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October 22, 2021

Honorable Chair Liane Randolph
Honorable Board Members
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

RE: Comment on 2022 Scoping Plan Update - Scenario Inputs Technical Workshop

To Chair Randolph and the Air Resources Board,

The California Environmental Justice Alliance ("CEJA") submits the following comments on the draft scenario assumptions of the 2022 Scoping Plan Update ("Scoping Plan"). CEJA is a statewide alliance of grassroots community-based organizations across California working together to advance environmental justice in state policy. Our member and partner organizations are the Asian Pacific Environmental Network, Communities for a Better Environment, Center for Community Action and Environmental Justice, the Center on Race, Poverty & the Environment, Environmental Health Coalition, People Organizing to Demand Environmental and Economic Rights, Central Coast Alliance United for a Sustainable Economy, Leadership Counsel for Justice and Accountability, Physicians for Social Responsibility – Los Angeles, and Strategic Concepts in Organizing and Policy Education. We work directly with low-income communities and communities of color in some of the most polluted and socioeconomically burdened areas of our state.

We submit the following comment requesting that the Air Resources Board ("CARB") modify Alternative 1 and other alternative PATHWAYS scenario modeling assumptions.

I. CARB Should Include EJAC Recommendations and Greater Innovation and Investment in Alternative 1.

It appears that recommendations¹ from our member and partner organizations shaped the first draft of Alternative 1, or the “Environmental Justice Scenario.” Acknowledging that the timeline has made meaningful engagement challenging, CARB should continue to develop Alternative 1 based on specific input from the EJAC, and we understand that the EJAC will provide such recommendations for modification by November 24th. In the meantime, we illustrate the differences between Alternative 1 and the responses submitted by environmental justice organizations. At the same time, however, by not including potential innovation dollars, and therefore other feasible fuels and GHG mitigation strategies in Alternative 1, CARB has designed Alternative 1 to fail. CARB must correct this error.

A. CARB Should Modify Alternative 1 to Conform to Environmental Justice Recommendations.

We thank CARB for waiting for the EJAC’s responses to the Scenario Input Questions, and highlight the following differences between the feedback from environmental justice organizations and Alternative 1:

Greater Focus on Emissions Reductions Over *Neutrality*: The environmental justice organizations had recommended focusing on the statutory 2030 target *first*, in addition to the 2045 targets. The absolute emission reduction mandate to cut GHGs 40 percent below 1990 levels by 2030 must be achieved *first*, through direct emissions reductions across all sectors. Alternative 1, however, strives for a more general goal of reaching neutrality by 2035, missing these nuances that focus on mandatory direct emissions reductions, public health, and the 2030 target, as more fully discussed below.

Vehicle Miles Traveled (“VMT”): While Alternative 1 includes the most aggressive VMT measures proposed out of all of the alternatives, environmental justice organizations had also proposed meeting transportation goals with additional measures, including more stringent targets for MPOs and increasing affordable and reliable mass transit. Alternative 1 should include such measures. CARB should clarify whether the PATHWAYS model has the capability to model MPO targets. If PATHWAYS is unable to incorporate an input that reflects MPO targets, CARB should propose a methodology to include such a measure in Alternative 1 and other alternative scenarios.

Petroleum Refining: Alternative 1 seeks a phase out of the refining sector by 2035. Environmental justice organizations have made a different recommendation: that phaseout target 90 to 100% phase out by 2045, as detailed in every scenario of the E3 Achieving Carbon Neutrality report,² with a proportional target by 2030. This recommendation to regulate the

¹ EJ Organizations Letter to the EJAC, September 17, 2021, *available at* <https://ww2.arb.ca.gov/sites/default/files/2021-09/EJ%20Orgs%20Scenario%20Input%20Question%20Responses%20091721%20final.pdf>

² See E3 Achieving Carbon Neutrality in California, October 2020, *available at* https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf

phaseout of oil extraction and petroleum refining is rooted in a concern about the lack of robust financial planning for community and worker transitions to date. CARB should also include an update review or course correction method to speed this transition as appropriate and as new conditions emerge. (For example, the pandemic accelerated some phaseout, but also exacerbated some fossil fuel emissions. We cannot perfectly predict ahead of time new options for faster phaseout but must take advantage of these options as they emerge.)

Building Decarbonization: Alternative 1 includes the most aggressive building decarbonization measures (electric appliances and building retrofits) compared to the other alternatives. Environmental justice organizations instead recommended CARB move forward with building decarbonization by meeting specific principles that focus on addressing the barriers and burdens on low income renters and communities.³ Addressing these barriers to electrification does not necessarily coincide with achieving decarbonization goals by the most aggressive timeline.

Biofuels: Alternative 1 proposes no biofuel transportation fuels by 2035, and the powering of buildings with hydrogen produced from biogas. Environmental justice organizations have instead proposed a more nuanced response, where future rulemakings should apply protective parameters, such as environmental and socio-economic analyses to evaluate appropriate uses of biomass for energy production. Environmental justice organizations have also opposed biogas for electricity generation. In particular, Alternative 1 proposes no additional capture of methane from dairy digesters, yet environmental justice organizations have consistently advocated for the complete discontinuation of dairy digesters and the production of dairy biogas.

Our prior comments have also detailed emission reduction measures that are not included in any of the alternative scenarios. These include: land use transitions; active transportation infrastructure such as walking and biking; equitable community development strategies; investments in mass transit operations; reduction in pesticide use, and operational transitions of highly polluting industry practices. Because these investments and policy strategies inform the advancement and feasibility of technologies and fuels, CARB should detail how these will be accounted for in or in addition to PATHWAYS, and included as assumptions before subsequent public health and economic analyses.

As CARB awaits more responses from the EJAC on these questions, CARB should consider these and other differences between Alternative 1 and the recommendations of environmental justice organizations.

B. CARB Should Not Design Alternative 1 to Fail.

By limiting the ambition for innovation and investment in Alternative 1, CARB has designed the Environmental Justice Scenario to fail. The other draft scenario alternatives include massive innovation and investment assumptions for carbon capture utilization and sequestration (“CCUS”) and certain biofuel technologies. Especially as the Scoping Plan looks out to at least

³ See *supra* fn. 1; equitable decarbonization principles include: ensuring affordability and removing barriers to accessing clean appliances; promoting high-road jobs, workforce development and family-sustaining wages; and protecting lower income households against harms.

2045, CARB must be at least as aggressive with similar innovation and investment in each alternative scenario, specifically towards *clean* energy resources and direct fuel substitutions.

The Scoping Plan must be forward looking, especially in regards to achieving “the maximum technologically feasible and cost-effective reductions of greenhouse gas emissions.”⁴ In order to adequately meet the Scoping Plan’s environmental justice objectives,⁵ CARB must avoid projecting a disproportionate portion of investment dollars into indirect measures that prioritize the preservation of the status quo polluting fossil fuel, extractive and industrial sectors.

The Scoping Plan must contemplate unprecedented technological investment and innovation to comply with the state’s emission reduction mandates, instead of assuming entire industries will collapse or that California will need to import certain “hard to decarbonize” products from out-of-state that it currently produces in-state. Feasibility must not be based on the level of investment we’ve seen to date. CARB cannot say industries will be displaced at this point in the fuels or technology stage without also projecting just as ambitious innovation and investment in the clean energy sector.

California has been primed for a clean energy transition for years—as long as investment is directed in the right, and equitable, direction.⁶ Maximizing the cost-effectiveness of measures to further a Just Transition will require the co-evolution of innovation, investment and policies that provide appropriate market signals.⁷ Regulatory certainty will accelerate the deployment of technologies that benefit environmental justice communities. Appropriate market signals include an accurate depiction of this potential in the Scoping Plan. CARB must balance the ambitious policies set forth in Alternative 1 with just as equally ambitious innovation and investment.

This is also not a novel idea. The SB 100 Joint Agency Report states that “continued *prioritization* of research and development of new and more cost-effective solutions is imperative,” in particular to further “zero-carbon technologies.”⁸ The Public Utilities Commission, Energy Commission and CARB have already committed:

Future analyses will be updated to incorporate market trends and aim to better evaluate the potential impact of emerging resources, such as offshore wind, long-duration energy storage, green hydrogen technologies, and demand flexibility.⁹

⁴ Cal. Health and Safety Code § 38561(h).

⁵ *See eg.* AB 32, Cal. Health and Safety Code § 38562(b)(2): CARB’s climate policies must not “disproportionately impact low-income communities.”

⁶ *See eg.* Kittner, Lill and Kamman, Energy Storage Deployment and Innovation for the Clean Energy Transition, July 2017, available at <https://www.nature.com/articles/nenergy2017125>. (Abstract: “We find and chart a viable path to dispatchable US\$1 W⁻¹ solar with US\$100 kWh⁻¹ battery storage that enables combinations of solar, wind, and storage to compete directly with fossil-based electricity options.”)

⁷ *Id.*

⁸ SB 100 Joint Agency Report at 6, 16 (*emphasis added*), available at https://www.energy.ca.gov/sb100#anchor_report

⁹ *Id.* at 17.

The Scoping Plan, and its draft scenarios, must be coordinated with other state activities and therefore contemplate these commitments. “The state’s ongoing collaboration with cleantech incubators, research labs, and private investment firms will be critical to leveraging state funding in innovation.”¹⁰ For instance,

One key area of innovation is in long-duration storage technologies. While there are 4.5 GW of pumped hydro energy storage in California, new longer-duration energy storage systems (for example, 100 or more hours of energy storage) are in the development phase and may be deployed within the next decade *with the right market signals*. Longer-duration storage technologies, such as advanced batteries, thermal energy storage, liquid air energy storage, and compressed air energy storage, can support reliability and further promote achievement of SB 100 goals.”¹¹

As the blueprint for the State’s climate policy and one continuation of the Joint Agency Report, CARB must provide these appropriate market signals by including the full range of this and other clean energy innovation and investment options in Alternative 1, and other potential scenarios in the Scoping Plan.

The federal government has also echoed the need to focus on equitable innovation and investment. The Department of Energy recently announced its goal to reduce the cost of grid scale, long duration energy storage by 90% by 2030.¹² Other opportunities and technologies for equitable innovation and investment are also being realized.¹³

We provide these examples from the power sector, but emphasize that the burden is on CARB as a regulator of public health¹⁴ to develop these appropriate and equitable market signals. *CARB should not shift this burden to the public*, especially when CARB is in possession and control of the feasibility studies and technical modeling that implicate essential questions about public health. Overall, by limiting innovation and investment to the fossil fuel industry, CARB sends the wrong, inequitable, market signals. CARB must correct this deficiency in Alternative 1 and other alternative scenarios.

¹⁰ *Id.* at 21.

¹¹ *Id.* at 109.

¹² Secretary Granholm Announces New Goal to Cut Costs of Long Duration Energy Storage by 90 Percent, *available at* <https://www.energy.gov/articles/secretary-granholm-announces-new-goal-cut-costs-long-duration-energy-storage-90-percent>

¹³ *See eg.* An Urgent Energy and Climate Plan for Maryland, October 2019, *available at* <https://ieer.org/resource/energy-issues/an-urgent-energy-and-climate-plan-for-maryland>; Form Energy Announces Pilot with Great River Energy to Enable the Utility’s Transition to an Affordable, Reliable and Renewable Electricity Grid, Long-duration battery paves the way to a carbon-free future by enabling renewable energy to power the grid reliably even in extreme weather conditions, May 2020, *available at* https://formenergy.com/wp-content/uploads/2020/05/Form-Energy_-GREPilotPress-Release.pdf (“The project with Great River Energy will be a 1-MW, grid-connected storage system capable of delivering its rated power continuously for 150 hours.”)

¹⁴ CARB Mission (“to promote and protect public health”) *available at* <https://ww2.arb.ca.gov/about>

C. CARB Should Not Dedicate Funding to False Solutions that Worsen Public Health Impacts.

Due to siting, permitting and construction uncertainties, some 8-12 years,¹⁵ it is simply not possible to deploy CCUS in time for the technology to even attempt to contribute to meeting our 2030 climate goals. Moreover, CCUS will only increase local pollution burdens on frontline environmental justice communities, and pose new threats and hazards to community health, without substantively capturing carbon dioxide as the industry is promising to do. Investing in CCUS would only divert public resources from needed investments in clean energy and ecosystem restoration, and agroecological solutions that improve health, strengthen resilience, and reduce GHGs and local pollution.

The same problem exists for biofuels. For instance, it makes sense to invest in clean refining substitutes. To the contrary, attempting to meet our climate goals through retooling refineries to process biofuels presents significant risks that the state and its environmental justice communities should not bear. We reject the premise that refining biofuels is part of a transition plan. In fact, “[r]efining for export continued to expand in California as biofuels that were expected to replace fossil fuels added a new source of carbon.”¹⁶ Between 2012 to 2019, the drive to increase refinery exports saw refining of biofuels *in addition to* petroleum refining.¹⁷ Biofuels *did not replace* petroleum:

[I]nstead of retiring oil assets when petroleum demand began to decline in California, [oil refiners] refined more oil for exports, then added biofuels that kept their refineries and fuel distribution systems running closer to full while they further expanded those petroleum distillate exports that burned elsewhere.¹⁸

This is another example of selective innovation and investment into the status quo fossil fuel chain that simply perpetuates disproportionate impacts in environmental justice communities, stunts opportunities for clean energy development, and runs contrary to the mandate and environmental justice objective of AB 32. Instead, it is imperative for CARB to plan for a Just Transition and meet our climate goals by including a comparable and adequate amount of innovation and investment to maximize direct emission reductions in Alternative 1 and other potential alternative scenarios.

II. CARB Should Include a Reference Scenario.

In order for CARB and the public to adequately understand the extent of measures required to meet our climate goals, it is important for CARB to include a reference scenario, and we are pleased that CARB has acknowledged this need. This baseline, or business as usual scenario, would evaluate current programs and chart our trajectory to meet our climate goals

¹⁵ See Public Workshop: Scoping Plan Update, Engineered Carbon Removal Technical Workshop Recording, August 2, 2021 *available at* <https://www.youtube.com/watch?v=jSCcS3NiweQ>

¹⁶ Greg Karras, *Throwing Fuel on the Fire*, *available at* https://f61992b4-44f8-48d5-9b9d-aed50019f19b.filesusr.com/ugd/bd8505_957611c429a2471e8df2fa30d0ccf24e.pdf

¹⁷ *Id.* (emphasis added)

¹⁸ *Id.*

absent further action included in any of the scenarios. Most of all, this scenario would allow for a baseline from which to compare alternative scenarios. This reference scenario could also detail what direct emission reductions CARB has successfully pursued, and where there is opportunity for prioritization of further direct emission reductions. The Energy Policy Solutions tool,¹⁹ developed by Energy Innovation could serve as a basis for this reference scenario.

Moreover, including a reference scenario is in line with the California Environmental Protection Agency's commitment to engage on the cap-and-trade program in the Scoping Plan process and ensure a "comprehensive review and consideration of . . . the extent to which the state's climate strategy should rely on the cap-and-trade program reductions relative to other approaches."²⁰

III. CARB Should Evaluate the Environmental Justice Impacts of Each Alternative by Modeling the Social Costs/Public Health Impacts of Each Alternative Scenario.

As stated in our prior comments, as cost-effectiveness is central to climate policy, to adequately meet the environmental justice objective of the Scoping Plan, CARB must necessarily balance the appropriate costs and benefits. It is therefore important for CARB to include additional modeling, on top of PATHWAYS, to provide the public with adequate information on the economic and social costs and public health implications of each alternative scenario. Only then can there be an apples to apples comparison of each alternative scenario.

CARB's current economic modeling is largely based on IMPLAN and REMI, but those tools only provide an assessment at the county level. This precludes an adequate impression of more local economic impacts. There are tools that exist that can provide a more granular impression at the census tract level.²¹ CARB should utilize more granular and community-level tools on top of its current modeling tools.

In addition, any analysis of social costs must extend beyond the social costs of avoided GHGs, as currently analyzed by CARB in the 2017 Scoping Plan. Similarly for this Scoping Plan, CARB has so far proposed to adopt the Biden Administration's work on social costs. However, that work is only based on *avoided* social costs. CARB is aware of the omission of local impacts in their analyses, and has been since at least 2017:

There are additional *costs to society* outside of the SC-CO₂, including costs associated with changes in co-pollutants, the social cost of other GHGs including methane and nitrous oxide, and costs that cannot be included due to modeling and

¹⁹ Energy Innovation, Energy Policy Solutions, *available at* <https://california.energypolicy.solutions/scenarios/home>

²⁰ Letter from CalEPA Secretary Jared Blumenfeld to Senator Bob Wieckowski (June 18, 2020); Rachel Becker, California re-evaluating its landmark climate strategy, CalMatters (June 24, 2020); Rachel Becker, California to review carbon trading program as part of climate roadmap, CalMatters (Feb. 16, 2021).

²¹ *See eg.* Scoping Plan Update Scenario Modeling and Evaluation Technical Proposal RFP No. 201SD005, September 21, 2020: BEAR Economic and Health Assessment methodology which can report economic and health results at a census tract level.

data limitations. The IPCC has stated that the IWG SC-CO2 estimates are likely underestimated due to the omission of significant impacts that cannot be accurately monetized, including important physical, ecological, and economic impacts. CARB will *continue engaging with experts to evaluate the comprehensive California-specific impacts of climate change and air pollution.*²²

While BenMap is a good start, that tool only determines public health benefits of GHG reductions, versus public health impacts of GHG reduction methods. In other words, while BenMap may detect public health benefits associated with capturing GHGs, BenMap cannot detect the local air and water pollution associated with the process of capturing those GHGs. CARB must include an analysis of these additional costs to society in the Scoping Plan and the environmental review of the Scoping Plan. In doing so, CARB should utilize the Precautionary Principle in its approach, where there is uncertainty about potential risks or harms resulting from new or unproven technologies, such as CCUS and other forms of engineered carbon removal. CARB should revise the Scenario Assumptions to detail this information gap and propose a solution to implement in the Scoping Plan. Only then can CARB comply with AB 32 and ensure that its alternative scenarios do not impose further disproportionate impacts in environmental justice communities.

IV. CARB Should Focus on Regulating the Phaseout of the Transportation Fossil Fuel Chain.

California cannot address the alarming climate disaster, nor the public health disasters of smog and toxics, without regulating the phaseout of oil extraction, oil refining, and the combustion of fossil transportation fuels (“Transportation Fossil Fuel Chain”) because these sectors collectively emit more than half the state’s GHGs, as well as smog precursors in addition to toxics. The four largest GHG emitting subsectors are within the Transportation and Industrial sectors, making up about half the state’s GHG emissions. These four subsectors—Fossil Fuel Combustion in Passenger Vehicles and Heavy Duty Trucks, Oil Refining, and Oil Extraction—are all inherently interconnected. Crude oil is extracted, sent to oil refineries to make gasoline and diesel (plus jet fuel, petroleum coke, and others), which are mostly burned in passenger vehicles and heavy-duty trucks.

All environmental justice communities—even those without fossil fuel sources nearby—are disproportionately impacted by this global climate catastrophe. The Scoping Plan provides the best opportunity to address climate change and the smog our communities have dealt with, but we fear the opportunity will be squandered if there is a failure to commit to a regulated phaseout of every step in the Transportation Fossil Fuel Chain. We must plan the phaseout of the Transportation Fossil Fuel Chain intentionally, using readily-available zero emission energy, primarily through transportation electrification and investments in mass transit operations and active transportation infrastructure while the grid is decarbonizing and intentionally phasing out refineries and oil extraction through a Just Transition.

²² *Id.* at 41 (emphasis added).

CARB should utilize the Zero Emission Scenario phaseout dates and percentages from E3’s Achieving Carbon Neutrality report²³ for these four worst GHG emitting subsectors in every scenario alternative. The table below identifies phaseout dates and percentages from this modeling. CARB should also commit to reevaluating expediting target dates and expanding direct emission reduction percentages in the years between each successive Scoping Plan, especially as the state moves closer to a Just Transition.

Subsector	Proportion of Current Statewide GHG Emissions	Energy Transition Modeling Assumptions from Achieving Carbon Neutrality
Passenger Vehicles (Mainly Gasoline)	29%	Light Duty Vehicles: 100% Battery Electric Vehicles (BEV) sales by 2030 Medium Duty Vehicles: 100% BEV sales by 2030
Heavy Duty Trucks	8%	50% BEV sales by 2030 50% Hydrogen* Fuel Cell Vehicles sales by 2030 <i>*We only support the hydrogen fuel cells if hydrogen is produced through zero emission options such as solar generation.</i> We oppose replacing diesel with 48% CNG (Compressed Natural Gas)
Oil and Gas Extraction	11% (which may be underestimated)	100% reduction by 2035
Oil Refineries	7% (which may be underestimated)	100% reduction by 2045, with proportional cuts by 2030

All three scenarios presented in the E3 Report assumed a 90-100% phaseout of emissions from Oil Refining and Oil Extraction subsectors by 2045. At a minimum, each of the draft alternative scenarios should regulate phaseout of these sectors at these rates and target dates. In addition, CARB should make a clear commitment to update the phaseout timetable every few years to evaluate whether the state can achieve an accelerated statewide 2035 target in a Just Transition.

In the Zero Carbon Energy scenario of E3’s report, 92% of overall direct emissions cuts are achievable by 2045 for all sectors under aggressive decarbonization assumptions. That 8% remaining non-energy, non-combustion emissions were then addressed through carbon capture

²³ See *supra* fn. 2.

after direct emissions cuts. Therefore, even in the E3 modeling, dubious and harmful CCUS strategies did not replace direct emission phaseout strategies, despite industry proposals to use CCUS instead of direct phaseout regulation.

As noted above, CARB should also clarify whether PATHWAYS is able to account for the development of other measures to address this Transportation Fossil Fuel Chain, for instance the greater deployment of mass transit. If PATHWAYS is not equipped to do so, then CARB should devise a strategy to account for this and other similar inputs. CARB has the authority to strengthen GHG reduction targets for MPOs, and environmental justice organizations have maintained the need to increase this target from 17% to 25% by 2035. Whether directly or indirectly, assumptions about mass transit systems are critical to securing equitable reductions in GHGs in the Transportation Fossil Fuel Chain.

V. CARB Should More Fully Integrate Natural Working Lands (NWL) with Energy Solutions.

It is important for CARB to examine the link between NWL and energy production. In particular, the draft alternative scenarios should explore how NWL can be part of the solution for energy production, versus placing NWL in a silo to shave off whatever remaining GHGs are needed to meet our climate goals after implementing each alternative scenario.

There has not been a strong focus in Scoping Plan development thus far on the role of agriculture, pesticides, and natural soil sequestration in our climate crisis, nor an environmental and social justice analysis of the state's agricultural future. The Scoping Plan must address toxic and warming emissions from agricultural industries, including emissions from pesticides, animal agriculture, and agricultural waste management. Synthetic pesticides contribute significantly to GHG emissions when applied, severely damage the microbial processes in soil that allow it to stably and naturally sequester carbon, and are produced from highly polluting and atmosphere-warming petrochemicals, such as ethylene, propylene, and methane. Practical solutions like sustainable non-chemical pest management, smaller herd densities and sustainable crops, and locally based agricultural and food systems must be integrated as assumptions in the Scoping Plan scenarios, in addition to regulatory strategies to directly reduce emissions.

Some ways these concerns can be directly addressed in the Scoping Plan are by including direct pesticide reduction strategies into CDFA's Healthy Soils Program, dedicating technical assistance and research to biologically integrated, non-synthetic pest management, creating incentives for diversified farming that decreases the need for chemical and synthetic inputs, equitably resourcing small-scale farmers and farmers of color in all sustainable agriculture programs, and establishing land access and tenure programs that allow underrepresented farmers to tend to and nourish the same land over time to demonstrate the profound soil health, climate, and production benefits. CARB, CDFA, CNRA and partner agencies should better integrate racial justice and access in their land management discussions, as this directly ties in to the ability for the state to confront the climate crisis.

Finally, it is critical that none of the strategies and solutions developed for NWLs result in carbon offsets, markets and pollution trading, and violate additionality policies. Sustainable

and healthy agricultural practices must be included as a strategy in the Scoping Plan to regenerate natural and working lands, but must not become a basis of any offset mechanism that allows continued emissions, which would be in conflict with environmental justice and CARB's foremost duty of directly reducing emissions.

VI. CARB's Draft Scenario Modeling Assumptions Must Respond First to the AB 32 Mandate of Reducing GHGs to 40% Below 1990 Levels by 2030, Not Carbon Neutrality.

As recently stated by the Senate Majority Leader and other legislators:

Simply put, the upcoming Scoping Plan needs to focus on achieving the 2030 emissions limit—not to the exclusion of long-term policy planning, but as a requirement of state law as well as a practical prerequisite for carbon neutrality.²⁴

Our organizations are concerned that each of the draft alternative scenarios places too much emphasis on neutrality, versus the reduction mandate of SB 32. CARB must focus on the 2030 target first, and not the other way around. Failure to meet the 2030 goal first presents significant local and global impacts. Moreover, as detailed in this comment, concluded by E3,²⁵ and noted in the quote above from the Senate Majority Leader and others in the Legislature, meeting the 2030 goal is a prerequisite to meeting neutrality.²⁶

Exceeding the 2030 target simply furthers the State's goal to achieve neutrality. In this regard, it appears that Alternative 1 does not include the full suite of feasible direct emission reduction measures. At the workshop, CARB's presentation indicated that Alternative 2 accelerates emission reductions to exceed the 2030 target by approximately 55%, whereas Alternative 1 would accelerate emission reductions to exceed the target by approximately 45%. CARB should modify Alternative 1 to include all feasible direct emission reductions.

Finally, to meet the 2030 target, we again emphasize that CARB must do so by prioritizing direct emission reductions.²⁷ In 2017, CARB incorrectly labeled cap-and-trade as a direct emission reduction measure.²⁸ However,

[CARB] should not have designated cap-and-trade as a 'direct emission reduction measure' and should not do so again . . . [doing so] needlessly exacerbated tensions with the environmental justice community and other air quality advocates.²⁹

²⁴ Senate Majority Leader Letter to CARB, August 6, 2021, *available at* <https://www.arb.ca.gov/lists/com-attach/55-sp22-concepts-ws-WzgAY1E6ADJVDARh.pdf> (Attachment A).

²⁵ *See supra* fn. 2.

²⁶ *Id.*

²⁷ *See* AB 197, Cal. Health and Safety Code § 38562.5.

²⁸ *See eg.* 2017 EJAC Priority Recommendations at 3, *available at* https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2030sp_appa_ejac_final.pdf

²⁹ *Supra*, fn. 24, Attachment A at 3.

To ensure that CARB does not again violate the mandate to prioritize direct emission reductions, and to maximize the opportunity to meet our 2030 climate goal, CARB should clarify in its Scenario Assumptions that direct emission reductions do not include measures under the cap-and-trade program.

Respectfully submitted,

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