



October 26, 2023

To: California Air Resources Board
From: Stephen Rosenblum, Ph.D., for Climate Action California
Daniel Chandler, Ph.D., for 350 Humboldt
Re: **Comments on the October 5, 2023 California Public Workshop: Potential Amendments to the Cap-and-Trade Regulation**

Climate Action California and 350 Humboldt, with nearly 9,000 supporters around our state, are grateful for the opportunity to comment on the Cap-and-Trade workshop held earlier this month. As you'll see, our comments are broad and speak to the overall design of the program, which is overdue for major revision—considering the climate crisis California faces. In addition, we know that other states and subnational entities look to California to lead on climate. It is our duty and responsibility to make our cap-and-trade program fully responsive to the urgency of the moment.

1. Consider the climate science and IPCC targets in CARB's scenario analysis.

In the 2022 Final Scoping Plan, the Executive Summary states that "The path forward is informed by robust science" and cites the IPCC's finding that "by the 2030s, and no later than 2040, the world will exceed 1.5°C warming unless there is drastic action." Without more concerted action it is clear that the world will exceed 1.5C warming in the next few years and will likely exceed 2C by the middle of the century. According to the IPCC:

In the scenarios we assessed, limiting warming to around 1.5°C (2.7°F) requires global greenhouse gas emissions to peak before 2025 at the latest, and be reduced by 43% by 2030; at the same time, methane would also need to be reduced by about a third. Even if we do this, it is almost inevitable that we will temporarily exceed this temperature threshold but could return to below it by the end of the century.

"It's now or never, if we want to limit global warming to 1.5°C (2.7°F)," said IPCC Working Group III Co-Chair Jim Skea. "Without immediate and deep emissions reductions across all sectors, it will be impossible."¹

We recommend that CARB include in its scenario modeling a contextualization of CARB's GHG reduction trajectories in relation to IPCC emission pathways (e.g., based on population- or GDP-weighted emission targets).

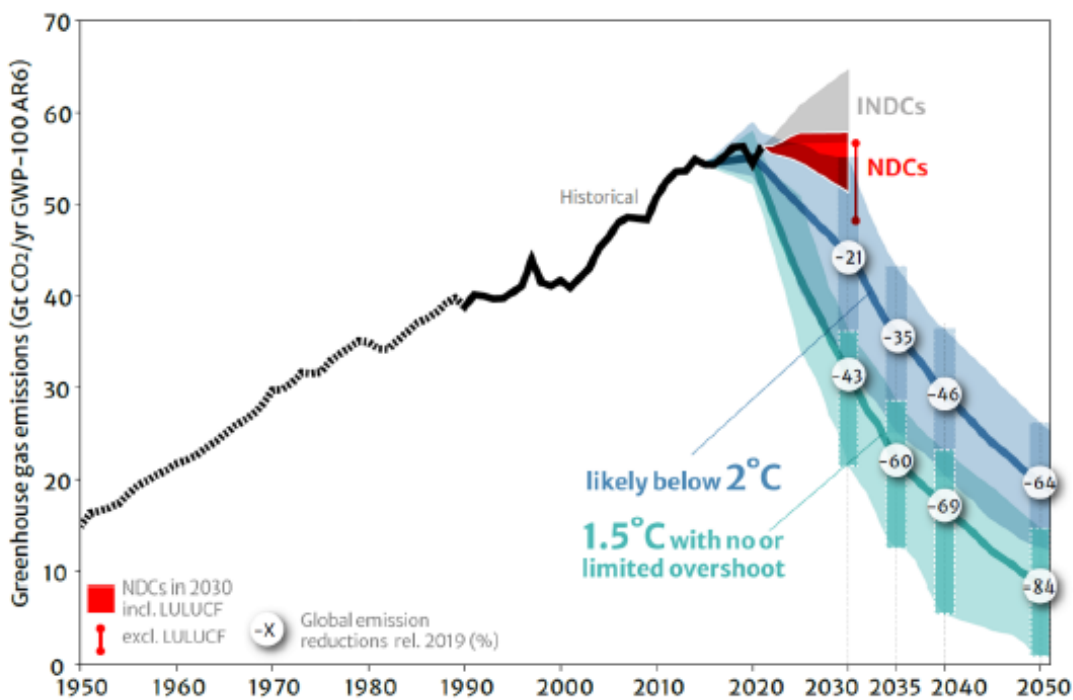
While CARB may not be expressly required by statute to consider the IPCC's 1.5°C target in setting California's GHG reduction goals, rating CARB's goals against the IPCC targets would help to inform the legislature,

¹ <https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/>

policymakers, and stakeholders of further climate action that is likely to be required. Such action will not be limited to CARB’s activities alone, but rather must include the actions of individuals, corporations, communities, and local governments working to support and augment the state’s climate goals. In addition, California will need to work in concert with other states and nations to achieve our *common* climate goals. All of these policies and actions should be informed by CARB’s scenario analysis and California’s agenda for climate action. This is bigger than Cap-and-Trade.

The report from the September 23, 2023 IPCC Global Stocktake shows that we need to increase our global ambitions to a 43 percent reduction in GHG emissions by 2030 to have any hope of staying close to 1.5C warming.² In fact, a close examination of the graph below³ shows that the brief pandemic-induced decline in emissions has been overcome and we are back on a trajectory of rising emissions.

Figure 1
Historical emissions from 1950, projected emissions in 2030 based on nationally determined contributions, and emission reductions required by the Sixth Assessment Report of the Intergovernmental Panel on Climate Change



2. CARB should adopt the 55% target suggested by Governor Newsom

Although California acting alone cannot have a significant effect on global emissions, we can, as the world's 5th largest economy, show the way to reducing emissions by our example of achieving a prosperous economy while significantly reducing greenhouse gas emissions. **We therefore urge CARB to use the Cap-and-Trade program principally as a tool to reduce emissions and meet IPCC goals rather than merely achieving statutory emission reduction requirements.** We applaud the 2022 Scoping Plan’s adoption of a 48 percent reduction goal by 2030 and urge you to adopt the Governor's suggested 55 percent target or

² https://unfccc.int/sites/default/files/resource/sb2023_09_adv.pdf

³ <https://www.oneclickca.com/un-global-stocktake-takeaways-for-construction/>

higher—and incorporate achievement of that target into the Cap-and Trade cap regulation. The fact that we have already significantly exceeded the 2020 reduction target should give us the courage to challenge ourselves further. To do this CARB needs to increase the value of allowances in the market either by raising the floor price, or retiring or removing allowances from the market.

3. CARB should create incentives for early action and overcompliance.

California’s greenhouse gas statutes do not specifically establish emission “targets.” Instead, they establish limits that should not be exceeded. SB-32 (Pavley, 2016; HSC §38566) requires that statewide greenhouse gas emissions be “reduced to *at least* 40 percent below the statewide greenhouse gas emissions limit *no later than* December 31, 2030.” Piling on, AB-1279 (Muratsuchi, 2022; HSC §38562.2(c)(1)) specifically codified state policy as “Achiev[ing]e net zero greenhouse gas emissions as soon as possible....” This requires more than just complying with the minimal requirements of HSC §38566.

Pursuant to these mandates, CARB should design its regulations to incentivize early action and overcompliance. Cap-and-Trade normally operates to disincentivize overcompliance, but this problem can be remedied, for example, by establishing a price floor to incentivize early action in the event that compliance costs are lower than expected.

4. CARB should rely less on CCS as a solution and more on stopping GHG emissions

CARB needs to ensure that the programs it supports lead to actual reductions in greenhouse gasses emitted to the atmosphere. There are many smokestack carbon capture and storage (CCS) projects that cannot, and will not, actually reduce emissions of global warming gases due to high costs, methane leakage, and phony accounting. In addition, CCS has not been proven to be safe due to pipeline failure, as occurred in Satartia, MS in 2020 on a CO₂ pipeline used for enhanced oil recovery.⁴ CCS is unproven when used for underground sequestration where CO₂ needs to be stored securely for centuries. If sequestered CO₂ migrates, it can cause contamination of aquifers, earthquakes, or major leaks as occurred in the Salah project in Algeria in 2011.⁵ Overall, CCS projects have a long history of failing to live up to expectations.⁶ Billion-dollar projects have been abandoned before or shortly after completion due to unforeseen un-economic operations or operational failures. **A regulatory focus on early action and overcompliance incentives will help reduce the need for costly and unproven GHG mitigation measures such as CCS, while the technology is developed to be safe, secure, and economical.**

5. Allowances should not be permitted if they allow pollution to continue in environmental justice communities

CARB needs to be able to assure vulnerable environmental justice that deployment of offsets allowed by cap and trade markets does not allow pollution to continue at health-damaging levels. Currently, offsets purchased with credits and deployed elsewhere perpetuate pollution and public health problems in EJ communities. Roy and Burtraw⁷ have recently proposed a cap on facility emissions near EJ communities. Their studies show that while the effect on carbon emissions statewide will be negligible, the health benefits to nearby communities will be enormous. **In accordance with the HSC §38562.2 state policy to “achieve net zero greenhouse gas emissions as soon as possible,” CARB should implement regulations to incentivize emissions reductions *in addition to, not in lieu of,* pollution reductions in EJ communities.**

⁴ https://www.huffpost.com/entry/gassing-satartia-mississippi-co2-pipeline_n_60ddea9fe4b0ddef8b0ddc8f

⁵ https://sequestration.mit.edu/tools/projects/in_salah.html

⁶ <https://ieefa.org/resources/carbon-capture-has-long-history-failure>

⁷ https://www.resources.org/archives/californias-cap-and-trade-program-and-improvements-in-local-air-quality/?mc_cid=89b3572e7c&mc_eid=4f19ffd494