

**Supplemental  
Responses to Comments**

on the

**Environmental Analysis**

Prepared for the

**PROPOSED STRATEGY FOR  
ACHIEVING CALIFORNIA'S  
2030 GREENHOUSE GAS  
TARGET**



**Released December 14, 2017  
to be considered at the  
December 14, 2017 Board Hearing**

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## **1. INTRODUCTION**

On November 30, 2017, CARB released the final California Air Resources Board – 2017 Scoping Plan (Scoping Plan), which incorporates the most recent air quality modeling and inventory data, as well as refinements to specific measures in response to public comments received, Board guidance, and continued technology assessments. The Final Environmental Analysis (EA) was also released on November 30, 2017, which merely clarifies, amplifies or makes insignificant modifications to an otherwise adequate Draft EA.

Though these letters were submitted after the close of the public review period, and do not require a response pursuant to PRC section 21091(d)(1), staff is providing written responses to the comments raised on the Final EA to further inform the public. This document presents those comments and CARB staff's written responses to environmental comments. Although this document includes written responses only to those comments related to the Final EA, all of the public comments were considered by staff and provided to the Board members for their consideration.

The Final EA, together with the Response to Comments on the Draft EA and this supplemental response document, will be presented to the Board for its consideration for approval prior to taking final action on the Scoping Plan. For reference purposes, this document includes a summary of each comment followed by the written response. The full comment letters containing comments related to the Final EA are provided in Attachment 1 of this document.

## **A. Comments Requiring Substantive Responses**

CARB prepared substantive responses to all comments that raise “significant environmental issues” associated with the proposed action as required by CARB’s certified regulatory program to comply with the California Environmental Quality Act (CEQA; California Code of Regulations, title 17, section 60007(a)).

Although CARB has not provided written responses to the remaining comments, all comments were considered and provided to Board members for their consideration. Written responses were not prepared for other comments that were determined to not raise significant environmental issues because this action is not subject to the requirements under the Administrative Procedures Act to prepare a Final Statement of Reasons with written responses to each issue raised, and there is no requirement in the Health and Safety Code, California Code of Regulations, or the Clean Air Act, to prepare written responses to written comments on a Scoping Plan document prepared by CARB. As noted above, pursuant to CEQA and CARB’s certified regulatory program, CARB is required to prepare substantive responses only to those comments that raise “significant environmental issues” associated with the proposed action, pursuant to California Code of Regulations, title 17, section 60007(a).

## **B. Requirements for Responses to Comments**

These written responses to public comments on the EA are prepared in accordance with CARB’s certified regulatory program to comply with the California Environmental Quality Act (CEQA). CARB’s certified regulations states:

*California Code of Regulations, title 17 section 60007. Response to Environmental Assessment*

*(a) If comments are received during the evaluation process which raise significant environmental issues associated with the proposed action, the staff shall summarize and respond to the comments either orally or in a supplemental written report. Prior to taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue.*

Public Resources Code section 21091 also provides guidance on reviewing and responding to public comments in compliance with CEQA. While this section refers to environmental impact reports, proposed negative declarations, and mitigated negative declarations, rather than an EA, it contains useful guidance for preparing a thorough and meaningful response to comments.

Public Resources Code section 21091, subdivision (d) states:

*(1) The lead agency shall consider comments it receives ... if those comments are received within the public review period.*

*(2) A) With respect to the consideration of comments received ..., the lead agency*

*shall evaluate any comments on environmental issues that are received from persons who have reviewed the draft and shall prepare a written response pursuant to subparagraph (B). The lead agency may also respond to comments that are received after the close of the public review period.*

*(B) The written response shall describe the disposition of each significant environmental issue that is raised by commenters. The responses shall be prepared consistent with section 15088 of Title 14 of the California Code of Regulations.*

California Code of Regulations, title 14, section 15088 (CEQA Guidelines) also includes useful information and guidance for preparing a thorough and meaningful response to comments. It states, in relevant part, that specific comments and suggestions about the environmental analysis that are at variance from the lead agency's position must be addressed in detail with reasons why specific comments and suggestions were not accepted. Responses must reflect a good faith, reasoned analysis of the comments.

*California Code of Regulations, title 14, section 15088 (a – c) states:*

*(a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft Environmental Impact Report (EIR) and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.*

*(b) The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.*

*(c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.*

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## 2.0 RESPONSES TO COMMENTS

The comment letters were coded by the order in which they were received. Table 2-1 provides the list of comment letters that contain substantive environmental comments. Responses to these comments are provided below. Responses are not provided to comments which do not raise substantive environmental issues. The full comment letters are provided in Attachment 1.

<b>Table 2-1 List of Commenters</b>			
<b>Comment Number</b>	<b>Date</b>	<b>Name</b>	<b>Affiliation</b>
Late Comment 9	October 27, 2017	Mastrandrea, Michael, Ph.D	Near Zero
209	December 12, 2017	Vanderwarker, Amy	CA Environmental Justice Alliance
214	December 12, 2017	Karras, Greg	Communities for a Better Environment
Late Comment 10	December 13, 2017	Hernandez, Jennifer	The Two Hundred

<b>Late Comment 9</b> 10/27/2017	Mastrandrea, Michael, Ph.D. Near Zero
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The comment was received after the close of the public review period, and does not require a response pursuant to PRC section 21091(d)(1). However, though not required to do so, CARB is choosing to respond to the comment to provide further clarity consistent with the purposes of CEQA.

Late 9-1

The commenter calls on CARB to commit to integrating its AB 398 implementation regulations with the Scoping Plan environmental analysis. Specifically, the commenter suggests that “ARB should commit to directly and quantitatively evaluating how its AB 398 regulations will deliver the annual emission reductions expected from the cap-and-trade market in the final 2030 Scoping Plan, consistent with the SB 32 target for 2030.”

This comment does not raise issue with the adequacy of analysis, including CEQA analysis, done for the Scoping Plan. Rather, the comment requests additional analysis in connection with future Cap-and-Trade Program amendments implementing AB 398. CARB has already begun the public process to amend its Cap-and-Trade Regulation to reflect the direction in AB 398. The process to amend the regulation will be subject to the Administrative Procedure Act and implemented pursuant to CARB’s usual robust public process with both formal and informal opportunities for feedback. Staff will review and consider all comments as the amendments for the Cap-and-Trade Regulation are developed.

The remainder of the comment letter does not raise significant environmental issues related to the Environmental Analysis (EA). The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

<b>Comment Letter</b> <b>209</b> 12/12/2017	Vanderwarker, Amy CA Environmental Justice Alliance
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The comment was received after the close of the public review period, and does not require a response pursuant to PRC section 21091(d)(1). However, though not required to do so, CARB is choosing to respond to the comment to provide further clarity consistent with the purposes of CEQA. Commenter makes policy recommendations rather than identifying particular issues requiring a response under CEQA.

209-1

The comment states that CARB does not provide any analysis or set of proposed activities to ensure that climate regulations/policies will not interfere with any air quality requirements or impact environmental justice communities.

The Scoping Plan is a programmatic document, and contains an appropriately detailed description of air quality impacts associated with its recommendations. More precise analysis of the effects of specific hypothetical measures is not required within this process, because all Scoping Plan measures undergo detailed environmental review in the process of adoption. Measures that have already been adopted have undergone their own more specific CEQA processes already. As each measure is designed and implemented, impacts are disclosed and appropriate mitigation is selected where appropriate and feasible. Please also see Master Response No 1.

209-2

The comment states that the Cap-and-Trade Program may increase emissions in environmental justice communities.

Please see Master Response No 1.

209-3

The comment states that the Scoping Plan limits addressing air quality issues to the AB 617 process.

CARB disagrees with this contention, which does not identify inadequacies with the CEQA analysis. The Scoping Plan excerpt quoted by commenters in support of this contention states that CARB recognizes the need to use all of the tools available to state and local agencies to achieve further emissions reductions that impact community health, including enhanced enforcement, new regulations, tighter permit limits, and other measures as needed. Some of these actions are not within the control of CARB, but rather are the responsibility of local agencies. CARB uses all of its authorities to address air quality issues and administers or oversees a broad suite of air quality improvement measures, including airborne toxic control measures, an extensive suite of vehicle and fuel standards, and

implementation plans to meet state and federal ambient air quality standards. These measures have produced marked improvements in state air quality. AB 617 provides an important adjunct to these authorities, but CARB does not solely rely upon that process to conduct its ongoing work.

209-4

The comment states that AB 617 will not analyze or assess whether greenhouse gas limits implemented by CARB, such as cap and trade, are disproportionately impacting low-income communities.

The programmatic analysis provided in the EA is sufficient for the high-level recommendations made in the Scoping Plan and are sufficient for CEQA purposes at this programmatic stage. Further analyses in future processes, including implementation of AB 617, are part of a suite of considerations and analyses that are ongoing and multi-faceted. Governor Brown issued a directive to the Office of Environmental Health Hazard Assessment (OEHHA) to prepare a report analyzing the benefits and impacts of the greenhouse gas emissions limits adopted by CARB within disadvantaged communities and update this report at least every three years. CARB will continue to implement AB 197 and AB 617 to improve criteria and air toxics data to support these analyses and collaborate with OEHHA as they update this report every three years.

209-5

The comment states that AB 617's impacts will be limited to a select, and as of yet undetermined, number of communities, and that relegating management of air quality issues to AB 617 would thus leave many communities, who could benefit from statewide action, without recourse.

This comment does not identify an inadequacy in CARB's CEQA analysis. But CARB takes such concerns very seriously, as demonstrated by the agency's long history of implementing air quality regulations to achieve federal and state air quality standards prior to the enactment of AB 617. CARB also points out that AB 617 in fact has many statewide components, including requirements to implement Best Available Retrofit Control Technology (BARCT) at sources covered by the Cap-and-Trade Regulation statewide. AB 617's Statewide Strategy and Monitoring Plan are also intended to consider pollution issues statewide, as well as to aid in a continuing process of identifying communities for particular focus. These efforts will continue to be monitored, revised, and enforced to ensure air quality improvements continue to be made throughout the State.

209-6

The comment states that the AB 617 process is extremely new and under development so many of its key programs have not been defined, and that thus, it is unreliable as the sole and primary vehicle to address environmental justice issues, even though it may have potential to address more environmental justice issues in the future.

This comment does not identify in inadequacy in CARB's CEQA analysis. Prior to the

enactment of AB 617, CARB has a long history of implementing air quality regulations to achieve federal and state air quality standards. These regulations will continue to be monitored, revised, and enforced to ensure air quality improvements continue to be made. Further, implementation of both AB 197 and AB 617 will help improve the emissions inventory and make these data available in the emissions inventory mapping tool by census tract, sector, and individual facility. This will allow for monitoring of emissions by CARB, districts, and the public, making it easier to identify areas of concern to take appropriate action. Additionally, CARB will continue to evaluate and pursue additional regulations to reduce air emissions as reduction technology or techniques become cost-effective and feasible.

209-7

The comment states that CARB should continue analyzing air quality and environmental justice issues specifically as they relate to implementation of climate regulations – in addition to and outside of the AB 617 process – and create a clear set of proposed actions to mitigate against any potential disproportionate impacts, as is required under AB 197, SB 32, and AB 398.

The programmatic analysis provided in the EA is sufficient for the high-level recommendations made in the Scoping Plan and are sufficient for CEQA purposes at this programmatic stage. Further analyses in future processes, including implementation of AB 617, are part of a suite of considerations and analyses that are ongoing and multi-faceted. Governor Brown issued a directive to the Office of Environmental Health Hazard Assessment (OEHHA) to prepare a report analyzing the benefits and impacts of the greenhouse gas emissions limits adopted by CARB within disadvantaged communities and update this report at least every three years. CARB will continue to implement AB 197 and AB 617 to improve criteria and air toxics data to support these analyses and collaborate with OEHHA as they update this report every three years. It is not possible to identify a set of proposed actions to mitigate any potential disproportionate impacts as appropriate action will be situation specific. And, as Scoping Plan measures are designed and implemented, CARB will evaluate for the potential for disproportionate impacts for environmental justice communities and identify mitigation, as available, or approaches to increase potential co-benefits.

Further, implementation of both AB 197 and AB 617 will help improve the emissions inventory and make these data available in the emissions inventory mapping tool by census tract, sector, and individual facility. This will allow for monitoring of emissions by CARB, districts, and the public, making it easier to identify areas of concern to take appropriate action.

209-8

The comment states that according to the CPUC's analysis, the CPUC's proposed 2030 scenario shows that the electricity sector is projected to increase harmful air pollution of fine particulate matter (PM<sub>2.5</sub>) and nitrous oxides (NO<sub>x</sub>) emissions in the State, and that this increase of air pollution is predicted to occur despite the fact that the scenario projects GHGs from the electrical sector to decline to 42 MMT and meet the RPS requirement. The

comment suggests that, the CPUC's analysis consequently illustrates that the RPS requirement alone could increase, rather than decrease, air pollution from power plants in communities.

The programmatic analysis provided in the EA is sufficient for the high-level recommendations made in the Scoping Plan and are sufficient for CEQA purposes at this programmatic stage. Further analyses in future processes, including implementation of AB 617, are part of a suite of considerations and analyses that are ongoing and multi-faceted. This analysis was a high level statewide analysis. It did not look at specific plants in specific communities. CPUC staff has publicly explained that broad classes of plants, not individual plants, were modeled in the IRP analysis to date. Even if the fleet as a whole were to behave as modeled, the operation of an individual plant in a particular community could well deviate from the average for that class of plants. These results represent a preliminary effort to understand how the RPS may affect power plants, not individual plants in communities. Additional evaluations are needed to better understand if the implementation of the 50 percent RPS would disproportionately impact disadvantaged communities.

209-9

The comment states that natural gas facilities emit more when operating at partial load, and that increased emissions from startup, shutdown, and partial load is not considered in CARB's assumption of a 1:1 ratio between greenhouse gas and air pollution. The comment suggests that CARB likely underestimates the air pollution that can be attributed to the measures described in the Scoping Plan.

This comment does not identify an inadequacy in the CEQA analysis. The Scoping Plan appropriately caveats the 1:1 relationship, noting that the exact relationship between GHGs and air pollutants is not clearly understood at this time. The air quality values are not intended to be seen as absolute values but allow for a common framework to compare different measures evaluated in the Scoping Plan across each other.

209-10

The comment states that the recently released 2016 cap and trade compliance data also showed similar patterns: certain sectors, such as refineries, have actually increased emissions.

This comment does not identify an inadequacy in the CEQA analysis, which describes programmatic air quality impacts. It is important to not just look at a single year, but instead to understand how emissions trends have changed over several years. The 2014 and 2016 data for this sector is similar. The 2015 data year showed a decrease in refinery sector emissions that was most likely due to one refinery being offline during that year. Once that refinery was back online, the emissions for the sector increased in 2016. Accordingly, observed single year data features do not, on their own, indicate any particular trend in air pollution. CARB, of course, continues to monitor air pollution impacts, and has described an extensive series of measures to address them.

209-11

The comment states that the Scoping Plan does not make any mention of over allocation of allowances, despite its clear relevance to California's ability to meet the 2030 GHG reduction goals. The comment suggests that failure to act on over allocation would have serious impacts on the ability of California to meet our 2030 goals in terms of actual emission reductions.

The commenter is referring to GHG emissions being well below the annual allowance budgets in the Cap-and-Trade Program due to the successful reductions in GHGs from the suite of climate programs enacted in the State. This comment appears to offer policy feedback rather than a comment on the CEQA analysis. AB 398 directs CARB to evaluate allowance budgets in the Cap-and-Trade Program for 2021 through 2030. CARB began a process to develop amendments to conform to AB 398 requirements in October 2017. The Scoping Plan is a high-level policy document to identify a feasible path to achieve the 2030 target. Individual measures are subject to their own, more detailed development processes.

The remainder of the comment letter does not raise significant environmental issues related to the EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

<b>Comment Letter</b> <b>214</b> 12/12/2017	Karras, Greg Communities for a Better Environment
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The comment was received after the close of the public review period, and does not require a response pursuant to PRC section 21091(d)(1). However, though not required to do so, CARB is choosing to respond to the comment to provide further clarity consistent with the purposes of CEQA. Commenter makes policy recommendations rather than identifying particular issues requiring a response under CEQA.

214-1

The comment states that De-prioritization and delay of sustained reduction in emissions from the oil sector during the critical period through 2030, when cumulative emissions would approach the climate protection limit defined by state emission targets while the time left to meet that limit shortens, is a clearly foreseeable result of the proposed action.

This comment does not identify an inadequacy in CARB's CEQA analysis, and instead appears to be a policy recommendation. CARB staff disagrees with the comment. Emissions reductions from the oil sector are not de-prioritized. The Scoping Plan released on November 30, 2017 is responsive to the direction provided in AB 398, which specifically designates the Cap-and-Trade Program as the control measure for combustion CO<sub>2</sub> emissions from refineries and the oil and gas sector. Emissions reductions mandated by SB 32 will be achieved by measures in the final Scoping Plan, which include direct emissions reductions from refineries and the oil and gas sector via Cap-and-Trade. Additionally, the oil and gas rule and Low Carbon Fuel Standard are designed to address fugitive and onsite emissions from the production of finished fuel.

214-2

The comments states that delaying/de-prioritizing GHG emissions from the oil and gas/refinery sector could cause socioeconomic or climate impacts to environmental justice communities.

This comment does not identify an inadequacy in CARB's CEQA analysis. CARB staff disagrees with its substantive premise. Climate change is an inherently cumulative issue. The Scoping Plan's purpose is to limit California's contribution to climate change to the maximum extent feasible, as required by law. Even if GHG emissions in one source category were to increase in certain years (and there can be annual variability for a variety of reasons), the Scoping Plan puts California on a path toward substantial statewide GHG emission reductions.

214-3

The comment states that incremental and sustained annual emission cuts from the extraction, refining, and use of petroleum refined in California that begin promptly could lessen or avoid all of these significant potential impacts of the proposed action.



This comment does not identify an inadequacy in CARB's CEQA analysis, and instead appears to be a policy recommendation. CARB staff strongly disagrees that significant potential impacts regarding GHG emissions are likely to occur. See response to comment 214-2 above. With regard to air quality impacts, see Master Response No 1.

214-4

The comment states that the EA did not identify and disclose these significant potential impacts of implementing the proposed action, or this less difficult least-impact path to climate stabilization that implementing the proposed action could foreclose. The comment suggests that the EA is deficient in these crucial respects.

The EA properly identified, analyzed, and disclosed all potentially significant impacts from the proposed project as well as all feasible alternatives as required by CEQA Guidelines section 15126.6(a). Please also see response to comment 214-2 above.

The remainder of the comment letter does not raise significant environmental issues related to the EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

<b>Late Comment 10</b> 12/12/2017	Hernandez, Jennifer The Two Hundred
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The comment was received after the close of the public review period, and does not require a response pursuant to PRC section 21091(d)(1). However, though not required to do so, CARB is choosing to respond to the comment to provide further clarity consistent with the purposes of CEQA.

Commenter submitted a 32-page letter the day prior to the Board meeting on this item, and did not submit comments earlier in the process. The comment letter is a lengthy critique of state climate and housing policy generally, and does not clearly distinguish the project under analysis from this critique. It appears to, via an extended series of disputed causal inferences, link an array of state policies, many not under CARB control, to negative impacts on poor and minority communities. CARB staff have, consistent with CEQA, made a good faith effort to distinguish aspects of the comment that bear directly upon the project at issue and respond to them here.

It is critical to emphasize that the comment appears to address not the project before the Board – which is clearly described in Chapter II of the proposed Scoping Plan and in the EA as the set of actions required to meet statutory mandates to CARB – but instead recommendations and further discussion elsewhere in the document which is nonbinding and does not purport to impose binding requirements. These recommendations in the Enabling Local Action subchapter of the Scoping Plan are not part of the proposed “project” for purposes of CEQA review. That subchapter involves no commitments by CARB or by any other public agency. The measures in Chapter II comprise the “project” for purposes of CEQA, and are appropriately the subject of the EA.

Accordingly, no response is required to this comment. Nonetheless, CARB recognizes that commenter has expressed concerns over these recommendations. CARB appreciates commenters’ expressed goal to promote social and racial equity, and commenters’ focus on improving outcomes for disadvantaged communities. Although, as this response further describes below, no modifications to the EA or project are appropriate, CARB will continue to engage these issues as appropriate.

#### Late 10-1

As a general matter, commenter claims the proposed Scoping Plan proposes to expand CEQA by adding mandatory GHG significance thresholds that apply statewide, regardless of location or project type. Commenter expresses concern that these purported thresholds may produce negative outcomes for social equity by increasing litigation risk for certain infill projects, and suggests variously that the “thresholds” may either impair infill development or result in significant environmental impacts from promoting infill development.

Commenter seems to fundamentally misunderstand the nature of the recommendations in the Enabling Local Actions subchapter of the Scoping Plan. The Scoping Plan would not “expand CEQA” in any way. As one of many lead agencies subject to CEQA, CARB lacks

any authority to modify CEQA, or to require any other agency to use a particular methodology for evaluating significance of GHG impacts. Requirements to analyze GHG impacts appropriately are instead already established in law. As the California Supreme Court has explained, “CEQA requires public agencies ... to ensure that [greenhouse gas] analysis stay[s] in step with evolving scientific knowledge and state regulatory schemes.” (See *Cleveland Nat’l Forest Found. v. San Diego Ass’n of Governments* (2017), 220 Cal. Rptr. 3d 294, 298 (“SANDAG”). To the degree CARB’s nonbinding recommendations are relevant, they simply provide guidance to public agencies that may assist in compliance with already established law, easing the concerns commenter expresses over uncertain CEQA requirements generating litigation risk. They do not represent a new binding requirement, and are not part of the proposed Scoping Plan project.

The proposed Scoping Plan project contains only those items analyzed in Chapter II of the document. CARB’s remaining recommendations are simply that – recommendations. They do not alter existing law or legal obligations, and make no new commitments. The Enabling Local Actions subchapter actually provides “guidance” to “support local governments in their efforts to reduce GHG emissions.” (Page 99.) The beginning of the section providing the two recommendations at issue in commenter’s letter states very clearly: “While this guidance is provided out of the recognition that local policy makers are critical in reducing the carbon footprint of cities and counties, the decision to follow this guidance is voluntary and should not be interpreted as a directive or mandate to local governments.” The section goes on to “recommend” both statewide and project-specific GHG targets, while recognizing that lead agencies maintain discretion to select appropriate CEQA significance thresholds. It also notes:

Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State’s long-term GHG goals, and climate change science. (Page 101.)

To the extent the commenter claims the Enabling Local Actions chapter does any more than this, CARB’s response is that it simply does not.

The Scoping Plan certainly does not formally establish any particular significance threshold for any particular project or plan; instead, it provides illustrative guidance and useful data that may inform further analyses. (See *SANDAG*, 220 Cal Rptr. 3d at 309-10). Under well-established CEQA law, the selection of an appropriate significance threshold is left to the lead agency. (See, e.g., *San Francisco Baykeeper, Inc. v. State Lands Comm’n* (2015) 242 Cal.App.4<sup>th</sup> 202, 227.) The Scoping Plan cannot change this fundamental principle of CEQA law, and it appropriately observes this lead agency discretion. (See pages 102 and Appendix B.)

As the commenter correctly notes in the comment letter, there is a dearth of guidance in this field, and CARB’s intent is to provide some direction to local agencies that wish to use it. As

with any other regulatory agency that provides CEQA-related guidance, lead agencies are not required to use significance standards suggested in regulatory agency guidance documents. The CEQA-related recommendations in the Enabling Local Actions subchapter are purely advisory, and provide recommendations intended to help local jurisdictions navigate how to analyze GHG impacts under CEQA. This is explained at multiple locations in both this subchapter and in Appendix B to the Scoping Plan (which sets forth potential GHG-reducing measures local agencies may consider).

The CEQA Guidelines already include provisions relevant to jurisdictions that are reducing GHG emissions through plans for reducing GHG emissions. (See 14 CCR 15183.5(b).) Many local governments in California are taking on leadership roles in reducing emissions, and are seeking additional guidance and support on aligning local actions with State goals and policies. The Enabling Local Actions subchapter emerged from a desire by local governments for greater guidance on how to develop project and plan level GHG emissions analysis. Both OPR's General Plan Guidelines and the Enabling Local Actions subchapter help provide greater clarity regarding how local agencies might satisfy the criteria set forth in the CEQA Guidelines.

As commenters' concerns appear to depend substantially on difficult-to-predict, and unsubstantiated inferences about the potential litigation risk associated with commenters' mistaken view of the Scoping Plan recommendations, commenters claimed impacts are ultimately not reasonably foreseeable. Nonetheless, the litigation risk associated with infill developments that underlies commenters' concerns is, in CARB's view, far more likely to be diminished by providing expert recommendations for local agencies, than it is to be increased. CARB staff intends to continue to collaborate with local and state agencies to support planning where appropriate, and to continue to develop useful recommendations in an ongoing process. CARB staff agrees with commenter that local agencies may benefit from assistance, and view that continued State assistance is far more likely to reduce planning risk than increase it.

In sum, CARB believes providing some guidance in this field is more helpful than providing none.

Late 10 -2

The commenter claims that the recommendations in the Enabling Local Actions chapter would inhibit development of higher-density infill housing, increasing GHGs overall, and exacerbating California's acute housing and poverty crisis.

This argument is not supported by substantial evidence in commenters' letter; indeed, this claim is undercut by other portions of commenter's letter, which claim an array of impacts will result from CARB's recommendations due to increased building activities and population densities. To the extent that commenter is claiming that such impacts would result from increased litigation risk posed by the recommendations in the Enabling Local Actions chapter of the Scoping Plan, CARB responds that such litigation risk is speculative and not reasonably foreseeable, and therefore need not be considered as part of the EA. Moreover, any litigation risk would be more likely to be diminished by providing clear data and recommendations, and ongoing state assistance with project planning. As noted above,

CARB's recommendations in that subchapter are advisory, and are not required in any way nor do they commit any agency to a course of action.

#### Late 10 -3

The commenter claims the Scoping Plan would raise housing and homeowner transportation costs, further increase the cost of living for the less affluent, and further delay completion of critically needed housing by increasing CEQA litigation risks.

See response 10-2 above. Furthermore, CEQA includes several "streamlining" provisions and exemptions for affordable housing, including agricultural employee housing and low-income housing; that are designed to help alleviate commenter's concerns. (See, e.g., Public Resources Code §§ 21159.21, 21159.22, 21159.23, 21159.24, and 21159.28.)

To the extent commenter is asserting that existing legally-mandated regulatory programs that are already in place, but discussed in the Scoping Plan, are driving the claimed impacts, those programs have already been analyzed under CEQA in prior rulemakings and plan decisions. Commenter does not appear to have participated in these processes. The Scoping Plan adopted pursuant to AB 32 is a plan for reducing greenhouse gas emissions, but does not itself establish the regulations by which it is to be implemented; rather, it sets out how existing regulations, and new ones yet to be adopted at the time of the Scoping Plan, will be used to reach AB 32's emission reduction goal." *Center for Biological Diversity v. California Dept. of Fish and Wildlife* (2015) 62 Cal.4th 204, 222. Thus, impacts associated with specific rulemakings already adopted, or more specific impacts associated with future, speculative actions, need not be further analyzed in this programmatic document. Accordingly, please see the certified regulatory program documents associated with those programs.

#### Late 10-4

The commenter states "If CARB actually cared about increasing density and transit services as a GHG reduction strategy, the Scoping Plan should have identified CEQA litigation - pursued by anonymous shadowy groups, business competitors, NIMBYs and labor unions - as a major obstacle and delay factor in achieving its ambitious GHG reduction goals for promoting infill housing, transit and public services. If CARB cared about working Californians, or about the poverty or housing crisis, or the transportation gridlock that is causing criteria air emissions from the transportation sector to actually increase for the first time in decades, then the Scoping Plan would have strongly advocated for statutory amendments to CEQA that would expedite housing, transportation, schools, parks and public infrastructure."

This comment does not identify any significant environmental issues with the proposed project. However, CARB notes that the purpose of the Scoping Plan's Enabling Local Actions chapter is to provide helpful guidance in a field with great legal and technical uncertainty. Identifying abusive CEQA litigation tactics by CEQA petitioners – a term that is not clearly defined or susceptible to CARB regulation -- does not help provide local agencies with practical guidance in developing CEQA analyses. Similarly, lobbying for statutory amendments to CEQA provides no immediate help to local agencies, has other

implications not relevant to this proceeding, and goes far beyond the goal of helping lead agencies develop defensible CEQA analyses. As noted above, CARB has determined that providing some non-mandatory guidance to the CEQA community is more helpful than providing none.

Late 10-5

The commenter states “It is the height of agency irresponsibility and racial insensitivity, given the severity of the housing, poverty and homelessness crisis and their collective effect on California's minority communities, for CARB in its expert agency role to interpret CEQA as requiring use of this net zero GHG CEQA threshold unless a lead agency can prove otherwise with substantial evidence.”

As noted above, CARB’s recommendations in the Enabling Local Actions chapter are in no way required, and CARB cannot and has not adopted any new principles of CEQA law. See response to comment 10-1 above. Additionally, the Scoping Plan establishes no binding requirement that agencies use a zero net GHG threshold “unless a lead agency can prove otherwise with substantial evidence.” The contention to the contrary in commenter’s letter is incorrect. As noted in response to comment 10-1, CARB’s recommendations appropriately observe and respect lead agency discretion. CEQA already requires lead agencies to make their determinations in accordance with substantial evidence, and with reference to available scientific guidance (including on greenhouse gases) as applied to a particular project. The Scoping Plan merely observes the state of the science and makes nonbinding recommendations. It does not change the law. In contrast, CARB is merely describing the urgent nature of greenhouse gas emissions reductions, consistent with generally accepted science.

Furthermore, the Scoping Plan provides:

Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State’s long-term GHG goals, and climate change science.(Page 102.)

As noted above, an agency’s selection of a significance threshold must always be supportable by evidence. This concept is not a creature of CARB’s Scoping Plan, but is another fundamental CEQA principle.

Late 10-6

Commenter contends the EA prepared for the Scoping Plan is deficient because it does not address all of the detailed significant impacts that have been identified in various local agency CEQA documents prepared in connection with regional SB 375 actions, or in connection with the “demolition of tens or hundreds of thousands of single family homes”.

This argument is not supported by the commenters' proffered evidence and is inconsistent with the commenter's other claims that the Scoping Plan would inhibit higher-density development.

That issue notwithstanding, as explained in the EA, the analysis conducted for the Scoping Plan is necessarily programmatic, as each of the measures undergo their own more detailed CEQA review as appropriate. In the SB 375 context, as commenter notes, there is a still more-detailed level of review, even after CARB adopts its SB 375 targets via a separate proceeding, in that regional agencies will then analyze the effects of their adopted regional transportation plans and sustainable communities strategies. Program-level CEQA documents are prepared at the "first tier" of review, and need not provide the kind of detailed, project-specific analysis the commenter requests. (See *Town of Atherton v. California High-Speed Rail Authority* (3 Dist. 2014) 228 Cal. App. 4<sup>th</sup> 314, 344, 347.)

CARB is in the process of updating the SB 375 targets. The reasonably foreseeable compliance responses associated with the SB 375 GHG reduction targets were evaluated programmatically in the EA for the Scoping Plan for their potential to result in adverse environmental effects on the environment. Further, the Draft EA prepared specifically for the proposed update to the SB 375 targets was published and circulated for public review in June 2017. CARB will prepare and certify a Final EA for the SB 375 Target Update prior to adopting updated SB 375 targets via a separate proceeding.

The Scoping Plan neither requires any particular type of development pattern, nor establishes specific SB 375 targets, nor approves or disapproves any development project. Instead, it articulates the current state of greenhouse gas emissions data and describes the importance of careful analysis of greenhouse gas impacts, consistent with governing law. No further analysis of particular project impacts is required, as these are beyond CARB's jurisdiction, and would be entirely speculative.

Late 10-7

Commenter claims CARB failed to evaluate the "increase in transportation emissions associated with the production of goods once produced in California but now produced in other jurisdictions and transported to California (e.g., cement)."

Per AB 32, CARB is required to minimize leakage --- the relocation of production outside the State in response to climate regulations. The Scoping Plan includes a mix of strategies to achieve the 2030 target. It notably includes the Cap-and-Trade Program, which is already designed and implemented to minimize leakage. That design feature will continue as the program is proposed to be utilized to achieve the 2030 target. Furthermore, the Scoping Plan includes the mobile source strategy and the Sustainable Freight Plan. These policies, in addition to the Low Carbon Fuel Standard, are estimated to reduce demand for on-road fuel by about 45 percent by 2030.

Late 10-8

The commenter claims CARB was required to conduct a comprehensive fiscal evaluation to allow members of the public as well as Board members to understand the fiscal impact of its Scoping Plan.

The Scoping Plan includes a macroeconomic analysis of the economic impacts resulting from the implementation of the plan. Between now and 2030, the economy is expected to continue to grow. In 2030, implementation of the Scoping Plan will have a negligible impact on the economy and jobs. The Scoping Plan economic analysis also looked at regional impacts.

Late 10-9

Commenter asserts that CARB has set VMT targets that are not analyzed in the environmental or fiscal analysis, and that these targets are unnecessary, or may produce adverse environmental impacts in part by discouraging infill housing or by reducing emphasis on mobile source control programs

This comment is not clearly a CEQA comment. Staff nonetheless are responding to provide public information as appropriate.

Initially, commenter is incorrect that CARB is setting specific VMT targets as part of this project. Projected reductions are analyzed but are not a specific project component. Reductions in VMT are included in the inputs to the PATHWAYS GHG emissions model. Additionally, the fiscal analysis reflects cost savings due to reduced demand for fuels and accounts for capital costs for cleaner technology. Reductions in VMT are part of the Mobile Source Strategy and not explicitly called out as separate measure in the high level policies identified in the Scoping Plan. Under the proposed SB 375 targets, the per capita rate of VMT and associated GHG emission growth would be lower than under existing conditions.

When the proposed SB 375 targets are taken together with the other proposed measures applicable to the transportation sector (e.g., vehicle efficiency, technology, and renewable fuels measures) outlined in the Scoping Plan and in the Mobile Source Strategy, total GHG emissions from the transportation sector are forecast to decrease on the trajectory needed to meet the GHG reduction mandates in AB 32 and SB 32.

CARB includes several GHG reduction measures in the transportation and fuels sector in the Scoping Plan to achieve the reductions necessary to meet the State's 2030 target. The highlights of which include 1.5 million ZEVs by 2030, Medium- and Heavy-Duty GHG Phase 2 Regulations, Advanced Clean Transit, Last-Mile Delivery, Low Carbon Fuel Standard, and a number of VMT reductions achieved not just by SB 375 compliance, but also through SB 743 implementation (infill development streamlining and CEQA changes to address VMT reduction), and additional measures not included in the Mobile Source Strategy.

In any event, to the degree that commenters' substantive concerns are germane, there is good evidence VMT reductions reduce GHGs from all income levels and that these measures can be appropriately designed to support affordable housing. The National



Center for Sustainable Transportation (NCST), based at the University of California at Davis has, for instance, extensively studied this matter and produced recommendations that can support further planning in accordance with Scoping Plan recommendations. (See, e.g., NCST, Affordable Housing in Transit-Oriented Developments: Impacts on Driving and Policy Approaches (Apr. 2017), available at: [https://ncst.ucdavis.edu/wp-content/uploads/2015/10/NCST-TO-027-Boarnet-Bostic-Affordable-TOD-White-Paper\\_FINALv2.pdf](https://ncst.ucdavis.edu/wp-content/uploads/2015/10/NCST-TO-027-Boarnet-Bostic-Affordable-TOD-White-Paper_FINALv2.pdf)).

It is also a broad consensus view that VMT reductions are an important adjunct to direct mobile source emissions reduction programs; CARB is, therefore, focused on both approaches. (See, e.g., generally, Ewing et al., Urban Land Institute, Growing Cooler: The Evidence on Urban Development and Climate Change (2007), available at: [https://www.nrdc.org/sites/default/files/cit\\_07092401a.pdf](https://www.nrdc.org/sites/default/files/cit_07092401a.pdf)). Further, to the degree that commenter is suggesting that the state is promoting “congestion” and should therefore focus on roadway expansions or other measures, the evidence provided by the California Department of Transportation and NCST demonstrates that roadway expansion generally does not alleviate congestion concerns because it induces further travel. (See, DOT & NCST, Increasing Highway Capacity Unlikely to Relieve Traffic Congestion (2015), available at: [http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST\\_Brief\\_InducedTravel\\_CS6\\_v3.pdf](http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf)). Other sources also recognize the connection between VMT reductions and greenhouse gas reductions, both from tailpipe emissions and from reduced upstream emissions associated with fuels. (See, e.g., Quantifying Greenhouse Gas Mitigation Measures - A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures, available at <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>; see also Growing Cooler: The Evidence on Urban Development and Climate Change, available at [https://www.nrdc.org/sites/default/files/cit\\_07092401a.pdf](https://www.nrdc.org/sites/default/files/cit_07092401a.pdf).)

In sum, substantial evidence supports the view that VMT reduction supports greenhouse gas reductions, is consistent with equitable housing policies, is an important adjunct to direct mobile source reductions, and is a superior climate policy to road construction to decrease congestion.

Staff also notes that many of the policies discussed in the Scoping Plan are designed specifically to benefit disadvantaged communities, including via reducing air pollution exposure risks, investing Cap-and-Trade auction revenues in disadvantaged communities, supporting public transit and equitable planning, and investing in and supporting green economic options.

To the degree commenter had substantive concerns with this evidence, those concerns are best directed at state transportation planning bodies or at specific planning target proceedings. The Scoping Plan does not set specific VMT targets, so no further CEQA analysis is required.

Late 10-10

Commenter claims CARB's refusal to postpone Scoping Plan approval until the SB 375 VMT reduction target decision can be appropriately disclosed and factored into the

unspecified VMT reduction Scoping Plan mandate is also unlawful piecemealing, in violation of both the environmental and fiscal disclosure, analysis and mitigation mandates applicable to the Scoping Plan.

CARB disagrees that piecemealing has occurred. The Scoping Plan is precisely what its name implies: a high-level plan to chart California's long-term GHG reduction strategy. The EA accompanying the Scoping Plan is accordingly programmatic in nature. Each Scoping Plan measure (including SB 375 target update) then undergoes its own CEQA review, as appropriate, before the measure is brought to the Board for consideration.

By commenter's logic, the Scoping Plan could not be approved until all of the measures identified in the Scoping Plan have been developed, which defeats the purpose of a Scoping Plan and is not required by CEQA.

Furthermore, the commenter incorrectly references VMT reduction targets under SB 375. CARB does not set VMT reduction targets under SB 375. Rather, CARB sets GHG reduction targets that apply to passenger vehicles. When the proposed SB 375 targets are taken together with the other proposed measures applicable to the transportation sector (e.g., vehicle efficiency, technology, and renewable fuels measures) outlined in the Scoping Plan and in the Mobile Source Strategy, total GHG emissions from the transportation sector are forecast to decrease on the trajectory needed to meet the GHG reduction mandates in AB 32 and SB 32.

The remainder of the comment letter does not raise significant environmental issues related to the EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

**ATTACHMENT 1: COMMENT LETTERS**  
**CONTAINING COMMENTS RELATED TO THE**  
**ENVIRONMENTAL ANALYSIS**

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October 27, 2017

Ms. Rajinder Sahota  
Assistant Division Chief, Industrial Strategies Division  
California Air Resources Board

Dear Ms. Sahota,

Thank you for the opportunity to comment on the October 2017 scoping plan and cap-and-trade staff workshop presentations.<sup>1</sup> We appreciate ARB's efforts to finalize the 2030 Scoping Plan and continue California's climate policy leadership.

We write today with comments on the relationship between the 2030 Scoping Plan and the AB 398 implementation process. As everyone is aware, AB 398 requires a number of substantive changes to the post-2020 cap-and-trade market design ARB adopted in August 2017;<sup>2</sup> however, the timing of these changes presents analytical challenges that we believe warrant additional consideration. At the October 2017 workshop on the cap-and-trade program, ARB staff indicated the Board hopes to approve final AB

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<sup>1</sup> ARB, 2017 Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. Public workshop (Oct. 12, 2017); ARB, Cap-and-Trade Regulation Workshop (Oct. 12, 2017).

<sup>2</sup> ARB Resolution 17-21 (Aug. 4, 2017).

398 cap-and-trade regulations in mid-2019.<sup>3</sup> In contrast, AB 398 directs ARB to finalize the 2030 Scoping Plan by January 1, 2018.<sup>4</sup>

Because AB 398 requires ARB to finish the 2030 Scoping Plan by the end of 2017, ARB will need to select its preferred portfolio of policy measures for reaching the state's 2030 climate target more than a year before the Board completes its post-2020 cap-and-trade market design process. As a result, the 2030 Scoping Plan could identify a role for the cap-and-trade program, but any such quantitative role might not reflect the final market design ARB later adopts in implementing AB 398.

We appreciate that ARB's statutory deadlines preclude any other outcome with respect to timing. Nevertheless, we call on ARB to commit to integrating its AB 398 implementation regulations with the 2030 Scoping Plan environmental analysis. Specifically, ARB should commit to directly and quantitatively evaluating how its AB 398 regulations will deliver the annual emission reductions expected from the cap-and-trade market in the final 2030 Scoping Plan, consistent with the SB 32 target for 2030. We elaborate on these points below.

- **A larger role for cap-and-trade.** In its draft 2030 Scoping Plan, ARB decided to analyze the emission reduction requirements from 2021-30 on a cumulative basis, estimating that policy measures would have to reduce emissions by 680 million tons CO<sub>2</sub>e over this period relative to a business-as-usual scenario in order to meet the 2030 target.<sup>5</sup> ARB projected that in its preferred scenario, cap-and-trade would need to deliver 191 million tons CO<sub>2</sub>e (about 28%) of that total reduction.<sup>6</sup> In its

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<sup>3</sup> ARB staff cap-and-trade presentation, *supra* note 1 at slide 34.

<sup>4</sup> Cal. Health & Safety Code § 38592.5(a)(1).

<sup>5</sup> ARB, The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target (Jan. 2017) at 37, 42. As we and our colleagues have previously emphasized, we believe that a single point forecast of business-as-usual emissions—whether annual or cumulative—cannot be accurate and should be accompanied by sensitivity analysis to create a robust strategy. *See, e.g.*, Comment letter from Mason Inman, Michael D. Mastrandrea, Danny Cullenward, and Michael Wara to ARB (Apr. 10, 2017), *available at* <http://www.nearzero.org/wp/reports/>.

<sup>6</sup> *Id.* at 41-42.

October 2017 workshop slides, ARB calls for an even larger role for cap-and-trade, which ARB now projects will need to reduce 294 million tons CO<sub>2</sub>e (about 43%) of the total in order to reach the target.<sup>7</sup> As this new outlook indicates, a well-designed cap-and-trade program is essential to delivering on California's climate goals.

- **Cumulative vs. annual accounting.** As discussed above, ARB's analysis in the 2030 Scoping Plan process emphasizes *cumulative* emission reduction requirements over the period 2021-30; however, the draft scoping plan and workshop slides also present estimates for *annual* reductions from policy measures in 2030.<sup>8</sup> For example, the workshop slides suggest that after accounting for the effects of non-cap-and-trade policies, cap-and-trade will still need to deliver between 34 and 76 million tons of additional reductions in the year 2030 alone, depending on how those other policies perform.<sup>9</sup> Annual estimates of policy impacts on emissions are essential, because SB 32 sets an annual target of reducing statewide emissions to 40% below 1990 levels by the year 2030.<sup>10</sup>

As we and our colleagues have previously emphasized, ARB needs to show how its 2030 Scoping Plan delivers on the SB 32 annual target for the year 2030, not an estimated reduction in cumulative emissions relative to a modeled baseline.<sup>11</sup> While cumulative emission reduction estimates can provide a helpful, high-level metric for comparing the role of individual policies, no cumulative analysis can replace a direct analysis of annual emissions showing that ARB's selected policy measures will deliver on ARB's legal requirement to achieve the SB 32

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<sup>7</sup> ARB staff scoping plan presentation, *supra* note 1 at slide 16.

<sup>8</sup> ARB draft 2030 Scoping Plan, *supra* note 5 at 43 (see Table II-3); ARB staff presentation, *supra* note 1 at slide 17.

<sup>9</sup> ARB staff scoping plan presentation, *supra* note 1 at slide 17.

<sup>10</sup> Cal. Health & Safety Code § 38566.

<sup>11</sup> See, e.g., comment letter from Mason Inman et al., *supra* note 5; comment letter from Michael Wara and Danny Cullenward to ARB (Dec. 16, 2016); comment letter from Michael Wara and Danny Cullenward to ARB (Nov. 21, 2016). All comment letters available at <http://www.nearzero.org/wp/reports/>.

annual target in the year 2030. ARB's inclusion of annual emission reduction requirements for the cap-and-trade program in the draft Scoping Plan is helpful but not sufficient, because the program is at core a cumulative emissions reduction instrument; translating the cumulative reduction requirements ARB identifies for the program into annual reductions will depend on the details of AB 398 implementation.

Further analysis showing how the 2030 annual target will be achieved is especially important given the large role ARB expects cap-and-trade to play. Like any cap-and-trade program, California's program allows regulated emitters to shift the timing of their emissions through various measures such as banking of allowances,<sup>12</sup> access to some 80 million extra allowances at price containment points in the post-2020 market period,<sup>13</sup> the use of over-allocated allowances from the pre-2020 period in the post-2020 period,<sup>14</sup> and unlimited allowances made available at a hard price ceiling.<sup>15</sup> As a result, the specific market design ARB adopts pursuant to AB 398 will have important effects on the timing of emission reductions from sources regulated under the cap-and-trade program. In turn, the timing of emission reductions will determine whether or not the cap-and-trade program is capable of closing the gap between ARB's selected complementary policies and the SB 32 annual target in 2030.

- **ARB should commit to analyzing how its final AB 398 regulations deliver on SB 32's 2030 annual target, making use of the PATHWAYS model results from the 2030 Scoping Plan.** Because ARB will not be able to incorporate the final cap-and-trade program market design into the 2030 Scoping Plan and because the final cap-and-trade market design has critical implications for the timing of annual emission reductions through 2030, ARB should commit to integrating its environmental analysis across these two regulatory processes.

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<sup>12</sup> Cal. Health & Safety Code § 38562(c)(2)(H).

<sup>13</sup> *Id.* at § 38562(c)(2)(B).

<sup>14</sup> *Id.* at § 38562(c)(2)(D).

<sup>15</sup> *Id.* at § 38562(c)(2)(A).



Specifically, we recommend that ARB explicitly analyze the annual reductions it expects from its final AB 398 market design regulations and compare these reductions with the PATHWAYS projections developed for the final 2030 Scoping Plan. Connecting these two analytical processes is critical because PATHWAYS does not model the emission reductions from cap-and-trade or other market-based measures.<sup>16</sup> Rather, ARB infers the emission reductions needed from cap-and-trade based on the gap between (1) the annual PATHWAYS projections for the contribution of non-market-based measures and (2) an annual emissions scenario that is consistent with the SB 32 annual target for 2030.

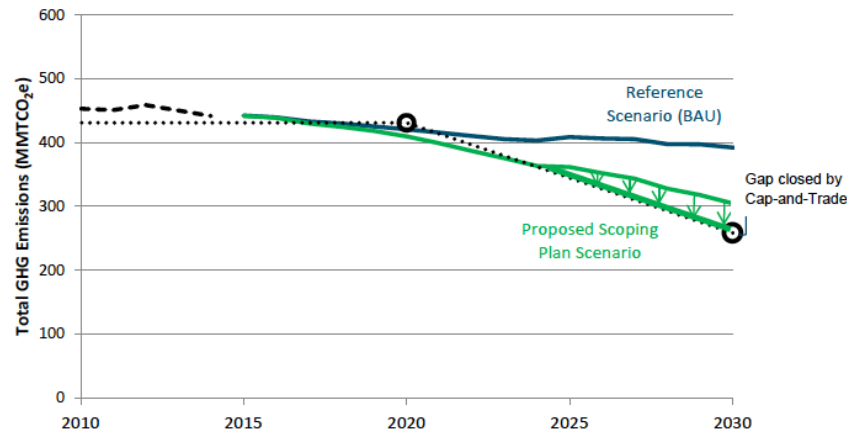
For example, in the figure below, the cumulative gap between PATHWAYS and ARB's preferred scenario is indicated by the area described by the arrows between the solid green line and the dotted Proposed Scoping Plan Scenario line; the annual gap is the difference between these two lines in 2030.<sup>17</sup> ARB assumes cap-and-trade will close these gaps.

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<sup>16</sup> Draft 2030 Scoping Plan, *supra* note 5, Table III-3 at 65-66 (citing California Air Resources Board, Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Staff Report: Initial Statement of Reasons, Appendix C: Revised Standardized Regulatory Impact Assessment (SRIA) (Aug. 2, 2017) at 11 ("PATHWAYS scenarios do not include the Cap-and-Trade Program, therefore, these scenarios provide information on reductions that may be achieved through other measures and the remaining emissions reductions that may be required to be achieved through the post-2020 Program."), *available at* <https://www.arb.ca.gov/regact/2016/capandtrade16/appc.pdf>).

<sup>17</sup> Draft 2030 Scoping Plan, *supra* note 5, Figure II-3 at 42. We note that this figure is from the January 2017 draft Scoping Plan and that the numbers released in the October 2017 workshop indicate that the complementary policies will play a reduced role relative to this figure.

**Figure II-3. Proposed Scoping Plan Scenario GHG Reductions**



In the final 2030 Scoping Plan, we anticipate that ARB will identify emission reductions in 2030 from various measures, including the cap-and-trade program. We also anticipate that the final 2030 Scoping Plan will quantify emission reductions from non-market-based measures using PATHWAYS model projections. However, it is impossible to say what the actual annual emission reductions from the cap-and-trade program will be until the market design is finalized, because the choices ARB will make in implementing AB 398 will control how the cumulative reductions delivered by the program are distributed on an annual basis.

To resolve this issue, we recommend that ARB directly and quantitatively evaluate how its cap-and-trade regulations under AB 398 will reduce emissions in 2030, above and beyond reductions from non-market-based measures identified in the final 2030 Scoping Plan and quantified using PATHWAYS. If ARB commits to providing such an analysis in the AB 398 rulemaking process, it would then be defensible to argue that the 2030 Scoping Plan need not identify the specific cap-and-trade market design that complies with SB 32's annual emissions target, because that design will be properly analyzed in the AB 398 implementation process using consistent analytical methods.

Fundamentally, we believe a commitment by ARB to integrate the environmental analyses in the 2030 Scoping Plan and AB 398 implementation processes would provide a rigorous and well-reasoned basis for argument that the final 2030 Scoping Plan will enable the state to achieve the SB 32 annual target.

Thank you for your consideration. Again, we appreciate the opportunity to comment and look forward to working with ARB staff and other stakeholders going forward.

Sincerely,



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December 11<sup>th</sup> 2017

TO: The California Air Resources Board

**RE: California Environmental Justice Alliance Comments On The 2017 Final Climate Change Scoping Plan**

On behalf of the California Environmental Justice Alliance (CEJA), we respectfully submit these comments regarding the California Air Resources Board (CARB)'s 2017 Final Climate Change Scoping Plan (Scoping Plan). CEJA is a statewide coalition of ten community-based organizations representing approximately 20,000 residents across the state.

Environmental justice (EJ) communities are on the frontlines of climate change.<sup>1</sup> Low-income communities and communities of color are disproportionately located near the state's largest sources of GHG emissions, including both industrial facilities and major transportation corridors,<sup>2</sup> as well as oil and gas infrastructure.<sup>3</sup> The communities where CEJA's members and partners work are already facing the impacts of climate change, from suffering most acutely during the impacts from extreme weather events to bearing the burden of drought.

CARB's Scoping Plan presents a unique opportunity to outline a bold vision for California to achieve our ambitious 2030 greenhouse gas (GHG) reductions targets. The Scoping Plan should provide a comprehensive and overarching strategic plan for California to effectively reduce our state's greenhouse gas emissions to meet mandatory targets, while at the same time addressing the needs of our most impacted and vulnerable communities. There is a well established statutory requirement for CARB to protect against any disproportionate impacts that may occur as a result of climate change regulations. AB 398 requires CARB to "[e]nsure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities."<sup>4</sup> SB 32 further requires CARB to "achieve the state's most stringent greenhouse gas reductions in a manner that benefits the state's most disadvantaged communities."<sup>5</sup>

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<sup>1</sup> See SB 32, Section 1(c) (2016) (describing how disadvantaged communities "are affected first, and, most frequently, by the adverse impacts of climate change").

<sup>2</sup> See L. Cushing, et. al, *A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program*, pg. 2, 4, 5 (2016), <https://dornsife.usc.edu/PERE/enviro-equity-CA-cap-trade>; OEHHA, *Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities*, pgs. 15-17 (Feb. 2017).

<sup>3</sup> See OEHHA, *Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities*, pgs. 15-17 (Feb. 2017).

<sup>4</sup> Cal. Health & Safety Code § 38562(b)(2). This provision is not limited to economic impacts, which CARB analyzes in Appendix E. As written, it includes all potential impacts including environmental impacts.

<sup>5</sup> Senate Bill 32, Section 1(d) (Pavley, 2016).

While CARB has increased programmatic attention and staffing dedicated towards environmental justice issues, it is disappointing that the current version of the Scoping Plan does not outline a clear course of action to meet California's 2030 climate targets. It further creates no clear plan for how the agency will comply with AB 398's, SB 32's, and AB 197's mandates to protect against disproportionate impacts in environmental justice communities.

We offer the following detailed analysis on several key EJ issues in the Scoping Plan, which is by no means exhaustive. In summary, our concerns are:

- I. The Scoping Plan does not include a clear plan to ensure climate regulations do not negatively impact EJ communities and over-relies on AB 617 to address air quality concerns.
  - II. The Scoping Plan does not comply with AB 197 because it fails to prioritize, accurately account for and analyze potential direct emission reductions.<sup>6</sup>
  - III. The Scoping Plan's analysis of the Cap and Trade program is insufficient and does not demonstrate how the program will achieve the outlined emission reductions.
  - IV. The Scoping Plan's transportation analysis lacks clear goals or targets, despite being the sector with the largest source of greenhouse gas emissions.
- I. The Scoping Plan does not include a clear plan to ensure climate regulations do not negatively impact EJ communities and over-relies on AB 617 to address air quality concerns.**

As the Scoping Plan clearly states, "[a]n important concern for environmental justice communities is for any Scoping Plan to provide air quality co-benefits."<sup>7</sup> CEJA and the environmental justice community have long advocated for policies that achieve the twin goals of improving air quality and reducing GHG's in our most vulnerable communities. The Environmental Justice Advisory Committee's (EJAC) priority Scoping Plan recommendations recently reiterated the EJ community's commitment to achieving these outcomes.<sup>8</sup>

The Scoping Plan has a clear focus on addressing criteria and toxic air contaminants through the newly-created AB 617 implementation process.<sup>9</sup> The Scoping Plan states:

*We agree with the EJAC that more can and should be done to reduce emissions of criteria pollutants and toxic air contaminants. These pollutants pose air quality and related health issues to the communities adjacent to the sources of industrial emissions. Further, many of these communities are already disadvantaged and burdened by a variety of other environmental stresses. As described in Chapter 3, however, there is not always a direct correlation between emissions of GHGs, criteria pollutants, and toxic air*

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<sup>6</sup> As described further below, although CARB analyzed many different programs before the passage of AB 398, its analysis after AB 398 fails to even analyze many of the same measures it previously analyzed. Scoping Plan, Appendix G.

<sup>7</sup> Scoping Plan, pg. 33.

<sup>8</sup> Scoping Plan, Appendix A, pg. 5, [https://www.arb.ca.gov/cc/scopingplan/2030sp\\_appa\\_ejac\\_final.pdf](https://www.arb.ca.gov/cc/scopingplan/2030sp_appa_ejac_final.pdf).

<sup>9</sup> Scoping Plan, pg. ES6.

*contaminants. Also, relationships between these pollutants are complex within and across industrial sectors. The solution, therefore, is not to do away with or change the regulation of GHGs through the Cap-and-Trade Program to address these legitimate concerns; instead, consistent with the direction in AB 197 and AB 617, State and local agencies must evaluate and implement additional measures that directly regulate and reduce emissions of criteria and toxic air pollutants through other programs.*<sup>10</sup>

AB 617 has indeed created new potential to monitor and achieve emissions reductions in communities overburdened with air pollution, and we look forward to working with CARB to achieve these goals. However, CARB is still required by law to ensure that implementation of climate regulations – including cap and trade – are not disproportionately impacting disadvantaged communities. This requires an ongoing commitment to analyze the relationship between GHGs and co-pollutants, as well as action to address any negative impacts that may be documented, outside of the AB 617 process. Below we outline several specific concerns related to the Scoping Plans’ treatment of air quality and EJ issues.

- a. The correlation between greenhouse gas emissions and co-pollutants, and whether climate regulations and cap and trade in particular impact these emissions, needs continued and deeper analysis.*

In order to comply with the provisions of AB 398, ongoing analysis and evaluation of the correlation between GHGs and co-pollutants is needed. AB 398 requires CARB to “[e]nsure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.”<sup>11</sup> CARB does not provide any analysis or set of proposed activities to ensure that climate policies will not interfere with air quality requirements.<sup>12</sup> Similarly, the Scoping Plan provides no concrete analysis or projected emission trends at facilities or sectors that have related toxic air contaminant emissions, thus providing no basis for how “activities” required in the Scoping Plan will impact toxic air contaminant emissions.<sup>13</sup>

The Scoping Plan uses an extremely limited reading of the major existing studies examining the relationship between greenhouse gas emissions and co-pollutants. In discussing the analysis completed by the Office of Environmental Health Hazard Assessment (OEHHA), the Scoping Plan states: “there are complexities in trying to correlate GHGs with criteria and toxics emissions across industry and within sectors, although preliminary data review shows there may be some poor to moderate correlations in specific instances. Lastly, the report noted, ‘...the emissions data available at this time do not allow for a conclusive analysis.’ ”<sup>14</sup> This limited reading overlooks other findings, which show a correlation between GHGs and criteria

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<sup>10</sup> Scoping Plan, pg. 71.

<sup>11</sup> Cal. Health & Safety Code § 38562(b)(4).

<sup>12</sup> CARB only cites generally to its State Implementation Plan without any analysis or discussion. Scoping Plan, pg. 35.

<sup>13</sup> CARB’s analysis of toxic air contaminants is limited to diesel PM. See, e.g., Scoping Plan, Appendix G.

<sup>14</sup> Scoping Plan, pg. 37.

pollutants. Specifically, OEHHA's report found that:

*There were moderate correlations between GHG emissions and the emissions of criteria air pollutants. The strongest correlation was with fine particulate matter emissions (PM2.5). There was also moderate correlation between GHG and toxic chemical emissions across the entire set of Cap-and-Trade facilities with covered emissions. Some individual industrial sectors showed greater correlations between emissions of GHGs and toxic co-pollutants. Refineries overall showed a strong correlation, while cement plants showed a moderate correlation. Oil and gas production facilities also showed a moderate correlation, depending on the statistical measure used. Facilities in certain sectors with broad ranges in emissions levels (e.g. electricity generation facilities) showed increased correlation with a specific statistical analysis (logarithmic transformation).<sup>15</sup>*

While it is certainly accurate that the exact relationship between GHGs and co-pollutants is complex and varies, it is clear there is a correlation that merits concern. Another study also affirms this basic relationship, but it is mischaracterized in the Scoping Plan.<sup>16</sup> In September of 2016, Lara J. Cushing, Madeline Wander, Rachel Morello-Frosch, Manuel Pastor, Allen Zhu, and James Sadd of UC Berkeley, University of Southern California and Occidental College published "A Preliminary Environmental Equity Assessment of California's Cap and Trade Program,"<sup>17</sup> which is erroneously referred to as "a California Environmental Justice Alliance report,"<sup>18</sup> instead of attributing the correct academics. Unfortunately, the Scoping Plan fails to include the actual results of the report, which are as follows:

*Preliminary analysis of the equity implications of California's cap-and-trade program indicates that regulated GHG-emitting facilities tend to be located in neighborhoods with higher proportions of residents of color and residents living in poverty. There is a correlation between emissions of GHGs and PM10, and facilities that emit the highest levels of both GHGs and PM10 are similarly more likely to be located in communities with higher proportions of residents of color and residents living in poverty. This suggests that the public health and environmental equity co-benefits of California's cap-and-trade program could be enhanced if there were more emissions reductions among the larger emitting facilities that are located in disadvantaged communities. Currently, there is little in the design of cap-and-trade to ensure this set of localized results. Indeed, while the cap-and-trade program has been in effect for a relatively short time period, preliminary evidence suggests that in-state GHG emissions from regulated companies*

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<sup>15</sup> OEHHA, *Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities*, <https://oehha.ca.gov/media/downloads/environmental-justice/report/oehhaab32report020217.pdf> page ix

<sup>16</sup> See Scoping Plan, pg. 37.

<sup>17</sup> L. Cushing, et. al, *A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program*, (2016), <http://dornsife.usc.edu/PERE/enviro-equity-CA-cap-trade>

<sup>18</sup> L. Cushing, et. al, *A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program*, (2016), <http://dornsife.usc.edu/PERE/enviro-equity-CA-cap-trade>

*have increased on average for several industry sectors and that many emissions reductions associated with the program were linked to offset projects located outside of California. Large GHG emitters that might be of most public health concern were the most likely to use offset projects to meet their obligations under the cap-and-trade program.*<sup>19</sup>

The Scoping Plan's effort to quantify co-pollutant reductions associated with climate regulations simply includes rough approximations of co-pollutant reductions associated with potential measures, and the majority of these approximations have not been updated since the passage of AB 398.<sup>20</sup> This rough approximation limits the ability of CARB to fully analyze localized impacts of its regulations and develop any needed mitigations.

Given the documentation provided in existing independent studies, as well as the requirements of AB 398, AB 197, and SB 32, CARB should clearly outline plans to analyze these issues and create action plans to address any negative air quality impacts, should they arise.

*b. Overreliance on AB 617 to address air quality concerns.*

Despite the separate requirements of AB 197, SB 32, and AB 398 related to air quality, the Scoping Plan limits addressing air quality issues to the AB 617 process. The Scoping Plan states that:

*While the reports do not provide evidence that implementation of the Cap-and-Trade Program is contributing to increased local air pollution, they do underscore the need to use all of the tools (e.g., enhanced enforcement, new regulations, tighter permit limits) available to the State and local agencies to achieve further emissions reductions of toxic and criteria pollutants that are impacting community health. Importantly, AB 617 provides a new framework and tools for CARB, in collaboration with local air districts, to deploy focused monitoring and ensure criteria and toxics emissions reductions at the State's largest GHG emitters.*<sup>21</sup>

While we support the effort to use other tools to achieve co-pollutant benefits and look forward to working through the AB 617 process to accomplish these goals, there remain existing climate and air quality concerns that are required by law to be considered, and that AB 617 will not address.

Initially, AB 617 will not analyze or assess whether greenhouse gas limits implemented by CARB, such as cap and trade, are disproportionately impacting low-income communities. It will not look at the relationship between climate regulations and how they impact air quality. While

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<sup>19</sup> L. Cushing, et. al, *A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program*, pg. 10 (2016),

[http://dornsife.usc.edu/assets/sites/242/docs/Climate\\_Equity\\_Brief\\_CA\\_Cap\\_and\\_Trade\\_Sept2016\\_FINAL2.pdf](http://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL2.pdf).

<sup>20</sup> See Scoping Plan, Appendix G, Section 2. See *infra* Section II for more analysis on the limitations of this analysis.

<sup>21</sup> Scoping Plan, pg 37



these relationships may be complex, this is all the more reason why the issue deserves ongoing analysis and attention from CARB.

In addition, the AB 617 process is extremely new and under development. Many of its key programs have not been defined. Thus, it is unreliable as the sole and primary vehicle to address environmental justice issues, even though it may have potential to address more EJ issues in the future.

Furthermore, as currently proposed, AB 617's impacts will be limited to a select, and as of yet undetermined, number of communities. Relegating management of air quality issues to AB 617 would thus leave many communities, who could benefit from statewide action, without recourse.

CARB has focused significantly in the Scoping Plan on increased coordination and deepened relationships with local air districts, which is indeed critical. But AB 617 itself does not clearly outline enforcement protocols in the event that the AB 617 process or local air districts fail to deliver emission reductions from large sources of both GHGs and co-pollutants. It is also unclear whether CARB will include enforcement measures as part of AB 617 implementation.

CARB should continue analyzing air quality and EJ issues specifically as they relate to implementation of climate regulations – in addition to and outside of the AB 617 process - and create a clear set of proposed actions to mitigate against any potential disproportionate impacts, as is required under AB 197, SB 32, and AB 398.

## **II. The Scoping Plan does not comply with AB 197 because it fails to prioritize, accurately account for and analyze potential direct emission reductions.**

As the August 24, 2016 Assembly Floor Analysis summarizes, AB 197 “requires ARB to prioritize regulations that result in direct emission reductions at large stationary, mobile and other sources.”<sup>22</sup> Its proper implementation is critical to environmental justice communities. The Scoping Plan's updated AB 197 analysis lists five overarching programs: the Renewable Portfolio Standard, Mobile Sources CTF and Freight, 18 percent Carbon Intensity Reduction Target for LCFS - Liquid Biofuels, Short-Lived Climate Pollutant Strategy, 2x additional achievable energy efficiency in the 2015 Integrated Energy Policy Report (IEPR), and cap and trade, and then provides associated estimated emission reductions with each for NOx, VOCs, PM2.5, and diesel PM.<sup>23</sup>

Unfortunately, the Scoping Plan does not adequately provide the required analysis of greenhouse gas emissions measures and their potential emission reductions, nor does it

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<sup>22</sup> AB 197, August 24, 2016 Assembly Floor Analysis, *available at* [https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201520160AB197](https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201520160AB197).

<sup>23</sup> Scoping Plan, pg. 37. The Scoping Plan's Updated Analysis does not include all the programs evaluated before passage of AB 398. Scoping Plan, Appendix G.

prioritize any emission reductions. It does not include any direct reduction strategies at stationary or mobile sources, outside of the broad programs outlined.

- a. CARB fails to actually prioritize any direct emission reductions, per the requirements of AB 197.*

The Scoping Plan does not provide the prioritization of measures. It does not identify potential measures by sector and industry that could help ensure that the most impacted communities are protected. For example, a large scale emissions cut similar to what CARB had earlier proposed for the refinery sector<sup>24</sup> should be explored for other sectors that have a disproportionate impact on disadvantaged communities, such as the transportation sector, or other sectors where GHG emission trends show increases.

- b. The AB 197 analysis does not include all potential direct emission reduction measures within each program, or update previous analyses for measures that were identified pre-AB 398.*

The five programs listed in the Scoping Plan's updated AB 197 analysis are broad programs, rather than specific measures as required under the AB 197 statute.<sup>25</sup> Several of the five programs listed in the Scoping Plan are actually comprised of multiple complimentary policies, but none of these are listed out or evaluated. Previous iterations of the Scoping Plan included a far larger range of measures, such as evaluating the potential for reductions from a variety of energy sector programs, including demand response and combined heat and power.<sup>26</sup> The Scoping Plan does not even provide updates or analysis for all the emission reduction measures that were analyzed *before* the passage of AB 398.<sup>27</sup> CARB's analysis also fails to include specific emission reduction measures that the California Legislature has enacted, such as legislation related to electricity resources and their potential to reduce air emissions.<sup>28</sup>

- c. CARB fails to analyze measures specifically listed in AB 398 as authorized ways to reduce emissions from the oil and refinery sector.*

Section 38592.5 provides that nothing in AB 398 limits CARB's ability to "adopt, maintain or revise" emission reduction measures including:

(A) Measures governing methane and fugitive emissions at refineries and oil and gas facilities.

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<sup>24</sup> CARB's earlier version of the Scoping Memo proposed a 20% direct reduction of refinery emissions. See Scoping Plan, pg. 43.

<sup>25</sup> Cal. Health & Safety Code § 38562.5

<sup>26</sup> See, e.g., CARB Scoping Plan Update, pgs. 43-45 (2013), available at [https://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf).

<sup>27</sup> Scoping Plan, Appendix G, Section 2.

<sup>28</sup> See, e.g., SB 350 (De Leon, 2015) (related to the energy system including distributed energy and energy planning); AB 797 (Irwin, 2017) (related to solar thermal systems); AB 2868 (Gatto, 2016) (related to energy storage).

- (B) Advanced clean cars program adopted by the state board.
- (C) Low-Carbon Fuel Standard regulations (Subarticle 7 (commencing with Section 95480) of Article 4 of Subchapter 10 of Chapter 1 of Division 3 of Title 17 of the California Code of Regulations).
- (D) Regulations addressing short-lived climate pollutants.

After the passage of AB 398, the Scoping Plan fails to evaluate these measures with the specificity required under AB 197. The Scoping Plan includes no analysis on the direct emission reduction potential for the advanced clean car program and measures related to methane and fugitive emissions at refineries and oil and gas facilities, which could potentially achieve air quality and GHG improvements in disadvantaged communities. Although the Scoping Plan discusses the low-carbon fuel standard and regulations for short-lived climate pollutants in relation to AB 197, its analysis fails to evaluate how different measures under these broad categories could impact emissions.

*d. The Scoping Plan's AB 197 analysis of the emissions reductions associated with each of the five programs is opaque and potentially inaccurate.*

The Scoping Plan does not provide a robust analysis for the expected range of air pollution from emissions reduction measures and how alternative compliance and incentive mechanisms are likely to impact this analysis. Recent data calls the underlying assumptions and values for the estimates in *Table 5: Ranges of Estimated Air Pollution Reductions By Policy Or Measure In 2030* into question. For example, although Appendix G states that the assumptions related to the Renewable Portfolio Standard (RPS) were updated after the passage of AB 398,<sup>29</sup> a recent analysis of the RPS by the California Public Utilities Commission (CPUC) shows that harmful air pollution is likely to increase in the energy sector even if the RPS is met. According to the CPUC's analysis, the CPUC's proposed 2030 scenario shows that the electricity sector is projected to increase harmful air pollution of fine particulate matter (PM2.5) and nitrous oxides (NOx) emissions in the State.<sup>30</sup> This increase of air pollution is predicted to occur despite the fact that the scenario projects GHGs from the electrical sector to decline to 42 MMT and meet the RPS requirement.<sup>31</sup> Consequently, the CPUC's analysis illustrates that the RPS requirement alone could increase, rather than decrease, air pollution from power plants in communities.

Table 5 not only includes potential data inaccuracies, it assumes that greenhouse gas emissions and air pollution are related on a 1:1 ratio.<sup>32</sup> This assumption is likely to be wrong and underestimate air pollution. Facilities often can emit more pollution when starting, stopping, and operating at partial load than during steady-state operation. For example, power plant facilities that are spinning and operating at partial load generally emit more pollutants per

<sup>29</sup> See Scoping Plan, Appendix G, pg. 13.

<sup>30</sup> See Cal. Public Utility Commission, R.16-02-007, September 19, 2017 ALJ Ruling, Attachment A, pp. 86-87 (summarizing the Staff's results), available at <http://cpuc.ca.gov/irp/proposedrsp/>.

<sup>31</sup> See Cal. Public Utility Commission, R.16-02-007, September 19, 2017 ALJ Ruling (describing the proposed reference case).

<sup>32</sup> Scoping Plan, pg. 37.

megawatt hour than units operating at full capacity.<sup>33</sup> In addition to increased emissions from startups and shutdowns, natural gas facilities also emit more when operating at partial load; the California Independent System Operator's SB 350 studies estimated that NOx emission increases "may be around 30 percent" as compared to steady state operation.<sup>34</sup> Increased emissions from startup, shutdown, and partial load is not considered in CARB's assumption of a 1:1 ratio between greenhouse gas and air pollution.

These are just a few examples that call into question CARB's assumptions regarding the 1:1 ratio of GHGs and co-pollutants. As a result, CARB likely underestimates the air pollution that can be attributed to the measures described in the Scoping Plan. In doing so, CARB fails to provide adequate analysis or a set of action items to ensure that its proposed activities are not disproportionately impacting disadvantaged communities.

### **III. The Scoping Plan's analysis of the Cap and Trade program is insufficient and does not demonstrate how the program will achieve the outlined emission reductions.**

While CEJA has long expressed concerns with the cap and trade program overall, the market design questions that CARB must now grapple with are more important than ever. Previous versions of the Scoping Plan projected the cap and trade program will only need to drive 28 percent of the total emissions reductions to achieve our statewide 2030 goal. In the current Scoping Plan, CARB projects that cap and trade will have to achieve 43 percent of the total reductions needed to achieve the 2030 target.

The increased "work" the cap and trade market must do is combined with new prescriptions on the program enacted within AB 398, such as an increase in Industrial Assistance Factors and limitations on CARB's regulatory authority to mandate reductions in the oil and gas sectors. All of this means increased pressure on the actual cap and trade market itself.

The Scoping Plan does not provide a clear analysis to show how the cap and trade market will achieve the additional reductions, how new prescriptions may or may not necessitate changes in market design, nor what other measures might be needed if the market cannot achieve the emissions outlined. Indeed, CARB finds that even under its rough analysis, the reductions from cap-and-trade could range from 76 to 144 MMTCO<sub>2</sub>.<sup>35</sup> This significant differential is not evaluated or analyzed even though this differential will impact whether California can meet its SB 32 requirements. Rather than conduct a detailed analysis, CARB simply notes that in late 2017, CARB began a process to evaluate program design features for 2020, and that changes will be part of a future rulemaking that would take effect by January 1, 2021.<sup>36</sup>

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<sup>33</sup> See CAISO SB 350 Studies, Volume 9, pgs. 98-101, available at <https://www.caiso.com/Documents/SB350Study-Volume9EnvironmentalStudy.pdf>.

<sup>34</sup> CAISO SB 350 Studies, Volume 9, pg. 99, available at <https://www.caiso.com/Documents/SB350Study-Volume9EnvironmentalStudy.pdf> (citing NREL).

<sup>35</sup> Scoping Plan, Appendix G, pg. 27.

<sup>36</sup> Scoping Plan, pg. 27.

The market design questions are a fundamental piece of whether California actually achieves our 2030 emission targets. Our main concern is that the current cap and trade structure could allow actual emissions to exceed the SB 32 targets in 2030, even while the cap and trade program is meeting its goals nominally. This is primarily because of the prevalence of allowances banked or held in reserve - of which there is currently a massive oversupply – as well as the use of offsets, and these issues are not adequately analyzed in the Scoping Plan.

Analysis by the Senate Environmental Quality Committee has raised serious questions about whether reductions will occur under AB 398's cap and trade paradigm. The Senate Environmental Quality Analysis committee stated:

*Allowing for an overreliance on allowances and offsets results in delays of true emission reductions. If ARB focuses on cumulative reductions in the Scoping Plan and cap-and-trade design processes, oversupply and banking will lead to delays in control measures being adopted, ultimately resulting in statewide emissions being substantially above the target in 2030.*<sup>37</sup>

Whether California actually achieves our GHG emission reductions is a critical issue for EJ communities. As has been well documented, California's largest sources of GHG emitters are in disadvantaged communities. If these sources are not reducing their actual emissions because of cap and trade design features such as an oversupply of allowances, allowance banking, and offsets, it directly impacts disadvantaged communities. In limiting our progress to mitigate climate change, it also perpetuates the disproportionate exposure to climate change impacts that many vulnerable communities are susceptible too. Unfortunately, neither in the Scoping Plan nor materials provided at the first cap and trade workshop, has CARB outlined any plans to model actual emission trajectories by sector, using various scenarios to model out the best path to achieving the SB 32 targets.

This issue is of particular concern in light of data analyzing emission trends by sector under cap and trade. The 2016 Cushing et. al report highlighted preliminary findings that showed emission increases in certain sectors under the cap and trade program.<sup>38</sup> The recently released 2016 cap and trade compliance data also showed similar patterns: certain sectors, such as refineries, have actually increased emissions.<sup>39</sup> In addition, the majority of California's emission reductions thus far have come from the electricity sector, and these reductions will only become harder to achieve in the future, meaning that cap and trade will need to drive more reductions in other sectors. Furthermore, recent modeling suggests that the electricity sector's pollution is predicted to increase as it reduces GHGs instead of decrease, as outlined in section II(d) of this letter.

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<sup>37</sup> July 12, 2017 AB 398, Analysis from the Senate Environmental Quality Committee, available at [https://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill\\_id=201720180AB398](https://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201720180AB398).

<sup>38</sup> L. Cushing, et. al, *A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program* (2016).

<sup>39</sup> [https://calmatters.org/articles/californias-emissions-dip-climate-policies-get-less-credit-weather/?utm\\_source=CALmatters+Newsletter&utm\\_campaign=fdc7a06db-RSS\\_WEEKLY\\_SUB\\_EMAIL&utm\\_medium=email&utm\\_term=0\\_faa7be558d-fdc7a06db-150198313](https://calmatters.org/articles/californias-emissions-dip-climate-policies-get-less-credit-weather/?utm_source=CALmatters+Newsletter&utm_campaign=fdc7a06db-RSS_WEEKLY_SUB_EMAIL&utm_medium=email&utm_term=0_faa7be558d-fdc7a06db-150198313)

In short, whether California actually achieves our GHG reduction goals, and where those reductions take place, is a critical environmental and climate justice issue that has not been fully addressed in the Scoping Plan.

One area of particular concern is the issue of overallocation. AB 398 requires CARB to evaluate overallocation of allowances, providing that CARB must: “[e]valuate and address concerns related to overallocation in the state board’s determination of the number of available allowances for years 2021 to 2030, inclusive, as appropriate.”<sup>40</sup> The Legislative Analyst’s Office has conducted an analysis on the potential impacts of the oversupply of allowances in the current market. In June 2017, in a letter to Assembly Member C Garcia, the LAO found that “the cumulative oversupply of allowances in California’s cap and trade program through 2020 could range from 100 million to 300 million allowances, with it most likely being roughly in the middle of that range.”<sup>41</sup> This could end up being a significant portion of our state’s post-2020 reductions.

The Scoping Plan does not make any mention of this significant market issue, despite its clear relevance to California’s ability to meet the 2030 GHG reduction goals. Failure to act on overallocation would have serious impacts on the ability of California to meet our 2030 goals in terms of actual emission reductions.

#### **IV. The Scoping Plan’s transportation analysis lacks any clear goals or targets, despite being the largest source of greenhouse gas emissions.**

Transportation is the largest source of GHG emissions in California, equaling nearly 40 percent of all GHG emissions statewide. Air pollution from tailpipe emissions contributes to disease and early death, with disproportionate impacts on low income communities and communities of color. Reducing GHG emissions from the transportation sector is critical to achieving California’s overall climate goals.

For both environmental justice communities and our overall climate change goals, it is critical that CARB support and accelerate progress on transitioning to a zero carbon transportation system, while ensuring vehicle miles travelled are actually reduced.

Unfortunately, the transportation section of the Scoping Plan lacks clear and specific targets for both freight and non-freight vehicle emissions. CARB has already identified the need for a 25 percent reduction in GHG emissions by 2035 through the regional SB 375 targets. The Scoping Plan must create commensurate, aggressive transportation sector related goals for emission reductions.

## **Conclusion**

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<sup>40</sup> Cal. Health & Safety Code § 38562(c)(2)(D).

<sup>41</sup> See July 12, 2017 AB 398 Analysis, Senate Environmental Quality Committee (citing letter).

CARB's Scoping Plan clearly outlines the many already existing impacts of climate change, the need for California to "continue to take steps to reduce GHG emissions in order to avoid the worst of the projected impacts of climate change,"<sup>42</sup> as well as reach the 2050 statewide GHG target (80 percent below 1990 levels).<sup>43</sup> The Scoping Plan consistently recognizes the need to decarbonize California to achieve these goals. Unfortunately, nowhere in the Scoping Plan does CARB outline efforts to actively explore the underlying need to make a managed and equitable transition off fossil fuels. Without engaging in a clear process to realize the climate benefits of phasing out of fossil fuel production in a thoughtful and carefully managed way, we will continue to fail our most vulnerable communities and limit our global climate leadership.

Finally, CEJA would like to lift up and echo the important role that the Environmental Justice Advisory Committee has played over the past year. We strongly support the priority recommendations that EJAC developed in regards to the final Scoping Plan, many of which are related to the issues outlined in this letter.

It is our hope that CARB will take action on the range of issues we have outlined, either through the Scoping Plan process or through additional activities. We recognize and appreciate the ongoing attention to environmental justice issues at CARB, and are encouraged to hear that CARB will be initiating a public process to develop "a new strategic plan for further institutionalizing environmental justice and social equity."<sup>44</sup> We look forward to working with the CARB staff in achieving our shared goals of environmental justice, improved air quality, and meeting our climate change goals.

Sincerely,



Amy Vanderwarker  
CEJA Senior Policy Strategist

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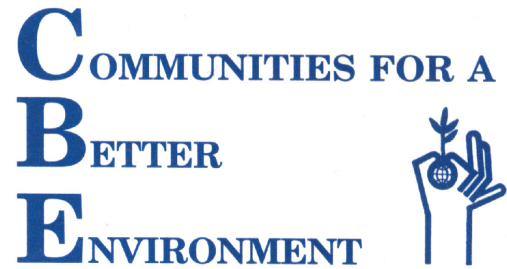
<sup>42</sup> Scoping Plan, pg. 9

<sup>43</sup> Scoping Plan pg. 18

<sup>44</sup> Scoping Plan, pg. 96

12 December 2017

Richard Corey, Executive Officer  
California Environmental Protection Agency  
Air Resources Board  
1001 I Street  
Sacramento, CA 95814



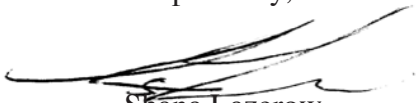
**Re: Comment on Final Environmental Analysis for the Strategy for Achieving  
California's 2030 Greenhouse Gas Target (released 30 November 2017)**

Dear Executive Officer Corey,

By this letter Communities for a Better Environment (CBE) transmits an expert report that provides specific evidence for the following findings as comment on the proposed Scoping Plan Environmental Analysis released by your agency on 30 November 2017:

- De-prioritization and delay of sustained reduction in emissions from the oil sector during the critical period through 2030, when cumulative emissions would approach the climate protection limit defined by state emission targets while the time left to meet that limit shortens, is a clearly foreseeable result of the proposed action.
- This delay during this critical period would greatly increase the annual emission cuts needed to meet the climate protection limit, the difficulty and disruptive impacts of doing so, especially in low-income communities of color near oil facilities, and thus the probability of failure to meet the state's mid-century climate protection goal.
- There is a reasonable potential that implementing the proposed action would result in significant socioeconomic impacts linked to the cumulative emissions it would allow, significant climate impacts linked to those emissions, or both.
- Incremental and sustained annual emission cuts from the extraction, refining, and use of petroleum refined in California that begin promptly could lessen or avoid all of these significant potential impacts of the proposed action. This least-impact path to climate stabilization would be less difficult to implement than the greater annual cuts needed to meet the cumulative limit after further delay but would be foreclosed by further delay.
- The Environmental Analysis did not identify and disclose these significant potential impacts of implementing the proposed action, or this less difficult least-impact path to climate stabilization that implementing the proposed action could foreclose. The Environmental Analysis is deficient in these crucial respects.

Respectfully,



Shana Lazerow  
Legal Director

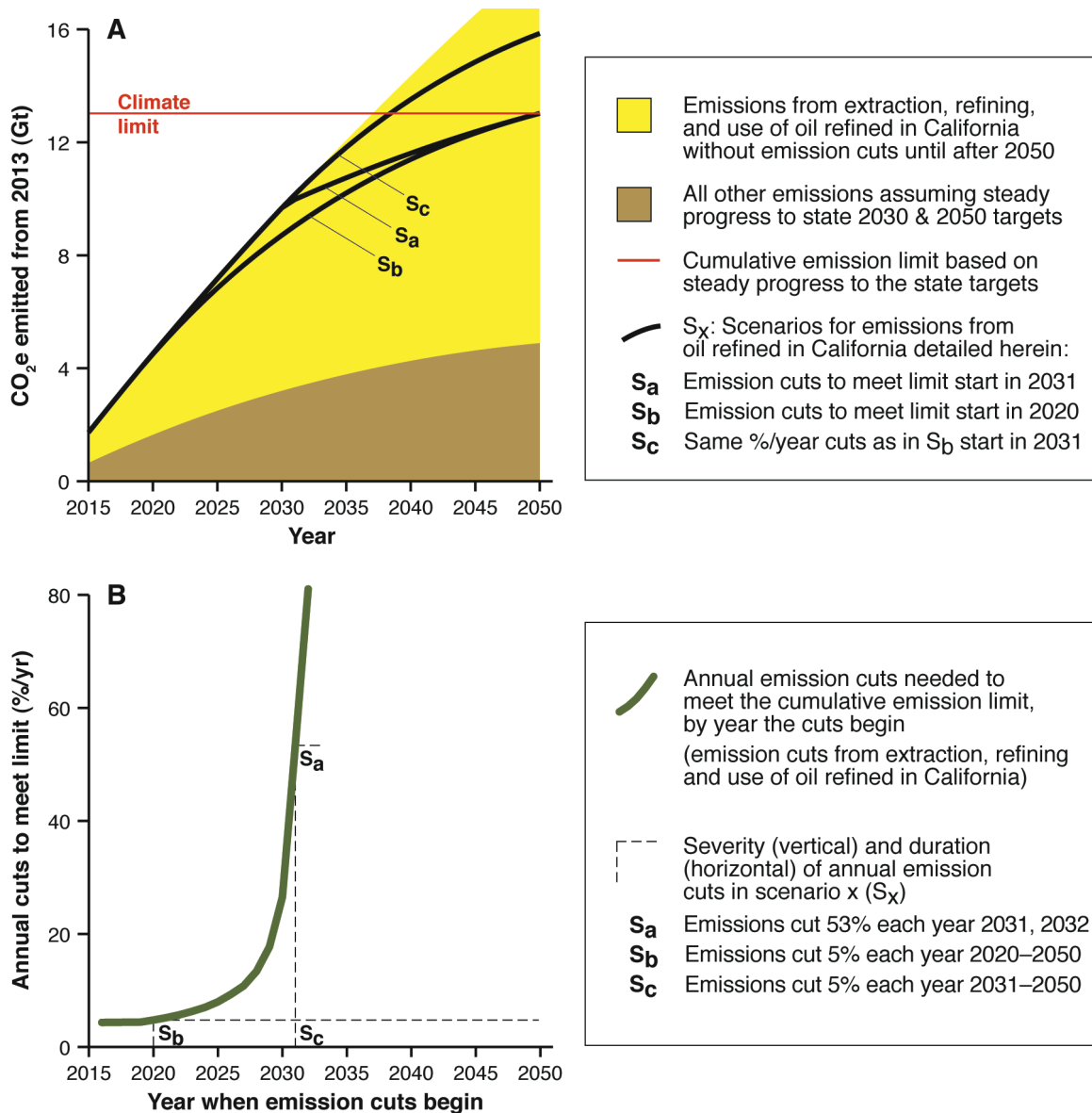
Enclosures (6)

CBE Exhibit A, Excerpted from Expert Report of G. Karras  
Expert Report of G. Karras including four attachments thereto

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**EXHIBIT A. Statewide Greenhouse Gas Emissions from 2015–2050 in Various Emission Scenarios for the Petroleum Fuel Chain (Extraction, Refining, and Use of Oil Refined in California), Assuming that All Other Emissions Meet the State’s Climate Targets.**

**Chart A:** Comparison of cumulative emissions with the cumulative emission limit for climate protection that is defined by incremental annual progress to the state’s 2030 and 2050 targets.

**Chart B:** Effect of delay on annual emission cuts needed to meet the cumulative emission limit.

**As cumulative emissions approach the climate protection limit (Chart A) and the time left to meet the limit shortens (A, B), the annual percentage cuts in emissions needed to meet the limit increase nearly exponentially (Chart B).**

**Gt:** Gigaton, 1 billion metric tons. **CO<sub>2</sub>e:** Carbon dioxide equivalent, 100-year GWP. **Scenarios** are outlined in the chart legends. All scenarios also assume that annual emissions from oil will not increase before emission cuts begin and will not be cut more than 80% (to account for the potential need for petroleum jet fuel through 2050), and that all non-petroleum emissions will be cut steadily to the 2030 and 2050 targets. Data are from the CARB, CEC, and US EIA.<sup>11-19</sup> See the text and attachments KR2–KR4 for data and details of analysis methods and results.

**Expert Report of Greg Karras**  
Communities for a Better Environment (CBE)  
12 December 2017

Regarding the  
**Final Environmental Analysis for the Strategy  
for Achieving California's 2030 Greenhouse  
Gas Target;** California Air Resources Board:  
Sacramento, CA. November 30, 2017.  
Appendix F to the Final Proposed  
2017 Scoping Plan Update.

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I, Greg Karras, declare and say:

1. I reside in unincorporated Marin County and am employed as a Senior Scientist for Communities for a Better Environment (CBE). My duties for CBE include technical research, analysis, and review of information regarding industrial health and safety investigation, pollution prevention engineering, pollutant releases into the environment, and potential effects of environmental pollutant accumulation and exposure.

## **Qualifications**

2. My qualifications for this opinion include extensive experience, knowledge, and expertise gained from more than 30 years of industrial and environmental health and safety investigation in the energy manufacturing sector, including petroleum refining, and in particular, refineries in the State of California.

3. Among other assignments, I served as an expert for CBE and other non-profit groups in efforts to prevent pollution from oil refineries, to assess environmental health and safety impacts at refineries, to investigate alternatives to fossil fuel energy, and to improve environmental monitoring of dioxins and mercury. I served as an expert for CBE and the City and County of San Francisco and local groups in efforts to replace electric power plant technology with reliable, least-impact alternatives.
4. I have served as an expert for CBE and other groups participating in environmental impact reviews of petroleum projects, including, among others, the “Chevron Richmond Refinery Modernization Project,” the “Contra Costa Pipeline Project,” the “Phillips 66 Propane Recovery Project” and the “Shell Greenhouse Gas Reduction Project” in the County of Contra Costa, the “Valero Crude by Rail Project” in Benicia, the “Phillips 66 Rail Spur Extension and Crude Unloading Project” in Arroyo Grande, and the “Keystone Pipeline Project” Phase I. My work as an expert for CBE and other non-profit groups in a 2007–2008 review of the proposed Chevron Richmond refinery “Hydrogen Renewal Project” was cited by the Appeals Court in support of CBE’s subsequent successful advocacy regarding that proposed project (*See CBE v. City of Richmond* 184 Cal\_Ap.4<sup>th</sup>).
5. During 2014 I served as an expert for the Natural Resources Defense Council in research on the effects of changes in oil feedstock quality on refinery air emission rates, specifically, on estimating toxic and particulate emissions from U.S. refinery cracking and coking of low quality, bitumen-derived “tar sands” oils.
6. As part of CBE’s collaboration with the refinery workers union United Steelworkers (USW), community-based organizations, the Labor Occupational Health Program at UC Berkeley, and environmental groups, I served as an expert on environmental health and safety concerns shared by refinery workers and residents regionally. In this role I served as CBE’s representative in the Refinery Action Collaborative of Northern California.
7. I serve as an expert for CBE and other groups in the development of emission control and reduction rules to be considered for adoption by the Bay Area Air Quality Management District.

8. I served as one of CBE's experts supporting informal state-level climate and energy planning discussions with California State agencies and the Office of Governor Edmund G. Brown. In this capacity I participated in meetings organized and attended by Governor Brown's senior advisors on 12 July 2013 in Oakland, California and on 13 April 2015 and 4 December 2016 in Sacramento, California.

9. I authored a technical paper on the first publicly verified pollution prevention audit of a U.S. oil refinery in 1989. I co-authored the first comprehensive analysis of regional oil refinery selenium discharge trends in 1994. From 1992–1994 I authored a series of technical analyses and reports that supported the successful achievement of cost-effective pollution prevention measures at 110 industrial facilities in Santa Clara County. I authored the first comprehensive, peer-reviewed dioxin pollution prevention inventory for the San Francisco Bay, which was published by the American Chemical Society and Oxford University Press in 2001. I co-authored an alternative energy blueprint, published in 2001, that served as a basis for the Electricity Resource Plan adopted by the City and County of San Francisco in 2002. In 2005 and 2007 I co-authored two technical reports that documented air quality impacts from flaring by San Francisco Bay Area refineries, and identified feasible measures to prevent these impacts.

10. My more recent publications include the first peer reviewed estimate of combustion emissions from refining lower quality oil to be based upon data from U.S. refineries in actual operation, which was published by the American Chemical Society in the journal *Environmental Science & Technology* in 2010. I authored a follow up to this study that focused on California refineries, which was peer reviewed and published by the Union of Concerned Scientists in 2011. I authored and presented invited testimony regarding *inherently safer systems* requirements at the U.S. Chemical Safety Board's 19 April 2013 public hearing on the 2012 Chevron Richmond refinery fire. I authored a January 2015 research report on toxic and aerosol emissions from U.S. refinery cracking and coking of bitumen-derived "tar sands" oils. I co-authored a July 2017 CBE technical report on refinery emissions observed under the State's cap-and-trade program from 2013–2015.

11. My curriculum vitae and list of publications are appended hereto as Attachment KR1.

## **Scope of Review**

12. The Scoping Plan does not demonstrate “how direct emissions reductions from the largest sources are prioritized as directed by AB 197” (Environmental Justice Advisory Committee).<sup>1</sup> Instead, it proposes to extend current “market based” and “demand-side” policies to address petroleum fuel chain emissions—emissions from extraction, refining, and refined products combustion.<sup>2</sup> Oil refiners and extractors would receive up to 90 % of their cap-and-trade emission allowances free of charge through 2030. Meanwhile, cap-and-trade exempts emissions from extracting oil imported by refiners and from burning their exported fuels, in-state demand reduction does not prevent refiners from exporting those refined products, and the Low Carbon Fuel Standard exempts all of the emissions from extracting, refining, and burning the exported fuels. These policies have not cut refinery emissions of carbon dioxide equivalent (CO<sub>2</sub>e),<sup>3</sup> and refiners here import more feedstock and export more product as statewide crude production and petroleum fuels demand decline.<sup>4-8</sup> Potential climate impacts will be more strongly driven by cumulative CO<sub>2</sub>e emissions through mid-century than by annual CO<sub>2</sub>e emissions in any one year.<sup>9,10</sup> But the Environmental Analysis (EA)<sup>2</sup> limits its analysis by focusing on annual emissions in 2030 instead of on cumulative emissions through 2050.

13. In light of the clearly foreseeable potential for the proposed action to delay cuts in emissions associated with oil refined in California through 2030, the importance of cumulative emissions through 2050, and the consequent potential for effects of delay, I was asked for my professional opinion on the adequacy of the EA as to these matters. My opinions on these matters and the basis for these opinions are stated in this report.

## **Annual Emissions Baseline**

14. Emissions of CO<sub>2</sub>e from the extraction, refining, and refined products combustion associated with oil refined in California, and all other activities statewide, were estimated for the three-year period from 2013–2015. An annotated, referenced tabulation of this estimate is appended hereto as Attachment KR2.<sup>11</sup> The estimate used California Air Resources Board (CARB) emissions data for refining and associated hydrogen plants,<sup>12</sup> extraction,<sup>12</sup> refined products combustion,<sup>13</sup> and all other activities statewide.<sup>13</sup> Emission

intensities for extraction from CARB data<sup>12</sup> and crude oil inputs to the refineries from California Energy Commission (CEC) data<sup>4</sup> were applied to imported oil volumes refined here<sup>4</sup> to complete the extraction emissions estimate. Similarly, CARB's gasoline, diesel-distillate, kerosene including jet fuel, LPG and propane, and pet coke products emission<sup>13</sup> and combustion<sup>14</sup> data were used with CEC<sup>8</sup> and Energy Information Administration<sup>15-16</sup> data to estimate emissions from burning refined product exports. CARB emissions<sup>13,17</sup> and fuel combustion<sup>14</sup> data were used to estimate emissions from all other activities, including the generation of imported electricity. Annual emissions estimated by this method averaged  $\approx 0.576 \text{ Gt}^{-y}$  (Gt: Gigaton, 1 billion metric tons) from 2013–2015, with petroleum fuel chain emissions accounting for  $\approx 62 \%$  ( $0.360 \text{ Gt}^{-y}$ ) of this total.<sup>11</sup>

### Cumulative Emission Estimates

15. It was necessary to calculate cumulative emissions because as stated, this is the appropriate metric for estimating climate impacts of emission scenarios through 2050<sup>9,10</sup> and the EA did not complete that analysis. Cumulative emissions from 2013–2050 were calculated by adding the annual emissions reported from 2013–2015 (§ 14) and those in each following year, accounting for the change in annual emissions expected that year. Specifically, the following basic math (Equation 1) was used:

$$CE_{Y1-Yx} = \sum AE_{Y1} \dots AE_{Y(x-1)} \cdot z \quad (\text{Eq. 1})$$

Where,

CE is cumulative emission;  
 AE is annual emission, expressed in  $\text{Gt}^{-y}$  (Gt: Gigaton, 1 billion metric tons);  
 Y1 is 2013 and Yx is a specific year from 2014–2050;  
 z is the change in AE from the previous year (x–1), expressed as a ratio;  
 $\sum$  is the sum of AE from year 1 through year x (Y1 ... Yx); and  
 results for CE are expressed in Gt (billions of metric tons).

This basic math simply quantified the fact that cumulative emissions increase with time (as x increases) and are limited by reducing annual emissions over time (as z decreases). For example, with average emissions estimated from 2013–2015 ( $0.576 \text{ Gt}^{-y}$ ; § 14), z is exactly 1 in these years, and  $CE_{Y1-Y3}$  is calculated as  $0.576 \text{ Gt}^{-y}$  for 2013 ( $AE_{Y1} = 0.576$ ) plus  $AE_{Y1} \cdot 1$  for 2014 ( $AE_{Y2} = 0.576$ ) plus  $AE_{Y2} \cdot 1$  for 2015 ( $AE_{Y3} = 0.576$ ), or  $1.728 \text{ Gt}$  of cumulative emission from 2013–2015.

16. Equation 1 (¶ 15) was used with the reported 2013–2015 emissions baseline (¶ 14), the cumulative emission limit defined by the incremental annual emission cuts that state climate targets anticipate to 2020, 2030, and 2050, and emission scenarios implied by the proposed action, to estimate cumulative emissions (CE) and annual emission cuts (z).

### **Cumulative Emission Limit**

17. State targets for incremental annual emission cuts to 2020 (1990 rate), 2030 (–40%), and 2050 (–80%) seek to limit cumulative emissions, and emissions are now close to the 2020 target. The 2030 and 2050 targets were applied to the average annual emission rate from 2013–2015 (¶ 14) to calculate the effect of the targeted incremental emission cuts from 2015 on cumulative emissions during 2013–2050. Details of this calculation for petroleum fuel chain emissions associated with oil refined in California and emissions associated with all other activities in the state are appended hereto as Attachment KR3.<sup>18</sup> The calculation indicates that achieving the incremental annual emission cuts to the state’s 2030 and 2050 targets would limit the total cumulative emission of CO<sub>2</sub>e from 2013–2050 to  $\approx 13.0$  Gt.<sup>18</sup>

### **Emission Scenarios Assessed**

18. Equation 1 (¶ 15) and emissions from 2013–2015 (¶ 14) were used to estimate cumulative emissions from 2013–2050 in 19 scenarios for reductions in annual emissions associated with oil refined in California. Three scenarios were given more detailed analysis: Scenario A (S<sub>a</sub>) assumed that the minimum sustained annual emission reduction necessary to meet the cumulative emission limit will begin in 2031. Scenario B (S<sub>b</sub>) assumed that the minimum sustained annual emission reduction necessary to meet the cumulative emission limit will begin in 2020. Scenario C (S<sub>c</sub>) assumed that the same sustained annual emission reduction as that in Scenario S<sub>b</sub> will begin in 2031.

19. The scenarios were compared based on several conservative assumptions that were applied to all of them:

- All other (non-petroleum) emissions make steady progress to the state’s targets.

- Petroleum fuel chain emissions will not be reduced more than the state's annual emissions target for 2050 (−80%). Allowing  $\geq 20\%$  of current annual emissions accounted for the possibility that safe substitutes for petroleum jet fuel ( $\approx 16\%$  of current refinery production)<sup>11</sup> might remain illusive through mid-century.
- No increase in petroleum fuel chain emissions will occur from 2015–2050. This is a conservative assumption for delayed action scenarios, given planned expansions for low quality, higher-emitting grades of oil, such as the Tesoro (Wilmington-and-Carson) and Phillips 66 (Rodeo) projects that are in dispute as of December 2017.

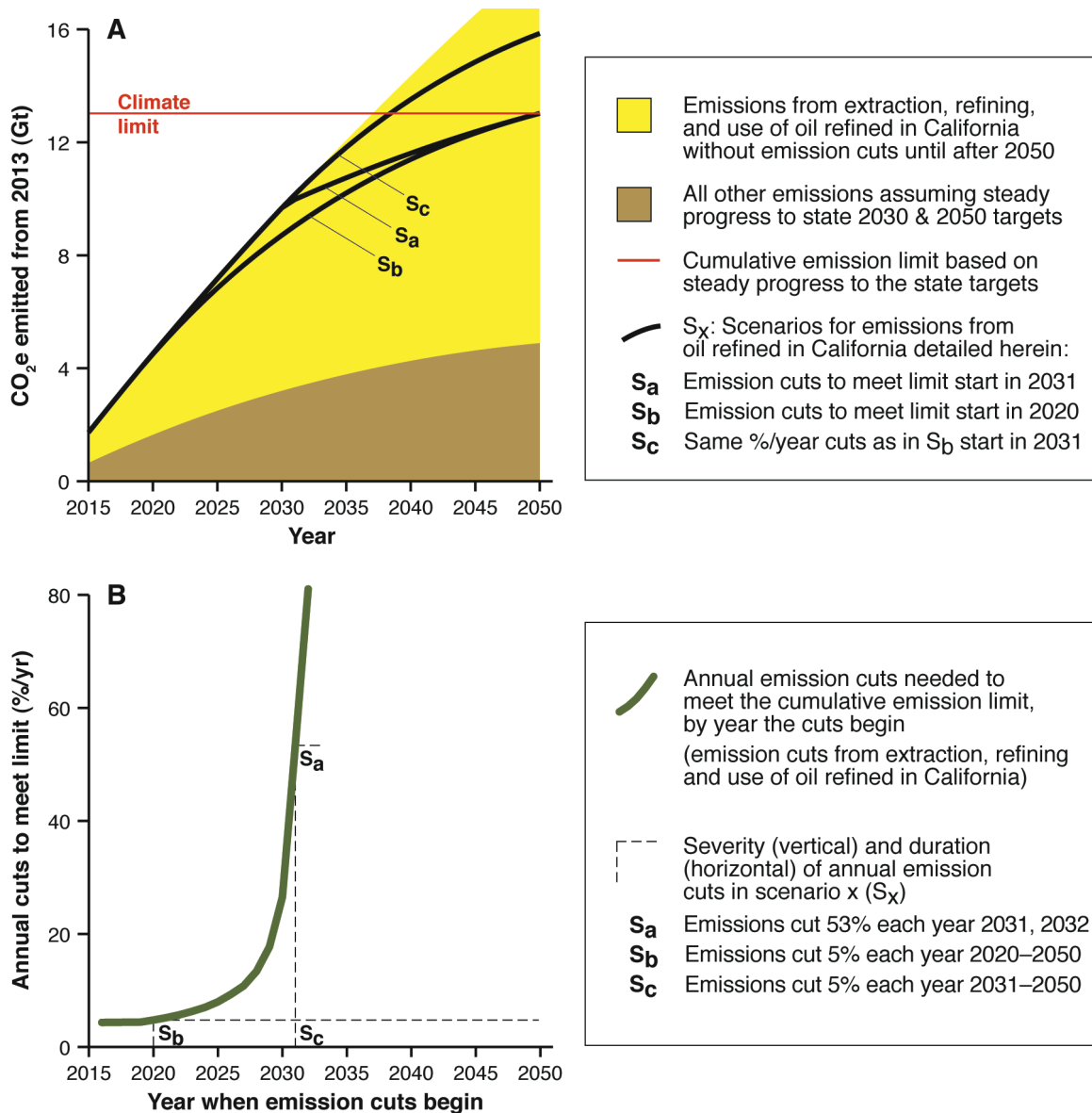
Applying these conservative assumptions to all scenarios allowed them to be compared for effects of the clearly foreseeable potential (§§ 12–13) that the proposed action could de-prioritize and delay cuts in emissions associated with oil refined in California.

### **Emission Scenarios Comparison**

20. Results from this analysis (§§ 12–19) are tabulated in Attachment KR4<sup>19</sup> and illustrated in Exhibit A below. Note the relationship over time between cumulative emissions (Chart A) and annual emission cuts needed for climate protection (Chart B). As emissions approach the cumulative climate limit, and the time left to meet the limit shortens, the annual emission cuts needed to meet the limit rise nearly exponentially.

21. Starting sustained petroleum fuel chain emission cuts in 2020 ( $S_b$ ) meets the climate limit by cutting annual emissions only  $\approx 5\%$  per year. In contrast, delay to 2031 ( $S_a$ ) can meet the limit only by cutting annual emissions more than ten times as much ( $\approx 53\%/yr$ ) and cutting them by a total of  $\approx 78\%$  over just two years.<sup>19</sup> The substantial jobs and tax base disruptions associated with this precipitous ( $\approx 78\%$ ) cut would be disparately severe in communities hosting oil infrastructure. Low-income communities of color already facing disparately severe CO<sub>2</sub>e co-pollutant health risk<sup>20-22</sup> and pollution-related blight due to the proximity of oil infrastructure would bear the brunt of these potential impacts. These impacts would be directly related to cumulative emissions resulting from delay, and by 2031, averting them fully would require holding annual emission cuts to the same ( $S_b$ ;  $\approx 5\%/year$ ) pace or less, but that would allow cumulative emissions to exceed the climate limit. Delaying petroleum emission cuts of  $\approx 5\%/year$  until 2031 ( $S_c$ ) would exceed the climate limit by  $\approx 2.8$  Gt, or  $\approx 22\%$ .<sup>19</sup> Delaying these emission cuts until after 2050 would exceed the climate limit by  $\approx 5.5$  Gt, or  $\approx 43\%$ .<sup>19</sup>





**EXHIBIT A. Statewide Greenhouse Gas Emissions from 2015–2050 in Various Emission Scenarios for the Petroleum Fuel Chain (Extraction, Refining, and Use of Oil Refined in California), Assuming that All Other Emissions Meet the State’s Climate Targets.**

**Chart A:** Comparison of cumulative emissions with the cumulative emission limit for climate protection that is defined by incremental annual progress to the state’s 2030 and 2050 targets.

**Chart B:** Effect of delay on annual emission cuts needed to meet the cumulative emission limit.

**As cumulative emissions approach the climate protection limit (Chart A) and the time left to meet the limit shortens (A, B), the annual percentage cuts in emissions needed to meet the limit increase nearly exponentially (Chart B).**

**Gt:** Gigaton, 1 billion metric tons. **CO<sub>2</sub>e:** Carbon dioxide equivalent, 100-year GWP. **Scenarios** are outlined in the chart legends. All scenarios also assume that annual emissions from oil will not increase before emission cuts begin and will not be cut more than 80% (to account for the potential need for petroleum jet fuel through 2050), and that all non-petroleum emissions will be cut steadily to the 2030 and 2050 targets. Data are from the CARB, CEC, and US EIA.<sup>11-19</sup> See the text and attachments KR2–KR4 for data and details of analysis methods and results.

22. These results show that prompt, incremental, and sustained petroleum emission cuts (e.g., scenario S<sub>b</sub>) support the least-impact path to climate stabilization in California.

23. These results also describe climate effects of social inertia caused by the cumulative emission impacts that would result from delayed petroleum emission cuts. Davis et al.<sup>23</sup> rank social inertia along with geophysical and technological inertia among the types of resistance to change affecting the climate system. Impacts of the cumulative emissions and unprecedented annual cuts to the climate limit that more delay could force—whether framed as health costs,<sup>24</sup> environmental<sup>20-22</sup> or social<sup>25</sup> injustice, stranded assets,<sup>26,27</sup> local tax base losses, transitory assistance needs<sup>28</sup> or jobs dislocation—would tend to increase climate effects of social inertia. Although it cannot be known today exactly what course the state’s people would take in 2031 should petroleum cuts be delayed until then, these results provide specific evidence that the potential for delay to result in exceeding state climate protection targets through 2050 is clearly foreseeable.

### **System Boundary Context**

24. The analysis treats emissions from major emitting activities consistently by including out-of-state emissions that necessarily result from oil sector ( $\approx 0.129 \text{ Gt}^{-\text{y}}$ ; 2013–2015)<sup>12</sup> as well as electricity sector ( $\approx 0.039 \text{ Gt}^{-\text{y}}$  from 2013–2015)<sup>13</sup> activities in the state (§ 14). This consistent system boundary is further supported by analysis of the need to account for cross-border effects of oil refining and other fossil fuel chain activities,<sup>29</sup> California’s dominance among West Coast refining states,<sup>15</sup> and the fact that getting and using the oil refined here emits regardless of where that extraction and end-use fuel combustion occur. For context, however, excluding these out-of-state emissions from the baseline and applying the cumulative limit only to in-state emissions, petroleum still dominates total emissions ( $\approx 57\%$  v.  $62\%$ ; compare with § 14), and the impact curve shown in Chart B only shifts by 1 year or less. Thus, a different consistently-applied system boundary assumption might underestimate potential emission impacts linked to in-state activities but would not otherwise change the main results of this analysis significantly.

## **Findings**

25. De-prioritization and delay of sustained reduction in emissions from the oil sector during the critical period through 2030, when cumulative emissions would approach the climate protection limit defined by state emission targets while the time left to meet that limit shortens, is a clearly foreseeable result of the proposed action.

26. This delay during this critical period would greatly increase the annual emission cuts needed to meet the climate protection limit, the difficulty and disruptive impacts of doing so, especially in low-income communities of color near oil facilities, and thus the probability of failure to meet the state's mid-century climate protection goal.

27. Therefore, there is a reasonable potential that implementing the proposed action would result in significant socioeconomic impacts linked to the cumulative emissions it would allow, significant climate impacts linked to those emissions, or both.

28. Incremental and sustained annual emission cuts from the extraction, refining, and use of petroleum refined in California that begin promptly could lessen or avoid all of these significant potential impacts of the proposed action. This least-impact path to climate stabilization would be less difficult to implement than the greater annual cuts needed to meet the cumulative limit after further delay but would be foreclosed by further delay.

29. The Environmental Analysis did not identify and disclose these significant potential impacts of implementing the proposed action, or this less difficult least-impact path to climate stabilization that implementing the proposed action could foreclose. The Environmental Analysis is deficient in these crucial respects.

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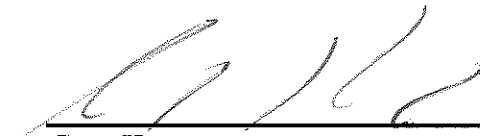
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30. I have given my opinions on these matters based on my knowledge, experience and expertise and the data, information and analysis discussed in this report.

I declare under penalty of perjury that the foregoing is true of my own knowledge, except as to those matters stated on information and belief, and as to those matters, I believe them to be true.

Executed this 12<sup>th</sup> day of December 2017 at Richmond, California

  
\_\_\_\_\_  
Greg Karras

## References

- (1) *Final EJAC Recommendations—Priority Changes*; AB 32 Environmental Justice Advisory Committee of the California Air Resources Board: Sacramento, CA. November 13, 2017. Appendix A to the Final Proposed 2017 Scoping Plan Update. Available online at: <https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>.
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(18) *Calculation for Cumulative Emission (CE) Limit Based on Actual Annual Emissions (AE) from 2013–2015 (Att. KR2) and Steady Progress from 2015 to California's 2030 (–40%) and 2050 (–80%) Annual Emission Targets*; table. Appended hereto as Attachment KR3.

(19) *Results for Cumulative Emission (CE) and Change in Annual Emission From the Previous Year (z) in Petroleum Fuel Chain Scenarios, Assuming that All Other Emissions Meet the State's Climate Targets*; tables. Appended hereto as Attachment KR4.

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## Attachments List

Attachment KR1. Author’s CV and Publications List.

Attachment KR2. Baseline CO<sub>2</sub>e Emissions Data (2013–2015). Annotated table and references.

Attachment KR3. Calculation for Cumulative Emission (CE) Limit Based on Actual Annual Emissions (AE) from 2013–2015 (Att. KR2) and Steady Progress from 2015 to California’s 2030 (–40%) and 2050 (–80%) Annual Emission Targets. Table.

Attachment KR4. Results for Cumulative Emission (CE), and Change in Annual Emission From the Previous Year (z) in Petroleum Fuel Chain Scenarios, Assuming All Other Emissions Make Steady Progress to California’s Climate Targets. Tables.

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Work experience

1994 to present	<b>Position</b>	Senior Scientist
1984 to 1993		Research Associate
	<b>Employer</b>	Communities for a Better Environment (CBE)
	<b>Description</b>	Lead research in toxic pollution documentation and prevention projects—San Francisco Bay Area focus. Assistance to Executive Director, staff, members and Board in program plans and development. Lead responsibility for implementation, budget and coordination of staff in assigned campaigns and projects (1994–2000). Litigation assistance as expert witness. Shared responsibility to develop science as a tool for community organizing (1997–present).
1982 to 1984	<b>Position</b>	Research Associate
	<b>Employer</b>	Calif. Environmental Intern Program/Citizens for a Better Environment
	<b>Description</b>	Research, advocacy, and public education and fund raising supporting leak detection, clean up, and prevention program for underground chemical storage tanks in Los Angeles County.
1976 and 1977	<b>Position</b>	Student Assistant
	<b>Employer</b>	California Air Resources Board
	<b>Description</b>	Air pollution surveillance field sampling, laboratory analysis, and reporting of results for air quality predictions and alerts in South Coast Air Basin. Summers.

Other relevant experience

Member, American Association for the Advancement of Science.  
Member, American Chemical Society.  
Member, Refinery Action Collaborative.  
Co-chair, San Francisco Alternative Energy Plan Load Forecasting and Power Flow Analysis and DSM–DG working groups. 2002–2004.  
Member, Monitoring and TMDL Public Advisory Group to the California Water Resources Control Board. 2000.  
Chair, Health Committee, CARAT Team established by the Coalition of Black Trade Unionists, Northern California Chapter. 1998–2000.  
Co-organizer with staff, S.F. Bay Water Board and Zero Dioxin Alliance, national science symposia on dioxins. 1997.  
Board Member, Silicon Valley Pollution Prevention Center (alternate). ca 1994–1996.  
Member, Study Design Committee, Contaminant Levels in Fish Tissue from San Francisco Bay Pilot Study. 1992–1993.  
Board Member, Aquatic Habitat Institute (now known as The San Francisco Estuary Institute). ca 1988–1990.

Education

Bachelor of Arts in Biology, 1979  
University of California, Santa Cruz  
Honors Conferred

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## Attachment KR2. Baseline CO<sub>2</sub>e Emissions Data (2013–2015)

	Measurement	Data Source	Units	Value	
California Refining					
Capacity	Atm. Crude Distillation	EIA <sup>a</sup>	m <sup>3</sup> /d	319,817	
CO <sub>2</sub> e emitted	Mass emissions	ARB <sup>b</sup>	Mt/y	35.1	
Extraction of feed					
Activity rate	Total crude feed rate	CEC <sup>c</sup>	m <sup>3</sup> /d	273,146	
In-state rate	Crude from California	CEC <sup>c</sup>	m <sup>3</sup> /d	101,054	
CO <sub>2</sub> e emitted					
In-state rate	Mass emissions	ARB <sup>b</sup>	Mt/y	22.7	
Total (all feed)	Mass emissions	ARB <sup>b</sup> , CEC <sup>c</sup>	Mt/y	61.3	
Refined products					
In-state usage:					
	Gasoline	ARB <sup>d</sup>	m <sup>3</sup> /d	139,610	
	Distillate / diesel	ARB <sup>d</sup>	m <sup>3</sup> /d	41,569	
	Jet fuel & kerosene	ARB <sup>d</sup>	m <sup>3</sup> /d	3,930	
	LPG & propane	ARB <sup>d</sup>	m <sup>3</sup> /d	6,279	
	Petroleum coke	ARB <sup>d</sup>	m <sup>3</sup> /d	688	
	Other refined products	ARB <sup>d</sup>	m <sup>3</sup> /d	1,568	
In-state emissions:					
	Gasoline	ARB <sup>d</sup>	Mt/y	121.2	
	Distillate / diesel	ARB <sup>d</sup>	Mt/y	41.2	
	Jet fuel & kerosene	ARB <sup>d</sup>	Mt/y	3.7	
	LPG & propane	ARB <sup>d</sup>	Mt/y	3.5	
	Petroleum coke	ARB <sup>d</sup>	Mt/y	0.8	
	Other refined products	ARB <sup>d</sup>	Mt/y	2.2	
California refinery production					
	Gasoline	CEC <sup>e</sup>	m <sup>3</sup> /d	162,228	
	Distillate / diesel	CEC <sup>e</sup>	m <sup>3</sup> /d	57,169	
	Jet fuel & kerosene	CEC <sup>e</sup>	m <sup>3</sup> /d	45,105	
	LPG & propane	Est <sup>f</sup>	m <sup>3</sup> /d	6,210	
	Petroleum coke	Est <sup>f</sup>	m <sup>3</sup> /d	14,993	
California refined product emissions					
In-and-out-of-state products use					
	Gasoline	Calculated	Mt/y	140.8	
	Distillate / diesel	from	Mt/y	56.7	
	Jet fuel & kerosene	data	Mt/y	42.8	
	LPG & propane	above	Mt/y	3.5	
	Petroleum coke		Mt/y	17.5	
	Other refined products		Mt/y	2.2	
	Products use subttl:		Mt/y	263.5	
Refinery fuel chain emissions (Calif. refineries 2013–15)			Mt/y	360.0	
All other statewide emissions (2013–2015)			ARB <sup>d</sup>	Mt/y	216.3
Statewide total including refinery fuel chain			Mt/y	576.3	

(continued on pages KR2-2 and KR2-3)

## Attachment KR2. Baseline CO<sub>2</sub>e Emissions Data (2013–2015)

**m<sup>3</sup>/d:** cubic meters/day

**Mt/y:** Megatons; million metric tons, per year

(a) Data for calendar day crude capacity by plant as of January 2017 from the U.S. Energy Information Administration (EIA). (See reference SR1.) Includes 3,339 m<sup>3</sup>/day of gas oil hydrotreating capacity for one small plant (Alon Bakersfield) that did not report crude capacity from 2011–2017. (Id.)

(b) Data from California Air Resources Board (ARB) Mandatory GHG Reporting Public Data Reports. (SR2.) Includes emissions from separately-owned hydrogen plants serving refineries: the Air Liquide El Segundo and Rodeo plants and the Air Products Carson, Martinez, and Wilmington plants; ARB ID nos. 101701, 101749, 101248, 101017, and 100127.

(c) Data from California Energy Commission (CEC); *Crude Oil Supply Sources to California Refineries*. (SR3.)

(d) Data from California Air Resources Board (ARB) *Greenhouse Gas Inventory by IPCC Category* (SR4), *Disaggregation of Industrial Cogeneration Categories in California's Greenhouse Gas Inventory* (SR5), and *Fuel Activity for California's Greenhouse Gas Inventory by Sector & Activity* (SR6). The ExxonMobil (now PBF) Torrance facility data are based on 2013–2014 in this table and main text Table 2. The 2015 emissions from this facility were anomalous due to an explosion that led to an exceptional FCC outage during most of 2015 and much of 2016.

(e) Data from California Energy Commission (CEC); *Weekly Fuels Watch Report*. (SR7.)

(f) Estimated product leaving the refinery gate, excluding refinery usage. For liquefied petroleum gas (LPG) and propane this value was estimated based on EIA data for PADD 5 net production of propane and butane (SR8) and the portion of PADD 5 conversion capacity accounted for by refineries in California (SR1). For petroleum coke (pet coke) this value was estimated based on EIA data for PADD 5 net production (SR8), the portion of PADD 5 coking capacity for pet coke accounted for by refineries in California (SR1), and pet coke combustion for cogeneration in California (SR5, SR6). Emissions from pet coke combustion by industrial cogeneration in California were conservatively assumed to be refining or extraction-related and were excluded from this estimate value to avoid the potential for double counting of refinery fuel chain emissions. For LPG and propane, total California industrial cogeneration emissions were too small from 2013–2015 (<0.001 Mt/y; SR5) to affect the estimate.

Total fuel chain emission calculation estimates conservatively assumed that emission rates for extraction of oil refined in California, and combustion of California-refined fuels, which occurred in other states and nations, were (and will remain through 2050) equivalent to those reported for these activities in California. These estimates also conservatively excluded any emissions from feedstock import and refined product export transportation associated with combustion of transport fuels which were not produced in California.

## Attachment KR2. Baseline CO<sub>2</sub>e Emissions Data (2013–2015)

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**Attachment KR3. Calculation for Cumulative Emission (CE) Limit Based on Actual Annual Emissions (AE) from 2013–2015 (Att. KR2) and Steady Progress from 2015 to California’s 2030 (–40%) and 2050 (–80%) Annual Emission Targets.**

**Gt:** Gigaton; 1 billion metric tons.

Year	Petroleum Fuel Chain			All Other Emissions			Total Emissions		
	AE (Gt/y)	CE (Gt)	AE % v. 2015	AE (Gt/y)	CE (Gt)	AE % v. 2015	AE (Gt/y)	CE (Gt)	AE % v. 2015
2013	0.360	0.360	100.0%	0.216	0.216	100.0%	0.576	0.576	100.0%
2014	0.360	0.720	100.0%	0.216	0.433	100.0%	0.576	1.153	100.0%
2015	0.360	1.080	100.0%	0.216	0.649	100.0%	0.576	1.729	100.0%
2016	0.350	1.430	97.3%	0.211	0.860	97.3%	0.561	2.290	97.3%
2017	0.341	1.771	94.7%	0.205	1.064	94.7%	0.546	2.835	94.7%
2018	0.331	2.102	92.0%	0.199	1.263	92.0%	0.530	3.366	92.0%
2019	0.322	2.424	89.3%	0.193	1.457	89.3%	0.515	3.880	89.3%
2020	0.312	2.736	86.7%	0.187	1.644	86.7%	0.499	4.380	86.7%
2021	0.302	3.038	84.0%	0.182	1.826	84.0%	0.484	4.864	84.0%
2022	0.293	3.331	81.3%	0.176	2.002	81.3%	0.469	5.333	81.3%
2023	0.283	3.614	78.7%	0.170	2.172	78.7%	0.453	5.786	78.7%
2024	0.274	3.887	76.0%	0.164	2.336	76.0%	0.438	6.224	76.0%
2025	0.264	4.151	73.3%	0.159	2.495	73.3%	0.423	6.647	73.3%
2026	0.254	4.406	70.7%	0.153	2.648	70.7%	0.407	7.054	70.7%
2027	0.245	4.651	68.0%	0.147	2.795	68.0%	0.392	7.446	68.0%
2028	0.235	4.886	65.3%	0.141	2.936	65.3%	0.377	7.822	65.3%
2029	0.226	5.111	62.7%	0.136	3.072	62.7%	0.361	8.183	62.7%
2030	0.216	5.327	60.0%	0.130	3.202	60.0%	0.346	8.529	60.0%
2031	0.209	5.536	58.0%	0.125	3.327	58.0%	0.334	8.863	58.0%
2032	0.202	5.738	56.0%	0.121	3.448	56.0%	0.323	9.186	56.0%
2033	0.194	5.932	54.0%	0.117	3.565	54.0%	0.311	9.497	54.0%
2034	0.187	6.119	52.0%	0.112	3.678	52.0%	0.300	9.797	52.0%
2035	0.180	6.299	50.0%	0.108	3.786	50.0%	0.288	10.085	50.0%
2036	0.173	6.472	48.0%	0.104	3.890	48.0%	0.277	10.362	48.0%
2037	0.166	6.637	46.0%	0.100	3.989	46.0%	0.265	10.627	46.0%
2038	0.158	6.796	44.0%	0.095	4.085	44.0%	0.254	10.880	44.0%
2039	0.151	6.947	42.0%	0.091	4.175	42.0%	0.242	11.122	42.0%
2040	0.144	7.091	40.0%	0.087	4.262	40.0%	0.231	11.353	40.0%
2041	0.137	7.228	38.0%	0.082	4.344	38.0%	0.219	11.572	38.0%
2042	0.130	7.357	36.0%	0.078	4.422	36.0%	0.207	11.779	36.0%
2043	0.122	7.480	34.0%	0.074	4.496	34.0%	0.196	11.975	34.0%
2044	0.115	7.595	32.0%	0.069	4.565	32.0%	0.184	12.160	32.0%
2045	0.108	7.703	30.0%	0.065	4.630	30.0%	0.173	12.333	30.0%
2046	0.101	7.804	28.0%	0.061	4.690	28.0%	0.161	12.494	28.0%
2047	0.094	7.897	26.0%	0.056	4.747	26.0%	0.150	12.644	26.0%
2048	0.086	7.984	24.0%	0.052	4.798	24.0%	0.138	12.782	24.0%
2049	0.079	8.063	22.0%	0.048	4.846	22.0%	0.127	12.909	22.0%
2050	0.072	8.135	20.0%	0.043	4.889	20.0%	0.115	13.024	20.0%

**Attachment KR4. Results for Cumulative Emission (CE) and Change in Annual Emission From the Previous Year (z) in Petroleum Fuel Chain Scenarios, Assuming All Other Emissions Make Steady Progress to California’s Climate Targets.**

**Table KR4–1. Cumulative Emission (CE), in billions of metric tons (Gt).**

Year	All Other (Gt)	Scenario S <sub>a</sub>		Scenario S <sub>b</sub>		Scenario S <sub>c</sub>		Delay >2050	
		Oil (Gt)	Total (Gt)	Oil (Gt)	Total (Gt)	Oil (Gt)	Total (Gt)	Oil (Gt)	Total (Gt)
2013	0.216	0.360	0.576	0.360	0.576	0.360	0.576	0.360	0.576
2014	0.433	0.720	1.153	0.720	1.153	0.720	1.153	0.720	1.153
2015	0.649	1.080	1.729	1.080	1.729	1.080	1.729	1.080	1.729
2016	0.860	1.440	2.299	1.440	2.299	1.440	2.299	1.440	2.299
2017	1.064	1.800	2.864	1.800	2.864	1.800	2.864	1.800	2.864
2018	1.263	2.160	3.423	2.160	3.423	2.160	3.423	2.160	3.423
2019	1.457	2.520	3.976	2.520	3.976	2.520	3.976	2.520	3.976
2020	1.644	2.880	4.524	2.862	4.507	2.880	4.524	2.880	4.524
2021	1.826	3.240	5.065	3.189	5.015	3.240	5.065	3.240	5.065
2022	2.002	3.600	5.601	3.500	5.502	3.600	5.601	3.600	5.601
2023	2.172	3.959	6.132	3.796	5.968	3.959	6.132	3.959	6.132
2024	2.336	4.319	6.656	4.078	6.415	4.319	6.656	4.319	6.656
2025	2.495	4.679	7.174	4.347	6.842	4.679	7.174	4.679	7.174
2026	2.648	5.039	7.687	4.603	7.251	5.039	7.687	5.039	7.687
2027	2.795	5.399	8.194	4.846	7.642	5.399	8.194	5.399	8.194
2028	2.936	5.759	8.696	5.079	8.015	5.759	8.696	5.759	8.696
2029	3.072	6.119	9.191	5.300	8.372	6.119	9.191	6.119	9.191
2030	3.202	6.479	9.681	5.510	8.712	6.479	9.681	6.479	9.681
2031	3.327	6.647	9.974	5.711	9.038	6.822	10.149	6.839	10.166
2032	3.448	6.725	10.174	5.902	9.350	7.148	10.597	7.199	10.647
2033	3.565	6.804	10.369	6.084	9.649	7.459	11.025	7.559	11.124
2034	3.678	6.882	10.560	6.257	9.935	7.756	11.433	7.919	11.597
2035	3.786	6.960	10.746	6.422	10.208	8.038	11.824	8.279	12.065
2036	3.890	7.039	10.928	6.579	10.469	8.306	12.196	8.639	12.529
2037	3.989	7.117	11.106	6.729	10.718	8.562	12.552	8.999	12.988
2038	4.085	7.195	11.280	6.871	10.956	8.806	12.890	9.359	13.443
2039	4.175	7.273	11.449	7.007	11.182	9.038	13.213	9.719	13.894
2040	4.262	7.352	11.614	7.136	11.398	9.259	13.521	10.079	14.341
2041	4.344	7.430	11.774	7.259	11.603	9.470	13.814	10.439	14.783
2042	4.422	7.508	11.930	7.377	11.799	9.670	14.092	10.799	15.221
2043	4.496	7.587	12.082	7.488	11.984	9.861	14.357	11.158	15.654
2044	4.565	7.665	12.230	7.595	12.160	10.043	14.608	11.518	16.083
2045	4.630	7.743	12.373	7.696	12.326	10.216	14.846	11.878	16.508
2046	4.690	7.822	12.512	7.793	12.483	10.381	15.072	12.238	16.929
2047	4.747	7.900	12.646	7.885	12.631	10.538	15.285	12.598	17.345
2048	4.798	7.978	12.777	7.972	12.771	10.688	15.487	12.958	17.757
2049	4.846	8.057	12.903	8.055	12.901	10.831	15.677	13.318	18.164
2050	4.889	8.135	13.024	8.135	13.024	10.966	15.856	13.678	18.567

(continued on page KR4-2)



**Attachment KR4. Results for Cumulative Emission (CE) and Change in Annual Emission From the Previous Year (z) in Petroleum Fuel Chain Scenarios, Assuming All Other Emissions Make Steady Progress to California's Climate Targets.**

**Table KR4–2. Timing and Extent of Change in Annual Emissions From the Previous Year (z) For All Scenarios Assessed.**

*Scenarios that meet the cumulative emissions limit*

Starting Year	z (ratio)	Percentage reduction	Ending Year	Duration of sustained emission cuts (to 2050)
2016	0.9567	4.33	2050	35 years
2017	0.9565	4.35	2050	34 years
2018	0.9563	4.37	2050	33 years
2019	0.9561	4.39	2050	32 years
2020	0.9524	4.76	2050	31 years <sup>a</sup>
2021	0.9482	5.18	2050	30 years
2022	0.9432	5.68	2048	27 years
2023	0.9371	6.30	2046	24 years
2024	0.9299	7.01	2045	22 years
2025	0.9202	7.98	2043	19 years
2026	0.9071	9.30	2041	16 years
2027	0.8919	10.82	2040	14 years
2028	0.8660	13.40	2038	11 years
2029	0.8226	17.74	2036	8 years
2030	0.7347	26.54	2034	5 years
2031	0.4664	53.36	2032	2 years <sup>b</sup>
2032	0.1895	81.06	2032	1 year

*Scenarios that exceed the cumulative emissions limit*

2031	0.9524	4.76	2050	21 years <sup>c</sup>
> 2050	1.0000	0.00	NA	NA

a. Scenario B; see Table KR4–1 for cumulative emission details.

b. Scenario A; see Table KR4–1 for cumulative emission details.

c. Scenario C; see Table KR4–1 for cumulative emission details.

See main text for explanation of methods and equation solved for "z"

**Table KR4–3. Scenario S<sub>a</sub> Change in Annual Emissions 2030–2032.**

Year	Petroleum emissions	
	(Gt <sup>-y</sup> )	(% cut)*
2030	0.35995	0.00%
2031	0.16789	-53.36%
2032	0.07831	-78.24%

\* Percentage emission reduction from 2030.



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December 11, 2017

VIA Hand Delivery and Federal Express

California Air Resources Board Members:

Mary D. Nichols	Ron Roberts
Sandra Berg	Phil Serna
John R. Balmes, M.D.	Alexander Sherriffs, M.D.
Hector De La Torre	Daniel Sperling
John Eisenhut	Diane Takvorian
Dean Flores	Richard Corey
Eduardo Garcia	Edie Change
John Gioia	Steven Cliff
Senator Ricardo Lara	Kurt Karperos
Judy Mitchell	Ellen M. Peter
Barbara Riordan	Veronica Eady
	Dr. Arie Haagen-Smit

Richard Corey, Executive Officer  
1001 "T" Street  
Sacramento, CA 95814

RE: Draft 2017 Scoping Plan

Dear Board Members and Mr. Corey:

The Two Hundred is a group of community civil rights leaders advocating for homeownership for California's minority families. We are committed to increasing the supply of housing, to reducing the cost of housing to levels that are affordable to California's hard working families, and to restoring and enhancing homeownership by minorities so that our communities can also benefit from the family stability, enhanced educational attainment over multiple generations, and improved family and individual health outcomes, that white homeowners have long taken for granted.

We also support the quality of the California environment, and the need to protect and improve public health in our communities.

We have, for many decades, watched with dismay as decisions by government bureaucrats discriminate against and disproportionately harm minority communities. We have battled against this discrimination for our entire careers, which for some of us means working to combat discrimination for more than 50 years. In litigation and political action, we have worked to force government bureaucrats to reform policies and programs that included blatant racial discrimination – by, for example, denying minority veterans college and home loans that were

available to white veterans. We sued and lobbied and legislated to force federal and state agencies to end redlining practices that denied loans and insurance to aspiring minority home buyers and small businesses. We sued and lobbied to force regulators and private companies to recognize their own civil rights violations, and end discriminatory services and practices, in the banking, telecommunication, electricity, and insurance industries.

We have learned, the hard way, that environmental regulators and lobbyists are as oblivious to the needs of minority communities, and are as supportive of ongoing racial discrimination in their policies and practices, as their banking, utility and insurance bureaucratic peers. Several years ago, we waged a three year battle in Sacramento to successfully overcome environmentalist opposition to establishing clear rules for the cleanup of the polluted properties in our communities, overcoming the cozy crony relationships between regulators and environmentalists who financially benefited from cleanup delays and disputes instead of creating the clear, understandable, financeable, insurable, and equitable rules for the cleanup and redevelopment of the polluted properties that blighted our communities.

Having successfully fought for decades to overcome government and business discrimination against minority working families, we were deeply saddened – but not surprised – that the predatory lending practices and discriminatory regulatory oversight deficiencies that led to the Great Recession disproportionately harmed minority homeowners, who lost homes to foreclosures at a far greater rate than white families. Just as the civil rights promises of laws enacted in the 1960s and 1970s had reached their stride, and the homeownership race gap was starting to close, the Great Recession wiped out generations of homeownership progress in our communities.

We were not surprised, but were likewise deeply saddened, when the regulatory climate change passions of California's environmental leaders were quickly distorted from their purported goals of reducing global GHG emissions to address climate change, into a series of regulatory proposals that impose stunningly regressive new costs on California middle income families. This regressive new regulatory regime, which punishes most harshly those Californians who work hard in middle income jobs, is presented by CARB as a global necessity – but in fact imposes higher costs for basic necessities like utilities, transportation, and housing that decades of anti-discrimination and pro-consumer protection statutes and agencies have sought to prevent. CARB's regressive and discriminatory agenda also embraces as California GHG "reductions" the relocation of higher wage manufacturing jobs accessible to those with high school degrees to other states and countries that have far higher per capita GHG emissions and then importing these formerly made-in-California products back to California, with still more GHG produced from transportation back to California! It is no surprise that the GHG habits of the wealthy, like jet plane travel, is ignored in favor of charging more for basic necessities, to be paid as a disproportionately greater share of earned income, by California's majority minority households.

We write to object to the 2017 Scoping Plan as a violation of the equal protection clause of the Federal and California constitution by disproportionately placing new cost burdens and regulatory obstacles on aspiring minority homeowners, while also disproportionately and arbitrarily reducing access to the higher wage jobs that allow members of California's minority communities to become homeowners. Approval of the proposed 2017 Scoping Plan would also

violate numerous other federal and state statutes, including but not limited to the federal Clean Air Act and Fair Housing laws, as described below.

We urge your Board to reject the 2017 Scoping Plan, and direct preparation of a revised Scoping Plan (inclusive of a revised environmental and fiscal analysis) that actually advances your climate change goal of reducing global GHG emissions with California leadership that does not discriminate against minority communities or violate constitutional and statutory protections, that advances rather than the discriminates against aspiring minority homeowners, and that results in meaningful global GHG reductions rather than simply causing the “leakage” of people and jobs to higher GHG states and countries that result in higher global GHG emissions.

While we recognize that the Scoping Plan also increases costs and reduces higher wage job access for aspiring white working families and workers, because California is now a minority majority state the imposition of new regulatory programs that unfairly burden middle and working class families and workers – the majority of which are now minorities - are unconstitutional.

CARB’s constitutional violation is particularly egregious in the context of GHG emission reduction mandates that allow California to claim GHG reductions for driving people and jobs out of California, while ignoring both the increased GHG emissions caused when people and jobs move to higher per capita and per gross domestic product (GDP) states and countries as well as the GHG emissions created by Californians’ consumption of goods and services (like cement imported from China and jet travel for the wealthy). As recently demonstrated in a joint study completed by scholars from the University of California at Berkeley and regulators at the Bay Area Air Quality Management District, high wealth households cause far more global GHG emissions – yet the Scoping Plan ignores this scientific truth and unfairly, and unlawfully, burdens California’s minority and middle class households with new regulatory costs and burdens to further reduce the less than 1% of global GHG emissions that are actually produced within California’s borders.

## **Background**

As has been our lifelong mission, we have resolved to once again advocate for equity, and against discrimination, on behalf of our communities and against discriminatory bureaucracies.

California has the nation’s highest poverty rate, highest housing prices, greatest housing shortage, highest homeless population - and highest number of billionaires. The housing supply and housing cost crisis has resulted in a diaspora of minority families from the core metropolitan cities with the greatest number of jobs and highest wages to ever more distant suburbs, exurbs, and even regions. Hard working families, which are disproportionately minorities in contrast to the wealthier whiter elites who bought into or can afford to remain in our wealthiest job centers, are forced to “drive until they qualify” for housing they can own (or even rent). Workers and their families then suffer a cascading series of adverse health, educational, and financial consequences from their unconscionably long commutes – sometimes sleeping during the week in cars and trucks parked overnight on construction job sites, in industrial neighborhoods, and in abandoned parking lots. This problem is not limited to minimum wage, other low income workers, and college students already struggling with staggering debt burdens: our skilled

construction workers, teachers, nurses, firefighters, police officers and sheriff's deputies, city staffers and truck drivers and union members – all once solid middle class California jobs that produced the world's greatest middle class of homeowners – can no longer afford to buy homes near where they work.

In our communities, homeownership is not a “developer” issue – it is a core value that allows each monthly housing check to contribute to financial security, and it is the only proven pathway to create the family wealth needed to pay for the inevitable periods of illness or lost jobs, and the inevitable multi-generational needs of financing college educations and senior health care.

Yet we see, over and over and over again, our government agencies taking actions to deny our people access to homeownership – always purportedly a “color blind” approach that they are shocked (shocked!) to learn has a disparate impact on minority communities.

If the California Air Resources Board (CARB) approves the October 2017 version of its Scoping Plan, CARB will enter the hall of shame occupied by other federal and state agencies who violate the equal protection clause of the federal and state constitution, and other federal and state laws – not the least of which is the Clean Air Act itself – by discriminating against California's minority communities.

California produces less than 1% of global GHG emissions, and has lower per capita GHG emissions than any other large state except New York – which unlike California still has multiple operating nuclear power plants. As everyone from Governor Brown to members of this Board have repeatedly stated, California climate change leadership depends not on further mass reductions in the 1% of global GHG emissions generated within our boundaries, and instead demands leadership that can and will be politically emulated by other states and countries.

Promoting leakage of jobs and people to higher per capita GHG states and jurisdictions, and exacerbating the state's extreme poverty, homelessness and housing crisis while depriving hard working minority Californians from homeownership and middle class stability, achieves only the twin goals of increasing global GHG emissions and promoting ever more acute income inequality and racial discrimination. The Legislature and Governor directed CARB to reduce GHG emissions – and did not direct CARB to violate applicable constitutional and statutory protections and mandates. California's climate leadership in promoting renewable energy and other technologies, such as solar panels and electric vehicles, can and has spurred GHG reduction measures that can and have been replicated by other states and countries. CARB's proposed expansion of the California Environmental Quality Act, and its promotion of “Vibrant Community” state agency land use interventions designed to intentionally increase road congestion and home prices throughout California, do not create meaningful reductions in GHG emissions in California – they just increase costs and misery for California's working families, and promote migration to other higher GHG states.

**We Urge You To Direct Staff To Revise The 2017 Scoping Plan To Avoid Increasing Poverty and Worsening Housing Crisis for California's Minorities and Other Working Families**

There are four components of the Scoping Plan that must be eliminated, and a revised Scoping Plan along with corresponding revisions to the Scoping Plan's statutorily required fiscal and environmental analyses must be completed and circulated for public review and comment, to avoid federal and state constitutional and statutory violations, and avoid increasing California's acute poverty, homelessness, and housing crisis.

## **I. Disapprove Expanding the California Environmental Quality Act.**

Numerous non-partisan analyses and expert studies have confirmed that CEQA is a significant factor in discouraging, downsizing, delaying, and increasing the cost of housing – especially in urban job centers. *See generally*, several housing crisis reports confirming that CEQA as a problem prepared by the non-partisan California Legislative Analyst office such as <http://www.lao.ca.gov/Publications/Report/3470> ; *see also*, <https://www.mckinsey.com/global-themes/urbanization/closing-californias-housing-gap> ; <http://www.milkeninstitute.org/videos/view/if-you-lived-here-you-d-be-home-by-now-addressing-californias-housing-shortfall> ; <https://www.sandiego.gov/blog/housing-action-plan> ; <https://bpr.berkeley.edu/2017/04/11/housingcare-how-to-solve-californias-affordable-housing-crisis/> ; <https://www.bizjournals.com/sanfrancisco/blog/real-estate/2016/08/unions-against-gov-browns-as-of-right-housing-plan.html> ; <http://www.sacbee.com/news/politics-government/politics-columns-blogs/dan-walters/article25352200.html> ; <http://www.caeconomy.org/content/landing-page/housing-landing> .<sup>1</sup>

Earlier this month, the Office of Planning and Research (OPR) separately released a massive regulatory amendment package that would make changes to the regulatory requirements implementing CEQA (CEQA Guidelines) with the convenient (for state agency bureaucrats assured lifetime employment, pension and medical insurance) and disgraceful (for California working families hoping to spend any quality time at home instead of in multi-hour daily commutes) public review process to begin over the holidays.

The Scoping Plan's vague and ambiguous CEQA provisions, coupled with the massive unknowns and ambiguities in OPR's proposal, would raise housing and homeowner transportation costs - and further delay completion of critically needed housing by increasing CEQA litigation risks – and thereby exacerbate California's acute housing and poverty crisis. This effect would be disparately felt by the disproportionately minority population of renters unable to afford homeownership, younger workers more generally including even the well-paid technology, artist and internet workforce that organized the new Yes In My Backyard (YIMBY) party with the bold motto that "Housing Is Not Illegal," and Californians that do not already have

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<sup>1</sup> A recent report prepared for the Senate Environmental Quality Committee concluded that CEQA litigation was not a problem – a conclusion made possible by the study's omission of housing entirely notwithstanding the housing crisis, with a methodology that ignores both the cost and time required to deal with CEQA compliance and litigation in relation to taxpayer funded public projects such as the CEQA lawsuit threat against expiring federal funding that caused "Carmageddon). <http://sd10.senate.ca.gov/news/2017-12-07-survey-state-projects-finds-ceqa-not-barrier>; *see also*, <http://ceqaworkinggroup.com/carmageddon>

adequate housing supply options at prices they can afford. Recent studies have confirmed that higher density infill housing is the most frequent target of CEQA lawsuits statewide.

<https://www.hklaw.com/news/holland-knight-study-uncovers-widespread-ceqa-litigation-abuse-08-04-2015/>; <http://sites.uchastings.edu/helj/publications/recent-volume/>

For example, in the part of our state that has the greatest population, highest density, and most acute housing affordability problem – the six-county area that comprises the Southern California Association of Governments (SCAG) region – 98% of the 14,000 housing units targeted by CEQA lawsuits between 2013 and 2015 are located in urban infill locations, 70% are within one-half mile of transit, and almost 80% are located in the whiter, wealthier and healthier areas of the region. Another study confirmed that California’s transit projects were more frequently targeted by CEQA lawsuits than roadway and highway projects combined! *Ibid.*

If CARB actually cared about increasing density and transit services as a GHG reduction strategy, the Scoping Plan should have identified CEQA litigation – pursued by anonymous shadowy groups, business competitors, NIMBYs and labor unions - as a major obstacle and delay factor in achieving its ambitious GHG reduction goals for promoting infill housing, transit and public services. If CARB cared about working Californians, or about the poverty or housing crisis, or the transportation gridlock that is causing criteria air emissions from the transportation sector to actually increase for the first time in decades, then the Scoping Plan would have strongly advocated for statutory amendments to CEQA that would expedite housing, transportation, schools, parks and public infrastructure. If CARB cared about global climate change, the Scoping Plan would have strongly advocated for amendments to CEQA and other statutes that help California retain its middle income workforce instead of driving this disproportionately minority population to higher per capita GHG states for housing they can afford based on jobs they can access based on the educational attainment levels delivered by California’s schools and colleges.<sup>2</sup>

Instead of taking any of these constructive steps, all of which would improve the political resiliency of climate change policies in the face of hyper-partisanship and staggering income inequality, the Scoping Plan proposes to actually expand CEQA by adding ambiguous, litigious, and unlawful new expert agency net zero CEQA thresholds, substantial reductions in total Vehicle Miles Travelled (VMT), land use growth controls such as urban limit lines and new ecosystem service fees which further increase housing costs in existing communities, and legally infeasible local climate action plan standards under CEQA. These components of the Scoping

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<sup>2</sup> With respect to education, we note that separate legal action is again underway to force California leaders to meet even minimal educational standards for its minority students, including an elementary school for which fewer than ten percent of students pass reading competency tests in yet another round of litigation forced by California leaders’ repeated inaction on core civil rights in the educational arena. Elitist special interests continue patterns of discrimination against California’s minority communities with many established policies, but only CARB (and OPR) are proposing to launch a new generation of “environmental” mandates to actually worsen the housing, poverty, and transportation gridlock crises that continue this unlawful history of racial discrimination against minorities.

Plan, like the massive OPR rulemaking just initiated, will benefit only the “CEQA industry” of lawyers, consultants, special interests, and bureaucrats who profit from repetitive studies, gain financial advantages from secret lawsuit settlements and duplicative lawsuits against projects that have already gone through one or more rounds of CEQA. The Scoping Plan is an elitist tool that will further empower our BANANA (Build Absolutely Nothing Anywhere Near Anyone) republics of wealthy coastal elites who refuse to build their fair share of housing that is affordable to California’s hard working families.

#### **A. Eliminate Presumptive Net Zero GHG CEQA Threshold**

The Scoping Plan recommends, based on CARB’s status as an expert state agency on GHG, that all new development projects – of all kinds – achieve no net increase in GHG emissions (“net zero GHG”) unless the lead agency or project proponent can prove that a project cannot meet this CEQA threshold based on “substantial evidence.”

This Scoping Plan component is not proposed to go through any future rulemaking proceeding: it stands, as senior CARB official Kurt Karperos recently confirmed at a Sacramento Climate Conference, as a “self-implementing” element of the Scoping Plan that takes legal effect as of CARB’s adoption of the Scoping Plan.

First, this Scoping Plan component is flatly at odds with OPR’s contradictory legal conclusion that CEQA cannot be interpreted to impose a “zero molecule” standard and prior definitive rejection of a “net zero” GHG mandate in the only completed CEQA GHG rulemaking in effect today. OPR’s voluminous new proposal on CEQA rulemaking includes a variant of this Scoping Plan CEQA threshold, but this new OPR proposal is the beginning – not the end – of the rulemaking process. There is zero evidence in the CARB record supporting presumptive imposition by a lead agency of this net zero GHG threshold for each type of individual project – from home renovations to high-rise towers, from rail to ferry to carpool lane expansions, from wineries to hotels, from universities to hospitals, from parks to schools – that is subject to CEQA.

Second, GHG emissions are the most litigated CEQA topic, and notwithstanding several decade-long lawsuits, the California Supreme Court declined to decide in two recent cases what CEQA (a 1970 statute) actually requires in the context of determining when a GHG emission is potentially “significant” under CEQA.

It is the height of agency irresponsibility and racial insensitivity, given the severity of the housing, poverty and homelessness crisis and their collective effect on California’s minority communities, for CARB in its expert agency role to interpret CEQA as requiring use of this net zero GHG CEQA threshold unless a lead agency can prove otherwise with substantial evidence.

It is also the height of arrogance, similar to decisions by California’s redevelopment agencies to demolish whole minority communities, for a billion dollar Sacramento agency staffed with hundreds of well-paid scientists and policy advisors to suggest that a CEQA lead agency – most often a city struggling with numerous complex budget and policy priorities, operating with minimal staff and no climate change experts – to develop its own “substantial evidence” to



withstand a CEQA court challenge to rejection of this expert agency net zero GHG CARB standard.

There have been examples of “net zero” buildings which rely on a combination of rooftop solar generation, various voluntary building construction materials and techniques that have not met California’s statutory consumer protection mandate of a ten year payback in reduced energy costs, and elimination of natural gas for heating and cooking (which thereby raises monthly utility costs for building occupants). All of these “net zero” buildings increase housing costs, which are already nearly triple the average housing costs for the nation.

However, none of these examples included the other components of a “project” as defined under CEQA, which span a much larger group of project-related activities including initial construction and ongoing occupancy as well as transportation fuel use by future project residents, guests, employees, and service providers.

CARB’s version of a CEQA net zero GHG threshold imposes even higher housing costs than the “net zero” housing structures in existence by including all of these project-related construction and future occupant transportation emissions, such that new project occupants will double pay in perpetuity for driving: once at the pump under the cap and trade program, and again (and again) as part of owning or renting and doing the same routine transportation activities living next door in pre-Scoping Plan housing. Since CEQA applies only to new projects, the Scoping Plan also doubles down on the broadly perceived generational inequities created by Proposition 13, where a new home owner can pay ten thousand dollars more than their next door neighbor – under the Scoping Plan, the new neighbor will also pay tens of thousands of dollars more in transportation-related GHG offsets or allowances than households not subject to this new CEQA regime.

Further, the CARB CEQA expansion proposal for net zero GHG would be triggered today for new projects (at the height of the housing crisis) notwithstanding the fact that over time less and less fossil fuel/GHG emissions are expected from future vehicle fleets.

In short, the direct effect of CARB’s net zero GHG project threshold CEQA expansion is to impose even higher housing costs on California families that are already suffering from an acute housing supply and affordability crisis.

Third, as noted in the studies cited above, the most frequent targets of CEQA lawsuits statewide are housing projects – and the most frequently challenged category of housing projects is higher density, multi-unit projects located in existing communities served by public transit. Anti-housing lawsuits are the reality of CEQA litigation, which is at odds with the academic theory of planners who believe that all neighbors (and CEQA leverage litigants like competitors and labor unions) welcome high density and crowded parks, schools and roads - or the idealized vision of what CEQA lawsuits “should be” in the minds of Sacramento agency lawyers bureaucrats.

If it is indeed a climate goal of CARB to promote costly, high density housing over the objections of neighboring voters, then again the solution is to reform and update CEQA – not to create a new litigious “net zero” standard for each new housing project that can be litigated for a decade or more while no housing is built, and California workers continue to suffer as well as migrate to other higher per capita GHG states.

Fourth, this “net zero” CEQA approach violates consumer protection statutes that were separately enacted to prevent Sacramento’s regulators from imposing on California homeowners (and renters) every last bell, whistle, and gizmo with a lobbyist or agency special interest champion behind it. CEQA is not, as courts have consistently held, a giant “workaround” to avoid compliance – or mandate “beyond compliance” measures that conflict with specific statutory mandates, or that attempt to impose through bureaucratic fiat what the Legislature has itself repeatedly rejected as a statutory mandate such as the Scoping Plan’s unlawful conflation of the SB 32 enacted mandate of reducing GHG 40% by 2030 with the decidedly NOT approved notwithstanding multiple years of unsuccessful legislative proposals mandate of reducing GHG 80% by 2050.

The Legislature, and not CARB, enacts new statutory standards.

California already has, and can enact future amendments to, vehicle standards and fuel standards that make vehicles and gas more costly for California consumers. The Legislature has done this twice already in 2017, with the new vehicle tax and the expansion of the cap and trade program. However, expanding CEQA to require *only* future occupants of acutely needed housing units to double-and triple-pay to get to and from work with a CEQA mitigation obligation to purchase GHG credits/offsets to satisfy CARB’s new “net zero” CEQA threshold unlawfully and unfairly discriminates against new occupants in violation of Constitutional protections for interstate commerce and equal protection, in addition to other fatal legal deficiencies.

California already has, and can enact future amendments to, building code standards that result in lower GHG emissions while also protecting consumers from excessive costs; expanding CEQA to impose “net zero” building mandates that are not cost-effective even over the ten year statutory payback period harms consumers in violation of this statute.

California already has, and can enact future amendments to, its renewable portfolio standards and electricity generation grid physical and governance configurations. Given the “duck curve” challenge of California’s current inability to consume the solar/wind power produced during some afternoons (as documented by the California Energy Commission’s building standards staff) coupled with the far lower rooftop ratios available in multi-story higher density housing advocated by CARB, forcing new home occupants to pay for ever more costly (and currently unproductive) rooftop solar arrays and/or pay for offsite renewable energy generation facilities in addition to paying normal consumer costs for electricity and natural gas (or banning natural gas entirely) increases housing project costs and CEQA uncertainties with virtually no corresponding GHG reduction benefits from lost afternoon renewable generation peaks.

Other GHG emissions of simply occupying a home – like composting and reusing trash or using a transit system instead of owning a car – likewise cannot be meaningfully assumed by the vast majority of individual housing projects, because these are community-scale facilities and systems that are neither feasible nor cost-effective measures applied to the individual projects subject to CEQA (and CEQA lawsuit challenges).

For example, does an apartment project near transit maximize density – or decide to use part of its property for composting its food waste but not the food waste of its neighbors, and then spending more money to arrange for the offsite use of the composted materials? Marin County is

among the most famously hostile to new housing, and notwithstanding its purported “environmental” values has also declined to allow any food waste composting facility to be built within the County. Is it CARB’s intention to hand Marin County NIMBYs still more CEQA lawsuit claims to block apartments near transit that decline to compost their own food waste because Marin County won’t provide this GHG reduction service to its residents?

On a much more significant cost and GHG emission scale, the existence of effective transit systems is far outside the control of an individual 20-unit housing project. The University of Minnesota’s authoritative, multi-year national metro region study of transit system confirms that far less than 10% of a metro region’s jobs can be accessed in a 60-minute one-way ride on public transit anywhere in California with the sole exception of the 49-square mile San Francisco peninsula. Notwithstanding billions of transit investments, and robust rail and express bus transit ridership, routine bus ridership has plummeted in California and nationally with transportation mode shifts to Uber/Lyft (and soon automated vehicles. Reforming CEQA – and rail projects in California routinely take 20 years or more (and multiple rounds of CEQA lawsuits) to get completed. Is it really CARB’s intention to let our whitest, wealthiest, healthiest enclaves – the wealthy communities who have fought for decades to block affordable housing, “crime trains” and transit stations – use the absence of effective transit systems as yet another reason to claim CEQA deficiencies in a lawsuit against housing??

The Scoping Plan’s “net zero” CEQA threshold violates multiple provisions of the state and federal constitution, and discriminates against future occupants of new housing units who are disproportionately members of minority communities, in violation of federal and state fair housing laws.

## **B. Eliminate CEQA Numeric Standards for Local Climate Action Plans**

The Scoping Plan purports to endorse current CEQA Guidelines and court decisions upholding project compliance with locally-approved climate action plans as an alternative to the “net zero” CEQA compliance pathway. Our courts have struggled, to no clear outcome, to understand and apply CEQA to global climate change. Appellate courts and the current CEQA Guidelines both recognize that a project that complies with an approved local climate action plan is a valid compliance pathway through CEQA, and the California Supreme Court has opined that this “may” be a compliance pathway but also urged establishment of clearer CEQA thresholds for GHG emissions.

As with the “net zero” threshold itself, however, CARB’s proposal that local governments – cities and counties – adopt climate action plans that are themselves designed to reduce per capita greenhouse emissions from current levels of eleven metric tons per year, to six metric tons per year by 2030, and then two metric tons per year by 2050, demonstrates willful ignorance of the statutory jurisdictional authority of local government to substantially reduce the sources of GHG emissions that result in already low per capita emissions.

As the 2017 Scoping Plan itself acknowledges, the vast majority of GHG emissions are from the transportation sector (where local governments lack any legal authority to regulate passenger vehicle fuels or technology), from electricity generation (where local governments have made substantial strides in encouraging and producing rooftop and canopy solar power generation, but

at tiny fractions of what would be needed for an entire community), from stationary sources (which are regulated through the cap and trade program, with fees collected and disbursed by the state and not local government), and from sector-specific activities like agriculture and landfills that typically are not located in the cities where most new housing is proposed to be developed based on the eight-state agency “Vibrant Community” Scoping Plan Appendix vision of focusing future development only in higher density, transit-oriented cities).

Even the CARB Scoping Plan Appendix recommending local government actions does not identify any measures that would contribute more than a tiny fraction toward reducing the community’s per capita GHG emissions to CARB’s six and two metric tons per year numeric criteria, respectively. The mandate for achieving a “declining trajectory” in mass GHG emissions is likewise inconsistent with substantially increasing population densities in California cities, since GHG emissions do indeed track population growth – and any substantial increase in population includes a mass increase in GHG emissions even if per capita greenhouse emissions are reduced.

There is no question that cities and counties can reduce GHG emissions, by for example reducing emissions from their own municipal facilities. Even these strategies can have a significant fiscal consequence to financially struggling communities burdened with ever-increasing pension and other costs. For example, converting a municipal swimming pool to solar and eliminating gas heating will reduce GHG emissions, but also reduces the ability of the young and infirm to swim during the winter and on cloudy or cool days. Backup electricity generation from the grid will help maintain appropriate pool temperatures, but at a much higher operating cost give the availability of inexpensive natural gas. If CARB believes that local jurisdictions must never use natural gas to heat swimming pools, then it should conduct a rulemaking to impose this requirement. Country club kids will continue to swim; poor kids and the infirm will not. How important is eliminating occasional natural gas use in public swimming pools to global climate change is an issue to be appropriately addressed in a separate rulemaking, but the CARB-mandated six and two ton per year numeric thresholds for legally adequate local climate action plans demand an immediate “all of the above” GHG reduction strategy regardless of the tradeoffs.

Although the two ton per person metric has won support from many scientists, the hard work of approaching that target – even from California’s very low 11 ton per year per person rate – is appropriately managed with regulation, not a bureaucratic putsch. In the 1970’s, the chairwoman of CARB believed that the only possible strategy for reducing air pollution from cars was to prohibit driving every other day – an impossible proposition for middle income workers who must be physically present at their jobs or risk falling into homelessness and poverty, even then. Over time, through methodical and transparent rulemaking, US EPA officials under President Obama reported that vehicular emissions were reduced by 98-99% in relation to tailpipe emissions from the 1960s. We removed lead from gasoline entirely, eliminated the risk of carbon monoxide poisoning at intersections, and vastly decreased other smog-creating pollutants. If CARB was serious about local climate action plans, it would prioritize, quantify, fiscally and environmentally assess, and then recommend regulatory standards to be met by local government. Instead, by again conflating the statutory 2030 statutory reduction standard with the 2050 unenacted policy, CARB’s local climate action plan numeric standards are accompanied only by an unquantified and unquantifiable list of Appendix mush measures. Cities

and counties have already experienced the joys of being targeted by – and losing - CEQA lawsuits seeking to overturn local climate action plans. The Legislature has also repeatedly declined to mandate local agency adoption of climate action plans. It is illusory, disingenuous, and hugely litigious, for CARB to suggest that a 2 ton per capita climate action plan is an alternate compliance pathway for projects under CEQA.

The Scoping Plan is a major step in the wrong direction: it prescribes a clearly unattainable numerical per capita GHG emission standards for 2030 and 2050, identifies loosely framed and largely unquantifiable examples of potential measures that local government can seek to achieve in local climate action plans, and utterly fails to provide any clear direction on what local governments should do about the vast majority of GHG emissions sources over which local governments have no jurisdiction or control. CARB's impractical, legally infeasible, and poorly-conceived mandatory numeric standards for local climate action plans will spawn even more CEQA lawsuits against local climate action plans, and spawn more judicial confusion and conflicting outcomes. Because adoption of climate action plans itself triggers CEQA, it will also discourage rather than encourage local jurisdictions to adopt such plans and face costly environmental impact report preparation and litigation defense gauntlets.

Like the ill-considered “net zero” presumptive CEQA threshold for projects, the bottom line of this Scoping Plan local climate action plan CEQA compliance pathway is to increase costs, add more delays, and expand litigation risks, for those filing CEQA lawsuits against housing, transit, and other critical local services and infrastructure projects.

Like the “net zero” presumptive CEQA threshold for projects, the numerical GHG per capita and trajectory criteria for climate action plans should be removed from the Scoping Plan. The quantum of GHG emissions that can feasibly be attained under existing legal authorities by local governments should be separately and clearly calculated and explained, and if this is indeed a new mandate then it should be separately legislated as such so that it can be placed in the context of the multitude of other legal and policy priorities, and fiscal opportunities and constraints, placed on local government.

At minimum, if this Scoping Plan numeric per capita and trajectory adequacy standard for local climate action plans is to be incorporated into CEQA, then this – like the GHG threshold issue – should be deleted from the Scoping Plan and assessed in the context of the OPR CEQA Guidelines update proposal for which the formal rulemaking process has just begun.

**C. Delete CEQA and Land Use “Vibrant Communities” Appendix Scoping Plan Components, All of Which Ignore Regional, Racial, Economic, and Project Diversity**

CARB is a state agency, with an extremely poor track record of CEQA compliance and multiple CEQA litigation lawsuit losses, and has virtually no experience, expertise, or statutory authority to regulate local land uses. CARB's mission does not encompass even a small fraction of the public health and welfare, safety, economic development, public services, infrastructure development and maintenance, representative government by elected officials, or law enforcement duties or obligations placed on local government by the California constitution and myriad state laws.

At even the most conceptual level, the Scoping Plan's assertion that a single "net zero" GHG emissions threshold should apply to projects in climates as varied as Mendocino and Palm Springs, and should apply equally to all project types including wineries, universities, hospitals, housing, carpool lanes, reclaimed water plants, bike lanes on busy urban streets, replacement homes lost to fires and earthquakes, ski resorts and marijuana grows, the High Speed Rail project and the Twin Tunnel project (to name just a few), confirms why CARB is not the appropriate agency to assert its "expert agency opinion" on how either GHG or land uses should be regulated under CEQA.

With respect to climate variants, to impose "net zero" as a threshold in a wealthier milder climate such as the Bay Area will increase housing costs and reduce the affordability of housing for minority communities. In the inland and desert areas of the state, in contrast, pricing new projects to achieve "net zero" compounds already extraordinarily high utility costs and will literally kill people – disproportionately minorities – who cannot afford either new housing, or monthly utility bills in excess of \$1000 during the summer. A "net zero" structure that deprives new homes of far less costly natural gas extends this new CARB CEQA death zone to mountainous regions during cold winters.

Utility subsidies for the very poor do not come close to recognizing the scale of suffering and economic distress that already affects working Californians and their families, and it ignores in the housing context conclusions by the Governor and numerous other political and academic experts that we simply cannot count on public funding to solve this problem for us.

While CARB staff will undoubtedly point to utility cost assistance programs for the very poor, United Way of California determined that a full 40% of the state's population cannot regularly meet even routine monthly costs even when taking into account public subsidies for food and health care. <https://www.unitedwaysca.org/realcost> How much more will Scoping Plan implementation cost these families – our teachers, health and food workers, retail clerks and truck drivers, construction workers and public safety employees – to heat and cool their homes, cook their foods, and get to and from work, school, and medical care?

Similarly, with respect to project variants, how much more will a "net zero" mandate add to the cost of subsidized affordable and supportive housing? How much more will it cost transit projects? How much more will reclaimed water treatment facilities cost, and how much will water cost consumers, with a "net zero" mandate? And is "net zero" paid up front, over time – and if over time is this a brand new annual cost imposed on the residents of all new housing everywhere??

Using CEQA – which applies solely to "new" projects - to impose these new costs – means that wealthier existing homeowners will never pay the same high cost as the unhoused victims of California's current NIMBY-driven housing crisis, it means that existing businesses will always have a permanent economic advantage over competitors even if that drives up prices for consumers, and it means that the already extraordinarily high infrastructure costs in California will get higher still – at a time of diminishing availability of federal infrastructure investment.

As patiently, and exhaustively explained by NAACP and Haas Business School Fellow Richard Rothstein in his book, The Color of Law, government bureaucrats don't always intentionally and

expressly engage in racial discrimination – but the repeated pattern of agency actions in California and nationally does indeed have this disparate discriminatory effect.

Discriminating against minorities by expanding CEQA will do nothing to advance California's leadership role in global climate change. It will instead cement the growing reputation of Californians as elitists that openly demonstrate their contempt for middle class workers.

We do not believe that the Legislature enacted climate laws that authorized or anticipated that CARB would expand CEQA to intentionally increase housing costs, drive up poverty rates, and increase global climate change by eliminating homeownership opportunities for middle class workers. We do not believe that the Legislature intended CARB to drive middle income families to states with far higher per capita GHG emissions, and within California to further burden housing costs and CEQA litigation risks while still protecting CEQA litigation abusers that have forced more Californians to live in housing located ever-further from temperate climate coastal jobs centers to inland areas with health-critical needs for more summer air conditioning and winter heating.

#### **d. Conclusion: Delete All CEQA Provisions from Scoping Plan**

Prescribing new CEQA requirements that are practical, lawful, equitable and affordable given our poverty, homeless and housing crisis, existed as a Scoping Plan opportunity for CARB, us, and other Californians committed to the twin goals of civil rights and equal protection, along with environmental protection and climate change leadership.

However, the political sloganeering behind the 2017 Scoping Plan's "net zero" CEQA threshold and local climate action plan numeric standards is irresponsible, inequitable, and unlawful. Because approval of the Scoping Plan is intended by CARB to give these CEQA expansions immediate legal effect as expert agency determinations regardless of the OPR or any other rulemaking, CARB's CEQA expansions also cause the greatest harms to the housing, transit, public service, infrastructure, park and school projects, that are most likely to be targeted, threatened, forced to pay "greenmail" in secret settlements using taxpayer dollars or private sector dollars that get rolled into increased housing costs, and ultimately delayed or derailed, in CEQA lawsuits.

The Scoping Plan's expansions to CEQA were also entirely ignored in the environmental and fiscal analyses prepared for the Scoping Plan, and thus also violated applicable rulemaking mandates for the Scoping Plan, as yet another set of legal violations by CARB in this ill-considered CEQA power grab.

CARB has previously received comments on its draft Scoping Plan, which instead of "net zero" proposed an equally opaque, litigious, and inequitable "all feasible" GHG mitigation standard on new projects. The 2017 Scoping Plan is even more extreme, and more unlawful, than earlier drafts by adopting the numeric "zero" threshold, and unveiling for the first time the six/two ton per capita standards for climate action plans.

All CEQA components of the 2017 Scoping Plan should be deleted (including the related land use measures in the Vibrant Communities Appendix). CEQA GHG requirements should be determined in the context of the just-commenced rulemaking process for amending the CEQA

Guidelines. We close these comments with a simple resolution that we ask you to approve in lieu of staff's recommended approval of the entirety of the Scoping Plan.

## **II. Delete Limits on New Vehicle Miles Travelled from Scoping Plan.**

The 2017 Scoping Plan states that CARB staff is "more convinced than ever" about the need for Californians to drive less – a lot less. However, CARB staff also recently issued a notice confirming that CARB staff was not ready to propose updated targets for GHG and vehicle mile travelled (VMT) reductions as part of the SB 375 process, and would not be ready to do so until sometime next year.

Like the CEQA components of the Scoping Plan discussed in Part I, the VMT reduction component of the Scoping Plan is not quantified or assessed in either the required environmental or fiscal analysis, and accordingly CARB has violated the fiscal and environmental review statutory requirements applicable to the Scoping Plan.

As background, while it has become a "political truth" that higher density transit oriented housing reduces VMT, the actual truth as documented in numerous studies including those funded by CARB and others is that adding density to transit-served urban neighborhoods adds VMT (even if it potentially reduces per capita VMT), that VMT is higher for the higher wealth households that can afford to pay the \$4000/month rents charged in the tony Bay Area and Los Angeles neighborhoods that have sprouted high rise residential density in recent years, and that the only peer reviewed academic study of VMT reduction in higher density transit neighborhoods confirmed that there is almost no correlation between VMT reductions and the expensive high density transit oriented housing development sought by the Scoping Plan authors. See, e.g., <https://www.arb.ca.gov/research/apr/past/13-310.pdf>, [www.tandfonline.com/doi/abs/10.1080/01944363.2016.1240044](http://www.tandfonline.com/doi/abs/10.1080/01944363.2016.1240044)

Add to this the fact that bus ridership has plummeted nationally and throughout California, even in San Francisco, which is the West Coast's most transit-oriented city (and the only city that largely took shape before the automobile became the dominant mode of transportation). Gentrification and the outmigration of minorities and working class families from the central city neighborhoods with the most transit has also been well documented, including the "diaspora" for example of African Americans to the San Joaquin Valley and distant suburbs like Antioch, Fairfield and Santa Rosa from the cities of Oakland, San Francisco and San Jose. While lower income workers may feasibly take transit where transit service can reasonably connect people to jobs (e.g., within cities like San Francisco), once such workers are forced by the housing crisis to "drive until they qualify" for housing they can afford regional VMT actually increases. Emerging transportation technologies and services like Uber and Lyft provide increasingly popular last-mile service between rail stations and work/home, but studies have confirmed these services also increase VMT. Automated vehicles likewise are projected to increase rather than decrease VMT.

Intentionally increasing road congestion as a climate strategy, as was explained in the "road diet" proposed in OPR's second Discussion Draft of SB 743 CEQA Guidelines, and as has been with less inflammatory words adopted as policy by Caltrans without benefit of notice to or statutory authorization from the Legislature, compounds the racial injustice of the housing crisis since the



victims of intentionally increasing congestion are the workers already forced to more distant inland locations away from higher wage jobs and more ample job opportunities.

The “cause more gridlock” transportation strategy also doesn’t work from an environmental and public health perspective: for the first time in the many decades since the state started comprehensively tracking air pollution from vehicles, criteria and GHG and toxic air emissions actually increased rather than decreased – even as cars and fuels emit less pollution – because people are forced to drive longer distances, and spend more time stuck in traffic congestion. And who lives closest to the freeways and ports where vehicular emissions increase from this intentional gridlock? No surprise answer: these are neighborhoods dominated by poor and minority residents, who also have disproportionately high rates of pollution-induced asthma and other adverse health conditions.

Increasing congestion to induce bus transit has never been approved by Californians, is contrary to several existing federal and state laws, and is absolutely contrary to the political will of California voters. In recent years, several of California’s most congested counties voted to approve roadway and transit system improvements in an effort to get the transportation systems working again. The state’s congestion management statutes, the enacted duties of Caltrans and regional transportation agencies, federal transportation statutes, and the federal and state clean air act, all require efficient goods movement and vehicular passenger mobility as strategies to reduce air pollution and protect and enhance the efficient movement of passenger and commercial vehicles. California’s agricultural sector, its ports, and its tourism industry – to name just a few examples – must have adequate transportation mobility.

We have watched with dismay the enforced “road diet” that CARB and other bureaucrats and academic want to impose on California’s minority communities, and we will weigh in when next the opportunity arises in the SB 375 context, as regional transportation agencies and CARB attempt to identify ever more stringent VMT reduction targets. We will again, in that context and all others, note the real truth that differs from the political truth: VMT has actually risen (by about 3% in the SCAG region for example) as a common sense outcome of increased population, jobs, and economic activities notwithstanding billions spent on transit improvements

Ahead of the new SB 375 targets, we have been stunned by CARB’s willful refusal to accept the reality of the multi-year national study coordinated by the University of Minnesota that confirms that less than 10% of jobs even in California’s metro regions can be accessed in 60-minutes by public transit, and that roadway gridlock makes bus ridership – which has plummeted nationally – even less viable for minority residents forced by the housing crisis to live far from their jobs.

We have remained stunned by CARB’s refusal to accept the inequitable and unlawfully discriminatory outcome of VMT fees, which take the same poorer and browner populations forced to travel the longest distances – and impose regressive new VMT fees and mandatory reduction crackdowns on people who are barely making ends meet notwithstanding having two or more jobs per household.

We already have the most economically regressive vehicle use taxation scheme in the nation: Californians pay about 75 cents more for gasoline than the national average, and this high fuel price will further increase with new cap and trade costs, new transportation system taxes charged

for each gallon of gas, and higher vehicle registration fees. California's middle income families, forced to live ever greater distances from their jobs and ever closer to the poverty line, also have the dubious privilege of paying far higher taxes and fees to the state than their proximate, wealthy, whiter work colleagues fortunate enough to be able to afford to live in coastal job centers – helped with financial inheritances or other contributions from parents who actually received the veteran home and college and small business loans that were denied to minority veterans by agency bureaucrats who also sincerely believed themselves to be acting in the public interest.

While recognizing that electric cars will comprise the majority of California's future car fleet under the Scoping Plan, the Plan provides no transition plan – and certainly no practical or equitable transition plan – for the 25 million registered California vehicles that are not electric, or for the 95% of the 2 million new cars sold annually in California that are not electric, or for the fact that new cars generally – electric or otherwise – are typically well outside the budget reality for Californians already burdened with excessive housing costs. It should come as no surprise that the majority of hard-working Californians driving used cars are minorities, or that the modest subsidies and occasional give-aways of green cars to the lowest income Californians or politically favored workers, such as public employees, do not “trickle down” to the vast majority of California's financially strapped middle income workers.

The social and racial inequity of imposing a VMT reduction mandate on California families cannot be overstated. A recent Stanford study shows that construction workers spend the absolute highest percentage of their income on transportation: is it really equitable, or necessary, to make that worker spend even more in VMT taxes and fees? Or perhaps CARB actually endorses the all-too common practice of having construction workers sleep in pickup truck beds at job sites or in city streets since they can't afford to live near work, and can't manage the 4+ hour daily commute between the Central Valley and Bay Area? Or is it better still for California to import construction workers from out of state, crammed into extended stay hotels with infrequent plane trips to their home state, since the residential GHG emissions for these workers and their families aren't counted as GHG emissions within California so this temporary worker import model helps us achieve the illusive 80% GHG reduction target?

Assuming CARB is not trying to force workers to sleep in cars during the work, and not trying to play a shell game by counting only GHG emissions of California's residents rather than its non-resident Reno/Phoenix/Las Vegas-based workforce, the fact is that mandating reductions in VMT discriminates against minority workers who drive the farthest because they can't afford to live near their jobs. It is also arbitrary and capricious in relation to CARB's focus on supporting clean car technologies that have steadily eroded the correlation between a vehicle mile driven and GHG emissions.

In fact, when asked to quantify the GHG reduction from an avoided vehicle mile travelled, CARB's senior executive and VMT staff could not do so in meetings in both Los Angeles and Sacramento. This equation (one mile travelled = how much GHG?) is, however, the single most important metric to understanding the need for, and effectiveness of, CARB's unquantified but unambiguous decision that significant VMT reductions are necessary and must be achieved as part of the Scoping Plan. If arbitrarily reducing VMT causes a million more Californians to slip into poverty, and 10,000 more to slip into homelessness, while only reducing GHG by 100,000

metric tons per year – is that really a necessary component of the Scoping Plan? Will this example really inspire other states or countries to follow California’s lead?

Or is this another example of the radical, unjust, and never implemented CARB proposal of this Governor’s first term, when allowing people to drive to work only every other day was identified as a necessary regulatory mandate to reduce criteria air pollutants? Of course this was not true, but the past is indeed the prologue in this tale – rather than embrace its own vision of an electric car future that reduces GHG emissions to a small fraction of today’s fleet, in reliance on the absolutely technically feasible existing electric car technology that already exists, the Scoping Plan imposes the longstanding desire environmentalists well before climate change policies took center stage to force people out of cars. Federal and state Clean Air Act mandates require cost-effectiveness transparency and accountable rulemaking, and absolutely worked to dramatically reduce criteria and toxic air pollutants based on technology that hadn’t even been invented at the time – without depriving people of the ability to get to work, school, and medical appointments.

CARB should have learned from the error of its over-the-top green advocacy against people thirty years ago, and engaged in a methodical GHG emission reduction regulatory process that focused on the most cost-effective, least harmful measures first. There is no mystery in identifying these measures: in 2017’s Drawdown: The Most Comprehensive Plan Ever Proposed To Reduce Global Warming,” an award-winning, New York Times bestselling treatise on reducing climate change by renowned environmentalist Paul Hawkins, scores of measures are identified that do not discriminate against the working poor by depriving them of the right to drive to necessary destinations via a mandatory vehicle mile travelled reduction regime. In fact, transportation changes (trains and ridesharing) rank as 74<sup>th</sup> and 75<sup>th</sup> of the 80 GHG reduction strategies that made the cut for inclusion in the plan at all – while electric vehicles ranked a respectable 26<sup>th</sup> in effectiveness ratings, with cleaner cars slotting in at 49<sup>th</sup>. The Scoping Plan’s CEQA, VMT and Vibrant Communities fixation on high density urbanized “walkable” communities slotted in at 54<sup>th</sup> of 80 – which when coupled with its racial and economic disparate incomes, including perpetuating the virtual end of homeownership for middle income and minority families in California, would not make the political cut of any elected decisionmaker as a politically resilient or lawful component of the Scoping Plan.

CARB’s decision effectively limits the ability of the vast majority of Californians to get to work, school, and medical care. While asserting that “on average” Californians will only have to drive a mile or two less each day, CARB ignores both assumed population growth in California as well as the fact that the “average” driving distance increases dramatically for minorities forced to move inland and away from their jobs in order to pay rent or purchase homes. While a wealthy Santa Monica or San Francisco resident may have the luxury of walking to work, or catching an Uber or Lyft ride, or hopping on a luxury employer-provided direct service bus, the rest of California is stuck – for hours and hours – in traffic. Long gone are the days when average Californians decided to take a drive for fun: today Californians grit their teeth and suffer backaches, headaches, high blood pressure and heightened stress – and miss hours of time which should have been spent helping children with homework or afterschool activities – because CARB and other California bureaucrats have managed our most populated regions into gridlock.

Of course there are people – mostly wealthier and whiter people – who will flock to luxury city apartments after college, spending every spare nickel on rent and student loans, before getting

married and having kids – and moving to a suburb where they can buy a house and raise their kids. Notwithstanding the academic hopes and aspirations of the “green blob,” data compiled from non-partisan experts (including Obama-era federal agencies like Fannie Mae) confirm that millennials want to raise their kids in the suburbs, and baby boomers are staying in their homes as long as their health allows. Suburbs are the fastest growing areas nationally, and a humane – and respectful of humans – transportation agenda would focus on expediting (inclusive of CEQA reform) construction of efficient rail service between suburban nodes so that suburbs can increase downtown densities and provide a more affordable range of multi-family housing options without worsening gridlock. Instead, the Scoping Plan engages in the “magic thinking” that there will be no future Californians needing to drive anywhere, that the steep fall in transit ridership in California metro areas (especially buses) notwithstanding major new transit funding investments can simply be ignored, and the use of our desired future fleet of electric cars – which have negligible GHG emissions – must be shut down in the same GHG reduction effort as a 1970 muscle car. If this makes no common sense, it’s because – as Mark Twain says – common sense isn’t so common, and climate bureaucrats talking to each other have managed to park common sense – and the needs of California’s workforce – in a dark closet and tried to close the door.

We are not willing to be put in a dark closet and deprived of the ability to access work, school, medical care, and other driving destinations that wealthier white elites take for granted. Dedicated Latino leaders in the California Legislature battled for years to provide drivers’ licenses to undocumented immigrants: understanding and complying with traffic laws, and having appropriate insurance, were among the many reasons why providing drivers licenses to immigrants and driving is a necessity, and not an option, in our communities.

CARB’s “back to the future” version of forcing people to drive less, now expressed as a VMT reduction rather than the easier-to-understand “you can only drive to work every other day” proposal, represents an advance in obfuscatory communications in a failed attempt to mask its racial and economically disparate, and unconstitutional, effect.

CARB’s refusal to postpone Scoping Plan approval until the SB 375 VMT reduction target decision can be appropriately disclosed and factored into the unspecified VMT reduction Scoping Plan mandate is also unlawful piecemealing, in violation of both the environmental and fiscal disclosure, analysis and mitigation mandates applicable to the Scoping Plan. This unlawful bureaucratic tactic splits the whole of CARB’s Scoping Plan action into smaller pieces – which in this case include OPR’s proposed amendments to the CEQA Guidelines and CARB’s future decision to adopt VMT reduction targets for all California regions.

As described in the proposed conditional approval of most of the Scoping Plan described below, all references to VMT reductions and reduction proposals should be deleted from the Scoping Plan. Any future VMT reduction proposal, including imposition of VMT reduction mandates that are separate from GHG reduction mandates in SB 375 plans, must be subject to its own comprehensive rulemaking process which includes environmental and fiscal disclosures that do not conceal today’s costs on today’s Californians behind the veil of the “social cost of carbon.”

We also note that the Legislature provided zero express authority to CARB to regulate VMT, just as it provided zero express authority to CARB to impose a “drive only every other day” mandate

several decades ago. Then, like now, legislation to vest this authority to limit Californians' ability to drive created unconstitutional limitations on both intrastate and interstate commerce, and was considered and rejected by the California Legislature.

CARB should focus on measures to hasten completion of regional transit systems at lower costs, making such systems more quickly accessible, and more affordable, for more Californians. The Legislature and direct voter approval of taxes and bonds to fund designated transportation projects are aimed at improving transportation and mobility, in direct democracy opposition to the highway gridlock and increase in health-damaging vehicle pollution promoted as a climate strategy in the VMT components of the Scoping Plan and OPR proposal. More CEQA lawsuits targeted transit projects than highway and roadway projects combined over the first three year study cited above: why doesn't the Scoping Plan find transportation solutions to keep more California workers here with their families, rather than forced to move to higher per capita GHG emitting states, as a global climate strategy?

Meanwhile, methodical and cost-effective promotion of lower GHG emitting vehicles – notably the Clean Car initiative for which Californians have invested hundreds if not billions of dollars – remains the signature transportation objective that actually does fall within CARB's statutory mission, unlike VMT reductions even for electric cars and CEQA expansions creating new litigation risks for critically needed housing, transportation and infrastructure projects. Trying to falsely "balance the books" with an 80% GHG reduction scheme that has no practical or foreseeable alternative to replacing California's 25M registered vehicles, or converting the 5% of electric vehicles sold annually to 95% of vehicles sold in 5 years, are just examples of the difference between the radicalized/politicized GHG regime which ignores people, and the success of the methodical rulemaking process (inclusive of technology promotion and recognition) that delivered 98+% decreases in vehicular tailpipe emissions under the federal Clean Air Act, thereby protecting both people and the environment.

### **III. Delete "Vibrant Communities" Appendix**

Further increasing the threat to the timely development of more than a million critically-needed housing units that are affordable to working families, and restore homeownership opportunities to California minorities, is the EIGHT-state agency consortium that has appointed itself in the "Vibrant Communities" Appendix to the Scoping Plan to "help" local governments manage land use. This EIGHT-agency cabal formed in the absence of any statutory authorization from the Legislature, under the cover of addressing global climate change. With the exception of the California Department of Housing and Community Development (HCD), none of the other seven agency participants in "Vibrant Communities" has the expertise or statutory authority to regulate the approval of local land use plans and housing projects. In fact, based on the extreme housing emergency, the Legislature enacted, and the Governor signed, a package of 15 housing bills in 2017 – none of which authorized EIGHT state agencies to interfere with local and state agency statutorily-prescribed housing roles. Both the Legislature and the Governor have committed to taking further action to address the housing crisis in 2018, and again there is not a single introduced piece of Legislation that brings EIGHT state agencies into housing land use decisions.

No sane human being would agree that adding EIGHT state agencies in an unstructured and unauthorized consortium to the housing approval process will expedite the timely completion of

more than a million new homes, at costs that are actually affordable to Californians. The only state agency that has this direct land use authority in California communities is the Coastal Commission, with prescribed authorities and procedures enacted by both the Legislature and separately approved by popular vote. Even within this very prescribed legal structure, no sane human being would agree that the Coastal Commission in its state agency role has expedited (or even tolerated) much new housing construction.

The fact is that we need a lot more housing built, at prices that are affordable to working Californian families including our majority minority community members. Neither we nor the Legislature want EIGHT state bureaucracies waging turf battles for money and staff and control in an unstructured “Vibrant Communities” groupthink paradigm shift away from the enhanced local government accountability measures and the strengthened state enforcement tools like the Housing Accountability Act that were actually enacted by the Legislature in 2017. The “Vibrant Communities” appendix is yet another Scoping Plan workaround for decades of failed aspirational legislative proposals by environmental activists seeking top-down state control of local communities so they can impose urban growth boundaries (consistently shown to increase housing costs) and new urban ecosystem service taxes (direct new tax on urban area residents).

The Scoping Plan’s Vibrant Communities appendix, like the Scoping Plan’s proposal to expand CEQA’s litigation risks while doing nothing to expedite critically needed housing and related infrastructure for California’s low per capita GHG residents, and imposing regressive new costs and driving restrictions on the minority workforce forced by the housing crisis to drive the most, collectively reflect the profoundly negative cultural shift in the environmental advocacy community to an openly anti-human agenda.

Succinctly described by the co-founder of Greenpeace 1986, this anti-human agenda continues to persist today among the environmental advocacy community and environmental agency representatives.

It was not until 2017 and the election of Donald Trump that the Sierra Club and other environmental groups executed an accord to recognize the importance of civil rights and social justice to the environmental agenda. In describing the schism this caused (including membership resignations from protesting Sierra Club members), on November 18 of 2017 the Sierra Club’s Executive Director Michael Brune noted in defense of the accord that he was “proud of how the Sierra Club has begun to address the intersection of climate with inequality, race, class and gender, and I guarantee that we’ll go even deeper.” As described in an Outside Magazine article chronicling the environmental movement’s troubling history of ignoring minority community concerns:

What Brune is acknowledging is the darker legacy of the green movement. Some may believe that environmentalism has little to do with social justice issues, but the mission of the Sierra Club, and many conservation groups like it throughout the late-19th century and most of the 20th century, was anything but race neutral. In many ways, racial exclusivity actually shaped the environmental mission, which is what makes the Sierra Club’s leap toward civil rights advocacy such a radical move. . . . Given the history of conservationists elevating endangered plant life over endangered people of color, it is environmentalism’s soul that most needs saving.

<https://www.outsideonline.com/2142326/environmentalism-must-confront-its-social-justice-sins>

This profoundly racist historical underpinning of the environmental movement continues to exist today. Look no further than political deference still provided to special interests NIMBY environmentalist donor strongholds, such as the Legislature's 2017 capitulation to Marin County's demand for still more delays in ever having to build its share of affordable housing – this in a California subject to a consent agreement for violations of federal Fair Housing Act laws.

The CEQA, VMT and Vibrant Communities components of the Scoping Plan represent either the oblivious or intentional continuation of this environmentalist racist tradition; neither attitude, however, makes these Scoping Plan components morally acceptable or lawful.

As the San Francisco Chronicle reported on December 10, the reason the Oakland A's aren't leaping at the opportunity to build a stadium at the Coliseum site to be paid for by the "profit" from redeveloping the sea of surface parking into acutely needed dense transit-oriented housing comes down to the simple math, and hash, that has created the housing crisis:

At a minimum cost of \$4.50 per square foot for construction, a 1,000-square-foot, two-bedroom apartment at the Coliseum would have to rent for as much as \$4,500 a month. You might be able to charge that downtown, but it would be a tough sell in East Oakland. <http://www.sfchronicle.com/bayarea/matier-ross/article/Oakland-has-a-Plan-B-for-A-s-It-s-called-the-12418059.php>

The United Way report and numerous other non-partisan sources report that households are supposed to spend 30% of their income on housing so that there is enough money to pay for food, medicine, childcare, insurance, taxes, and savings. Under this 30% criteria, households would need to earn nearly \$170,000 per year to rent one of these new urbanist, transit-oriented, dense apartments. Given that the median household income in Alameda County is less than half of that amount (just under \$80,000), the "infill" high density apartments favored by the environmental community and threatened to be enshrined by CARB into the Scoping Plan can't even be rented, let alone owned, by the vast majority of Alameda households, including Alameda's hard-working minority families.

[https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml?src=bkmk](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmk)  
<https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Confronted with the harsh reality of an entire region's housing costs, Alameda's households – the majority of whom are minorities – can leave the region or the state (an outward migration pattern that surveys report is in fact occurring, *see, e.g.,*

<https://sf.curbed.com/2017/3/31/15140036/bay-area-leaving-poll-san-francisco> ). It should come as no surprise that this "environmental" agenda of intentionally displacing minorities from California's coastal communities has occurred only now in our minority majority state.

The EIGHT agency Vibrant Communities appendix, like the CEQA and VMT components of the Scoping Plan, should be deleted as unlawful and discriminatory, and as exacerbating rather than helping solve our housing, homeless, poverty, and transportation gridlock problems.

### **III. Correct Environmental and Fiscal Analytic and Procedural Deficiencies Prior to Implementation of Remaining Scoping Plan Provisions**

The 2017 CARB Scoping Plan fails to comply with applicable statutory mandates requiring completion of CEQA and fiscal analyses and public review process for the remainder of the Scoping Plan components. Even with deletion of the CEQA Expansions, VMT restrictions, and Vibrant Community appendix, final agency approval of any implementing actions under the Scoping Plan must be postponed pending lawful completion of the required CEQA and fiscal review procedures.

#### **a. Violations of the California Environmental Quality Act**

Notwithstanding its foray into expanding CEQA in the 2017 Scoping Plan, CARB has been sued, and has appropriately lost, numerous CEQA lawsuits. The same pattern of CEQA compliance deficiencies plague this Scoping Plan's environmental document. No version of the Scoping Plan can be approved until these CEQA deficiencies are corrected. Specifically:

Regional agencies charged with implementing just the transportation/land use planning requirements of SB 375 have approved environmental impact reports documenting scores of significant impacts warranting mitigation, and scores of unavoidable adverse impacts that remain even after mitigation, which are associated with high density, transit oriented development of housing and transit systems required to comply with CARB's panoply of GHG mandates, policies and directives including but not limited to those identified in the Scoping Plan. Examples of significant impacts warranting mitigation, and significant unavoidable impacts, from significantly increasing density and reducing vehicular mobility as a climate strategy include:

- adverse aesthetic impacts (e.g., from changes to public and private views and the character of existing communities based on increased building intensities and population densities),
- adverse air quality impacts (e.g., from increases in per capita emissions of GHG, criteria and toxic air pollutants, which has already occurred from the longer commutes caused by intentionally increasing auto congestion in advance and independent of the availability of any time- or cost-effective transportation alternatives for Californians forced to "drive until they qualify" for rental or ownership homes they can afford),
- adverse biological resource impacts (e.g., from increased usage intensities in urban parks from substantial infill population increases),
- adverse cultural impacts (e.g., including adverse changes to historic buildings and districts from increased building and population densities, and changes to culturally and religiously significant resources within urbanized areas, from increased building and population densities),



- adverse impacts to urban agriculture (e.g., from the conversion of low intensity urban agricultural uses to high intensity, higher density uses from increasing populations in urbanized areas, including increasing in the urban heat island GHG effect),
- adverse impacts to geology/soils (e.g., from building more structures and exposing more people to earthquake fault and other geologic/soil hazards in intensifying the intensity and use of these urbanized areas),<sup>3</sup>
- adverse impacts hazards and hazardous materials (e.g., by locating more intense/dense housing and other sensitive uses such as schools and senior care facilities near freeways, ports, and stationary sources in urbanized areas)
- adverse impacts hydrology/water quality (e.g., by increasing volumes and pollutant loads from stormwater runoff from higher density/intensity uses in transit-served areas as allowed by current stormwater standards),
- adverse impacts from noise (e.g., from substantial ongoing increases in construction noise from increasing the density and intensity of development in existing communities, and ongoing operational noise from more intensive uses of community amenities such as extended nighttime hours for parks and playfields),
- adverse impacts to population/housing (e.g., from substantially increasing both the population and housing units in existing communities,
- adverse impacts to recreation/parks (e.g., from substantially increasing the population using natural preserve and open space areas as well as recreational parks and other amenities),
- adverse impacts to transportation/traffic (e.g., from substantial total increases in total vehicle miles travelled in higher density communities, increased VMT from rideshare/carshare services and future predicted VMT increases from automated vehicles notwithstanding predicted future decrease in private car ownership),
- adverse impacts from traffic-related gridlock and multi-modal congestion impacts (e.g., noise increases, adverse transportation safety hazards in multi-modal dense areas including bike/pedestrian/bus/truck/car accidents and fatalities),
- adverse impacts to first responder fire, police, and paramedic services (e.g., from congested and gridlocked urban streets with high population densities;
- adverse impacts to public utilities and public services (e.g., from substantial increases in population and housing/employment uses and demands on existing water, wastewater, electricity, natural gas, emergency services, libraries and schools).

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<sup>3</sup> Although the California Supreme Court has determined that CEQA does not encompass impacts from existing environmental conditions on a project, OPR has repeatedly declined to recognize this decision and hence it is included here and in most other SB 375 SCS EIRs).

CARB is legally obligated to complete a comprehensive CEQA evaluation of these and related reasonably foreseeable impacts from forcing all or most development into higher densities within existing urban area footprints, intentionally increasing congestion and prohibiting driving, and implementing each of the many measures described in the “Vibrant Communities” appendix.

This CEQA analysis does not presuppose that CARB is prohibited from proceeding with these provisions of the Scoping Plan, or of the other provisions of the Scoping Plan. CEQA requires full disclosure, a comprehensive analysis, and approval of feasible mitigation measures. CEQA also requires an analysis of other feasible alternatives for achieving the Legislatively mandated GHG reductions, and separately considering the feasibility and differential impacts of achieving an 80% GHG reduction based solely on existing technologies, services, incomes, and constraints.

While outside the scope of CEQA, we also urge CARB to evaluate the gentrification and displacement impacts of its Scoping Plan.

While we very much respect the work of the environmental justice advocates assigned by law to a seat at CARB’s table, the civil rights of minority communities extend well beyond environmental justice: we are constitutionally entitled to equal protection under all laws, from education to housing to financial services to health care. California’s top national ranking in poverty and homelessness, and its acute housing shortage and extreme housing prices, require all agencies – including “environmental” agencies such as CARB, to carefully weigh their actions through the prism of equal protection – and not thoughtlessly ignore or dismiss the disparate racial consequences of purportedly color-blind actions like expanding CEQA or limiting driving.

Although the CARB Scoping Plan and environmental assessment are fulsome in their praise of GHG reductions and open space protection – including imposition of still more costs in the form of “ecosystem service fees” on urban area residents – the Scoping Plan’s willful refusal to acknowledge the corresponding adverse environmental and public health/welfare impacts of Scoping Plan implementation violates CEQA. The Scoping Plan’s equally unlawful inclusion of numerous strategies that will actually increase housing costs and poverty, and reduce housing affordability and homeownership opportunities in California communities, is equally unlawful. The purported “Vibrant Communities” appendix and the Scoping Plan itself include such discriminatory housing and pro-poverty strategies as growth control boundaries that numerous studies have confirmed actually increase in-boundary housing costs and reduce supplies (*see, e.g., <http://www.tandfonline.com/doi/abs/10.1080/02673037.2013.825695>*), its priority on the development of small high density housing units that cost 3-5 times more per square foot to build than homeownership units like single family, duplex, and town homes (*see, e.g., <https://ternercenter.berkeley.edu/right-type-right-place>*), and its endorsement of raising taxes on urban residents still higher to achieve “eco-system service” wealth transfers to rural areas, and for imposing VMT fees and restrictions on all new.

The only honest effort to translate the “Vibrant Community” vision into actual housing cost and housing production, completed by UC Berkeley professors, confirms that under the CARB vision families will pay the same for an 800 square foot apartment as they pay for a 2000 square foot home or town home – and that building the necessary number of homes to address California’s housing crisis within the growth control constraints imposed under this Vibrant Communities

vision will require the “demolition of tens of thousands, if not hundreds of thousands, of single family homes.” (*Ibid.*)

The 200 has lived through the last round of bureaucratic “do gooder” land use policies in the form of redevelopment programs that wiped out minority communities, permanently deprived minority homeowners of their equity and homeownership status, and took the already “vibrant” minority neighborhoods that white middle class agency elites concluded were “blighted” with sterile, failed, and largely unrealized new land uses more than 40 years later. Using climate change is this generation of bureaucrat’s new excuse to wipe out minority homeowners – since it’s obvious the “tens if not hundreds of thousands” of demolished homes will not be in Malibu or Marin, or Hillsborough or Beverly Hills, but will again be the last remaining homes owned by California’s minority and working class communities. Everyone associated with this latest “vision” of what constitutes a “vibrant community” should visit the actual existing minority vibrant communities that they are intent on demolishing, and visit with the minority families who have actually attained homeownership and used their equity to weather financial setbacks from temporary job losses and illnesses, fund college or senior care, and provide a modicum of multi-generational middle class security that is so scornfully dismissed by the anti-human environmentalist elites driving so much of California’s climate politics (and policies). As the co-founder of Greenpeace, ecologist Dr. Patrick Moore, announced when he resigned from that organization:

Greenpeace is an “evil organization” which has “lost concern for humans” and is part of an environmental movement that is now dominated by the “self-serving” and “highly-paid” network of environmental pressure groups that comprise the “green blob.”

The Scoping Plan is a dream come true for the “green blob” – it will further accelerate the elimination of younger, browner, working class people off of that piece of the planet that it governs: the state of California.

The CEQA expansion and driving limit provisions of the Scoping Plan are also unconstitutional, and unlawful.

For example, the Scoping Plan’s CEQA analysis wholly ignores substantial evidence of significant adverse impacts – conclusions reached by the SB 375 implementing agencies in the Bay Area, Sacramento, San Diego and Southern California – in violation of CEQA. Sustainable Communities Strategy EIRs approved throughout the state likewise identify scores of significant impacts warranting mitigation, and significant unavoidable impacts even with mitigation. The Program EIRs for current Sustainable Communities Strategies in each of these jurisdictions is hereby incorporated by reference in this comment letter, and all are available on the websites maintained by each regional agency. The Scoping Plan’s failure to identify, assess, and prescribe feasible mitigation measures, for each of the significant unavoidable impacts identified in each of these Program EIRs, and in a programmatic CEQA evaluation of the many components of the Scoping Plan such as the increase in transportation emissions associated with the production of goods once produced in California but now produced in other jurisdictions and transported to California (e.g., cement), is a prejudicial abuse of discretion and per se violation of CEQA given the ready availability and substantial evidence of significant adverse CEQA impacts identified in the regional SB 375 certified EIRs, in CARB’s prior environmental

assessments, and in the EIRs and CEQA equivalent documents approved by other agencies charged with the past and ongoing implementation of Scoping Plan components such as the California Energy Commission and California Public Utilities Commission. The Scoping Plan certainly does not acknowledge, nor does its environmental analysis disclose or assess, the environmental – or any other – impacts of the “demolition of tens or hundreds of thousands of single family homes” and the dispossession of minority homeowners and denial of aspiring minority homeowners.

**b. Violations of Fiscal Evaluation Requirements**

CARB was required to conduct a comprehensive fiscal evaluation to allow members of the public as well as Board members to understand the fiscal impact of its Scoping Plan.

CARB’s fiscal evaluation makes a mockery of this statutory requirement by completely failing to identify the reasonably foreseeable costs to California households of Scoping Plan implementation. Instead, CARB relies on the “social cost of carbon” metric to justify its determination that the Scoping Plan meets applicable fiscal consequence legal requirements. CARB’s reliance on the social cost of carbon includes two fundamental legal deficiencies.

First, this methodology allows CARB to fully conceal costs to current Californians in reliance on a methodology that presumes that all adverse future climate change costs will be avoided based on worldwide GHG emissions achieved at some future time. Current Californians struggling with poverty and the homeless crisis will bear these fiscal costs; future avoided costs will benefit future Californians.

Second, this methodology assumes that climate change adaptation costs will be avoided because the rest of the world will reduce GHG to the prescribed metric of two tons per capita per day – a metric that is indeed achieved by some of the poorest countries in the world, which no countries seek to emulate. Instead, growing economies like China and India continue to substantially increase their GHG emissions with robust ongoing growth in such technologies as coal-fired electric plants and petroleum-powered vehicles – and even countries committed to reducing GHG like Germany continue to derive nearly half of their electricity from coal. It is simply delusional – and economically false – to think that today’s Californians will never be burdened with the cost of climate adaptation infrastructure and related improvements, given the ongoing strong linkage in international and national GHG emission trajectories and economic productivity and human health.

The social cost of carbon is not a lawful “McGuffin” factor that can be used to mask the Scoping Plan’s actual costs on actual Californians today. At minimum, the Scoping Plan’s fiscal analysis needs to identify those actual projected costs to California households, by region, to allow for informed decisionmaking. The social cost of carbon is at a supplemental narrative explanation of this theory, and a hypothetical emissions and cost adjustment tables at the back of this real world analysis. The actual fiscal analysis, presented ahead of and separately from the social cost of carbon factor, must be a far more realistic assessment of the adaptation costs of climate change that must also be borne by today’s Californians.

These comments should not be interpreted to dismiss future climate change costs and risks to society in general, and Californians in particular. The scale of pain to individual Californians, especially the minority hard working Californians in our communities, needs to be assessed in relation to today's costs as well as tomorrow's costs. We have read with alarm that "leakage" of people from California to much higher per capita GHG states may have nearly offset all of California's GHG reduction regulatory achievements. We have read that California successfully reduced GHG emissions this past year by almost 5%, but that this was almost entirely due to the unusually high rainfall that allowed greater reliance on hydropower from dams and reduced use of fossil fuels to produce electricity. <http://www.mercurynews.com/2017/12/10/walters-the-ironic-cause-of-our-greenhouse-gas-decline/> We have read that California's greenhouse gas emission reductions were in turn wiped out by the Northern California fires; with Southern California we assume that California's total GHG emissions for the year are far higher than our reductions. <http://www.sfchronicle.com/bayarea/article/Huge-wildfires-can-wipe-out-California-s-12376324.php>

We do not intend that our comments be interpreted in any way that could be read as denying the importance of addressing climate change, or reducing greenhouse gas emissions. We do not believe that that this objective can only be achieved, or is politically or scientifically required to be implemented, so as to worsen California's housing and poverty crisis. An honest cost-benefit analysis of measures to reduce GHG emissions should be completed as required by law, which steps back from the chaotic paralysis of an EIGHT-agency Vibrant Community policy, expanding CEQA, a mythic local climate plan, and regressive schemes to punish those forced to drive the longest distances – or the end of homeownership as an achievable aspiration for hard working California families.

It is a testament to the power the "green blob" that the intentional obfuscation of fiscal consequences and racial equity has been allowed to permeate climate policy. California has a remarkably effective track record in vastly reducing air and water pollution over 40 years, to levels that could not be effectively predicted based on technologies and processes that existed 40 years ago. Instead, the hard work of science and politics required a methodical cost-benefit analysis of potential air pollution reduction strategies, it required implementation of the most cost-effective strategies first to avoid or minimize economic disruption to California's working families, and it established future objectives that could be – and were – ultimately met by innovative solutions such as technological advances.

The hard work of science and politics in reducing criteria and toxic air pollutants could not have been accomplished in the retaliatory echo chamber culture of what the Greenpeace co-founder calls the "green blob."

Instead of rationally attempting to reduce GHG emissions to address climate change while also respecting the role of people on the planet (and the state), the Scoping Plan's priorities and California's climate change politics are hemmed in by a long list of "we oppose" environmentalist admonitions: we must shutdown nuclear plants and tear down hydro power (the only non-fossil fuel electric production options that provide close to the reliability of fossil fuel power generation); we must oppose utility-scale solar and wind in favor of far less efficient rooftop solar (and indeed solar/wind utility plants were the most frequent industrial/utility CEQA litigation target in California), we may not build powerline improvements anywhere near any one

or any species, we must shut down dairies and farms, we must end California extraction of oil and gas and “keep it in the ground” even though leading climate scientists like UC’s Severin Borenstein agree that this will simply result in importation of fossil fuels from other states with higher resultant GHG emissions while eliminating workforce jobs often held by minorities for which there are no financially equivalent proximate replacement job opportunities. Most unbelievably, given documented evidence of routine CEQA litigation abuse for non-environmental reasons by all major newspapers, the Governor, and other leaders, the 2017 Scoping Plan avoids suggesting revisions to CEQA that would expedite its desired transit and dense housing priorities because CEQA reform is, as the Governor reported, blocked by construction unions demanding project labor agreements. Instead the Scoping Plan proposes to expand CEQA with the litigation magnets of “net zero” GHG projects (unless they aren’t) and local climate action plans to reduce per capita GHG emissions by 80% (although local governments lack authority to do anything to come close to that outcome).

The Scoping Plan vision for minorities in California consists of bus riders calmly sitting through 4 hour daily commutes, giving an exhausted hour or two to their kids (or better yet having no kids at all) in a tenth floor micro-apartment in a neighborhood that once had porches and playgrounds, and where grandma used to own her own home (imagine!). And the alternative Scoping Plan vision is for California to achieve its 80% GHG reductions by simply exporting its people and jobs to other states, and not counting that pesky GHG consumption that’s so nettlesome to billionaires – and who cares about “global” greenhouse emissions anyway?

Californians didn’t vote for this vision, nobody’s figured out how to pay for it, and CARB’s environmental and fiscal assessments didn’t come close to honestly disclosing or “mitigating” the adverse equity, environmental and economic impacts of implementing the Scoping Plan’s CEQA expansions and driving restrictions. These components of the Scoping Plan make fundamental necessities (housing, transportation, utilities) more expensive for precisely the people who cannot afford it and are victims of the environmental NIMBYists who use (and continue to use) CEQA to block housing and transit projects. These components of the Scoping Plan would permanently end the ability of minorities to become homeowners, to raise kids safely, and to get where each of us needs to go without three bus transfers and highway gridlock. The biggest difference between the 2017 Scoping Plan and Paul Hawken’s vision for effective global climate change strategies, is encapsulated in the mission statement of Drawdown:

Drawdown is a message grounded in science; it also is a testament to the growing stream of humanity who understands the enormity of the challenge we face, and is willing to devote their lives to a future of kindness, security, and regeneration.

Expanding CEQA and restricting driving shows neither a commitment to science, nor a vision of the future that includes kindness, security, and regeneration to actual people (including minorities and the poor). Instead, the Scoping Plan’s CEQA, driving restrictions, and Vibrant Community measures, are an extension of the “green glob” political culture of “no” to the needs of people and “no” to “win-win” solutions that benefit the environment and also solve the state’s housing and poverty crisis.

None of this is news to CARB: we and our colleagues have submitted comment letters and had multiple conversations with CARB and OPR staff, to no avail.

We have been forced to sue government agencies in the past to protect the civil rights of our communities, and we anticipate needing to do so again if CARB approves the proposed Scoping Plan as is. We do not want to obstruct California climate change leadership activities that avoid disparate impacts to California's minority community members who aspire to homeownership, and accordingly urge CARB to approve the following resolution when acting on the 2017 Scoping Plan:

“Resolved, in approving the 2017 Scoping Plan it is not the intent or mission of the California Air Resources Board to increase poverty, homelessness, or the housing crisis – or to discriminate against California minorities and working households. We therefore conditionally approve the Scoping Plan, subject to the following modifications:

1. All Scoping Plan recommendations and references to CEQA, VMT, Vibrant Communities and land use planning be removed, and replaced with a recommendation that the Office of Planning and Research complete a rulemaking process to clarify GHG compliance requirements under CEQA in the CEQA Guidelines (including but not limited to thresholds of significance).
2. The remainder of the Scoping Plan be adopted as proposed, provided that no new or amended regulations may be approved pursuant to the Scoping Plan until a revised environmental and fiscal analysis of the Scoping Plan is completed, and subject to additional public review and comment, that clearly describes the environmental and fiscal consequences of Scoping Plan implementation for current California households, that includes recommendations for increasing housing supplies and related transportation and other local infrastructure to help alleviate the current poverty, homeless and housing crisis, and that restores and improves opportunities for members of our hard working minority communities and other workforce Californians to become homeowners.
3. Legislative oversight hearings be convened and completed, with the enactment of further authorization legislation, prior to CARB's proposal or adoption any fees, restrictions, CEQA provisions, or any other action or recommendation associated with reductions in VMT, or associated with any increase in the involvement of any state agency in local agency land use and housing approval decisions beyond those expressly authorized by current law, or imposition of regulations, mandates or recommendations that extend beyond the target of reducing GHG emissions 40% by 2030 as expressly set forth in SB 32, or any such additional deadline and emission mandate expressly specified in any other law mandating GHG reductions in California.

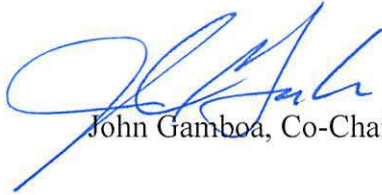
In conclusion, we have won many hard fought civil rights battles in our careers, and we ultimately win – because the law is on our side, and what we seek is justice. We did not anticipate needing to engage in this battle again, in deep blue California, to protect California's minority community from environmentalists. We did battle with the environmentalists almost 20 years ago, and won, so we could access the financing and insurance needed to cleanup polluted properties in our neighborhoods and not just wealthy communities. We are ready to fight this next battle, which has caused much more severe hardship for millions of Californians in our communities, until we win, again.

We urge you to avoid this unnecessary fight, and take the right action by adopting the alternate resolution we have suggested above as you consider the proposed Scoping Plan

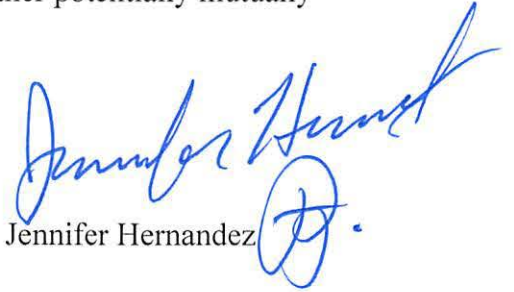
We would also welcome the opportunity to meet and confer about other potentially mutually acceptable paths forward.



Joe Coto, Chair



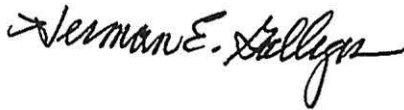
John Gamboa, Co-Chair



Jennifer Hernandez



Cruz Reynoso



Herman Gallegos



Hyepin Im



Jose Antonio Ramirez



Sunne Wright McPeak



Ortensia Lopez

Additional references:

Color of Law, Richard Rothstein (2017): Federal, state and local agency use of rulemaking, planning and practices to create and perpetuate racial segregation in housing and transportation projects, and in lending and funding practices

Drawdown, Paul Hawken (2017): Ranked list of effective strategies for reducing global GHG emissions

Right Type, Right Place, Turner Center/Berkeley Law (2017): mid-rise and high-rise buildings cost 3-5 times more per unit than single family/townhome/duplex/quadplex units (lower density units), and confirming that building necessary housing within existing communities with more affordable lower density units would require the demolition of tens if not hundreds of thousands of existing single family homes.



Summary Table of Impacts and Mitigation Measures for Regional Sustainable Communities Strategies that reduce GHG emissions from increasing density and intensity of development in urban cores, while causing significant new impacts:

For SCAG region see <http://rtpscs.scag.ca.gov/Pages/Final-2012-PEIR.aspx> , with updates reviewing only changes from 2012 RTP/SCS at <http://rtpscs.scag.ca.gov/Pages/2016-PEIR.aspx>

For MTC/ABAG region see <http://www.planbayarea.org/previous-plan/final-supplementary-reports-and-additional-resources> with updates reviewing only changes from 2013 RTP/SCS at <http://www.planbayarea.org/2040-plan/environmental-impact-report>

For SANDAG region see <http://www.sandag.org/index.asp?projectid=349&fuseaction=projects.detail>

California Environmental Quality Act Lawsuits and California's Housing Crisis, Hastings Environmental Law Journal, Jennifer Hernandez (2017)  
<http://www.uchastings.edu/news/articles/2017/12/introducing-hastings-environmental-law-journal.php> : *see* all citations and text for increases in vehicle miles travelled notwithstanding billions invested in transit infrastructure (rail ridership up; bus ridership down), absence of VMT reduction outcomes in newer higher density urban housing and wealth/racial data, top target status of housing in CEQA lawsuits filed statewide, greenhouse gas emissions from outmigration of Californians to higher per capita GHG states, and prior CEQA litigation studies.