Public Comments on the California Air Resources Board's Climate Change Scoping Plan

Submitted by the Institute for Energy Research

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<u>Introduction:</u> IER appreciates the opportunity to provide comments on the California Air Resources Board's (CARB) "Climate Change Proposed Scoping Plan: A Framework For Change." We have serious reservations relating to the economic analysis underpinning the Scoping Plan. (The Economic Analysis Supplement was originally released in September 2008, and an updated version is included as Appendix G in the current Scoping Plan.[1]) We echo the concerns raised by such respected parties as the Legislative Analyst's Office, which concluded that CARB "failed to demonstrate the analytical rigor of its findings" and that "economic analysis played a limited role in the development of [the] scoping plan."[2]

In the same vein, Director of the Harvard Environmental Economics Program Robert Stavins writes: "I have come to the inescapable conclusion that the economic analysis is terribly deficient in critical ways and should not be used by the state government or the public for the purpose of assessing the likely costs of CARB's plans."[3]

We at IER share these concerns. In order to allow California citizens, as well as policymakers in other jurisdictions, to reach an accurate understanding of the costs and benefits of initiatives such as AB 32, it is crucial that CARB perform a proper economic analysis. CARB's current analysis does not accurately depict the tradeoffs involved, because it (i) overestimates the benefits—in terms of mitigated climate change—likely to result from AB 32's targets for greenhouse gas emissions, and because (ii) CARB's economic analysis also underestimates the costs—in terms of reduced economic output—of AB 32. Until CARB adequately deals with these shortcomings, policymakers are in no position to assess the impact of AB 32 on the citizens of California.

We now address each issue in turn.

<u>CARB's Analysis Overstates the Environmental Benefits of AB 32:</u> The fundamental problem with state-level initiatives to limit greenhouse gas emissions is that global climate change is a *global* problem. In the economics of climate change literature, the term "leakage" refers to the phenomenon whereby even draconian regulations in one jurisdiction do not reduce overall emissions as much as would have been expected, because the affected industries might choose to relocate to other, more permissive jurisdictions. In the case of California, even if it mandated *zero* greenhouse gas emissions *by 2010*, it is not correct to assume that *global* emissions of greenhouse gases would forever be that much lower. On the contrary, many of California's current businesses and citizens would simply leave the state, so that other areas would see their own emissions grow at a faster rate than would have occurred under the status quo.

It is incumbent upon CARB to model plausible scenarios, showing the likely trajectory of global greenhouse gas emissions with and without AB 32, taking into account the phenomenon of "leakage." Then, CARB would need to plug these different estimates (which will surely not differ all that much from each other, especially as the projection goes further into the future) into a reasonable model showing the likely damages from climate change resulting from the two different trajectories of global emissions. Using standard models of the economic impacts of climate change, the anticipated benefits of AB 32 are likely to be very small indeed. If CARB disagrees with this conclusion, the burden of proof rests on it to explain exactly why this standard modeling exercise is flawed, and why efforts to cap greenhouse gas emissions at the level of a U.S. state will noticeably affect the global climate in, say, the year 2050.

<u>CARB's Analysis Understates the Economic Costs of AB 32:</u> Contrary to other respected models of the impact of climate legislation, CARB's analysis finds that the new constraints placed on businesses and households in AB 32 will actually create jobs and save money:

> This economic analysis indicates that implementation of this forward-looking approach creates more jobs and saves individual households more money than if we stood by and pursued an unacceptable course of doing nothing at all to address our unbridled reliance on fossil fuels. (Scoping Plan, p. G-i.)

Yet it is unclear how this is possible. With or without AB 32, businesses in California already have the *option* of reducing their greenhouse gas emissions, and households already have the *option* of installing energy-efficient windows, new installation, solar panels, etc. If it really were the case that the measures of AB 32 would, on net, make California businesses more profitable, it raises the question of why the legislature needs to use the force of law to implement the changes. CARB should simply fax its economic analysis to the owners of the major businesses, and they would make the changes voluntarily. By the same token, if households really do stand to save so much money from the efficiency measures contained in AB 32 that it is clearly worth their effort to implement the renovations, then the state should focus on educational efforts, rather than mandates.

In reality, the true situation is that businesses *on net* would suffer from AB 32. Certain industries may see net job creation, such as those involved in the production of materials necessary for “green” projects. But although AB 32 might lead firms that install solar panels and wind turbines to expand, at the same time AB 32 would cause other firms—not only directly tied to fossil fuels but also ones relying on carbon-intensive inputs—to lay off workers because of their escalating costs of doing business. To repeat, businesses currently *have the option* of reducing their greenhouse gas emissions, and using the favored “green” techniques championed in the Scoping Plan. The fact that AB 32 needs to force businesses to comply with its ambitious targets proves that these goals do not pass the market test.

Conclusion: In these brief comments, we have argued that the economic analysis contained in CARB’s current Scoping Plan very likely overstates the benefits, and underestimate the costs, of AB 32. To raise these points does not, by itself, prove that AB 32, or “green” policies in general, are undesirable. The question is whether the benefits of such plans outweigh their costs. The same test should be applied to other government projects as well. For example, if the state is considering whether to build a new road, it should balance the benefits (of reduced congestion, lower commute times, etc.) against the costs (higher taxes imposed on businesses and citizens).

In the case of climate change, the procedure is similar. For example, Yale economist (and pioneer in the economics of climate change) William Nordhaus is an *advocate* of a globally harmonized carbon tax. But even he acknowledges that such a tax would impose trillions of dollars in forfeited output on the world economy.[4] Nordhaus believes, however, that these high costs would be outweighed by mitigation of future damages from climate change. Analysts can quibble with Nordhaus’ numbers—both on the cost and benefit side of the ledger—but at least he acknowledges that environmental goals *carry a price tag*, and that policymakers must be aware of this lest they overpay.

Yet CARB’s Scoping Plan has not even attempted this honest assessment of the tradeoffs. It simply assumes that there are no tradeoffs, that the state can achieve its ambitious environmental goals *and* create jobs at the same time. Until CARB produces a more realistic weighing of the pros and cons, policymakers cannot responsibly judge the merits of AB 32. We at IER recommend that policymakers do not move forward with AB 32 until they have received a more accurate assessment of its likely economic impacts.

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[1] For the Scoping Plan and Appendix G (the economic analysis), see: http://www.arb.ca.gov/cc/scopingplan/economics-sp/economics-sp.htm.

[2] See the LAO critique of the ARB economic analysis at: http://www.lao.ca.gov/laoapp/PubDetails.aspx?id=1896.

[3] Quoted in *ClimateWire*, Debra Kahn, "EDF tells California to ignore economists' criticism of its climate plan." December 8, 2008.

[4] See Nordhaus' new book, *A Question of Balance: Weighing the Options on Global Warming Policies* (Yale University Press, 2008), available at: http://nordhaus.econ.yale.edu/Balance_2nd_proofs.pdf.