CARB Responses to 2018 IEMAC Report



APRIL 5, 2019

Introduction: CARB Process

- The IEMAC submitted a report to CARB in late 2018 as part of the Cap-and-Trade formal rulemaking process
- CARB staff responded to the 2018 IEMAC Report as part of the Final Statement of Reasons (FSOR), a required process document for Office of Administrative Law (OAL)
- Responses in FSOR required staff to identify if comments result in changes to the regulation, or why not
- CARB Board final vote on proposed amendments balanced staff proposal and analyses with formal stakeholder comments and public comments at Board hearing

Scoping Plan Measures and Known Commitments

"Identify the potential that overlapping or companion policies may reduce allowance prices and examine remedies if this is a problem."

- An analysis completed by CARB in late 2018 evaluated the impacts of companion policies and interactions on allowance demand
- Demand was estimated to exceed supply of allowances and support steadily increasing carbon price signal
- CARB staff welcomes suggestions from IEMAC on tools for looking at prices explicitly

Transportation

"Evaluate alternative methods to reduce emissions in the transportation sector if the state cannot implement its tailpipe and ZEV standards."

- CARB is assessing federal efforts regarding California's plans and responses to such efforts
- 2017 Scoping Plan stated we would look for other ways to find reductions in the transportation sector in response to federal delays
- Meeting California's statewide targets requires action in this sector

Environmental Justice (1 of 3)

"Local and regional air pollution poses significant environmental and health risks, and these local pollution problems should be addressed as vigorously as global climate change."

- Local and regional air pollution have been a key component of CARB's work for over 50 years
- Pursuant to AB 617, CARB is increasing its efforts to reduce exposure to criteria and toxic pollutants in the State's most-burdened communities, including enhanced reporting of criteria and toxics emissions to better understand exposure

Environmental Justice (2 of 3)

"Continue to monitor and analyze the distribution of emissions impacts associated with California's GHG emissions trading program on disadvantaged communities."

- CARB is in process of finalizing a rule for enhanced criteria and toxics reporting
- Visualization tool allows analysts and public to better track trends of GHGs and criteria and toxics emissions
- Challenges remain on attribution of changes in trends to any specific factor – economic growth, product demand changes, overlapping federal, state, and local regulations

Environmental Justice (3 of 3)

"More is expected and must be done to further an inclusive and transparent process between the agency, environmental justice advocates, and local communities to foster trust."

- CARB has worked to increase transparency, accessibility, and relationship building with environmental justice community representatives regarding all CARB activities. This includes regularly scheduled dialogues between CARB leadership and environmental justice advocates
- >50% of auction proceeds benefit disadvantaged communities and programs are being designed to address equity concerns through engagement with advocates and community members

Minimize Emissions Leakage (1 of 2)

"Additional data collection and analysis is needed to refine and improve the current approach to calibrating and conferring output-based leakage mitigation compensation. As California's GHG policies increase in stringency and ambition, the efficiency and distributional implications of any miscalibration of these subsidies become more significant."

CARB agrees.

- CARB staff will continue to analyze the issue of leakage risk, treatment of leakage across other programs, and must report on this issue to the legislature in 2025
- AB 398 established the assistance factor for leakage to be 100 percent from 2021-2030

Minimize Emissions Leakage (2 of 2)

"GHG reductions in the electricity sector are driving statewide trends. Electricity imports are potentially subject to resource shuffling. CARB should review and update core resource shuffling accounting methods in the current and proposed regulations. A more comprehensive assessment of the extent to which resource shuffling has occurred would be complicated and inevitably imprecise, but would help to target and inform any mitigation actions going forward."

- Reporting with third-party verification ensure accurate reporting
- Recent regulatory amendments related to the Energy Imbalance Market reflect action to monitor and minimize leakage in instances where leakage is detected
- CARB welcomes additional clarity from IEMAC on new types of assessments

Offsets (1 of 2)

"The proposed regulatory text defining "direct environmental benefits" (DEBs) contains an ambiguity that could enable any offset project to claim a DEB on the basis of its greenhouse gas emissions. CARB should foreclose this option."

CARB made change in regulation.

 CARB staff clarified their original intent by modifying the regulatory provision to remove the ambiguity on what could be claimed as providing direct environmental benefits in the state

Offsets (2 of 2)

"Credits issued under the U.S. Forest Projects protocol account for about three-quarters of the offsets market. The subcommittee recommends additional review of this protocol's crediting methods to reflect technical concerns related to leakage, the timing of credited reductions, and the risk of unintentional reversal due to fires and other exogenous causes."

- The integrity of offset program is critical and staff continues to assess the most up to date information related to leakage risk in the forest sector
- To date, more than 15% of U.S. forest offset credits have been set aside in a forest buffer account to ensure Program environmental integrity in situations of reversals

Allowance Supply (1 of 2)

"Public and private banking of allowances that are not needed in the pre-2021 market period will increase market supply in the post-2020 period, with the total number made available depending on future market prices. To improve transparency and address concerns about the ultimate emissions outcome, CARB should increase its public data reporting and prepare a comprehensive report on allowance supply."

- CARB publishes data that enables the assessment requested, but agrees better data access, analysis of public data, and new metrics should be explored for public posting
- CARB will prepare a report on pre-2021 allowances per Board direction
- Compliance instrument reports allow understanding of quantity of compliance instruments in circulation, among other market trends

Allowance Supply (2 of 2)

"CARB should consider rule-based adjustments to program design that would adjust the supply of allowances based on observable metrics and in response to any concerns identified in the recommended studies."

- From the beginning the Regulation has had a self-ratcheting mechanism based on auction performance and notes AB 398 codified this mechanism
- CARB will hold a workshop later this year on what additional metrics should be tracked to better evaluate instances of low allowance demand relative to allowance supply

Cost Containment (1 of 3)

"The state should develop an independent estimate of the social cost of carbon (SCC) to be included in a justification of the price tiers and price ceiling, accounting for the potential impact on disadvantaged communities from covered sources."

CARB agrees.

 CARB continues to collaborate with experts to updated Obama-era estimates of SCC and how to expand the scope to reflect additional impacts from global warming currently not included in the SCC

Cost Containment (2 of 3)

"The focus of program integrity should be placed on the level of emissions reductions achieved, not the amount of revenue the program generates."

- The focus of program should be, and always has been, emissions reductions in the sectors covered by the Program
- The revenues can help address climate equity concerns and further the goals of reducing GHGs

Cost Containment (3 of 3)

"The state should consider the development of out-of-market emissions reduction opportunities in advance of when they might be needed in the program to provide compliance instruments if the price ceiling is triggered. New protocols that might apply can generate global environmental benefits."

- Will be part of future rulemaking
- Project types and location will be key considerations
- CARB notes that the cost containment features of the program work together such that reaching the price ceiling is highly unlikely

Additional Supporting Materials

- Compliance Instrument Report https://www.arb.ca.gov/cc/capandtrade/complianceinstrumentreport.xlsx
- Appendix D to Cap-and-Trade Rulemaking https://www.arb.ca.gov/regact/2018/capandtrade18/ct18398.pdf
- Overview of Publicly Available Market Information https://www.arb.ca.gov/cc/capandtrade/public_info.pdf

New 2019 CARB Activities

California Carbon Neutrality (CO₂e)

Today



Minimize emissions









Transition from source to sink



Both categories emit GHGs

No net GHG emissions

Carbon Neutrality: Key Questions for California

- Pathways to minimize emissions in fossil energy and industrial sectors by mid-century?
- Long-term potential of a resilient NWL to store and sequester carbon and timing to transition from emissions source to sink?
- Options for additional mechanical sequestration technologies?
- Optimal mix of carbon pricing with complementary policies?
- •Tools to assess economic and environmental outcomes of achieving carbon neutrality under different scenarios at multiple levels (e.g., state economy, jobs, households and small businesses)?
- •How to maximize co-benefits for vulnerable communities?

2019 Engagement

- Carbon Neutrality Webinar and Bioresources Economy Summit
- Workshops to explore topic areas on achieving carbon neutrality
 - Energy demand and supply
 - Transformation across economic sectors (i.e. transportation, industrial)
 - Options and support for sequestration activities
- Continued collaboration
 - State and local agencies
 - Academics and researchers
 - International partners

Thank You