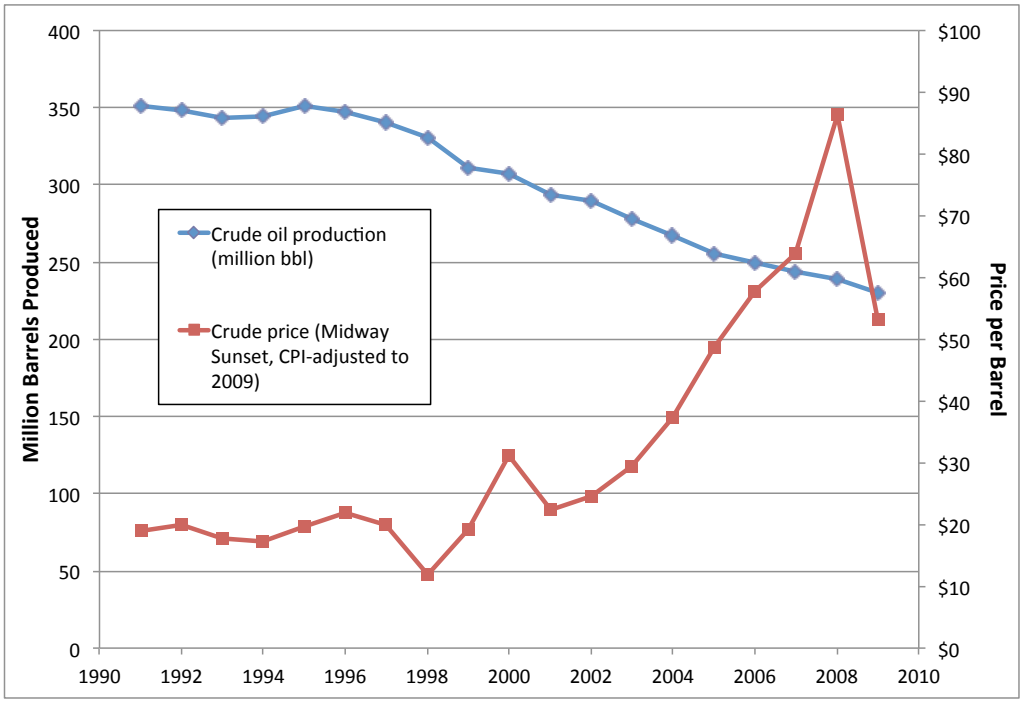

Figure 1: Price versus production of California crude oil
Sources: California Department of Oil, Gas, and Geothermal Resources; Chevron price bulletins

Proposed Oil Refinery Subsidies

Based on CARB's allocation formulas, refiners would receive the majority of industrial sector free allowances, as shown in Figure 2 below. This sector would be the biggest recipient overall behind electric utilities. The value of these allowances at $20 per GHG allowance over the years at 2012 to 2020 is estimated at $4 billion dollars.[8] The leakage risk for refined California surface transportation fuels is low due to unique California fuel requirements[9] and can likely be minimized further without free allocations (through mechanisms such as a border adjustment).

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[7] ICCT estimates that the cost of allowances would change producers net price per barrel by approximately 1% compared to oil prices from 2005-2009 based on data from Chevron price bulletins and the CARB emissions inventory, assuming that most oil & gas sector emissions are assigned to oil production (which may be overly conservative)

[8] Calculations are based on CARB estimate that benchmarks will be set at 90% of average emissions; allocations to this sector would decline due to lower assistance factors and cap –adjustment factors, and that the growth factor is consistent with CARB's overall economic growth projections.

[9] US Energy Information Agency (US EIA) data is a potential source for identifying how much refined petroleum motor vehicle fuel is imported into the Western United States although the Western United States estimate would overestimate the level of imports specific to California.

Any free allocations based on production should be based on the most efficient refinery and not reward refineries with higher GHG emissions due to the type of crude refined or their configuration. Benchmarks for any free allocations should be based on the type of intermediate or final product produced and whether the process begins with an unrefined or a partially refined intermediary product, and updated based on best practices similar to Best Available Control Technology for criteria pollutants.

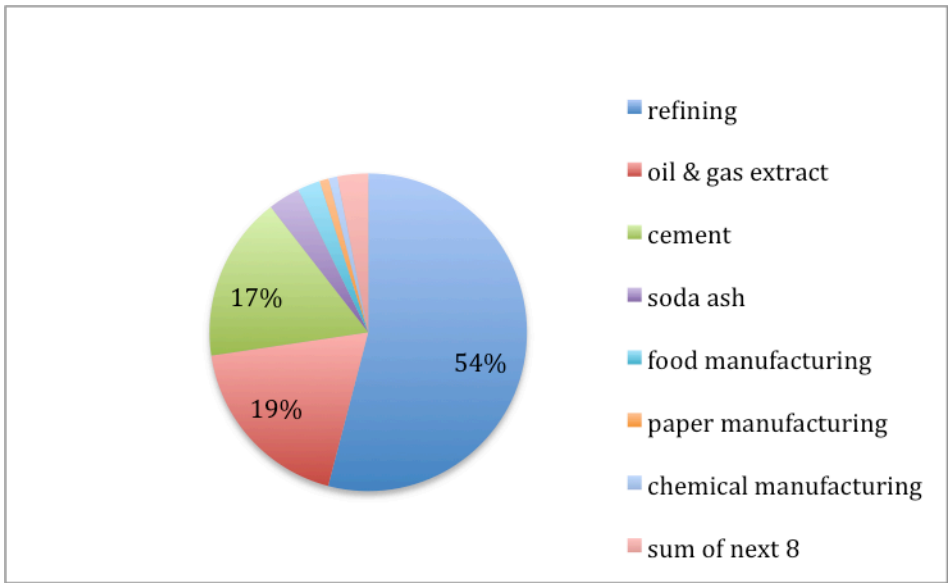

Figure 2: Share of Free GHG Allocations to GHG Intensive Producers
Sources: CARB proposed GHG allocation factors and ICCT analysis