

CALIFORNIA POLICY BRIEFING MEMO
REVIEW OF NAVIGANT CONSULTING REPORT
“Preliminary Assessment of Regulatory Cost Drivers in California’s Energy Market”

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I. Introduction

In August 2013, Californians for Affordable and Reliable Energy (CARE) released a paper by Navigant Consulting, titled “Preliminary Assessment of Regulatory Cost Drivers in California’s Energy Market.” For several reasons, EDF finds that the report inaccurately represents the outcomes regarding energy regulation in California.

First, the study focused exclusively on the costs of California’s complementary clean energy and clean fuels policies while avoiding comparative assessment of the benefits. Rather than conducting an economically sound cost-benefit analysis, this report presents only the costs. In fact, scholarly, peer-reviewed studies indicate that, together, these regulations will provide *net* benefits to the state. Second, Navigant has not considered the cost-minimizing and transformational features of the policies, so the report likely overstates the costs. Third, the Navigant report relies on sources that have not been peer reviewed and misinterprets analyses and energy market trends.

In sum, policy makers should treat the Navigant study with extreme caution; it likely overstates costs while considering neither the benefits to be enjoyed nor the cost-minimizing aspects of policies carefully designed to deliver environmental benefits as efficiently and quickly as practicable.

II. Limitations of Navigant Study

The Navigant report “Preliminary Assessment of Regulatory Cost Drivers in California’s Energy Market” suffers from several major deficiencies, including likely overestimate of costs, lack of consideration of benefits, no recognition of the policies’ cost-minimizing features, cherry picked sources, and misinterpreted analysis. We discuss each in turn below.

1) The report’s singular focus on costs without considering benefits paints an incomplete picture.

At various points the report explicitly states that it focuses on costs, neglecting potential benefits. While this acknowledgment is appreciated (for example, noting in footnote 5, p.12, that the report does not provide a cost-benefit analysis), **Navigant’s singular focus on costs paints an overly dreary picture of the implementation of the policies evaluated.**

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Rather than focusing solely on costs, the appropriate question for policy makers is to ask whether the benefits are expected to exceed the itemized costs. Because AB 32 and complementary policies seek to improve upon current pollution levels and public health costs, and enjoy the direct benefits of pursuing and developing new industries that cut pollution and grow the economy, it is intuitive that their benefits will exceed their costs. In fact, unlike the Navigant study, the California Air Resources Board (CARB) has carefully analyzed the costs and benefits of AB 32 through transparent, peer-reviewed stakeholder-informed processes and concluded that benefits will indeed exceed costs.ⁱ

Furthermore, the benefits associated with avoidance of climate change’s massive costs are not considered in the Navigant study, and have not been fully represented in any analysis of California’s policies. A federal interagency task force in 2010, working with scientists and economists, estimated that the cost of damages caused by greenhouse gas pollution is \$21 per ton of emissions.ⁱⁱ Recent research indicates the true benefit of avoiding greenhouse gas pollution could be more than ten times that amount.ⁱⁱⁱ In fact, the Obama Administration recently guided federal agencies to use a value of \$35 per ton of greenhouse gas pollution in their policy cost-benefit analyses (aka, regulatory impact analyses).^{iv}

2) The Navigant study lacks discussion of the cost-minimizing features of existing regulations and the reinforcing value of complementary programs; therefore Navigant has likely overstated costs.

Navigant opines on the potential costs of selected policies, like the AB 32 cap and trade regulation and the Low Carbon Fuel Standard (LCFS), yet fails to acknowledge either the cost-minimizing features of these policies or the role of innovation in keeping costs low. Accordingly, Navigant paints a picture associated with high-cost scenarios, failing to give attention to more likely low-cost outcomes. As a result, the report should be viewed as an inaccurate overstatement of policy costs.

With regard to the AB 32 cap and trade regulation, several cost minimizing features have been included. For example, the program allows for high-quality offsets, allowance trading and banking, and an innovative allowance price containment reserve (APCR). Second, the program keeps costs low for California businesses and individuals through the free distribution of allowances to energy-intensive trade-exposed companies and electric utilities, and through a climate dividend that returns money to energy users. Third, the cap and trade investment plan includes auction proceeds investment to reduce greenhouse gas emissions across the California economy. Through these features allowance prices will be kept low while covered entities develop and deploy new low-cost solutions.

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In addition to the cost containment provisions, cap and trade is itself a mechanism that spurs innovation and allows the marketplace to find the least-cost compliance pathway through trading and banking. Cap and trade creates a signal for businesses to seek out emissions reductions, and achieve them as fast as possible and at lowest cost. This unique market signal reduces overall costs, and leads to the transformational opportunities capable of fostering deep emission reductions throughout the economy.^v

California’s LCFS also contains several cost minimizing features. This includes credit trading and banking, as well as exchange between the diesel and gasoline programs, both market-based mechanisms that will lower compliance costs. Furthermore, like cap and trade, the LCFS creates a price signal that will drive innovation, and allow market participants to find least-cost solutions. While the Navigant report laments the number of policies being jointly implemented, they will have synergistic effects; solutions inspired by the LCFS will likely lower compliance costs for the other regulations such as cap and trade.

3) Navigant has created a pessimistic picture of policy implementation due to the use of prior analyses, present assumptions, and selective comparisons that overstate actual costs.

a) The manner in which Navigant used prior analysis is improper for assessing likely costs.

Navigant has relied on papers by the Boston Consulting Group, Sierra Research Inc. and Stonebridge Associates Inc. to question CARB studies indicating that costs will be manageable.^{vi} CARB studies are peer-reviewed, transparent and well-vetted by stakeholders through exhaustive public process, yet Navigant chooses selectively from the grey literature that has been questioned by experts in the field because of overstated costs.^{vii}

Navigant has also mischaracterized a paper by Bailey et al. (2013) to support the assertion of unmanageable costs from AB 32.^{viii} Tables 4.3 and 4.4 on page 32 of the Navigant report show that when carbon prices are near the low reserve price, as Baily et al. and others believe is very likely, the impact on electricity prices will be less than one cent per KWh. Accordingly, the Bailey et al. paper does *not* support the notion that the policy costs will be excessive.

Furthermore, Navigant does not consider the current dividend strategy that will return the value of emissions allowances in the AB 32 cap and trade program to California energy users. Therefore, even if energy prices rise, the dividend will enable energy users who use an average share of energy to experience no net energy bill impacts.

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b) Navigant’s selective use of pessimistic assumptions overstate costs

The Navigant report properly states that electricity demand in California peaked about 5 years ago.^{ix} However, it fails to recognize that this may be a result of changes in the economy that predate AB 32 and will further lower policy costs. Such changes have been documented in specific sectors of the economy including heavy industry (i.e. refining and cement).^x Accordingly, to the extent that heavy industries are modernizing, costs should not be characterized as resulting solely from AB 32 or an increase in renewables stemming from the Renewable Portfolio Standard (RPS), as the Navigant report suggests.

With respect to reporting on energy prices, the Navigant report includes statistics that clearly indicate falling prices of wholesale energy, mainly as a result of falling natural gas prices.^{xi} Since natural gas fired power plants are a likely source of reserve power to support renewables, the cost of supporting capacity (to address the intermittency of renewables) seems likely to fall or remain low for years to come, an element neglected in this report.

Navigant fails to discuss the numerous reports that demonstrate the current growth of alternative fuels and industries both in California and outside the state.^{xii} These reports show that LCFS compliance is achievable at the lower costs forecasted by CARB and experts at UC Davis, rather than the higher costs identified in the papers Navigant selectively chose to cite.

c) Navigant’s comparisons are incomplete and inaccurate

The Navigant report consistently discusses electricity rate impacts by comparing California’s energy prices to those from other states and the rest of the nation (see figure 3-1).^{xiii} However, the report fails to compare average energy bills or energy productivity, two metrics that lead to a very different conclusion.

By presenting high energy prices in California without a discussion of monthly energy bills or energy productivity, Navigant paints an inaccurate picture of the costs associated with the policies evaluated. According to the Analysis Group, California residential customer electricity bills are the 12th lowest in the nation, and California is the third lowest in terms of electricity used per dollar of gross state product in the nation.^{xiv} Furthermore, according to Next 10, California businesses are more productive than businesses from other states— meaning that California businesses use less energy per unit of output.^{xv} These facts imply that in California both residential and commercial customers can absorb increases in electricity prices more easily than customers in other parts of the country; and it is most likely, as described in Section 3.a, that energy price increases will be minimal.

Additionally, Navigant’s comparison of California to nearby states (pages 14-16) is problematic without the context of energy market size. An illustration of the need for a contextualized comparison can be seen in data from the US Energy Information Agency’s (EIA) website which shows that California consumes nearly four times as much energy as the next closest state (Washington).^{xvi}

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III. Conclusion

CARE and Navigant Consulting, through their paper “Preliminary Assessment of Regulatory Cost Drivers in California’s Energy Market,” discuss an important issue for California- the additive and complementary effect of California’s energy and climate policies. Upon review of the structure, analysis and findings of the report, however, it is apparent that the paper is an incomplete, unreliable and pessimistic assessment that only focuses on costs without considering the benefits these policies can provide.

Even with an overt focus on costs, by using pessimistic assumptions, Navigant has not delivered data that supports its conclusions regarding energy regulation in California. Accordingly, policy makers should receive the Navigant report with extreme skepticism. A balanced review of the best peer-reviewed evidence would instead lead to a conclusion that the benefits of California’s clean energy and clean fuel policies are very likely to exceed their costs.

ⁱ California Air Resources Board. April 2010 “Updated AB 32 Scoping Plan Economic Analysis” Available at <http://www.arb.ca.gov/cc/scopingplan/economics-sp/economics-sp.htm>

ⁱⁱ Interagency Working Group on Social Cost of Carbon, United States Government. February 2010. “

Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis” Available at <http://www.whitehouse.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf>

ⁱⁱⁱ Johnson, L. and Hope, C. 2012. “The social cost of carbon in U.S. regulatory impact analyses: an introduction and critique.” *Journal of Environmental Studies and Sciences*. 2 (3) 205-221 available at <http://link.springer.com/article/10.1007%2Fs13412-012-0087-7>

^{iv} EDF’s Gernot Wagner on the Obama administrations social cost of carbon

Wagner, G. June 2013 “Uncovering the Real Cost of Carbon” Environmental Defense Fund. Available at:

<http://blogs.edf.org/markets/2013/06/03/uncovering-the-real-cost-of-carbon/>

^v “Cap and trade programs have several attributes that support clean technology innovation. ... no emissions-reducing policy instrument is unambiguously superior in its incentives for innovation.”

Taylor, M. 2012. “Innovation under cap-and-trade programs.” *Proceedings of the National Academy of Science*. Available at <http://www.pnas.org/content/early/2012/03/08/1113462109>

^{vi} According to Navigant, “Their combined effect is to emphasize the divergence of opinions, and therefore the increasing level of uncertainty associated with LCFS compliance and costs.”

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^{vii} University of California, Davis. May 2013. “Evaluating BCG’s Report: Understanding the Impacts of AB 32.” Available at <http://policyinstitute.ucdavis.edu/informing-policy-3/expert-review/bcg-evaluation/>

Boston Consulting Group. May 2013. “Boston Consulting Group Responds to UC Davis Expert Review.” Available at <http://cafuefacts.com/boston-consulting-group-responds-to-uc-davis-expert-review/>

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^{viii}Bailey, E.M., Borenstein, S., Bushnell, J., Wolak, F. A., and Zaragoza-Watkins, M. 2013 “Forecasting Supply and Demand Balance in California’s Greenhouse Gas Cap and Trade Market.”, , March 12, 2013 Available at <http://ei.haas.berkeley.edu/pdf/Forecasting%20CA%20Cap%20and%20Trade.pdf>

^{ix}Navigant Consulting. Footnote on p. 6

^xCalifornia Air Resources Board. June 2013. “Energy Efficiency and Co-benefits Assessment of Large Industrial Sources, Refinery Sector Public Report.” Available at <http://www.arb.ca.gov/cc/energyaudits/eeareports/refinery.pdf>

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^{xi} Navigant Consulting. p. 18

^{xii} E2. September 2013. Add citation to alt fuels reports – E2, EDF, 1013 IEPR, Biodiesel, etc.

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^{xiii} Navigant Consulting p. 16

^{xiv} Tierney, S. 2011. Analysis Group In the Matter of Investigation of Capacity Procurement and Transmission Planning, State of New Jersey, Public Utilities, DOCKET NO. EO11050309

^{xv} Next 10. 2012. “2012 California Green Innovation Index.” Available at http://next10.org/sites/next10.huang.radicaldesigns.org/files/2012_GII%20Report_R6.pdf

^{xvi} EIA. “U.S. States, State Profiles and Energy Estimates, Total End-Use Energy Consumption Estimates, 2011.” Available at http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_sum/html/sum_use_tx.html&sid=US