December 15, 2022

California Air Resources Board Votes to Approve State Climate Plan; The Catch: Billions in Anticipated Subsidies for Carbon Capture Schemes

Environmental justice groups note Board leadership in scaling up mass transit, stopping the expansion of gas power plants, and planning for a coordinated phasedown of oil production; warn that reliance on carbon capture schemes for fossil fuel infrastructure derails meaningful climate action.

SACRAMENTO, CA - Today, the California Air Resources Board voted to adopt the final 2022 Climate Change Scoping Plan Update, a blueprint that will guide the next 20 years of climate action in California. Environmental justice advocates praised the Board's leadership in key sectors, including progressive goals for mass transit, strong interim goals to wind down gas-fired electricity generation, and the creation of a multi-agency process to coordinate the phasedown of oil refining and extraction; but warned that the plan's reliance on carbon capture schemes for fossil fuels undermines meaningful climate action.

"Improvements in the state climate plan—including bold targets for expanding mass transit, stopping the expansion of gas power plants, and planning for the phasedown of oil production – could not have been won without the political courage of current Board leadership," **said Mabel Tsang, CEJA Political Director.** "We applaud the call for an inter-agency process to coordinate the phasedown of oil refining and extraction in California. However, the plan still paves the way for billions in subsidies for oil and gas executives by using carbon capture schemes to lock in refineries, dirty gas power plants, and polluting bioenergy and hydrogen facilities. We urge CARB to hold a dedicated rulemaking process for carbon capture and storage permitting to ensure that these projects do not increase air and water pollution in already overburdened communities."

In developing its climate plan, several Board members visited communities that live alongside massive oil refineries, dirty gas-fired power plants, and polluting industries. They met with residents and advocates, and heard about the impacts of California's climate policies on people's lives.

"The improvements in the state's climate plan show what's possible when regulators and decision-makers step out of the halls of Sacramento and see firsthand the consequences of their policy decisions," said **Juan Flores, Community Organizer with Center for Race, Poverty, and Environment and Environmental Justice Advisory Committee Member** "We hope that this practice will be a model for future climate policy development both within CARB and beyond, and urge CARB to establish a permanent Environmental Justice Advisory Council and incorporate robust public health analysis for the implementation of the Scoping Plan."

This year, Californians sent **over 10,000 letters** to Governor Newsom and the CARB Board, urging them to adopt a scoping plan that scaled up investments in mass transit, planned for a full, coordinated phaseout of fossil fuels by 2045, and kept carbon capture off of fossil fuel infrastructure.

In response to these calls for action, the California Air Resources Board doubled its targets for reducing vehicle miles traveled (VMT) which would accelerate and scale up investment in mass transit and at the Governor's direction, replaced its plan to dramatically expand gas power plants with a plan to bring 20 GW of offshore wind online by 2045. The Board went even further to set an interim target for reducing dirty gas-fired electricity generation.

"The Air Resources Board raised the bar for California in doubling the state's targets for reducing vehicle miles traveled, putting a necessary spotlight on the need for real climate solutions that work for all Californians, not just the wealthy," said **Kyle Heiskala, Climate Justice Policy Advocate at Environmental Health Coalition**. "These progressive VMT goals are a call to action for the state to accelerate and scale up investments in mass transit, to get serious about anti-displacement policies as a climate strategy, and design a future where Californians no longer need to spend hours stuck in traffic to reach family, friends and work."

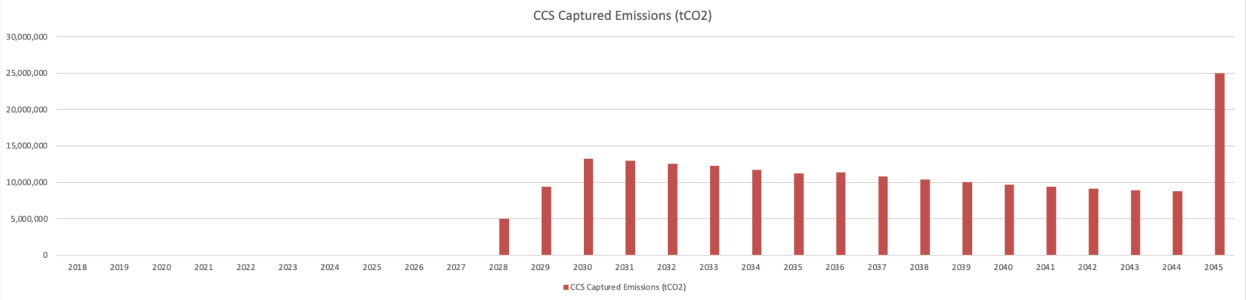
"This year, the Air Resources Board heeded the voice of frontline communities by eliminating any new gas-fired electricity generation from the Scoping Plan. The Plan's 30 MMT by 2035 greenhouse gas emissions goal for the electricity sector sets the stage for retiring these toxic, unreliable plants," said **Ari Eisenstadt, Regenerate Campaign Manager**. "These changes lay the groundwork for this year's federal commitment to clean energy development to become reality. We urge implementing agencies to use the Scoping Plan as a launching point to develop even more ambitious timelines to phase out gas plants and replace them with 100% clean, renewable, and truly reliable energy."

In June and again in September, the Board committed to including an interagency planning process to coordinate the phasedown of oil production in California alongside the decline in in-state demand, while addressing the growing issue of oil exports. While CARB's modeling projects an over 80% decline in demand for finished petroleum products, and recognizes major feasibility issues with carbon capture on refineries, the plan tentatively puts carbon capture on 70% of California's refinery operations, potentially keeping these refineries online and polluting long after Californians no longer need them.

"This Board is starting to show some real climate leadership with their call for a coordinated, multi-agency process to phase down oil refining and extraction as demand for oil declines in California. This is a huge step toward protecting public health, stabilizing our climate, and finally addressing the growing issue of oil exports. However, the plan still offers massive giveaways to Big Oil, using carbon capture to keep refineries online and increasing pollution through the expansion of dirty hydrogen in California," said **Connie Cho, Associate Attorney with Communities for a Better Environment**. "With the end of the oil era approaching, we look forward to working with the Governor's office, CalEPA, and other state agencies in the

interagency planning process to end California's century-long legacy of environmental racism and ensure a just transition for all."

In July, Governor Newsom directed the Board to set massive targets for carbon removal - 20 million metric tons by 2030 and 100 million metric tons by 2045. Despite his direction to prioritize nature-based solutions to sequester carbon, the final plan relies almost entirely on engineered carbon removal, including both controversial carbon capture and storage technologies and direct air capture.



Data source: AB 32 GHG Inventory Sectors Modeling Data Spreadsheet, "CCS by Fuels" tab.

Federal 45Q tax credits subsidize polluters at $85 per tCO2 for point source capture and $180 per tCO2 for direct air capture coupled with dedicated geologic storage. The final scoping plan includes over 130 million metric tons of captured carbon from oil refineries, paving the way for over $11 billion in federal subsidies for oil corporations.[1]

"As Governor Newsom champions a price gouging penalty to curb skyrocketing gas prices, we urge the Governor to ensure that the transition away from fossil fuels is led by the communities and workers that are most directly impacted by these decisions, not fossil fuel executives who are using carbon capture schemes to line their own pockets with taxpayer funds," said **Faraz Rizvi, Campaign and Policy Manager with Asian Pacific Environmental Network**.

The final scoping plan also doubles down on incentivizing polluting fuels such as factory farm gas through the Low Carbon Fuel Standard (LCFS). Although the scoping plan directs CARB to increase the stringency and scope of the LCFS, it does not include important directions to ensure that emissions reductions that are counted are in addition to reductions already counted by other California programs, fuels are evaluated using a full and accurate lifecycle analysis, and impacts to water and air in surrounding communities are considered.

"California's climate strategies cannot continue to rely on policies that increase pollution in low-income communities of color, and the inclusion of factory farm gas in the LCFS does just that. While we are disappointed that our concerns with the LCFS weren't addressed in the final scoping plan, we are looking forward to continuing to engage with CARB in the 2023 LCFS

[1] AB 32 GHG Inventory Sectors Modeling Data Spreadsheet, "CCS by Fuels" tab. Calculated 130,821,882.75 tons of captured CO2 from petroleum refineries between 2028 and 2045. At $85 / ton, amounts to $11,119,860,034.

rulemaking process to ensure that our fight against climate change protects the health and well-being of all Californians," said **Jamie Katz, Staff Attorney with Leadership Counsel for Justice and Accountability.**

In the coming year, the California Air Resources Board will engage in critical rulemaking processes including:

- **Advanced Clean Fleets** will set a timeline for achieving 100% zero-emissions heavy-duty truck sales.
- **Low Carbon Fuel Standard** rulemaking will make changes to how the state subsidizes polluting fuels including hydrogen, biofuels, biogas from mega-dairies, and biomass.
- **Cap-and-Trade** rulemaking will make changes to the design of the state's accounting system for industrial pollution including examining loopholes like allowance banking and offsets.
- **SB 905** requires that CARB establish standards and a permitting system for **carbon capture and storage projects** and reduce air and water pollution from CCS projects to the maximum extent technologically feasible.

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CARB's Draft Scoping Plan, Final Scoping Plan, and Environmental Justice Recommendations

Red = Backsliding on California's climate, environmental health recommendations .
Orange = Some progress.
Yellow = Progress towards climate, environmental health recommendations.
Green = Meets climate, environmental health recommendations.

Sector	Draft Scoping Plan	Final Scoping Plan	Environmental Justice Recommendations
Oil Refineries	No target date for phaseout of oil refining. Leaves phaseout up to fossil fuel corporations. Puts carbon capture and storage on majority of operations by 2030.	Multi-agency process to evaluate and plan for a transition away from petroleum refining and extraction in line with in-state demand, and address rising exports. Puts carbon capture and storage on majority of operations by 2030, beginning in 2028.	Full, coordinated phaseout of oil refining by 2045. No carbon capture and storage on any refinery operations.
Oil Extraction	Follows Newsom's EO to phase out oil extraction by 2045.	Reduce oil and gas extraction operations in line with petroleum demand by 2045	Phaseout of oil extraction by 2035. No carbon capture and storage on any oil and gas operations, including for enhanced oil recovery.
Light Duty Vehicles	Follows Newsom's EO to get to 100% ZEV sales for light-duty vehicles by 2035.	Follows Newsom's EO to get to 100% ZEV sales for light-duty vehicles by 2035.	100% ZEV sales for light-duty vehicles by 2035.

Sector	Draft Scoping Plan	Final Scoping Plan	Environmental Justice Recommendations
Medium- and Heavy-Duty Trucks	100% ZEV medium- and heavy-duty truck sales by 2040.	100% ZEV medium- and heavy-duty truck sales by 2040. 100% of drayage trucks are zero emission by 2035. *CARB is currently in the Advanced Clean Fleets rulemaking process and may accelerate the timeline for 100% ZEV medium- and heavy-duty truck sales to 2036.	100% ZEV medium- and heavy-duty truck sales by 2035.
Mass Transit and Reducing Reliance on Vehicles	12% reduction in VMT by 2030, 22% reduction in VMT by 2045.	25% reduction in VMT per capita by 2030	30% reduction in VMT by 2035.
Carbon Capture and Storage	CCS on majority of operations in large oil refineries by 2030. CCS on 40% of operations in stone, clay, glass, and cement by 2035, all facilities by 2045.	CCS on majority of operations in oil refineries by 2030, beginning in 2028. Acknowledges that “deployment of CCS on refineries is uncertain.” CCS for grey hydrogen produced from fossil fuels. CCS on gas power plants and bioenergy facilities. CCS on 40% of operations in stone, clay, glass, and cement by 2035, all facilities by 2045.	No CCS on polluting fuel sources. Eliminate or minimize reliance on CCS in all sectors.

Sector	Draft Scoping Plan	Final Scoping Plan	Environmental Justice Recommendations
Electricity	10 GW of new gas-fired electricity generation. Sector GHG target of 38 MMTCO2e in 2030 and **30 MMTCO2e**[2] in 2045.	No new gas-fired electricity generation. Sector GHG target of 30 MMTCO2e by 2035. 20 GW of additional offshore wind generation.	No new gas-fired electricity generation, and zero emissions electricity generation by 2045 at the latest.
Existing Buildings (residential and commercial)	80% of all appliance sales are electric by 2030. 100% of residential appliance sales are electric by 2035, 100% of commercial appliance sales are electric by 2045. Appliances are replaced at end of life.	80% of all appliance sales are electric by 2030. 100% of residential appliance sales are electric by 2035, 100% of commercial appliance sales are electric by 2045. Appliances are replaced at the end of life. Includes strategies for energy efficiency upgrades prioritizing low-income and disadvantaged communities.	100% sales of electric appliances by 2030. Retire all gas end-uses by 2045. Transformative and comprehensive energy efficiency upgrades prioritizing low-income and disadvantaged communities.

[2] Note: This has increased from the 24 MMTCO2e in the December 2021 revised modeling assumptions to 30 MMTCO2e in the draft plan.

Sector	Draft Scoping Plan	Final Scoping Plan	Environmental Justice Recommendations
Agriculture	25% energy demand electrified by 2030 and 75% by 2045. No targets for reducing pesticide emissions.	25% energy demand electrified by 2030 and 75% by 2045 Implement climate smart practices for annual and perennial crops on ~80,000 acres annually. Land easements/ conservation on annual crops at ~5,500 acres annually. Increase organic agriculture to 20% of all cultivated acres by 2045 (~65,000 acres annually).	Emissions reductions from energy consumed by California's agricultural sector. There should be no energy created from agricultural waste that creates additional greenhouse gasses or toxic emissions, such as with dairy digesters and bioenergy plants. Transition large-scale, resource-intensive, and polluting factory farms to agroecological models, including a statewide phase out of agricultural burning. Include an ambitious pesticide reduction target to 1) reduce the use of synthetic pesticides by 50% by 2030 and 2) reduce the use of hazardous pesticides by 75% by 2030, starting with organophosphates, fumigants, paraquat and neonicotinoids.

Sector	Draft Scoping Plan	Final Scoping Plan	Environmental Justice Recommendations
Non-Combustible Methane Emissions	Increase landfill and dairy digester methane capture. Some alternative manure management deployed for smaller dairies. Moderate adoption of enteric strategies by 2030. Divert 75% of organic waste from landfills by 2025. Oil and gas fugitive methane emissions reduced 50% by 2030 and further reductions as infrastructure components retire in line with reduced natural gas demand.	Increase landfill and dairy digester methane capture. Some alternative manure management deployed for smaller dairies Moderate adoption of enteric strategies by 2030 Divert 75% of organic waste from landfills by 2025. Oil and gas fugitive methane emissions reduced 50% by 2030 and further reductions as infrastructure components retire in line with reduced fossil gas demand	Directly regulate livestock methane emissions starting in 2024. Significantly increase rate of dairy herd size reductions compared to historic levels. Discontinue and retire dairy digesters, and redirect incentive funding to zero-emission solutions.