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California Air Resources Board ("CARB") California Air Resources Board Staff 1001 "I" Street Sacramento, CA 95814

SUBMITTED VIA EMAIL

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RE: Comments on Specific Sectors and Greenhouse Gas Emission Reduction Measures in the 2022 Draft Scoping Plan

Dear Board Members of the California Air Resources Board:

As members of the California Environmental Justice Alliance ("CEJA"), we thank you for this opportunity to comment on the 2022 Draft Scoping Plan ("Draft Scoping Plan"), the Draft Environmental Analysis ("Draft EA"), and other accompanying documents to the Draft Scoping Plan.

CEJA's comments are based on our fundamental commitment to ensure well-being and equity for all Californians, including low-income communities and communities of color who experience the worst climate and pollution impacts. AB 32, SB 32, AB 197, and other key climate laws also embody the values of well-being and equity. Under AB 32, CARB must design GHG emission reduction measures "in a manner that is equitable, [] seeks to minimize costs and maximize the total benefits to California,"¹ and ensure that these measures "do not disproportionately impact low-income communities."² Similarly, AB 197 requires CARB to "protect the state's most impacted and disadvantaged communities" and prioritize direct emissions reductions when adopting rules and regulations to reduce GHG emissions.³

¹ Cal. Health & Safety Code § 38562(b)(1).

² Cal. Health & Safety Code § 38562(b)(2); see also Draft Scoping Plan, Appendix B at 13 (Project Objective 13).

³ Cal. Health & Safety Code § 38562.5.

Unfortunately, CARB's Proposed Scenario ("Alternative 3") and the Draft Scoping Plan fail to meet these clear mandates. As detailed in the proceeding sections, CARB has failed to meet these statutory directives for the following reasons:

- Alternative 3, if adopted, will not ensure that California's GHG emission reduction measures are direct, equitable, and maximize the total benefits to California, in violation of both AB 32 and AB 197.
- Alternative 3 will not allow the State to meet its 2030 emission reduction target and 2045 carbon neutrality goal.
- If adopted, Alternative 3 will create an overreliance on costly and high-risk mechanical carbon capture and sequestration ("CCS") and carbon dioxide removal ("CDR") actions.
- Alternative 3 will perpetuate unacceptable climate, air quality, and health impacts resulting from the extraction and refining of oil and gas, transportation, electricity generation, building emissions, industrial agriculture, and livestock methane sectors.
- CARB fails to analyze a range of viable and cost-effective alternatives that would allow CARB to meet all of the Scoping Plan's objectives while maximizing short and long-term health, environmental, and economic benefits. See Attachment A: Real Zero Alternative.
- Despite relying on Cap-and-Trade as a vehicle for emissions reductions, CARB improperly defers its analysis of California's Cap-and-Trade until after its adoption of the Final Scoping Plan.
- Additionally, the environmental impacts, alternatives, public health, and social costs analyses in the Draft Scoping Plan and Draft EA are inadequate.

As a result of these profound inadequacies, the Draft Scoping Plan and Draft EA fail to provide crucial information that the CARB Board needs in order to meaningfully evaluate the costs and benefits of each proposed alternative, and ensure that the alternative that is ultimately adopted will not disproportionately harm low-income and disadvantaged communities. As such, we request that the Board direct CARB staff to substantially revise the Draft Scoping Plan and accompanying Draft EA to achieve compliance with the State's climate laws and the California Environmental Quality Act ("CEQA"). We specifically request that CARB analyze and adopt the Real Zero Alternative, attached below as Attachment A.

We provide cross-sector comments on the Draft Scoping Plan and Draft EA in this letter. Additionally, we provide comments on CARB's proposed alternatives and measures focusing on specific AB 32 GHG Inventory sectors in a separate letter.

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I. CARB fails to disclose the sources of its emissions estimates, making it impossible for the public to verify the accuracy of its project baseline regarding GHG emissions.

CARB uses 2021 statewide emissions of GHGs as its project baseline for the Draft Scoping Plan's GHG emissions modeling and analysis in the Draft EA.⁴ Under CEQA, CARB must describe physical environmental conditions as they exist at the time the notice of preparation is published, or at the time the lead agency commences its environmental analysis.⁵

As detailed below, the Draft Scoping Plan and Draft EA's baseline GHG emissions estimate is unsubstantiated. CARB has not disclosed the source(s) of the emissions data included in its Modeling Data Spreadsheet. Therefore, it is impossible for the public to verify it. The GHG emissions modeling data that CARB includes in the Draft Scoping Plan is significantly lower than CARB's own publicly-available emissions data.⁶ The Draft Scoping Plan estimates that the 2021 baseline GHG emissions for the Reference Scenario totaled 381.8 MMT CO₂e.⁷ Alarmingly, this is more than 27 *MMTCO₂e less* than CARB's own provisional estimate of 2021 emissions of 409 MMT CO₂e.⁸ Even in 2019, GHG emissions under the Reference Scenario were 402.7 MMT, which is more than 15 *MMT lower* than the 418.1 MMT CO₂e emissions level that CARB includes in its official GHG emissions inventory.⁹

⁸ See Cal. Air Res. Bd., Preliminary Assessments of California's 2020 and 2021 Greenhouse Gas Emissions for Budget Item 3900-001-3237 1 (Apr. 2022), available at: https://ww2.arb.ca.gov/sites/default/files/2022-04/2021%20GHG%20Estimates%20Report%20for%20Item%203900-001-3237%20-%20Remediated.pdf.

⁹ Draft Scoping Plan at 33; Cal. Air Res. Bd., Current California GHG Emission Inventory Data (last visited June 23, 2022), available at: https://ww2.arb.ca.gov/ghg-inventory-data.

⁴ Draft Scoping Plan at 88; Draft EA at 31.

⁵ 14 C.C.R. § 15125(a)(1); 14 C.C.R. § 15125(a)(3) (baselines cannot contain hypothetical conditions).

⁶ See AB 32 GHG Inventory Sectors Modeling Data Spreadsheet. https://ww2.arb.ca.gov/our-work/programs/ab-32climate-change-scoping-plan/2022-scoping-plan-documents [hereinafter ("Modeling Data Spreadsheet")].

⁷ Id.

CARB fails to explain the significant discrepancy between its prior estimates and the reference scenario on which it relies. As such. CARB must revise the Draft Scoping Plan's modeling and Draft EA to incorporate its provisional estimate of 2021 emissions, or include an updated estimate based on actual emissions in 2021 to ensure that the project baseline is based on available data supported by substantial evidence, in accordance with CEQA.¹⁰ An accurate baseline, drawing from CARB's provisional estimate of sector-by-sector GHG emissions, would likely reveal greater total GHG emissions in 2030. Accordingly, CARB must ensure that the Final Scoping Plan acknowledges and addresses the significant discrepancy between its provisional estimate of 2021 emissions and its project baseline estimate—either by increasing direct emission reduction measures or adopting additional ones, as we propose in the Real Zero Alternative (*see* Attachment A) and throughout our comments.

II. Alternative 3 will not achieve the State's 2030 GHG emissions reduction target.

SB 32 mandates that CARB reduce statewide emissions to below 259 MMT CO₂e (or 40 percent below 1990 levels) by 2030.¹¹ CARB incorporates this requirement into the Draft EA's Project Objective 2.¹² Further, CARB must assess the State's progress towards achieving its 2030 emission reduction target (Project Objective 1).¹³ As discussed in detail in our technical comments, many of CARB's GHG reduction measures do not result in real-world emissions reductions or do not incorporate significant sources of GHGs from oil and gas, industrial, or agricultural sectors. Moreover, as noted above, CARB presents an unsubstantiated project baseline that likely underestimates overall emissions of GHGs in California. As such, although CARB claims that Alternative 3 will allow the State to meet its 2030 target, ¹⁴ this statement is likely based on incorrect and overly-optimistic assumptions. Consequently, California is likely not on track to meeting its 2030 target based on CARB's 2030 GHG emissions projection for the Reference Scenario.¹⁵ Further, in Appendix C, CARB fails to describe the quantity of GHG emissions reductions necessary under each proposed reduction measure to achieve its 2030 target.

On the contrary, CARB will not be able to meet the 2030 target under Alternative 3. Among other things, CARB has incorrectly assumed that carbon capture and sequestration (CCS) technology at refineries *had already been implemented and achieved substantial GHG emissions at refineries beginning 2021*. This assumption is clearly false; refinery CCS technology has not been deployed at any California refinery.¹⁶ Thus, accurate AB 32 GHG Sector modeling, including using a feasible timeline for deployment of CCS technology at refineries, would reveal that Alternative 3, which relies heavily on speculative CCS technology, will not meet the 2030 target. We discuss this fatal flaw in Section IV of our Sector-Specific Comments.

¹⁰ North County Advocates v. City of Carlsbad (2015) 241 Cal.App.4th 94.

¹¹ EO B-30-14 and SB 32; Legislative Analyst Office, Assessing California's Climate Policies-Electricity Generation (Jan. 2020), available at: https://lao.ca.gov/Publications/Report/4131.

¹² *Id.* at 12.

¹³ Draft EA at 11.

¹⁴ Draft Scoping Plan at 56 ("The Proposed Scenario achieves GHG emission reductions that exceed levels expected based on existing policies represented in the Reference scenario, keeping California on track to achieve the SB 32 GHG reduction target for 2030 and become carbon neutral no later than 2045."). *See also* Draft Scoping Plan at 57 (Figure 2-1).

¹⁵ See Draft Scoping Plan at 90 (Figure 2-10).

¹⁶ See Sector-Specific Comments, Section IV.

Because Alternative 3 will not achieve the State's 2030 emission reduction target, CARB must analyze and adopt the Real Zero Alternative, in order to meet this goal and comply with SB 32.

III. Alternative 3 will not achieve the State's 2045 carbon neutrality goal.

CARB claims that Alternative 3 will meet the carbon neutrality goal established under Executive Order B-55-18, which directs the State to achieve net-zero emissions by 2045.¹⁷ (Project Objectives 1 & 2). However, contrary to this mandate and CARB's own goals, CARB's modeling data makes clear that all of the proposed alternatives will in fact result in net 15 MMT CO2 emissions by 2045.¹⁸

This discrepancy likely stems from CARB's error in assuming that Natural and Working Lands (NWL) Sector measures will act as a net carbon sink of 15 MMT CO₂e per year by 2045.¹⁹ CARB acknowledges that this assumption was incorrect: "[f]or purposes of the Draft 2022 Scoping Plan, CARB assumed NWL could compensate for 15 MMTCO₂e of residual emissions. This assumption was made prior to completion of the NWL GHG analysis described in Chapter 2."²⁰ Indeed, CARB concludes that NWLs will be a net source of CO₂, emitting 8 MMT CO₂e per year from 2025 through 2045.²¹ Although CARB recognizes, in the Draft Scoping Plan, that NWLs will be a net source of emissions, this is not reflected in CARB's technical modeling spreadsheet. In actuality, CARB's claim that Alternative 3 will achieve net-zero emissions does not reflect any real pathway towards net neutrality, but rather represents an artifact of CARB's prior, admittedly incorrect assumption that NWLs would be a net carbon sink. In total, this discrepancy accounts for a 23 MMT CO₂e per year difference between CARB's incorrect modeling assumptions and the actual GHG emissions resulting from implementation of Alternative 3.

This error represents only one, albeit significant, discrepancy of many between CARB's modeling assumptions and the actual climate implications of the Proposed Scenario. We further reiterate that CARB's incorrect assumption that refinery CCS can achieve emissions reductions immediately—and may even be applied retroactively—jeopardizes any opportunity for CARB to achieve a true net-zero scenario by 2045.

Because neither Alternative 3, nor any other proposed alternative, will achieve CARB's 2045 carbon neutrality goal, CARB must analyze and adopt the Real Zero Alternative (Attachment A).

IV. CARB's alternatives analysis is inadequate.

¹⁷ Cal. Exec. Order No. BO-55-18 § 1; *see also* Draft EA at 11 (describing the Scoping Plan's goals of achieving carbon neutrality no later than 2045).

¹⁸ AB 32 GHG Inventory Sectors Modeling Data, *supra* note 6.

¹⁹ Danny Cullenward, *California's Draft Climate Change Scoping Plan is Incomplete*, CARBONPLAN (May 17, 2022), available at: https://carbonplan.org/research/scoping-plan-comments.

²⁰ Draft Scoping Plan at 94, fn. 165.

²¹ Draft Scoping Plan at 72.

CARB's Draft EA shall contain "[a] discussion of a reasonable range of alternatives to the proposed project [that] could feasibly attain most of the project objectives but could avoid or substantially lessen any of the identified significant impacts[]."²² CARB must discuss a reasonable range of alternatives in order to "foster informed decision making and public participation."²³ Unfortunately, the alternatives sections in both the Draft Scoping Plan and Draft EA fail in several fundamental ways, which CARB must correct by revisiting its analysis of potential alternatives or adopting the attached Real Zero Alternative. We discuss these points in further detail below.

A. CARB fails to analyze the same alternatives in the Draft Scoping Plan and Draft EA.

The Draft Scoping Plan provides that "[f]our scenarios for the AB 32 GHG Inventory and NWL were considered separately and helped to inform the Proposed Scenario."²⁴ The Draft EA concludes that "CARB has identified a reasonable range of four alternatives that allow the public and CARB to understand the differences among the different approaches."²⁵ However, the alternatives analyzed in the Draft EA are drastically different from the proposed AB 32 GHG Inventory and NWL alternatives in the Draft Scoping Plan. As a result, there is simply no way that the alternatives analyzed in the Draft EA allow the Board to make an informed decision on completely different alternatives included in the Draft Scoping Plan.²⁶

Specifically, in the Draft Scoping Plan, Alternatives 1 and 2 would allow the state to achieve carbon neutrality by 2035, while Alternatives 3 and 4 would allow the state to achieve carbon neutrality by 2045.²⁷ The Draft Scoping Plan also provides four NWL alternatives with various management intensities for forest shrublands/chaparral/grasslands, croplands, developed lands, wetlands, and other lands.²⁸ The Draft EA, however, describes environmental impacts of a no project alternative and Alternatives A to C that are significantly different from the alternatives presented in the draft Scoping Plan. Below, we detail the ways in which the alternatives in the Draft EA differ from those presented in the Draft Scoping Plan, which again makes it impossible to understand the environmental impacts of the Draft Scoping Plan's alternatives or for the Board to make an informed decision, in violation of CEQA.

- i. Alternative A
- CARB claims that Alternative A in the Draft EA is the "most similar" to the AB 32 GHG Inventory Sector Alternative 1 in the Draft Scoping Plan. However, these two alternatives are fundamentally different, as Alternative A analyzes carbon neutrality by 2045, not 2035.²⁹

²² 17 C.C.R. § 60004.2(a)(5) (citing 14 C.C.R. § 15126.6).

²³ 14 C.C.R. § 15126.6(a), (f) (lead agencies must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation).

²⁴ Draft Scoping Plan at 39.

²⁵ Draft EA at 252.

²⁶ 14 C.C.R. § 15126.6; 17 C.C.R. Section 60004.2(a)(5).

²⁷ Draft Scoping Plan at 40, 43-47.

²⁸ *Id.* at 48-51, 64-65; Draft Scoping Plan, Appendix C at 10-13, Table C-2.

²⁹ Draft EA at 256, 260.

• CARB claims that Alternative A also contains an analysis on NWL Alternative 3/the Proposed Scenario. However, CARB fails to discuss any environmental or related health impacts of the land management strategies contained in NWL Alternative 3.³⁰

ii. Alternative B

- Alternative B in the Draft EA, which CARB claims is similar to Alternative 4 in the Draft Scoping Plan, is fundamentally different. Alternative B would not meet the zero-emission goals for light-duty trucks, in contravention of both EO N-79-20 and Project Objective 5.³¹
- In Alternative B, CARB ignores likely significant environmental and health impacts resulting from the extensive build out and operation of mechanical CCS and carbon dioxide removal facilities. We discuss these impacts in more detail in Section IV of our Sector-Specific Comments.
- CARB claims that Alternative B contains an analysis on NWL measures contained in the Proposed Scenario. However, this is also unsupported, as CARB fails to discuss any environmental or related health impacts of the land management strategies contained in NWL Alternative 3.³²

iii. Alternative C

- CARB claims that Alternative C in the draft EA considers the Proposed Scenario's AB 32 GHG Inventory Sectors and NWL Alternative 2.³³ Contrary to CARB's claim, Alternative C does not include any environmental impact analysis of Alternative 3 for the AB 32 GHG Inventory Sectors.
 - iv. Other Significant Errors and Omissions in the draft EA
- Shockingly, the draft EA fails to include any environmental impact analysis of:
 - Alternatives 2 for AB 32 GHG Inventory Sectors, nor
 - Alternatives 1 and 4 for the NWL scenarios.³⁴
- The Proposed Scenario is not defined in the Draft EA. Given that none of the alternatives analyzed in the Draft Scoping Plan and the Draft EA are the same for the AB 32 GHG Inventory Sectors or NWL Sectors, CARB must include, in the Draft EA, the full range of reasonably foreseeable environmental impacts under the Proposed Scenario.

In sum, CARB must revise the Draft Scoping Plan and EA so that all of the AB 32 GHG Inventory and NWL Sector Alternatives analyzed in the revised documents are the same, and that the Proposed Scenario is clearly defined. Only then can the CARB Board and the public evaluate and compare the different environmental impacts of these alternatives as mandated by CEQA.

³⁰ *Id.* at 256-57 Table 7-1, 260-62.

³¹ *Id.* at 263.

³² *Id.* at 256; 263-64.

³³ *Id.* at 263.

³⁴ *Id.* at 256.

B. Alternative 3 is not a reasonable alternative as it will not allow the Scoping Plan to feasibly meet most of its project objectives.

To the extent that Alternative 3 is analyzed in the Draft EA or will be analyzed in a revised draft environmental analysis, it should be rejected as it is not feasible and will not be able to meet most of the Scoping Plan's project objectives.³⁵ Unfortunately, as discussed in Sections II and III above, Alternative 3 will fail to meet the Scoping Plan's Project Objectives 1 and 2. Additionally, we discuss in this letter and in our Sector-Specific Comments how CARB has failed to ensure that Alternative 3 and associated measures do not disproportionately impact low-income communities (Objective 13); do not worsen air pollution and toxic air contaminant emissions (Objective 14); consider overall societal benefits, including air pollution reduction and public health benefits (Objective 15); maximize additional environmental and economic benefits (Objective 18); and consider the social costs and prioritize direct emissions reductions (Objective 20). Therefore, Alternative 3 is not a reasonable alternative and should not be considered or adopted by CARB.

C. CARB's inclusion of mechanical carbon capture and sequestration and carbon dioxide removal in all of the AB 32 GHG Inventory Sector alternatives artificially narrows the alternatives in a way that forecloses meaningful consideration of alternatives that do not contain these unnecessary and infeasible technologies

Unfortunately, three of the four proposed AB 32 GHG Inventory alternatives in the Draft Scoping Plan, and most of the alternatives included in the Draft EA, heavily rely on mechanical carbon capture and sequestration ("CCS") and carbon dioxide removal ("CDR")." This artificially narrows CARB's alternative analysis in a manner that forecloses the Board's ability to meaningfully consider alternatives that do not rely on CCS on industrial facilities such as refineries, and thus their ability to make an informed decision.³⁶

Additionally, as we discuss in Section IV of our Sector-Specific comments, CCS, in particular on refineries, is not feasible. By focusing on unproven and currently infeasible technologies—to the detriment of effective alternatives that do not overzealously promote CCS and CDR—CARB fails to analyze a reasonable range of alternatives that are feasible and incorporate stronger direct emissions reduction measures to meet the Scoping Plan's project objectives.

To ensure that CARB provides a reasonable range of feasible alternatives that do not artificially narrow the Draft Scoping Plan and Draft EA's alternatives analysis, we recommend that CARB analyze a new alternative—the Real Zero Alternative—that will meet all of the Scoping Plan's project objectives, including reducing GHG emissions to 80-92% below 1990 levels by 2045, and avoiding disproportionate harm to low-income and disadvantaged communities. The Real Zero Alternative also allows California to naturally transition internal combustion vehicles to ZEVs. See more details in Attachment A: Real Zero Alternative.

³⁵ 17 C.C.R. § 60004.2(a)(5); 14 C.C.R. § 15126.6.

³⁶ CEQA Guidelines § 15126.6(a), (f) (lead agencies must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation).

V. CARB fails to describe the environmental setting in low-income and disadvantaged communities.

CARB must provide a "description of the applicable environmental and regulatory setting for the project" in its environmental analysis.³⁷ The purpose of the environmental setting description is "to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts."³⁸

In addition, AB 32 requires and CARB includes as Objective 13 that the "activities undertaken to comply with [proposed GHG emission reduction] measures do not disproportionately impact low-income communities".³⁹ Similarly, AB 197 requires CARB to ensure that the Scoping Plan's measures "protect the state's most impacted and disadvantaged communities."⁴⁰ In light of these statutory mandates and Objective 13, the Draft EA's environmental setting discussion must describe existing environmental conditions in California's low-income and disadvantaged communities.

Unfortunately, CARB fails to describe existing physical conditions in low-income and disadvantaged communities in the Draft EA. Rather, Attachment A to the Draft EA (Environmental and Regulatory Setting) only discusses existing physical conditions and climate laws and regulations in California generally. As we discuss throughout this and our Sector-Specific Comments, the environment in which low-income and disadvantaged communities live is disproportionately polluted, and therefore are distinct from the environmental setting for California as a whole. Without explicitly including the baseline conditions facing low-income and disadvantaged communities, CARB would not be able to analyze and disclose whether the Scoping Plan's measures will result in short- and long-term impacts in these communities, in violation of CEQA, AB 32, and AB 197.

CARB must therefore revise Attachment A to the Draft EA to explicitly describe the existing environmental conditions in low-income and disadvantaged communities in California.

VI. CARB fails to analyze the health effects that the Draft Scoping Plan would have on low-income and disadvantaged communities in the draft EA.

The Draft EA fails to analyze the Draft Scoping Plan's impacts on human health, in particular in low-income and disadvantaged communities.

The draft EA must include "[a] discussion and consideration of environmental impacts, adverse or beneficial, and feasible mitigation measures which could minimize significant adverse impacts identified".⁴¹ Section 15126.2(a) of the CEQA Guidelines clarifies that environmental documents shall clearly identify and describe direct and indirect significant environmental effects of the project on the environment, including "*health and safety problems* caused by the physical

³⁷ 17 C.C.R. § 60004.2(a)(2).

³⁸ 14 C.C.R. § 15125(a).

³⁹ Cal. Health & Safety Code § 38562(b)(2); Draft EA at 13 (Project Objective 13).

⁴⁰ Cal. Health & Safety Code § 38562.5.

⁴¹ 17 C.C.R. § 60004.2(a)(3).

changes^{"42} Relatedly, a project may have a significant effect on the environment if "[t]he environmental effects of a project will cause substantial adverse effects *on human beings, either directly or indirectly*," among other criteria.⁴³

As discussed above, CARB is also required, under AB 32 and AB 197, to ensure that the Scoping Plan's measures protect and not cause disproportionate impacts to low-income and disadvantaged communities. In light of these statutory mandates, CARB must also analyze and disclose the nature and magnitude of the measure's human health impacts in low-income communities and disadvantaged communities.

CARB includes health benefit estimates from projected PM2.5 and ozone reduction under the various proposed alternatives, in its discussion on long-term air quality impacts.⁴⁴ Unfortunately, the rest of the Draft EA fails to discuss the potential human health impacts that could result from the Draft Scoping Plan's reasonably foreseeable compliance responses. Nor does CARB specifically analyze health impacts in low-income and disadvantaged communities in the Draft EA or elsewhere in the Draft Scoping Plan.

CARB must therefore analyze the health impacts of each reasonably foreseeable compliance response, in order to comply with CEQA and ensure that the Board and the public understand the short- and long-term health impacts of the Scoping Plan, in particular in low-income and disadvantaged communities.

VII. CARB's public health analyses are inadequate and misleading.

We appreciate CARB staff's effort in providing preliminary public health analyses on the Draft Scoping Plan. However, the Draft Scoping Plan provides piecemeal, incomparable, and misleading analyses and therefore fails to provide critical information that the CARB Board needs to meet its legal obligation and ensure that the Final Scoping Plan minimizes negative health impacts and maximizes health benefits, particularly for low-income and disadvantaged communities.

Under AB 32, CARB shall "consider overall societal benefits, including reductions in other air pollutants . . . and other benefits to the economy, environment, and public health" when adopting GHG emission reduction measures in the Scoping Plan.⁴⁵ Relatedly, under AB 197, CARB must identify: (a) the range of projected GHG emissions reductions; (b) the range of projected air pollution reductions; and (c) the cost-effectiveness, including avoided social costs, for each proposed measure.⁴⁶ Social costs estimates must include the economic damages to public health, among other criteria.⁴⁷

⁴² 14 C.C.R. § 15126.2(a).

⁴³ Cal. Pub. Res. Code § 21083(b)(3).

⁴⁴ Draft EA at 68-71.

⁴⁵ Cal. Health & Safety Code § 38562(b)(2); *see also* Draft EA at 13 (Project Objective 15).

⁴⁶ Cal. Health & Safety Code § 38562.7.

⁴⁷ *Id.* § 38506.

Ultimately, CARB must design GHG emission reduction measures "in a manner that is equitable, [and] seeks to minimize costs and maximize the total benefits to California []."⁴⁸ CARB must ensure that it reduces GHG emissions in a way that "benefits the state's most disadvantaged communities,"⁴⁹ and "do not disproportionately impact low-income communities".⁵⁰

To meet the above statutory requirements, CARB must estimate how much overall air pollution reduction would be achieved under each proposed GHG emission reduction measure by 2045. CARB must also analyze both the short and long-term negative health impacts and benefits that each measure would bring, in particular in low-income and disadvantaged communities. These comprehensive public health analyses are necessary for the Board to be adequately informed so it can select the scenario or a combination of measures that would meet its statutory requirements, maximize health benefits, and minimize harm to low-income and disadvantaged communities.

Instead, CARB staff presents a partial, flawed public health analysis in the Draft Scoping Plan:

- For the proposed AB 32 GHG Inventory Sector alternatives, CARB provides an estimate of:
 - Avoided short-term negative health incidents and health benefits in monetary terms (i.e. health savings) for the months of January and July 2045, based on projected PM2.5 and ozone precursor emissions reductions under each proposed alternative.⁵¹
 - Avoided negative health incidents for the five measures "that are represented by changes to fuel combustion," in the years 2035 and 2045.⁵²
- For the NWL alternatives, an estimate of:
 - Average annual avoided negative health incidents from 2025-2045, based on projected forest, shrubland, and grassland wildfire PM2.5 emissions reductions.⁵³
 - Average annual relative health savings, based on projected forest, shrubland, and grassland wildfire PM2.5 emissions reductions.⁵⁴
- A qualitative analysis of health benefits of "take action" scenarios versus the "no action" scenario.⁵⁵

Unfortunately, these quantitative analyses are based on arbitrary or unsubstantiated modeling assumptions, partial data, and inconsistent methodologies—all of which lead to partial, misleading, and incomparable results. Accordingly, the Draft Scoping Plan's incomplete and inconsistent public health analyses fails to provide the information that the CARB Board needs in order to evaluate which measures and alternatives would provide the greatest health benefits to Californians, and balance health benefits with other societal costs and benefits as mandated by AB 32, SB 32, and AB 197. As we detail below, CARB staff's decision to conduct piecemeal and

⁴⁸ *Id.* § 38562(b)(1).

⁴⁹ Senate Bill 32 § 1(d) (2016).

⁵⁰ Cal. Health & Safety Code § 38562(b)(2); see also Appendix B at 13 (Project Objective 13).

⁵¹ See Draft Scoping Plan at 102-7; Draft Scoping Plan, Appendix H at 62-85.

⁵² Draft Scoping Plan at 113-17; Draft Scoping Plan, Appendix C at 17-25.

⁵³ See Draft Scoping Plan at 117-18; Draft Scoping Plan, Appendix C at 27-28.

⁵⁴ See Draft Scoping Plan at 107-08, Appendix I.

⁵⁵ Draft Scoping Plan at 127-144; Appendix G.

incomparable health analyses is arbitrary and in violation of these laws. We urge CARB staff to substantially revise the draft health analyses in order to allow CARB to meet its statutory mandates, and to allow the Board to meaningfully compare the costs and benefits of each proposed measure and alternative.

A. CARB's Analysis on Short-term Health Savings of AB 32 GHG Inventory Sector Alternatives Is Inadequate for Meaningful Cost-Benefit Analysis, In Violation of AB 32.

CARB's preliminary health benefits and savings analyses for PM2.5 and ozone for only two months in 2045 result in extremely short-term and incomplete estimates that should not be used in CARB's analysis of the cost-effectiveness of the AB 32 GHG Inventory Sector alternatives. Yet, CARB inappropriately compares apples to oranges by weighing the estimated health savings for two months in 2045 from projected PM2.5 and ozone emissions reductions against estimated economic costs (direct costs, economic growth, and jobs) in the entire years of 2035 and 2045.⁵⁶

CARB acknowledges that its health incident reductions and health savings estimates are episodic and do not amount to a comprehensive analysis of health benefits for the year of 2045 or over the Scoping Plan period.⁵⁷ Accordingly, CARB acknowledges that the value of short-term exposure health benefits is significantly lower than estimates of long-term exposure.

CARB has the ability to analyze long-term health benefits. CARB states that "BenMAP can be used to estimate long-term health impacts such as those occurring from annual average PM2.5 changes []."⁵⁸ CARB's decision not to analyze avoided health incidents and health savings over the Scoping Plan period or another longer period of time is arbitrary, especially given its ability to do so and its legal mandate to "maximize total benefits to California," consider overall societal benefits, social costs, and ensure the cost-effectiveness of each GHG emission reduction measure.⁵⁹ As we discussed above, it is impossible for CARB Board members to fulfill these mandates without being able to meaningfully compare the costs and benefits of the proposed alternatives and measures.

CARB's arbitrary decision to only analyze two months of data is especially irresponsible given that its sister agency, the Office of Environmental Health Hazard Assessment (OEHHA), recently used BenMAP to project long-term (2020 to 2045) health benefits of implementation of 100% electric heavy-duty vehicles by 2045.⁶⁰

⁶⁰CAL. OFFICE OF ENV'T HEALTH HAZARD ENF'T, IMPACT OF GREENHOUSE GAS EMISSIONS LIMITS WITHIN DISADVANTAGED COMMUNITIES: PROGRESS TOWARD REDUCING INEQUITIES 11, 28-29 (Feb. 2022), available at: https://oehha.ca.gov/media/downloads/environmentaljustice/impactsofghgpoliciesreport020322.pdf.

⁵⁶ Draft Scoping Plan at 51-53.

⁵⁷ Draft Scoping Plan, Appendix H at 72.

⁵⁸ Id.

⁵⁹ Cal. Health & Safety Code § 38562(b)(1); Cal. Health & Safety Code § 38562(b)(2); Cal. Health & Safety Code § 38562.7.

Currently, CARB estimates that 362-606 premature deaths would be avoided in January and July, 2045.⁶¹ If CARB analyzes health benefits and in turn, health savings, over the Scoping Plan period of 2021 to 2045, it would likely project an exponential increase in health savings than its current estimates.

In sum, we strongly recommend that CARB revise its AB 32 GHG Inventory Sector Alternative health analyses to disclose health savings based on average annual health benefits from the baseline year of 2020 through 2045 so that CARB Board members and the public can truly compare health benefits against other costs and benefits.

We highlight other arbitrary, unexplained, and unsubstantiated aspects of CARB's AB 32 GHG Inventory Sector alternative health analyses:

- Inexplicably, emissions reductions, reductions in health incidents, and health savings for PM_{2.5} by itself are only presented for only January 2045, and are not compared to a reference scenario.⁶²
- Health savings for "total health benefits" are also presented only for January and July 2045, and are not compared to a reference scenario.⁶³ CARB also fails to define "[t]otal health benefits."
 - B. CARB Fails to Adequately Analyze Health Benefits and Savings in Low-income and Disadvantaged Communities.

CARB estimates that health savings in disadvantaged communities from the AB 32 GHG Inventory Sector Alternatives range from \$2.5 to \$4.7 billion, based on only two months of data in January and July 2045.⁶⁴ Unfortunately, this analysis fails in several ways.

First, CARB's analysis does not allow CARB to meet its AB 32 mandate to ensure that the Scoping Plan does not disproportionately impact low-income communities. In order to analyze whether low-income communities are disproportionately impacted by the Scoping Plan's alternatives and measures, CARB should have compared health savings in low-income communities, not DACs, to higher-income communities.

Additionally, at the April 20, 2022 workshop, experts from UC Irvine also stated that they have the ability to evaluate public health impacts of GHG emissions reduction measures in disadvantaged communities.⁶⁵ Yet CARB fails to present any information on public health impacts

⁶¹ See Draft Scoping Plan, Appendix H at 79, 81, Tables H-40 and H-42. These calculations are based on avoided mortality estimates from PM_{2.5} emissions reductions in January and July 2045, and PM_{2.5} and ozone emissions reduction in July 2045.

⁶² Draft Scoping Plan at 104-05, Figure 3-5; Draft Scoping Plan, Appendix H at 79-81, Tables H-40 & H-41.

⁶³ Draft Scoping Plan at 106, Figure 3-6; Draft Scoping Plan, Appendix H at 85, Table H-44.

⁶⁴ Draft Scoping Plan at 106-07, Figure 3-7; *see also* Draft Scoping Plan, Appendix H at 85, Table H-44.

⁶⁵ 2022 Scoping Plan Update - Initial Air Quality & Health Impacts and Economic Analyses UCI (4-20-22), Slides 8, 13, 16, available at:

https://ww2.arb.ca.gov/sites/default/files/2022-04/SP22-Initial-AQ-Health-Econ-Results-ws-UCI.pdf; *see also* Video, "2022 Scoping Plan Update - Initial Air Quality & Health Impacts and Economic Analyses Workshop," at 4:00:20 to 4:02:37, *available at* https://www.youtube.com/watch?v=PtsFweUncT4.

and benefits of the measures for each disadvantaged community. Similarly, while CARB calculated health savings in DACs at a 4km x 4 km granularity, and acknowledges that the results "can then be reasonably down-scaled to the census tract level," it has failed to disclose this information in the Draft Scoping Plan. CARB must revise the Draft Scoping Plan to analyze and disclose health savings data at the census tract level.

In addition, the Integrated Transportation and Health Impacts Model (Cal-iTHIM) shows that increased physical activity from active transport and reduced vehicle miles traveled (VMT) yield significant health benefits and as a result significant health savings. The draft scoping plan fails to integrate these significant VMT health benefits into its analysis.⁶⁶

C. CARB Fails to Conduct Pollution Reduction, Health Benefits, and Health Savings Analyses for NOx, ROG, and Other Criteria and Toxic Air Contaminants, in Violation of AB 32 and AB 197.

CARB has completely failed to conduct health analyses for nitrogen oxides (NOx) and reactive organic gases (ROG), and other criteria and toxic air contaminants. AB 32 requires CARB to "consider overall societal benefits, including reductions in other air pollutants . . . and other benefits to the economy, environment, and public health".⁶⁷ Under AB 197, CARB must identify: (a) the range of projected GHG emissions reductions; (b) the range of projected air pollution reductions; and (c) the cost-effectiveness, including avoided social costs, for each proposed measure.⁶⁸

In the Draft Scoping Plan, CARB presents emissions reductions data for three primary pollutants, NOx, particular matter (PM), ROG, as well as two secondary pollutants, ground-level ozone and fine PM (PM_{2.5}).⁶⁹ CARB recognizes that "both primary (emitted) and secondary (formed) pollutants are important from a public health standpoint and contribute to the incidents of air pollution-related mortality and disease within California populations".⁷⁰

CARB estimates that NOx emissions will be reduced by 89 percent under Alternative 1 and 43 percent under Alternative 4 in 2045, compared to 2020 baseline emissions.⁷¹ However, CARB fails to explain why it does not take the necessary next step to evaluate the avoided negative health incidents and health savings for NOx, as it does for PM_{2.5} and ozone. CARB fails to provide any evidence on why it has not conducted this analysis despite recognizing that primary pollutants are important contributors to air-pollution related health incidents, as discussed above. Similarly, CARB fails to analyze the public health benefits of projected ROG emissions reductions, and fails to substantiate this decision.

⁶⁶ Neil Maizlish et al., *Health Benefits of Strategies for Carbon Mitigation in US Transportation*, 2017–2050, AM. J. PUB. HEALTH (Oct. 15, 2021), available at: https://ajph.aphapublications.org/doi/10.2105/AJPH.2021.306600.

⁶⁷ Cal. Health & Safety Code § 38562(b)(2); *see also* Draft Scoping Plan, Appendix B at 13 (Project Objective 15).

⁶⁸ Cal. Health & Safety Code § 38562.7.

⁶⁹ Draft Scoping Plan at 102.

⁷⁰ Id.

⁷¹ *Id.* at 103-104, Figure 3-4.

In Table H-38 of Appendix H, CARB also estimates emissions reduction of NOx, PM2.5, and ROG under each alternative in January and July of 2045.⁷² However, CARB fails to explain whether these estimates are relative to the same 2020 baseline and 2045 Reference Scenario as used in the 2045 NOx emissions reduction estimates in Figure H-4. Without knowing this information, it is impossible to understand the relevance of the information presented in Table H-38.

Furthermore, CARB must analyze the public health impacts of reducing other criteria and toxic air contaminants, such as benzene, (a known carcinogen), and diesel particulate matter, for each alternative. CARB recognizes that it has not studied the health benefits of reducing benzene and other toxic air contaminants, which pose "known risks to public health".⁷³ The fact that toxic air contaminants are regulated via local rules and regulations does not excuse CARB from fulfilling its legal requirements under AB 32 and AB 197. Indeed, CARB already has emissions data on both criteria air pollutants and toxic air contaminants from existing stationary sources.⁷⁴ We urge CARB to analyze the health impacts of projected reductions for all criteria air pollutants and toxic air contaminants are reduction measures.

D. CARB's Health Analysis on Select GHG Emission Reduction Measures Violates AB 197.

CARB also presents, in Appendix C (AB 197 Analysis), an analysis on relative avoided mortality and other negative health incidents for specific measures in the years 2035 and 2045.⁷⁵ As discussed above, AB 197 requires CARB to identify a range of GHGs, air pollutants, and assess the cost-effectiveness of all of the specific measures evaluated for the Draft 2022 Scoping Plan.⁷⁶

CARB claims that it uses the criteria pollution emission reduction data in Tables C-3 to C-5 to calculate the health benefits/avoided negative health incidents (e.g., mortality, cardiac ER visits) that are "associated with the five key measures that are represented by changes to fuel combustion."⁷⁷ CARB completely failed to analyze the health impacts of non-fuel combustion measures, such as landfill and dairy emission reduction measures.⁷⁸ However, CARB fails to explain why it limited its health benefits analysis to these five key measures, instead of all measures as required by AB 197.⁷⁹ CARB's decision to conduct this limited analysis is arbitrary, violates AB 197, and likely resulted in a gross-underestimation on the health benefits associated with each alternative. Additionally, CARB estimates the health benefits of measures related to fuel combustion only for the years 2035 and 2045.

⁷² Draft Scoping Plan, Appendix H at 73, Table H-38.

⁷³ Draft Scoping Plan at 102.

⁷⁴ OEHHA, *supra* note 59, 28-29.

⁷⁵ Draft Scoping Plan at 113-17; Draft Scoping Plan, Appendix C at 17-25.

⁷⁶ Cal. Health & Safety Code § 38562.7.

⁷⁷ Draft Scoping Plan, Appendix C at 17-18.

⁷⁸ See Id. at 9-10 (summarizing non-combustion emission reduction measures).

⁷⁹ Cal. Health & Safety Code § 38562.7.

Additionally, CARB must also analyze the health savings of each GHG emission reduction measure to comply with its mandate to assess the cost-effectiveness of each measure under AB 197.⁸⁰

CARB's health benefits analysis of measures related to fuel combustion, based only on these "snapshot" years of 2035 and 2045, violates AB 197, and is insufficient for CARB Board and the public to understand the public health benefits and savings of each emission reduction measure. Therefore, we recommend that CARB analyze and disclose health savings for all proposed GHG emission reduction measures based on average annual health benefits from 2021 through 45.

E. Appendix G functions as a scientific literature review; it does not incorporate this information into emissions reductions strategies or foster informed decision-making by the CARB Board.

We appreciate that CARB acknowledges in Appendix G that climate-related health risks and impacts are not distributed equally in California, and that specific populations face the greatest health risks and impacts.⁸¹ Unfortunately, CARB does not use the information provided in Appendix G (Public Health) to supplement the qualitative health analyses discussed above.

Appendix G does not analyze qualitative health impacts or benefits among the AB 32 GHG Inventory Sector alternatives and measures.⁸² Instead, Appendix G adopts a completely different methodology that has no connection to the Draft Scoping Plan's scenarios or measures. Appendix G describes health impacts between "no action" and "take action" scenarios.⁸³ The "no action" scenario assumes "[i]f the state and other jurisdictions take no action to reduce or minimize expected impacts from future climate change".⁸⁴ The "take action" scenario "is not a specific scenario within the Draft Scoping Plan but examines the broad outcomes of actions to achieve carbon neutrality in 2045".⁸⁵ Relatedly, the "take action" scenario alludes to "Draft Scoping Plan actions," but fails to define what these actions actually are.⁸⁶ CARB further fails to analyze in Appendix G how the Draft Scoping Plan's proposed measures would affect the health of specific communities, in particular low-income or disadvantaged communities.

In sum, the current public health analysis in Appendix G is nothing more than a literature review that does not inform CARB Board and the public on the public health tradeoffs among the alternatives. There is no clear connection between the information in Appendix G and the specific

⁸⁰ Cal. Health & Safety Code § 38562.7.

⁸¹ See Draft Scoping Plan, Appendix G at 6.

⁸² The only section in Appendix G where CARB evaluates relative health impacts among proposed scenarios is in its comparison of the health impacts and savings/costs that would result from different wildfire smoke exposures based on the four proposed NWL alternatives. *See* Draft Scoping Plan, Appendix G at 46-48. However, this information is derived from analysis included in Appendix I. *See* Draft Scoping Plan, Appendix I at 100-02.

⁸³ Draft Scoping Plan, Appendix G at 30-31, 91.

⁸⁴ Draft Scoping Plan, Appendix G at 30.

⁸⁵ Draft Scoping Plan at 129, 140.

⁸⁶ Draft Scoping Plan, Appendix G at 31 (stating generally that "[t]aking the actions outlined in the Draft Scoping Plan will dramatically reduce fossil fuel combustion," as well as reduce heat and air pollution and wildfire smoke emissions).

measures proposed by CARB. To correct this oversight, CARB must integrate a robust health equity analysis in the design and prioritization of its strategies and substantially revise Appendix G to analyze health impacts according to the AB 32 GHG Inventory Sector alternatives or the proposed measures within each alternative.

VIII. CARB's social costs analysis is inadequate.

As we pointed out in our May 5 Comment Letter, CARB uses the Interagency Working Group on the Social Cost of Greenhouse Gases (IWG)'s 2021 interim Values, but inexplicably does not evaluate the social costs of NOx emission reductions.⁸⁷ CARB also fails to analyze and present the social costs of GHGs at the community level.⁸⁸

A. CARB must complete and incorporate the climate vulnerability metric into this Scoping Plan.

In the Draft Scoping Plan, CARB states that its contractors at UC Santa Barbara are developing a Climate Vulnerability Metric (CVM) "to quantify and map climate impact on human welfare in California communities, taking into account community vulnerability, and provide this information at the census tract level."⁸⁹ We appreciate CARB's and UCSB's work on developing the CVM, but are alarmed that CARB states that this critical tool *may* be included in the Final Scoping Plan.⁹⁰

CARB's delay on finalizing the CVM violates its AB 32 mandate to ensure that the Scoping Plan's measures and actions do not disproportionately impact low-income communities,⁹¹ and its AB 197 mandate to include in the Scoping Plan "[t]he cost-effectiveness, including avoided social costs, of [each GHG emission reduction] measure."⁹² This delay necessarily means that CARB will fail to fulfill its commitment, articulated in the 2017 Scoping Plan, "to evaluate the comprehensive California-specific impacts of climate change and air pollution."⁹³ Indeed, CARB staff noted in the March 15, 2022 workshop that the purpose of the CVM is to help CARB fulfill its AB 197 requirement and commitment in the 2017 Scoping Plan to analyze the social costs of carbon at the community level.⁹⁴

Even if CARB includes the CVM in the final Scoping Plan, it will not have provided sufficient time for the Board to use this information to consider social costs of climate change under AB 197, and ensure that the alternative it adopts for the Scoping Plan does not result in disproportionate impacts on low-income communities under AB 32.

⁸⁷ Draft Scoping Plan at 120-21.

⁸⁸ See detailed comments in pages 8 to 10 of our May 5 Comment Letter (Attachment B).

⁸⁹ Draft Scoping Plan, Appendix G at 6.

⁹⁰ Draft scoping Plan, Appendix G at 6.

⁹¹ Cal. Health & Safety Code § 38562(b)(2).

⁹² Id. § 38562.7.

 ⁹³ CAL. AIR RES. BD., CALIFORNIA'S 2017 CLIMATE CHANGE SCOPING PLAN 41 (Nov. 2017) available at: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf (emphasis added).
 ⁹⁴ Video, 2022 Scoping Plan Update - Initial Modeling Results Recording (March 15, 2022) at 5:48:15 to 5:53:00,

available at https://www.youtube.com/watch?v=_lVCQ-RpTRM.

Consequently, we urge CARB to complete the CVM and include it in a revised draft Scoping Plan, as well as provide an additional public comment period for the draft Scoping Plan, before presenting the final Scoping Plan along with the complete CVM for Board's consideration.

IX. Local Actions to Reduce GHG Emissions Must Be Equitable.

- A. Local Climate Actions Must Prioritize Benefits to Low-income and Disadvantaged Communities.
 - i. Transportation Electrification

We appreciate CARB's guidance in the Draft Scoping Plan and Appendix D (Local Actions) on how local governments may reduce GHG emissions by decarbonizing and electrifying the transportation sector.⁹⁵ We strongly recommend that CARB revise Appendix D to clarify that all transportation electrification projects must prioritize the needs of disadvantaged community members. For instance, CARB should emphasize that state and local ZEV programs must prioritize residents living in low-income and disadvantaged communities. See our Sector-Specific Comments, at Section V, for additional recommendations on transportation.

ii. VMT Reduction

We also appreciate CARB's goals to reduce vehicle miles traveled (VMT) as the transportation sector accounts for the largest share of greenhouse gas emissions in our state. We again recommend that CARB emphasize that local actions to reduce VMT must be equitable for low-income and disadvantaged communities. See our Sector-Specific Comments, at Section V, for additional recommendations on transportation.

We further recommend that CARB explicitly direct local governments to pair their VMT reduction actions with actions to increase affordable housing near public transit. We are concerned that CARB's current guidance reinforces the notion that local governments could reduce or eliminate parking standards in new developments as a stand-alone strategy to achieve GHG reductions; such a measure will negatively impact low-income communities.⁹⁶ Instead, CARB should clarify that local governments should use the Density Bonus Law, which allows project proponents to bypass minimum parking availability requirements if they build 100 percent affordable housing projects near public transit. Similarly, CARB should clarify that local governments are public transit. Similarly, CARB should clarify that local proponents to amend zoning or development codes to enable infill development must prioritize affordable housing.⁹⁷

iii. Building Decarbonization

While CEJA is in support of building decarbonization, we urge CARB to emphasize that local governments' efforts must prioritize projects that benefit low-income and disadvantaged

⁹⁵ Draft Scoping Plan, Appendix D at 3-5.

⁹⁶ *Id.* at 5, Table 1.

⁹⁷ Id.

communities first, before directing incentives to higher-resourced communities. See our Sector-Specific Comments on building decarbonization in Section VII.

B. CARB Should Not Contribute to the False Narrative that the California Environmental Quality Act ("CEQA") is a Barrier to Infill Development. Appendix D Should Requize That CEQA is Necessary to Advance and Sustainable and Equitable Development.

CEJA supports the use of land use planning laws and sustainable development projects as tools to advance our state's GHG emission reduction goals. In particular, we appreciate the set of recommendations in Appendix D entitled "Equity and Other Social and Environmental Considerations are Key Elements in Addressing the Climate Crisis."⁹⁸ We agree that comprehensive and integrated plans that center equity and guarding against displacement are crucial to advancing our state's climate, housing, and sustainable development goals.

However, we are very concerned that CARB perpetuates the misleading narrative that CEQA is a major barrier to development, most notably for infill housing.⁹⁹ This narrative has been created and perpetuated by corporate developers and industry representatives to inappropriately target CEQA, our state's most important environmental law. This narrative is problematic, disproven, and could lead to further environmental and public health harm, especially to low-income and disadvantaged communities.¹⁰⁰

In Appendix D, CARB states that CEQA GHG impact analyses and mitigation measures continue to be sources of litigation and delay for projects, especially for infill housing projects in high-resource areas.¹⁰¹ This narrative implicitly and errantly antagonizes CEQA as a reason for local governments' inability to reduce GHG emissions through infill development, and should be removed. Empirical data demonstrates that CEQA has not recently served as a barrier to new housing production, due to existing streamlining measures, CEQA's long-standing tiering and standardized mitigation measures, and the use of existing exemptions, where appropriate.¹⁰² Additionally, CARB must recognize in Appendix D that: (1) CEQA litigation is often a last resort to compel local governments and developers to adopt more necessary practices that would result in greater GHG and co-pollutant emissions reduction; and (2) CEQA and CEQA litigation is necessary to protect low-income and EJ communities from projects on or near toxic or polluted areas.

Indeed, CEQA is one of the few legal tools that allows low-income and EJ communities to meet both their housing and environmental protection needs.¹⁰³ It allows a community to be

¹⁰³ CAL. ENV'T JUSTICE ALLIANCE, RETHINKING LOCAL CONTROL IN CALIFORNIA 8-9, 19-20 (Mar. 2020), available at: https://calgreenzones.org/report-rethinking-local-control/; ROSE FDN., CEQA:

⁹⁸ Id. at 7-9.

⁹⁹ *Id.* at 6-7.

¹⁰⁰ ROSE FDN. & THE HOUSING WORKSHOP, CEQA'S ROLE IN HOUSING, ENVIRONMENTAL JUSTICE, & CLIMATE CHANGE 30 (Oct. 2021), available at: https://rosefdn.org/wp-content/uploads/CEQA-California_s-Living-Environmental-Law-10-25-21.pdf (concluding that CEQA has not restricted the supply of housing in California).

¹⁰¹ Draft Scoping Plan, Appendix D at 7.

¹⁰² Rose Fdn. & The Housing Workshop, supra note 99 at 41.

notified of projects that are proposed in their neighborhoods, to share their concerns regarding such projects, and to recommend ways to improve a project so that it better serves and protects the community. CEQA also provides a mechanism for holding project proponents and agencies accountable if they insufficiently analyze potential harms against local residents and neighborhoods.¹⁰⁴ The current pandemic demonstrates that we must carefully analyze and reduce projects' environmental impacts to protect the most vulnerable residents throughout the State, who are extremely susceptible to such public health threats.

While CARB recommends CEQA streamlining to facilitate forms of development that may reduce GHGs, it fails to provide any data to support the notion that such streamlining will result in more infill development, let alone tangible VMT reductions or other climate benefits. As discussed, a number of recent studies undermine the false narrative that CEQA creates significant barriers to development, and instead show that CEQA results in environmentally protective and equitable planning.

In addition, CARB concludes that if a residential project has all of the attributes it lists on pages 10-11 in Appendix D (e.g., minimum 20 percent affordability for lower-income families; siting on previously developed or underutilized land), there is "generally no evidentiary support for an argument that projects with all of these attributes would present potentially significant GHG/climate change impacts under CEQA".¹⁰⁵ We caution CARB to remove this sweeping and unsupported statement, as local governments could rely on them, resulting in unintended consequences, especially for already vulnerable and overburdened disadvantaged communities. For instance, if a residential development is being proposed on or near a toxic site, the project may result in significant GHG, co-pollutant, and public health impacts during excavation, build out, and/or use of it as a residence or mixed-use space.

Unfortunately, there are a number of additional claims within this section that are inaccurate and problematic, as they do not, in fact, promote equitable and sustainable development. For instance, "net-zero emissions" developments such as the FivePoint Valencia development project (formerly known as Newhall Ranch) that have been touted as climate-friendly models actually promote sprawling development¹⁰⁶ and are likely to produce impacts on the local ecology despite its claim of being "net-zero GHGs." This section also discusses the alleged benefits of projects subject to AB 900 (2011) and, similarly, SB 7 (2021) CEQA judicial streamlining processes," despite the fact that the purported environmental and climate benefits of such projects are unclear and dubious at best.¹⁰⁷ Furthermore, we continue to urge CARB to reduce or eliminate the use of market mechanisms such as cap-and-trade, including carbon offset programs.

Instead of promoting false solutions that disproportionately harm low-income residents and communities of color, CARB should revise Appendix D to present a more nuanced perspective

CALIFORNIA'S LIVING ENVIRONMENTAL LAW 77-79 (Oct. 2021), available at: https://rosefdn.org/wp-content/uploads/CEQA-California_s-Living-Environmental-Law-10-25-21.pdf.

¹⁰⁴ *Id*.

¹⁰⁵ Draft Scoping Plan, Appendix D at 11.

 ¹⁰⁶ Emily Witt, *Can Sustainable Suburbs Save Southern California?*, NEW YORKER (May 3, 2022), available at: https://www.newyorker.com/news/letter-from-los-angeles/can-sustainable-suburbs-save-southern-california.
 ¹⁰⁷ POLICY MATTERS, REVIEW OF ENVIRONMENTAL LEADERSHIP DEVELOPMENT PROJECTS (Apr. 2019), available at: https://www.pcl.org/media/2019/09/2206-policy-matters-04.19-environ.-leadership-projects.pdf.

and recognize the important role of CEQA, or eliminate its critique of CEQA altogether in this section. For further reference, CEJA recommends reviewing the Environmental & Housing Justice Platform (EHJP) for CARB's consideration.¹⁰⁸

C. Local Governments Should Prioritize Avoiding and Mitigating GHG Emissions and other Pollution Impacts On-site, and Eliminate the Use of Offsets.

We appreciate CARB's statement in Appendix D that it would be inappropriate for local governments "to rely upon the State's Cap-and-Trade Regulation as a reason not to provide appropriate GHG analysis and, if needed, mitigation, for local development projects."¹⁰⁹ We also appreciate that CARB emphasizes that project proponents should first exhaust all on-site mitigation options before turning to local off-site mitigation options, as it is important to prioritize direct emissions reductions at the source. However, CARB contradicts this latter statement by also stating that a desired outcome of its guidance on mitigation hierarchy is to encourage project proponents and local governments to "use local, *off-site* mitigation options consistent with CEQA's requirements."¹¹⁰ CARB should correct its error by emphasizing that project proponents must first exhaust *on-site* mitigation throughout Appendix D.

We appreciate CARB's guidance that lead agencies minimize the usage of CEQA "Statement of Overriding Considerations" to avoid mitigating impacts, and instead build better projects that avoid significant impacts or mitigate them on-site. However, we are severely concerned that CARB continues to promote the usage of carbon offset strategies, which have been proven to be inequitable, ineffective, and unverifiable.

Fundamentally, offsets allow harmful industry and development to pollute the same neighborhoods where they are located, and are likely to produce disproportionate harms and burdens for historically-marginalized low-income neighborhoods and Black, Indigenous, and people of color (BIPOCs). Offset projects in the form of local infrastructure may actually increase socioeconomic inequities if the investments (e.g., electric vehicle charging stations or energy efficiency retrofits) benefit higher-resourced households at the expense of lower-income BIPOC residents. In many instances, development that purports to produce environmental and climate benefits are "greenwashing" strategies that cover up sprawling growth and local damage to the environment while not, in fact, reducing GHGs.¹¹¹ In addition, "[o]ffsets are different than the cap and trade market as there is no regulatory cap ratcheting down emissions for the land development sector."¹¹² We discuss additional issues with Cap-and-Trade offsets in Section VIII of our Sector-Specific Comments.

Furthermore, while regional frameworks and collaborations are important for designing and implementing regional solutions for reducing emissions, such strategies should not be undertaken to advance local mitigation markets.¹¹³ Similarly, we are wary of CARB's suggestion

¹⁰⁸ Environmental & Housing Justice Policy Platform, Cal. Env't Justice Alliance,

https://calgreenzones.org/platform-for-environmental-housing-justice/.

¹⁰⁹ Draft Scoping Plan, Appendix D at 19.

¹¹⁰ *Id.* at 14.

¹¹¹ Witt, *supra* note 105.

¹¹² *Id*.

¹¹³ Draft Scoping Plan, Appendix D at 20.

to create a statewide mitigation bank if it would allow developers to pay a nominal fee in order to avoid their responsibility to directly lower emissions and mitigate environmental harms on-site or locally.¹¹⁴ Similar to the existing challenges with in-lieu fees for housing developments,¹¹⁵ stricter standards must be established to ensure that money held in trust will be used to deliver its intended benefits, such as direct and verifiable GHG emissions and pollution reduction, as well as benefits in low-income and disadvantaged communities. If a statewide mitigation bank is created, the majority of funds should be directed to affordable housing developments in disadvantaged communities. Moreover, statewide mitigation banking should not take precedent over on-site mitigation strategies, to ensure that directly impacted communities experience the benefits of mitigation activities.

D. Appendix E Should Recognize That CEQA is Necessary for Advancing Sustainable and Equitable Communities.

We appreciate the recommendations in Appendix E that encourage the preservation of existing housing stock in order to protect residents and businesses from displacement and harmful climate impacts.¹¹⁶ Similar to our comments regarding Appendix D, however, we are concerned that the recommendations in this section promote the troubling misconception that CEQA remains a significant barrier to housing development in California. Action G, in particular, encourages the state to remove "CEQA barriers to increasing density and streamlining affordable housing development, and create policy protections that preempt local voter initiatives."¹¹⁷ While CEQA is frequently blamed as a major barrier to housing in our state, no credible evidence or research has been shown to support that hypothesis.¹¹⁸ We recommend that CARB remove this unsupported and false narrative in Appendix E.

In addition to CARB's use of CEQA as a scapegoat for California's affordable housing concerns, we are concerned about the language in Action G that recommends preempting certain voter initiatives to remove alleged hurdles to housing development. When designed well, voter initiatives can create important solutions for healthier and more sustainable development (e.g., designating land use setbacks or buffers between incompatible uses, or creating urban growth boundaries to curb sprawl). The recommendation to preempt local voter initiatives could empower local governments to inappropriately overturn any local initiative that aims to protect public health if it could be misconstrued as a "barrier to development." Reversing local voter initiatives is undemocratic, subverts the will of local communities, and may lead to further environmental and environmental justice harms for low-income and BIPOC communities. We recommend that CARB remove this language in Appendix E.

X. CARB has failed to provide individuals with limited English proficiency the opportunity to participate in the Scoping Plan process.

¹¹⁴ *Id*.

¹¹⁵ Aaron Shroyer, *Determining In-Lieu Fees in Inclusionary Zoning Policies*, URBAN INST. 5 (May 2020), available at: https://www.urban.org/sites/default/files/publication/102230/determining-in-lieu-fees-in-inclusionary-zoning-policies.pdf.

¹¹⁶ Draft Scoping Plan, Appendix E at 28-29.

¹¹⁷ Id.

¹¹⁸ ROSE FDN., *supra* note 41 at ii.

Finally, CARB has failed to provide meaningful opportunities for engagement to individuals with limited English proficiency (LEP), who represent a major constituency across diverse California communities. In doing so, CARB violates its own Bilingual Services Policy.¹¹⁹ As of this writing, CARB has produced no materials regarding the Draft Scoping Plan—not even brief summaries outlining the major policy decisions contained therein—in any language other than English.¹²⁰ Nor were any of the written materials prepared for more than a dozen public workshops provided in any language other than English.¹²¹ The only apparent attempt to address the significant participation barriers facing LEP individuals appears in the "Notice of Public Meeting to Consider the Draft 2022 Climate Change Scoping Plan" which provides written instructions—in Spanish only—for those wishing to request live interpretation services during the Board hearing on June 23, 2022.¹²²

CEJA is composed of a diverse coalition of grassroots environmental justice organizations representing low-income communities, including many low-income immigrant communities and communities of color. Collectively, our organizations represent a richly diverse set of communities, including many LEP individuals who primarily or exclusively speak Spanish, Tagalog, Cantonese, Mandarin, various Indigenous languages, , and others. As the Draft Scoping Plan appropriately notes, Black, Indigenous, and People of Color (BIPOC) communities, and particularly low-income BIPOC communities, have been disproportionately burdened with the negative health and environmental impacts of climate change and the continued failure to curb its effect. It is essential that CARB, in executing its mandate, take meaningful steps to engage with those most deeply impacted by its efforts. The piecemeal language access measures CARB has taken to date are sorely inadequate in upholding this important responsibility.

Thank you for considering our comments above and our separately-submitted Crosscutting Sector Comments on the Draft Scoping Plan. We hope to continue working with CARB staff and the Board to adopt a Scoping Plan that meets California's climate and equity mandates to promote well-being for all Californians and our planet.

Sincerely,

Julia May, *Senior Scientist* Connie Cho, *Attorney* Gabriel Greif, *Legal Fellow*

¹¹⁹ BILINGUAL SERVICES POLICY 07-14, CALIFORNIA AIR RESOURCES BOARD (CARB), (Oct. 2007), https://ww3.arb.ca.gov/eeo/07-14.pdf.

¹²⁰ The website hosting the 2022 Draft Scoping Plan, which CARB initially published on May 10, 2022, currently states that a Spanish translation of the Draft is "forthcoming." To date, however, no such document has been publicly posted nor is there any indication that translations in other languages will be provided. *See* CAL. AIR RES. BD., 2022 SCOPING PLAN DOCUMENTS (last visited June 24, 2022), available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

¹²¹ Scoping Plan Meetings & Workshops, CARB (last updated June 10, 2021), available at:

https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/scoping-plan-meetings-workshops. ¹²² CAL. AIR RES. BD., NOTICE OF PUBLIC MEETING TO CONSIDER THE DRAFT 2022 CLIMATE CHANGE SCOPING PLAN (May 10, 2022), available at:

https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/draftsp22notice1.pdf.

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