**May 3, 2022**

**Ms. Liane Randolph**

**Chair, California Air Resources Board**

**1001 I Street**

**Sacramento, CA 95814**

***Submitted electronically***

**Re: Environmental Defense Fund Comments on 2022 Scoping Plan Update - Economic and Public Health Analyses as Presented on April 20, 2022.**

Dear Chair Randolph,

On behalf of Environmental Defense Fund (EDF), we appreciate the opportunity to provide comments on the 2022 Scoping Plan update. Recognizing both the challenge of considering varied time horizons as well as the increasing urgency of the climate crisis, EDF commends the California Air Resources Board’s (CARB) significant effort in developing this Scoping Plan update. Additionally, EDF appreciates the work of E3, Rhodium Group and University of California Irvine to evaluate the air quality and public health benefits of the proposed Scoping Plan scenarios. When the state embarks on implementation of strategies in the Scoping Plan, it is critical that policies are designed to ensure that overburdened communities benefit from health and air quality improvements and the economic opportunities of an energy transition.

As EDF has pointed out previously in the Scoping Plan process, this decade is a critical window for California, and the world, to dramatically reduce greenhouse gas emissions. Avoiding the worst impacts of climate change will require securing as many reductions as possible as early as possible to stay within the carbon dioxide budgets identified by the Intergovernmental Panel on Climate Change (IPCC) to limit global warming to 1.5℃ – a grave milestone that the world could reach as early as 2030. Fortunately, due to decades of climate leadership including at CARB, California already has many of the tools and certainly the opportunity to increase ambition, right now, in addressing climate change.

In these comments, we reiterate several critical issues following the April 20, 2022 Health and Economic Analyses workshop: the importance of accelerating ambition to reduce as much climate and conventional air pollution as possible before 2030; explicitly evaluating the role of cap-and-trade; and the need for transparency with the data and underlying assumptions in each set of Scoping Plan modeling results.

1. **Importance of frontloading climate ambition before 2030**

The presentations in CARB’s April 20, 2022 workshop on economic and public health analyses demonstrated the importance of front-loading emission reductions prior to 2030 and exploring ways to accelerate climate ambition in the current decade. The sooner emissions are reduced, the greater the cumulative reductions will be – and the better the chance we have at achieving temperature stability at safe levels. The final Scoping Plan scenario must, at a very minimum, meet the 2030 goal and seek to exceed that goal to the extent feasible.

Acting now to reduce greenhouse gas emissions has both near- and long-term benefits. For example, reducing emissions of short-lived climate pollutants (e.g. methane) – which govern the rate of warming – is crucial for slowing the pace of warming and limiting associated damages. On the other hand, reducing emissions of long-lived climate pollutants (e.g. carbon dioxide) – which govern the maximum extent of warming – is crucial for limiting the overall amount of warming we experience in the long-term. It is essential that California maximize emission reductions in the current decade to minimize the cumulative build-up of long-lived greenhouse gasses in the atmosphere. At the same time, we know that greenhouse gas emissions are correlated with conventional air pollution that causes local health impacts.

As EDF comments previously submitted on the Scoping Plan update, accelerated action is critical to achieving economic, environmental, and public health goals. However, many aspects of the scenarios modeled do not reflect an increase in ambition. For example, the initial modeling results as presented by E3 on March 15, 2022 appeared to assume that there would be no increase in the carbon intensity (CI) reduction targets under the Low Carbon Fuel Standard across all four proposed alternative scenarios. As CARB has already contemplated such an acceleration pre-2030 and an extension of CI targets post-2030, EDF would encourage increasing the ambition of assumptions in this policy. CARB staff seemed to acknowledge this opportunity in comments at the March 24, 2022 Board meeting, and EDF supports more ambitious CI targets in the Scoping Plan modeling. We also support CARB moving forward with summer 2022 workshops to explore higher ambition in the Low Carbon Fuel Standard program.

Additionally, EDF encourages CARB to accelerate electricity sector emission reductions beyond the currently-mandated 38 million metric ton (MMT) CO2 target level. Alternative Scenario 2 appears to achieve 30MMT CO2 by 2030, and Alternative Scenarios 3 and 4 are at approximately 30MMT after 2045. As CARB has indicated that they intend to move forward with Alternative Scenario 3, we suggest exploring an acceleration of the emission reductions in the electricity sector to achieve 30MMT CO2 closer to 2030.

Front-loading ambition across assumptions in Alternative Scenario 3 will help ensure that California achieves the maximum possible emission reductions and associated health benefits before 2030, as illustrated in the air quality modeling presentation on April 20, 2022. Increasing our climate ambition can also help improve local air quality and health outcomes. With CARB’s announcement that it plans to pursue Alternative Scenario 3, we would encourage CARB to look again at the public health modeling assumptions under a more front-loaded version of Alternative Scenario 3 to ensure these health benefits are maximized.

1. **Evaluating the role of cap-and-trade**

California’s cap-and-trade program is a nation-leading policy; CARB must ensure that the declining limit on greenhouse gas emissions, alongside numerous other essential emission regulations, provide the greatest level of certainty that the state will meet its 2030 greenhouse gas reduction goal and be on an ambitious path to achieve net-zero greenhouse gas emissions no later than 2045. To that end, we would like to underscore the importance of ensuring that the cap in the program is sufficiently stringent to act as a backstop for emissions.

When well-designed, afirm, declining cap on emissions provides the greatest possible certainty of meeting greenhouse gas reduction targets. This pollution limit, set by the emissions budget for covered sources, is the most essential feature of the cap-and-trade program. The relative role of the cap-and-trade program compared to sector-based policies as the “primary driver” for emission reductions is less important than the role the cap plays in ensuring that emissions do not exceed the allotted budget, and the stringency of the budget itself. The cap should act as the backstop to keep California on track with its climate goals. If other programs help achieve greater reductions than expected then there is less pressure on the cap; but if other programs deliver fewer reductions, the cap remains the state’s “insurance policy” to make sure emissions continue to decline at the pace required. In order to function effectively as the backstop, the emissions budget must be calibrated to ensure that cumulative emissions in California, at a minimum, do not exceed emissions allowed under a linear trajectory from 2020 levels to the 2030 target, factoring in any previously “banked” allowances that may be retired for compliance in the upcoming years.

In line with the recommendations of the Independent Emissions Market Advisory Committee in their 2021 report, EDF encourages CARB to move forward swiftly with a robust analysis of the cap-and-trade program’s role in achieving economy-wide greenhouse gas reduction goals and any necessary design adjustments to provide the greatest possible certainty of achieving those goals. Furthermore, as discussed below, it is important that CARB transparently details the underlying assumptions and quantifiable results when evaluating the role of cap-and-trade.

The Environmental Justice Advisory Committee (EJAC) recommendations point out the need for “thorough analysis of the cap needed to meet 2030 goals.” EDF also supports the intention to explore any necessary modifications to California’s cap-and-trade system to ensure that the state realizes as many emission reductions as possible before 2030, and encourages CARB to undertake this work on as swift a timeline as possible.

In the Joint Legislative Committee on Climate Change Policies hearing on April 21, 2022, Chair Randolph clarified that the Scoping Plan will include an estimate of the role the cap-and-trade program will play in meeting California’s climate targets. EDF is pleased that CARB will be conducting this evaluation in the Scoping Plan. Most importantly, this analysis will need to inform swift action to calibrate the program to cut as much pollution as possible, as quickly as possible. Moreover, CARB should use the emissions projections developed for all California emissions sources — including sectors outside the cap — to ensure that the allowance budget in the cap-and-trade program is stringent enough to accommodate any potential growth in emissions from uncapped sectors and still secure the cumulative reductions necessary. In other words, if an increase is projected in uncapped sectors, the budget should be tightened in order to ensure the capped sectors overperform and reduce additional emissions to accommodate any projected increase in uncapped sectors.

1. **Underlying data from modeling results**

EDF appreciates the immense amount of work done by CARB staff, E3, University of California Irvine, and Rhodium Group in developing the four alternative Scoping Plan scenarios and evaluating health, air quality, and economic impacts. We look forward to reviewing the underlying data of these initial modeling results in order to fully assess the practical and policy limitations – as well as opportunities - of the proposed scenarios. We encourage CARB to publish the data and assumptions as quickly as possible to ensure ample time for meaningful review and engagement.

**Conclusion**

Thank you for your ongoing work to develop the 2022 Scoping Plan update, and for your consideration of these comments. EDF looks forward to working with your staff through the balance of the Scoping Plan process and additional workshops and rule-makings on these topics.

Sincerely,

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