

Monday, February 26, 2024

RE: IEMAC draft 2023 report

Submitted electronically: iemac@calepa.ca.gov

To the members of the Independent Emissions Market Advisory Committee (IEMAC):

Thank you for the opportunity to comment on the draft 2023 report. We, the undersigned, would ask that the following points be addressed in the final report:

1. The draft report gives very little attention to concerns regarding **cap and trade's harmful impacts on environmental justice communities**. While the movement is not a monolith, environmental justice advocates have raised substantial and substantiated critiques about the program since its inception. Additionally, the California Air Resources Board's Environmental Justice Advisory Committee (EJAC) has repeatedly expressed concerns that the cap and trade program as implemented by CARB does not sufficiently reduce emissions, and that it in fact can cause increases in emissions of both greenhouse gasses and criteria air pollutants in environmental justice communities. Racist practices such as redlining and purposeful permitting of major pollution sources in low income communities of color have led to a concentration of environmental hazards. The ability to trade or purchase emissions credits that are a fraction of the cost of direct emissions reductions fails to create sufficient cost incentive, meaning these facilities will continue to produce pollutants that are detrimental to public health and the climate, particularly for frontline communities.¹
2. It is a glaring oversight to ignore the fact that **most of the offsets so far have been proven to be fake or vastly inflated**. There is ample research that raises serious questions about the validity and permanency of offset projects. For CARB to continue to subsidize those dubious "reductions" in a manner that allows continued emissions in communities in California is unacceptable. IEMAC should recommend that CARB eliminate offsets or, at the very least, evaluate ways to course-correct on credits that have already been used for compliance that were sourced from projects that have demonstrated they are not delivering the assumed reductions. Additionally, IEMAC should recommend that CARB continue to prohibit international credits to be valid for compliance, such as

¹ For example: Cushing, Lara et al. "A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program." September 2016, available at:

<https://dornsife.usc.edu/eri/publications/preliminary-environmental-equity-assessment-cap-and-trade/>;

"Not So Clear: Revisiting the Impacts of Cap-and-Trade on Environmental Justice," available at:

<https://peri.umass.edu/economists/michael-ash/item/1740-not-so-clear-revisiting-the-impacts-of-cap-and-trade-on-environmental-justice>

those generated under the Tropical Forest Standard or the Reducing Emissions from Deforestation and forest Degradation (REDD+) program.

3. The draft report makes **no mention of facility specific caps/no trade zones**, despite the IEMAC expressing support for further exploration in your 2022 report, active and ongoing dialogue with EJAC members on this and other topics, and an analysis conducted by chair and committee member Dallas Burtraw on the implications of such a policy showing little to no adverse impact on credit prices.² Such an omission is at best an oversight, and at worst backtracking on recognition of a basic and overdue adjustment that would be a step toward rectifying the inequities of the program.
4. Chapter 4 contains several **egregious mischaracterizations and omissions regarding Carbon Capture, Use, and Storage (CCUS) and Direct Air Capture (DAC)**.
 - a. The statement: *“By most accounts, renewable energy resources with energy storage is the least-cost pathway to deep emissions reductions, but obstacles to the complete substitution away from fossil fuels remain,”* seems to directly contradict two sentences later (emphasis added): *“To achieve carbon neutrality, any remaining emissions after achieving maximal sectoral reductions through substitution away from fossil fuel will likely require add-on post-combustion technology at point sources such as natural gas power plants, biomass power plants and concrete plants to capture and concentrate carbon dioxide from flue gas and store it underground.”* How is renewable energy with storage “the least-cost pathway,” yet carbon neutrality will “likely require” substantially more expensive CCUS on power plants, which will come at the cost of public interest? There is also serious potential for “double-counting” reductions under the Low Carbon Fuel Standard or cap and trade system that must be addressed.
 - b. **Research disputes the feasibility of BECCS actually resulting in a net reduction of emissions**, despite the draft report’s assertion (emphasis added): *“When biomass is used for electricity production and coupled with CCS (BECCS), it can yield negative emissions if the captured emissions are greater than the net emissions from bioenergy combustion, the energy used to capture and inject flue gas CO₂, and the complex dynamics of land use and land opportunity costs.”*³

² Acknowledging that Burtraw and his co-author conducted this work in their respective roles at Resources for the Future and not on behalf of IEMAC: Burtraw, Dallas and Nicholas Roy (2023). How Would Facility-Specific Emissions Caps Affect the California Carbon Market? Available at: <https://www.rff.org/publications/reports/how-would-facility-specific-emissions-caps-affect-the-california-carbon-market/>

³ See for example: Carbon Plan (2023). Ethanol carbon capture and storage isn’t carbon removal, available at: <https://carbonplan.org/research/ethanol-cdr-claims> and FERN (2022). Six problems with BECCS, available at: https://www.fern.org/fileadmin/uploads/fern/Documents/2022/Six_problems_with_BECCS_-_2022.pdf

- c. The draft report states that **CCUS on refineries will only work on certain emissions streams, without acknowledging that: i)** the vast majority of refinery emission streams and emissions are not good candidates for CCUS, **ii)** the subsidy would have to be significantly increased for it to be profitable, **iii)** space requirements make it questionable whether crowded urban refineries could even add the capture apparatuses, and **iv)** it is infeasible to construct and ensure the safety of hundreds or thousands of miles of carbon pipelines to transport the carbon to suitable storage formations.
- d. We strongly disagree with this characterization of **Senate Bill 905** (Caballero, 2022): “*SB 905, adopted in 2022, which directs CARB in consultation with other state agencies, to create a CCS program aimed at accelerating the deployment of carbon management technologies...*” Arguably, such direction lies in AB 1279, but only with caveats. **SB 905 is intended to both facilitate deployment and constrain it, not to accelerate it.**
 - i. *Relevant text of AB 1279: “(d) The state board shall work with relevant state agencies to do both of the following: ... (2) Identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California to complement emissions reductions and achieve the policy goals stated in subdivision (c).”* Therefore, CARB must implement a variety of policies and strategies on CDR/CCUS to complement - not comprise - emissions reductions only to the extent they achieve emissions reduction and carbon neutrality goals, which is to say that **CCUS should only be deployed in the hardest to decarbonize sectors, or not at all.**
 - ii. It’s also troubling that the IEMAC has left out the **community protections in SB 905** while running through a list of other provisions of the bill that have far less bearing on reality, such as the California Natural Resources Agency being required to suggest a regulatory framework with no force of law. These protections include a pipeline moratorium, the prohibition on use for Enhanced Oil Recovery, and, most pressingly, the requirement that CARB produce regulations to ensure that operators minimize co-pollutant emissions to the maximum extent technologically feasible.
 - 1. Groups organizing with frontline communities from across the state have worked to build consensus on necessary protections and guardrails. This information is publicly available at <https://www.calcleanair.org/ccus/> (See [2023 Platform Summary](#) and [2023 Platform](#) for full details) . This page also has a recent [letter to CARB explaining why they have a legal duty to promulgate rules to protect communities](#) under the statute.

We respectfully request your attention to these matters. Please contact us if you have questions or would like further information.

Sincerely,

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