

Chapter XX: Climate Change Scoping Plan

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California’s climate leadership is built on ambitious climate goals, but also on successfully implementing policy to deliver emission reductions to meet those goals. The Climate Change Scoping Plan, updated every five years, is a critical part of this policy implementation. CARB is currently in the process of developing the 2022 Scoping Plan, which if credible and actionable, could be an important global example of identifying the emission reduction policies that deliver a specified greenhouse gas reduction goal.

This chapter briefly reviews the 2017 Scoping Plan and the progress thus far on the 2022 Scoping Plan. It concludes with recommendations to ensure the current Scoping Plan is designed to maximize emission reductions in the current decade and ensure California is on track to meet longer-term climate goals.

2017 Scoping Plan

California’s 2017 Scoping Plan identified pathways to achieving the state’s 2030 greenhouse gas reduction goal of 40% below the 1990 level, as well as how to position the state to be on track for mid-century decarbonization. The adopted Scoping Plan finds that “enhancing and implementing these ongoing efforts [low carbon fuel standard, renewable portfolio standard, etc.], paired with a more stringent cap-and-trade program, puts California on the path to achieving the 2030 target per SB 32 and to deliver climate, air quality, and other benefits.”¹

Specifically, the 2017 Scoping Plan estimated that known commitments from sector-specific abatement would likely account for 385 MMT CO₂e in cumulative emission reductions between 2021 and 2030, or 62% of the needed abatement — leaving the cap to close the remaining gap. The cap-and-trade program covers combustion-related CO₂ emissions constituting about three-quarters of the state’s total greenhouse gas emissions inventory. The Scoping Plan anticipated that the cap would be the primary driver of 236 MMT CO₂e in additional cumulative reductions from 2021 to 2030 — 38% of the needed economy-wide abatement.

Since the adoption of the 2017 Scoping Plan, there has been a great deal of discussion regarding the 38% expected reductions from cap and trade and if that is realistic or appropriate. Either way, projecting these outcomes with certainty is extremely difficult. However, the more crucial question is if the cap is set with sufficient stringency to ensure that total greenhouse gas emissions from all sources do not exceed target levels, and that the budget itself is sufficiently ambitious to drive the immediate emission reductions needed in this decade. In other words, the emissions cap must be set to ensure the state meets the 2030 greenhouse gas reduction target. A well-designed emissions limit at

¹ <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents>

sources covered by the cap-and-trade program provides greater confidence of meeting the state’s greenhouse gas reduction goals.²

Quantity with Price

The approach taken in the 2017 Scoping Plan clearly established the role of the cap-and-trade program as a backstop for emissions at sources covered by the trading program, and alongside sectoral policies it also enhances confidence of achieving economy-wide emission reduction goals. The cap is designed to be responsive to allowance prices; changes in the quantity of allowances can increase or decrease the role of the cap in achieving economy-wide goals.

At the same time, CARB has previously characterized the purpose of the cap-and-trade program as to create a steadily increasing price signal.³ A well-designed quantity limit that delivers a price on carbon are powerful drivers of emission reductions. An appropriately calibrated declining cap increases the confidence of limiting greenhouse gas emissions to the levels required, such as those in law in California under SB32, while the price on carbon can send a clear economic signal—guiding the innovation and investment necessary to achieve those reductions.

2022 Scoping Plan

The purpose of the 2022 Climate Change Scoping Plan is to assess progress toward meeting the 2030 greenhouse gas reduction goal, as well as lay out a path to carbon neutrality by 2035 or 2045, and is described by CARB as an “actionable statewide blueprint to align efforts to achieve the state’s climate goals.”⁴ But unlike the 2017 Scoping Plan, the 2022 Scoping Plan as discussed in the planning process thus far does not evaluate abatement potential of policies nor attribute reductions to specific measures.⁵ It is difficult to understand how progress toward the 2030 greenhouse gas emission reduction goal or the development of an “actionable blueprint” of state efforts can be achieved without such evaluation of existing policies.

Instead, it appears that CARB’s intention is to identify technology options and subsequently choose a technology pathway, rather than identifying the potential gap between expected reductions and those reductions needed to achieve the 2030 goal or a subsequent carbon neutrality goal.⁶

² The 2017 legislative extension of the cap-and-trade program under AB 398 (E Garcia) included a price ceiling as an additional cost containment feature. If a price ceiling sale is held, CARB issues allowances sufficient to cover all compliance obligations. In order to maintain the integrity of the emissions cap despite the issuance of additional allowances, CARB is required to use the revenue from a price ceiling sale to purchase additional reductions on at least a ton-for-ton basis.

³ <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2018/capandtrade18/ct18398.pdf>

⁴ https://calepa.ca.gov/wp-content/uploads/sites/6/2021/10/2021_0928_CARB-IEMAC-Scoping-Plan-Update.a.pdf

⁵ CARB staff presentation at September 28, 2021 IEMAC meeting

⁶ https://ww2.arb.ca.gov/sites/default/files/2021-08/carb_presentation_sp_scenarioconcepts_august2021_0.pdf

IEMAC understands that the Scoping Plan process is not a regulatory proceeding and that specific policies are not amended or adopted through this process. However, to ensure an “actionable blueprint” and that the state is on track to meet its climate commitments, IEMAC recommends that the Scoping Plan include an evaluation of existing policy, recommendations where existing policy could be more ambitious, and recommend what, if any, additional policy will likely be needed. Any gap between emissions projected under existing/planned policies and state level targets could in principle be closed by the cap-and-trade program, provided the cap is sufficiently stringent.

More specifically, in the previous Scoping Plan CARB made a prediction regarding the role of the cap-and-trade program in achieving the 2030 goal based on the abatement potential of sector-specific policies. No such evaluation is evident in the current Scoping Plan planning process, leaving an assessment of the role of cap and trade in meeting the 2030 goal absent from the Scoping Plan process. While this is a challenging exercise, a clear expectation of the role of cap and trade in the current decade is important for regulatory certainty and emissions planning.

Recommendations

Modeling

- IEMAC recommends that CARB establish an emissions baseline scenario by evaluating the abatement potential of all existing climate policy out to 2030, 2035, and 2045. This is the foundation for identifying additional actions the state must take to achieve the 2030 statutory goal as well as those directed by executive action.
- CARB should also consider the approximate abatement potential of the cap-and-trade program, including offsets, and specifically evaluate the required level of the emissions cap to act as a backstop for meeting climate goals. While IEMAC recognizes that any change to the program would take place through a formal rule-making process, an appropriate cap level (i.e. an appropriate allowance budget) is essential to achieving these goals and providing regulatory certainty—and thus a key input for modeling the abatement needed from other policies. IEMAC is concerned that none of the proposed Scoping Plan scenarios consider the level of the emissions cap or the rate at which it could decline.

Policy Ambition

- After CARB has established the emissions baseline based on the reductions expected from current policy including the backstop currently embodied in the cap-and-trade program, IEMAC encourages CARB to identify the sectoral policies that could be strengthened and/or where additional policy could be beneficial including potential reforms of the cap-and-trade program. IEMAC recognizes these would each require a formal regulatory process or additional legislative direction. While cap and trade is likely the most cost-effective means to achieving a particular greenhouse gas emissions goal as it ensures that individual entities have an incentive to pursue all available low-cost opportunities to reduce emissions, there are potentially

additional benefits that would come from enhanced sectoral policies including local air quality improvements or addressing environmental equity, and CARB should consider evaluating such benefits.

- As CARB discusses cap and trade in the Scoping Plan, IEMAC recommends the agency be transparent in framing the goals for the program as it contributes to achieving the economywide emissions target.
- While the limit covering 75% of California’s emissions is a central feature of the state’s climate policy, the remaining 25% of emissions must be addressed as well. IEMAC recommends that the Scoping Plan make specific recommendations with respect to these uncovered sources, again including where existing policy could be more ambitious or where new policy is potentially beneficial.

Timeline

- As CARB identifies opportunities for greater ambition in existing policy, including cap and trade, and potential new policy IEMAC encourages CARB to seek to maximize cumulative emission reductions before 2030 rather than delay necessary abatement.
- The Intergovernmental Panel on Climate Change has found that the world could reach 1.5°C of warming as early as 2030.⁷ As such, it is essential that California accelerate its emission reductions in the current decade. Because of the need for near-term climate ambition, IEMAC strongly encourages CARB to not wait until after the Scoping Plan is adopted in late 2022 to begin considering which climate policies need to be strengthened or newly developed. Instead, IEMAC recommends that CARB and the Legislature begin considering additional action before the Scoping Plan is finalized. At the very least, CARB could begin a process similar to what they have done with the Low Carbon Fuel Standard; identify possible program enhancements and start soliciting feedback now, so a rulemaking could start immediately upon conclusion of the Scoping Plan process and implementation could begin as early as 2024. Delayed implementation of policy adjustments would lead to greater cumulative emissions in the interim – requiring increasingly steep reductions to achieve the same emissions outcome and making it increasingly difficult to keep emissions within the necessary carbon budgets.

Additional Analysis

- In addition to the economic and health analysis of the Scoping Plan scenarios already planned, IEMAC recommends that CARB consider an analysis of affordability impacts, specifically with respect to the electricity sector and rural, low-income, and historically overburdened communities. However, technology outcomes alone do not determine the distribution of costs and benefits to Californians; instead, affordability impacts depend on the policy design. To help understand “who pays,” it needs to be clear which policies are being relied upon to

⁷ https://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_version_stand_alone_LR.pdf

get California to its climate goals. As such, the above recommendations to identify the emissions gap and policies to close the gap are also necessary to identify, and then prevent, disproportionate cost burdens on heavily impacted communities as California meets its climate goals.

Conclusion

To ensure that California is on track to meet its climate goals, it is important for CARB to identify the potential of existing climate policy to deliver emission reductions. IEMAC also encourages CARB to establish the necessary level of the emissions backstop embodied in the cap-and-trade program to provide the greatest possible certainty of meeting those goals. IEMAC recommends that the Scoping Plan then describe where enhanced ambition is necessary – either through increased stringency of existing policy or potential new policy. This would make the Scoping Plan not only actionable, but replicable in the future and in other jurisdictions.

A credible and actionable Scoping Plan is an important global example of identifying the emission reduction policies that deliver a specific level of greenhouse gas reductions. As such, as CARB develops the latest Scoping Plan, it is important to identify replicable climate policy and its abatement potential as well as how to close an emissions gap with the greatest possible certainty in order to meet climate targets. A Scoping Plan designed without policy is a poor example for other jurisdictions that are off track from their own climate goals because it obscures *how* to meet such goals.