Appendix A
AB 32 Environmental Justice Advisory Committee (EJAC) Recommendations

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Introduction

This appendix includes Final Environmental Justice Advisory Committee (EJAC) Recommendations that were developed in November 2017; Priority EJAC Recommendations with CARB Responses that were discussed at the May 26, 2017 EJAC Meeting; and the full list of EJAC Recommendations that were initially developed in August 2016, revised in December 2016, and further refined in March 2017.

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Final EJAC Recommendations

This document does not include the full list of recommendations that were developed in August 2016, revised in December 2016, further refined in March 2017, and prioritized in April 2017. However, it is not the EJAC's intent to disregard those recommendations. **We want CARB staff to review every recommendation we have made.** This document is a refined list intended to highlight the EJAC recommendations from the November 13, 2017, Committee meeting.

Top Recommendations from the November 13, 2017, EJAC Meeting
1. In the Scoping Plan, demonstrate how direct emissions reductions from the largest sources are prioritized as directed by AB 197, including the 25% industry, mobile source strategy, and 2.5x additional achievable energy efficiency measures as listed in Table III-6 of the Scoping Plan (p. 69) in the Proposed Scenario. Ensure that there is coordination of AB 197, AB 398 and AB 617 implementation and enforcement, especially for EJ communities.
2. Study and report emissions trends in environmental justice communities as part of Cap-and-Trade inclusion in the Scoping Plan: increases and decreases of emissions in Cap-and-Trade facilities and sectors over time (immediate and long-term modeling) in the most disadvantaged communities using CalEnviroScreen. Finalize and implement the Adaptive Management Plan and keep the tools to evaluate Cap-and-Trade facilities on localized emissions.
3. While we still find Cap-and-Trade problematic for EJ communities, we need CARB to evaluate how the Cap-and-Trade model will meet 2030 emissions targets by modeling the program between 2020 and 2030 to avoid issues with overallocation and banking of allowances, price, offsets, and out-of-state sources. Identify results from those evaluations.
4. Develop an emissions reduction target for the whole transportation sector.
5. In any discussion of waste in the Scoping Plan, prioritize and emphasize composting and recycling over biomass combustion.

Overall and Industry

- Do not accept the Scoping Plan until it is reconciled with new legislation.
- Remove the following sentence from page 56 of the Scoping Plan: "As noted in the OEHHA report, the exact relationship between GHGs and air pollutants is not clearly understood at this time." You do not need exact data, OEHHA report is vague. State that there is a direct relationship between GHGs and health.
- Include better analyses of health impacts due to all emissions. The published health statistics, like avoided hospitalizations associated with the Scoping Plan, look very low.
- Ensure that unintended releases such oil and natural gas leaks and explosions are included in the emissions inventory. Include an analysis of such effects on the 2030 greenhouse gas reduction targets to address those emissions.

- Draw upon the Greenhouse Gas Reduction Fund (GGRF) guidelines when discussing overall economic opportunities with all the Scoping Plan measures for EJ communities with GoBiz.
- Use the social cost of carbon to evaluate California's current carbon pricing and impacts. Establish an open process for determining the carbon price beyond CARB staff managing it now, because the price is too low to encourage deep decarbonization of the economy.
- Prepare an updated leakage study, including a border carbon adjustment program, and hold EJ discussions around leakage.

Transportation

- Consider transportation infrastructure, like freeway mazes, as stationary sources. Target urban greening near transportation corridors.
- Coordinate transportation recommendations with Caltrans.
- Consider and prevent anti-displacement in the implementation of all climate programs, especially transportation projects. Encourage investment without displacement throughout implementation. Examine the character of plans; see the work by Jesus Hernandez at the University of California, Davis.
- U.S./Mexico border policies need to address non-fleet emissions to ensure that transport policies do not endanger the health of border communities, and that climate investments do not have unintended consequences in those communities.
- Ensure no agricultural exemptions for heavy equipment.
- Enforce regulations for on-road and off-road equipment; clarify restrictions for both.

Energy and Water

- Evaluate energy facility siting to ensure that all energy projects (including renewable energy like solar farms on prime farmland) do not harm the health of residents or displace productive business and jobs in EJ communities.
- On page 97 of the Scoping Plan, clarify the baseline for "double" in the sentence "More than $10 billion in private capital investment will be needed to double statewide efficiency savings in California."
- When encouraging implementation of net zero activities, include the caveat that such activities must be implemented equitably.
- Water systems in EJ communities must not be displaced without reviewing the ecosystem and socioeconomic impacts of that displacement. Develop a model that can evaluate the costs of the deep water pumping necessary to produce water as the result of droughts. Account for the fact that pumping costs increase logarithmically by depth.

Natural and Working Lands, and Waste

- Methane from dairy manure must not be considered renewable.
- The goal for tree canopy should be 40%, not 20%.

May 23, 2017

Priority EJAC Recommendations and CARB Responses

Below are the priority EJAC recommendations discussed at the April 26, 2017 joint CARB Board/EJAC public meeting. At the meeting CARB staff committed to provide responses to each of the recommendations. This document describes how CARB plans to respond in the Final Proposed Plan where applicable. Following each EJAC recommendation is the CARB response. Based on CARB staff's review there is general agreement on the majority of the recommendations. However, a number of the recommendations are beyond the level of detail in the Plan, but rather concern the subsequent measure development and implementation. Where that is the case, the responses outline suggested next steps.

General Themes:

1. **Equity**: CARB has acknowledged that environmental justice communities are more heavily impacted by climate change and exposure to pollution, but has yet to acknowledge the pitfalls of current AB 32 programs in either perpetuating or not fully addressing that inequity. All policies and sectors discussed within the Scoping Plan need to have equity and environmental justice analyses to identify any inequity and give space to CARB staff to identify how the policy may be further improved to address the identified inequity. CARB also needs to include tangible metrics for each sector and policy so staff and the communities can track the implementation of the Scoping Plan and quickly address issues as they arise. In recognition of the need to consider timing and feasibility of some recommendations, staff should use a "loading order" to help prioritize actions: reduce fossil fuel use FIRST, reduce emissions through technology and innovation SECOND, and THIRD (if the other two aren't possible) prevent emissions from increasing.

   CARB Response: Agree in principle and will strengthen plan*: Addressing equity issues and narrowing the equity gap until there is equity is a key priority. Understanding the Proposed Plan discussion of equity issues in the public health and Environmental Justice sections (Chapter I, D.4 – D.5) does not convey a complete commitment, staff plans to strengthen the discussion by underscoring the important role that equity considerations have on the design, implementation, and monitoring of the policies presented in the Scoping Plan. Where applicable, staff will add references to equity related metrics that are anticipated to inform measures as they are developed following the completion of the scoping plan.*

2. **Partnership with Environmental Justice Communities**: CARB needs to highlight the need and opportunity for community-level solutions, citizen science and monitoring of programs and impacts, as well as community involvement in Scoping Plan implementation more generally throughout the final Plan. CARB also needs to mandate equity and environmental justice trainings for all staff to promote the culture shift that is needed to effective communicate and partner with our communities.

   CARB Response: Agree partnership with EJ Communities is critical and bigger than the Scoping Plan*. The appointment of an Assistant Executive Officer for Environmental Justice reporting directly to the Executive Officer is in response to a recommendation made by environmental justice organizations and will play a key role in helping to strengthen CARB's interaction with the environmental justice community. Further suggestions like training and promoting an EJ culture shift will be part of the*

Assistant Executive Officer's strategic plan and implementation of that plan. This change is system wide and will not only apply to the Scoping Plan and climate change but rather our portfolio of programs including strategies to reduce criteria and toxic pollutants. In the coming months, CARB will be developing and sharing how the agency will continue to engage with environmental justice communities on its air quality and climate programs.

***Agree to strengthen Scoping Plan by adding text to Chapter V: Public Outreach section**; reflecting CARB's intent to strengthen EJ community relationships through the appointment of the newly created Assistant Executive Officer for EJ and a description of the future efforts and approach to ongoing engagement with EJ communities on climate and air quality efforts.*

3. **Coordination**: CARB has been given a mandate to create a Scoping Plan to address greenhouse gas emissions, but does not have within its authority all of the tools to take adequate action to achieve our 2030 and 2050 climate goals. We do not believe that it was the intent of AB 32 and SB 32 to limit actions to only CARB's programs and policies, thus we think that AB 32 and SB 32 require CARB to work with and coordinate actions with other state, regional, and local agencies to ensure that California can meet our ambitious climate goals.

   ***CARB Response: Agree to strengthen coordination language** by adding text to the Scoping Plan to emphasize the need for the State to encourage and assist local jurisdictions with taking substantive actions to address climate change to the extent feasible. The Proposed Plan includes text on local coordination with air districts and communities (Chapters I and V). Table V-1 discusses agency coordination on specific policies/measures. Staff also agrees on the key role that local agencies play in advancing State's climate policies and have developed tools (e.g., carbon calculators) to assist with and promote these efforts. Staff will add language to the Scoping Plan to reflect this point as well as call out specific opportunities for further local action.*

4. **Economic Opportunity**: CARB has acknowledged that modeling within the Scoping Plan with regard to job loss or gain is limited to the current economic activities – in other words, when our models say we can expect job loss or job gain, it is in a fossil fuel based economy that those job shifts are happening. While it is very important to understand the impact policies will have on current jobs, it is even more important to start thinking about crafting a way to build a new economy based on sustainable economic endeavors (green energy, agriculture, urban greening, etc.), and to prioritize job training and business development in our environmental justice communities – also known as Just Transition. These jobs should be intentional about hiring local first, and identify ways to hire folks with employment barriers (such as a history in the justice system). This includes prioritizing local organizations and individuals for state contracts and grant programs, not out-of-state or out-of-community organizations.

   ***CARB Response: Agree economic opportunity for the EJ communities is crucial and is broader than the Scoping Plan.** Staff agrees with the principles outlined in the recommendation as the policies in the Proposed Plan will help to transition California to a clean energy economy and create tremendous job opportunities. Staff also agrees that preparing for these opportunities needs to be intentional and involve academic, business, government, and community based-groups. However, the recommendation goes beyond the level of detail in the Scoping Plan but is an important next step (i.e., post Plan adoption) to ensure we do not miss important opportunities as part of its implementation. As such, this recommendation has been referred to the Governor's*

Office of Business and Economic Development (GO-Biz) as well as State agencies implementing measures in the Scoping Plan.

5. **Long-Term Vision**: CARB has been given a mandate to achieve 2030 and 2050 targets, but our actions must look well beyond those timelines. We must take every action we can – and reduce emissions as much and as quickly as possible – if we are to honor the Earth we will leave to our children and grandchildren.

   CARB Response: Agree - Will strengthen Scoping Plan language. *CARB Staff will strengthen the current discussion in Chapter I of the need to build on our successes in staying on the path to reach our long-term GHG reduction targets and that doing so will deliver public health, environmental, and economic benefits.*

Industry:

- The EJAC's top priority is emissions reduction in environmental justice communities per the intent of AB 197. In addition to 20-30% refinery emissions reduction measures, CARB needs to identify emissions cuts from other large stationary sources like power plants, cement plants, etc. CARB needs to specify which strategies within the Scoping Plan achieve emissions reductions in environmental justice communities. CARB should work with OEHHA to continue their studies on emissions in environmental justice communities. CARB needs to develop and expand a real-time air monitoring network to better track and address inequalities in air pollution exposure as they occur. CARB should also expand the Adaptive Management program to monitor and address changes in toxic or criteria air pollutant emissions, and implement no-trading zones for EJ communities to ensure no localized emissions increases occur.

  CARB Response: Agree - Emission reduction is a priority for the EJ communities and the Scoping Plan is only one tool to achieving this goal. *Specifically in the Scoping Plan there is a suite of measures which will contribute to reducing total emissions including air pollutants and toxics. First, staff is proposing to target refineries for focused development of measures to achieve co-benefit reductions of toxic and criteria pollutants as well as GHGs. Second, the Scoping Plan identifies recommendations for cleaner fuels, cleaner transportation, and enhanced efficiency as part of the solution.*

  Other CARB actions included in the Scoping Plan towards reducing emissions in the EJ communities include:

  (1) Improving CARB monitoring data is a priority including expanding air monitoring networks to better track and address inequalities in air pollution exposure as they occur. A plan to develop and implement increased monitoring stations, particularly in disadvantaged communities, is part of CARB's AB 197 related strategies and included in our overall plans to communicate transparently and verify facility criteria and toxics emissions. This data will provide a cornerstone of science that all CARB regulatory tools will rely on, including future updates to the Scoping Plan.

  (2) SIP/air quality and toxic regulation are also tools used on a statewide level. It is clear that more needs to be done at the community level to reduce exposure to pollutants that adversely impact public health (e.g., diesel particulate emissions, toxic metals). Creating transparent reporting tools to inform communities of the emissions by Industry along with linking regulation to the reduction of these

emissions to reduce community exposures is critical. Most of these sources are stationary sources and the authority to address these pollutants from stationary sources primarily rests with local air districts. In response to the EJAC recommendations, CARB is establishing an industrial source action committee with the California Air Pollution Control Officer's Association. The charge of the committee will be to work with CARB on a refinery measure(s), as a replicable model for other sectors, as well as prioritize and develop other industrial control strategies focused on reducing community exposures to pollutants that adversely impact public health. The work with CAPCOA will also consider options for enhanced community monitoring. Further, we will continue working with OEHHA as it tracks the benefits and impacts of greenhouse gas mitigation strategies on disadvantaged communities.

CARB will focus on the tools and regulatory authority along with working with local and State agencies to take additional actions that reduce impacts impacting EJ communities.

- CARB should abandon the Cap and Trade system for a non-trading system option like Carbon Tax (also referred to by staff as Cap and Tax), Cap-and-Dividend, Fee-and-Dividend, or command and control regulations. These options would eliminate free allowances and offsets, and allow CARB to set facility caps. CARB should conduct full economic analyses of these alternatives. CARB needs to fully transition to using the social cost of carbon for all scenarios, which would include broadening the definition of economy to include costs to the public and health care costs of pollution. Funds generated from carbon pricing should be used for emissions reduction programs, dividend to lower income households to alleviate energy price spikes, and a Just Transition Fund to train industrial workers and impacted communities to gain jobs in the clean energy economy.

  CARB Response: Disagree. *The analyses in the Scoping Plan strongly support the important and continuing role of the cap-and-trade regulations in the package of strategies needed to achieve our near- and long-term GHG emission reduction targets. The modeling conducted for the Scoping Plan includes an incorporation of health impacts and costs using the data and tools available at this time. Per AB 197, the Scoping Plan also includes the estimated avoided damages using the social cost of carbon that are estimated to result from the measures included in the Scoping Plan Scenario. The analysis also evaluates a broad spectrum of alternatives as well as a consideration of related reports and recommends retaining cap-and-trade as an important element in California's overall strategy for achieving our GHG reduction targets.*

- Commit to reducing oil. This includes a moratorium on new or expanded fossil fuel infrastructure, limiting oil and gas exports now to close that loophole, and placing quality controls on feedstocks so as to not import extreme oil (tar sands, Bakken crude).

  CARB Response: Agree. *The Governor's Executive Order B-32-15 and related State policies (e.g., the transformation of the transportation sector to zero emission vehicles) clearly support phasing out the use of petroleum-based fuels. Further, the tightening of the low carbon fuel standard as called for under the Scoping Plan will promote the use of cleaner fuels with progressively smaller carbon footprints. In response, text will be added to the Scoping Plan to further clarify this position.*

- Do not authorize CAPCOA to create a new carbon market. Delete the following sentence in the

Scoping Plan: "Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry."

> ***CARB Response: Disagree.*** *The context for the brief discussion in the Scoping Plan is important to understand. As new projects (e.g., large residential developments) are considered, local agencies are beginning to expect GHG emissions associated with the "project" to be mitigated. The strategies generally begin with building highly energy efficient structures with installed renewable energy (e.g., photovoltaics) to minimize the on-site carbon footprint. However, even highly efficient projects can lead to increased carbon emissions (e.g., GHG emissions associated with traffic). In these cases, a resource such as the CAPCOA's Rx can provide mitigation to enable a proposed project to reduce its carbon emissions to as low as zero which historically has not been the case. The program is designed to benefit California's local communities by achieving additional in-State GHG reductions. The mitigation can be produced from projects that include investments in energy efficiency upgrades in low income communities.*

Natural and Working Lands:

- CARB must reconsider the assumption that burning biogenic carbon is "sustainable" or "renewable" because biomass can be regrown. The time scales necessary to recapture carbon are too long, and the incentives for regulated entities to burn biomass are much higher than the incentive to leave it in place.

> ***CARB Response: Agree long term; disagree in the short term.*** *From a carbon cycle standpoint the burning of biogenic fuel does not increase GHG emissions providing supplemental fuels (such as petroleum) are not introduced.*
>
> *However, there is a more important principle here where there is full agreement with the EJAC. Specifically, the State needs to transition away from the combustion of fuel to meet its energy needs. We also need to reduce our waste streams and use the waste (e.g., landfill wastes, agricultural wastes, gases and sediments generated during wastewater treatment) we do produce more efficiently. Today, that means using waste streams for strategies that include composting and combustion (e.g., use of renewable natural gas to replace diesel fuel in trucks) to name a few. ARB tracks biogenic carbon emissions consistent with IPCC guidelines, the US EPA's national GHG inventory, and other nations' inventories submitted to the UNFCCC, and we will continue to work on strategies that promote alternatives to combustion.*

- CARB must include a goal to increase urban tree canopy to 40% by 2030. Urban greenery projects should be used as natural barriers between housing and industrial activity.

> ***CARB Response: Agree in principle with the importance of increasing urban tree canopy.*** *The Forest Carbon Plan contains a goal to increase total urban tree canopy statewide by one-third above current levels, to 20 percent coverage of urban areas by 2030. CARB, however, does not have the underlying analysis to set a quantitative urban tree canopy target. Yet, we strongly support the value of urban greening projects and have added language to the Proposed Plan (including the discussion of local action) to underscore this point. We will also refer this recommendation to the local government commission as well as CAL FIRE, the Natural Resources Agency, and the Strategic Growth Council.*

- CARB must include an annual 5 million metric tons CO_2e reduction target for this sector.

  CARB Response: Agree. *As discussed at the April 26th meeting of the ARB Board and the EJAC, CARB is in agreement with the need for a quantitative target of 5 million metric tons, or possibly more, and is currently in discussions with the Natural Resources Agency to reflect this position. This will be discussed in Chapter IV of the Scoping Plan.*

- CARB should explore ways to allow and streamline the process for cultural and prescribed burning for land management and to prevent large-scale wildfires.

  CARB Response: Agree in principle however this suggestion is beyond the Scoping Plan. *This is an important implementation issue that goes beyond the level of detail in the Scoping Plan. CARB has been working with air districts and federal and State land managers to develop improved tools and coordination to facilitate increased opportunities for prescribed burning to prevent large-scale wildfires. CARB plans to refer this recommendation to CAPCOA, along with federal land managers, CAL FIRE, and the Bureau of Indian Affairs for consideration.*

Waste Management:

- CARB should mandate that local jurisdictions manage the waste they create, and do not export it outside of the community. Local jurisdictions should be given clear direction that the goal is to reduce waste and redirect 100% of the waste that is recyclable or compostable, not just to divert waste; state and local jurisdictions should also adopt goals to get households and businesses to purchase more responsibly to create less waste in the first place. All jurisdictions should be mandated to have recycling and composting programs.

  CARB Response: Agree in principle. *In response to legislation, the State is developing regulations that require significant reductions in the organic materials deposited in landfills. CARB is working closely with CalRecycle to develop and implement these requirements which will entail substantially expanding the infrastructure to support composting. Thus, we agree with the principles reflected in the EJAC's recommendations—the need to reduce the amount of waste diverted to landfills as well as the expansion of composting operations to better utilize such wastes. However, we believe the approach described here is more likely to be effective and withstand challenge than that recommended by the EJAC (i.e., regulations that ban the export of waste beyond the community boundaries where the waste was generated). Staff will ensure Chapter IV clarifies our shared priorities as well as the approach that is underway.*

- CARB must not consider biomass burning or biodigestors as "renewable." CARB should present a hierarchy of management options for materials from forests and agriculture, with burning as least preferable.

  CARB Response: Agree in principle long term; disagree short term. *As noted above, from a carbon cycle standpoint the burning of biogenic fuel does not increase GHG emissions.*

  However, there is a more important principle here where there is full agreement with the EJAC. Specifically, the State needs to transition away from the combustion of fuel to meet its energy needs. The fact is that we need to reduce our waste streams and use

the waste we do produce more efficiently. Today, that means using the wastes for strategies that include composting and combustion (e.g., use of renewable natural gas to replace diesel fuel in trucks) to name a few. We will continue to work on strategies that promote alternatives to combustion and, in fact, have established a biomass working group tasked with evaluating barriers and developing recommendations to more sustainably use the State's biomass streams. Text will be added to Chapter IV of the Scoping Plan to more completely discuss the efforts underway as well as the next steps.

Energy, Green Buildings, Water:

- Prioritize distributed generation of renewable energy and the siting of rooftop solar, community-owned solar, grid storage, microgrids, and community choice aggregation projects within EJ communities to reap the environmental and economic benefits of these energy projects. These programs should also help low income homeowners and renters access solar.

  CARB Response: Agree. *In Chapter IV of the Scoping Plan, staff will add an action item for the energy sector to implement the recommendations in the California Energy Commission's barriers study that specifically speaks to solar for low income households and to expand distributed generation per AB 693 in multi-family and for low income households. The California Energy Commission's study focuses on barriers to expand the use of renewables and energy efficiency programs and includes recommendations that call for actions by the Legislature, communities, State, and local agencies.*

- CARB needs to implement the recommendations of the SB 350 studies to overcome barriers in low income community adoption of clean energy.

  CARB Response: Agree. *In Chapter IV of the Scoping Plan, staff will add an action item for the energy sector to implement the recommendations in the two barriers studies that speak to clean energy and transportation access for low income households.*

- Promote the development of community-driven clean energy projects that hire from disadvantaged communities, prioritize community ownership of (and equitable access to) clean energy technologies, maximize energy bill reductions for low- and moderate-income communities within disadvantaged communities, and prioritize anti-displacement strategies.

  CARB Response: Agree in principle. EJAC's suggestions are broader than the Scoping Plan. *We agree with the principle that economic growth is crucial for EJ community members along with financial certainty are two key issues for healthy communities. EJAC suggestions for the community economic growth including training and hiring individuals from disadvantaged communities, and utilizing community talents in the transition to a clean energy economy are excellent suggestions as are other suggestions increasing access as we move to the clean energy economy. EJAC's recommendations focus on implementation and go beyond the level of detail in the Scoping Plan. We have referred this recommendation to the Governor's Office of Business and Economic Development to work with businesses, communities, and academic institutions to assist in this effort.*

  We are also concerned with displacement and economic certainty including the cost of energy during this transition. In response, CARB commissioned a comprehensive displacement study[i] by researchers at UC Berkeley and UCLA, which was released earlier this year. That study informs CARB's work so that we are better positioned to

develop proposals that provide public health benefits as well as understand regulatory impacts on displacement and minimize where possible. We look forward to working with the EJ community as work on developing proposals and coordinate with a broad spectrum of stakeholders.

- Set a moratorium on new oil and gas operations (refineries, power plants, fracking wells, etc.). Include guidance for strong health-based standards, buffer zones around locations affected by emitting facilities, and capture and measurement of leaking methane.

  CARB Response: Agree in principle however with a different path to accomplish the goal. *We need to reduce our consumption of petroleum-based fuels and have several policies in the Scoping Plan focused on this objective (e.g., renewable targets, zero emission vehicles, tighter low carbon fuel standard, oil and gas regulation). Thus, we agree with the critical need to phase out our use of petroleum. We also support the development of additional strategies to reduce emissions of air pollution that adversely impact communities and have initiated efforts to advance that objective. However, a moratorium such as that recommended by the EJAC is outside of the purview of the Scoping Plan and will be provided to the California Energy Commission for consideration by its Petroleum Market Advisory Committee.*

- Stop investing in dirty energy. Eliminate subsidies and financing for fossil fuels and in technologies such as corn-based biofuels, agricultural methane, biomass burning, waste-to-energy, or other unsustainable technologies that result in negative impacts on EJ communities. Use funds instead for clean energy projects in EJ communities.

  CARB Response: Agree in principle however with a different path to accomplish the goal. *As described above, the policies outlined in the Scoping Plan will lead to a decline and ultimate phase out of petroleum-based fuels. However, this transition will take time. Thus, in addition to promoting zero emission sources (e.g., zero emission vehicles, renewable energy) we need to concurrently lower the carbon footprint and co-pollutants from liquid fuels which continue to be used. Policies that support the increased use of renewables such as renewable and biodiesel, renewable natural gas, and lower carbon intensity ethanol serve as an important complement to our longer term goals of fully phasing out petroleum-based fuels. We fully support expanded funding of clean energy projects in environmental justice communities.*

Transportation:

- CARB needs to identify the SB 375 targets. Specifically, since the target setting process will not conclude until Fall 2017, CARB needs to identify the amount of emissions reduction SB 375 related implementation need to achieve for the state to reach the 2030 and 2050 targets in the Scoping Plan, directing staff to ensure that the SB 375 targets are conducive to meeting those goals. Implementation and tracking of these targets should focus on reducing vehicle miles traveled to promote secondary goals of reducing sprawl, focusing on housing affordability and job access, as well as encouraging alternative modes of travel.

  CARB Response: Agree. *The Scoping Plan to will be updated to reflect the contribution that the updated SB 375 targets have in achieving our GHG reduction targets. This will be described in Chapter IV of the Scoping Plan.*

- CARB needs to implement the recommendations of the SB 350 studies.

CARB Response: Agree - EJAC's suggestions are broader than the Scoping Plan. *As described above there are actually two low income barrier reports produced in response to SB 350: one produced by the California Energy Commission focusing on barriers to expand the use of renewables and energy efficiency programs, as mentioned above, and the other produced by CARB focusing on barriers to clean transportation and mobility options. Both reports include a series of recommendations that call for actions by the Legislature, communities, State, and local agencies. Further, the Governor's Office is convening a Task Force comprised of State agencies to ensure that the recommendations in both reports are implemented. The Scoping Plan will be revised to reflect how the SB 350 process is moving with implementation.*

- CARB needs to examine transportation regionally, as each region in our state faces unique barriers to reducing emissions from transportation. The Scoping Plan should identify specific language about how the various regions in the state can address mobility issues specific to their communities. This includes an analysis of how to increase infrastructure for bikes, electric vehicles, and other low emission vehicles. This also includes restricting truck routes and limiting new trucking operations to reduce the impact that industry has on disadvantaged communities.

  CARB Response: Agree in principle - EJAC's suggestions are broader than the Scoping Plan. *This type of analysis is critical for the development and implementation of regional plans (e.g., sustainable community strategies) on which CARB is currently working with the State's Metropolitan Planning Organizations (MPOs) as part of SB 375, as well as regional State Implementation Plans for meeting federal air quality standards. However, this recommendation is more effectively directed at the implementation of the Scoping Plan. In response, CARB will continue to work with MPOs to quantify the region-specific benefits of various mobility strategies, as well as with local air districts on targeted efforts to reduce diesel PM and criteria pollutants in disadvantaged communities. The final Scoping Plan will also identify what share of GHG reductions from VMT would be attributed to SB 375.*

- CARB needs to include off-road sources, such as construction and agricultural equipment, in the emissions inventory for transportation.

  CARB Response: Agree - Existing GHG emissions inventory includes these emissions sources. *This information is included in our emissions inventory, which is published each year, and these are key categories CARB is addressing in its mission to achieve healthy air quality as well as reduce greenhouse gases. The inventory information can be found at: https://www.arb.ca.gov/ei/ei.htm. CARB has an ongoing program to periodically update inventory sectors to reflect new data and methodologies, including most recently those for locomotives and ocean going vessels and will also continue to review and update the agricultural equipment inventory.*

- CARB should consider the development of green transportation hubs that integrate urban greening with transportation options, and provide refuge as our state's temperatures continue to rise.

  CARB Response: Agree in principle - Adding language to Scoping Plan and working with local and sister agencies.

(1) We plan to add text to the Scoping Plan that more clearly recognizes the role of urban greening in transportation planning and project development in our continued work with these agencies.
(2) We also plan to provide the recommendation to the key transportation planning agencies including Caltrans and the Strategic Growth Council.
(3) CARB works with the State's MPOs that are responsible for transportation planning, as well as other State and local agencies that provide funding to help implement specific transportation infrastructure projects through our SB 375, California Climate Investments, and CoolCalifornia programs.

- Under "Local Action," CARB needs to delete the following sentence that describes a new local carbon market proposed by CAPCOA: "Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issues by a recognized and reputable accredited carbon registry."

CARB Response: Disagree. *As described above, the context for the brief discussion in the Scoping Plan is important to understand. As new projects (e.g., large residential developments) are considered, local agencies are beginning to expect GHG emissions associated with the "project" to be mitigated. The strategies generally begin with building highly energy efficient structures with installed renewable energy (e.g., photovoltaics) to minimize the on-site carbon footprint. However, even highly efficient projects that promote walkable communities and public transportation can lead to increased carbon emissions (e.g., GHG emissions associated with traffic). In these cases, a resource such as the CAPCOA's Rx can provide mitigation to enable a proposed project to reduce its carbon emissions to as low as zero which historically has not been the case. The mitigation can be produced from projects that include investments in energy efficiency upgrades in low income communities.*

California Climate Investments:

- The EJAC wants to be clear that several alternatives to Cap and Trade detailed in our Industry recommendations will generate revenue for the Greenhouse Gas Reduction Fund. We do not see our recommendation to eliminate Cap and Trade as contradictory to our recommendations for investments into our communities.

CARB Response: Agree. *The evaluation of the alternatives states that other options, beyond cap-and-trade could potentially generate State proceeds. Further, in response to EJAC comments, the modeling for the carbon tax and cap-and-tax alternatives generate monies that are returned directly to residents in the form of a climate dividend.*

- CARB must prioritize funding to those more directly impacted by regulated industry. Regulated entities should not be eligible for any funding from the Greenhouse Gas Reduction Fund.

CARB Response: Outside of CARB's authority. *We agree with the principle of directing a significant share of State proceeds to disadvantaged communities. The recommendation is appropriately directed to the Legislature who is tasked with appropriating funds to each of the administering State agencies. Further, the Legislature has passed and the Governor has signed several bills (e.g. SB 535 and AB 1550) that provide direction on where State cap-and-trade proceeds are to be directed, with a minimum share of 35 percent required to be expended in disadvantaged and low income communities and households.*

- CARB must prioritize projects identified by communities. To that end, there should always be technical assistance, translation, and a transparent process to allocate funding. Environmental justice communities should work with funders to define what "benefit" looks like to them, and to select projects that are of best service to the community. Any project selected should focus on local job creation, or hiring local organizations to conduct the work. No project should rely on free or volunteer labor from environmental justice communities, but should pay those participants for their time.

  CARB Response: Agree in principle within the established budget processes. *CARB agrees that the use of GGRF funds should be targeted to the needs of EJ communities. The use of GGRF funds is subject to Legislative priorities/Legislative appropriation. Further, projects are subject to publicly posted solicitations and program guidelines developed and administered by the State agencies which receive Legislative appropriations. Collectively, the State agencies administering the GGRF programs are interested in continuing to improve how they address EJ concerns within their respective programs. CARB will commit to convening a dialogue with the administering agencies and EJ advocates to discuss how to better address EJ needs.*

- CARB should explore other sources of revenue to support the goals of AB 32 and SB 32.

  CARB Response: Agree. *The Proposed Plan includes a discussion of incentive programs, including financial incentives and direct funding, as critical components of the comprehensive approach to support climate action.*

- CARB should explore ways to increase funding for urban forestry, sustainable transportation infrastructure, and clean drinking water.

  CARB Response: Agree in principle however outside of CARB's authority. *We agree with the need for further funding for these efforts, but the decision on the appropriation of State funds is made by the Legislature rather than CARB. This recommendation will be forwarded to the Legislative leadership.*

- CARB should explore ways to promote the use of recycled water for funding projects.

  CARB Response: Agree in principle: (1) authority outside of CARB's however (2) will strengthen Scoping Plan language in Chapter IV.

  (1) For the Scoping Plan, we agree that water conservation and management strategies (e.g. the use of recycled water) are important for California, but as indicated Chapter IV of the Scoping Plan, the interaction between water and energy is complex and efforts to replace fresh water with recycled water do not automatically translate into GHG reductions due to the nature of the water supply system. In response, we will add language to the Scoping Plan to clarify support for recycled water projects for many reasons while qualifying the extent to which there are GHG benefits depends upon the specific circumstances.

  (2) This is a recommendation that should be pursued by the agencies/organizations that have direct influence over the use of recycled water including local water agencies as well as the Department of Water Resources and State Water Resources Control Board. We will pass on this recommendation to the appropriate agencies.

- CARB should ensure all applicants have policies to protect against displacement or gentrification.

> ***CARB Response: Outside of CARB's authority.*** *CARB shares EJAC members' concerns about land use planning and the impact it can have on displacement and gentrification and it is an important concern that needs to be addressed. CARB is committed to participate in the discussion, work with our State and local partners and do our part however CARB does not have the authority ensure against or protect communities from displacement or gentrification.*
>
> *CARB has commissioned a major study on displacement, "Developing a New Methodology for Analyzing Potential Displacement," which was released in March.*[ii] *The study found, among other things, that transit-oriented development has a significant impact on neighborhood stability, especially in downtown areas. The study also identifies anti-displacement strategies and develops an off-model tool for examining gentrification and displacement around TODs. We are still evaluating the results of the study, but it could be helpful to applicants seeking climate investment funding. However, allocation of cap and trade proceeds is subject to Legislative direction and appropriation. This recommendation is beyond the level of detail in the Proposed Plan. In response, we plan to provide the recommendation to the Strategic Growth Council as well as the Department of Finance to consider as part of the triennial investment plan it submits to the Legislature.*

[i] "Developing a New Methodology for Analyzing Potential Displacement," https://www.arb.ca.gov/research/apr/past/13-310.pdf
[ii] *Id.*

AB 32 Environmental Justice Advisory Committee (EJAC)
Recommendations for Proposed 2030 Target Scoping Plan Update
March 30, 2017

Initial Recommendations prepared Aug. 26, 2016; revisions made Dec. 22, 2016 and March 30, 2017.

Overarching Issues

The AB 32 Environmental Justice Advisory Committee (EJAC) started meetings about the 2030 Target Scoping Plan in December 2015. In addition to committee meetings across the state, the EJAC hosted a robust community engagement process in July of 2016, conducting 9 community meetings and collecting over 700 individual comments. In March of 2017, the EJAC hosted an additional 6 community meetings. The recommendations below are informed by those meetings, EJAC member expertise and comments received. To help make our recommendations more actionable, we sorted them into five themes that are described in more detail below and throughout this document: partnership with environmental justice communities, equity, economic opportunity, coordination, and long-term vision. While our recommendations are sorted by sector, we intend them to be read and implemented holistically and not independently of each other.

Partnership with Environmental Justice Communities

1	Encourage public engagement and a culture shift in California to step up the implementation of our state's climate plans, by stating in the Scoping Plan overall strategy and by sector, using the following strategies: a. Develop a communications plan to get everyday people excited about our climate programs. The plan must focus on the health and socio-economic impacts of air pollution and climate change, and include innovative, multilingual delivery methods like integration into school curriculum, technology applications, or Public Service Announcements (PSAs) to convey how air pollution and greenhouse gases are related to increases in hospital visits, lost wages, and economic insecurity. b. Promote community-level climate projects to show people how they are done and what they can accomplish. c. Create a "report card" for elected officials that show community members how officials voted on regulatory policies and the implications of those policies. d. Create a "report card" on Scoping Plan implementation that is updated every two years, using metrics identified in the Scoping Plan.
2	Emphasize and demonstrate neighborhood-level solutions that draw on community ideas, rather than just taking a top-down approach. Ensure long-term community engagement and pre-assess projects in the targeted community and conduct at least five-year follow-up to ensure that projects result in community-directed benefits. State demonstration of neighborhood-level solutions as a strategy in the overall Scoping Plan and in each sector.
3	Continue to convene the EJAC beyond the Scoping Plan process. Implementation of the Scoping Plan can tap on the expertise and relationships of the EJAC members and their networks. Public policy is more successful when there is broad public awareness to ensure its success and oversight.
4	The Scoping Plan must reflect that California communities drive how and where activities are implemented.

Equity

5	ARB must better balance reducing greenhouse gases and reducing costs (cost compliance) with the other AB 32 goals of improving air quality in EJ communities while maximizing benefits for all Californians. List improving air quality in EJ communities as one of the priority criteria for choosing one of the five scenarios. Make clear the difference between costs to industry and those to the public. There has been too much emphasis on reducing costs to industry, and not enough attention on reducing emissions and their associated costs in EJ communities.

Overarching Issues	
6	Equity must always be a primary consideration when examining issues in any sector. Decades of cumulative impacts and inaction have led to a sense of urgency in needing to resolve adverse health and economic issues in disadvantaged communities. To demonstrate progress and build trust, both short- and long-term activities need to result in positive, immediate, and measurable impacts in these communities. ARB must conduct an equity analysis on the Scoping Plan and each sector. Work with EJAC on the analysis and the right questions to ask. State the commitment to the EJ analysis explicitly in the Scoping Plan overall and by sector.
7	Provide clear, measureable metrics that can be used to identify what is working and what is not working. All climate goals and policies need to have metrics and baselines quantified to ensure that actions are meeting targets and goals over time. Each sector's data must show historic emissions and future trends (both business as usual and how much reduction if certain programs are implemented). Each emissions sector, must calculate goals for emissions reduction to 2030; see example with the Short Lived Climate Pollutant strategy. These metrics must also include public health outcomes and issues. CalRecycle must conduct public health impact analyses before approving projects.
8	ARB must develop contingency plans for mitigation and adjustment to the overall plan if emissions increase in benchmark years (due to huge leaks like Aliso Canyon, or if certain programs fail to reduce emissions). Timely emissions data will also allow ARB to adjust or incorporate new strategies as needed.
9	Expand and integrate real-time air quality monitoring, citizen science, and SEPs (supplemental environmental projects) in disadvantaged regions, including the California/Mexico border region. Monitors must be placed throughout regions to ensure we have an accurate understanding of air quality issues in that region. Consider a carbon tax that funds monitor installation and maintenance at every school in California.
10	Health impacts should be prominent in the Scoping Plan.
11	Develop innovation hubs in every sector to support innovative projects for disadvantaged communities. Identify how to support residents through these hubs.
Coordination	
12	Achieving our ambitious 2030 targets will require ARB to work with other agencies, jurisdictions, and program processes. Coordinate meetings between the interagency working groups (IWG) and EJAC, to encourage information sharing and mutual cooperation between the groups. Improve coordination among state, federal, and local agencies with regard to their planning and implementation activities. Support cities and local implementation of Energy and Climate Action Plans.
13	Coordinate strategies to prevent and address sprawl with equity at the center. Sprawl has negative environmental impacts on transportation, air, water, and more. New projects must not create adverse impacts like displacement of existing residents. Negative Declarations need to be phased out. All new greenhouse gas sources must be mitigated.
14	All policies and programs must adopt strong, enforceable, evidence-based policies to prevent displacement of existing residents.
15	Maximize electrification across sectors.
16	Each sector in the Scoping Plan should provide an environmental justice paragraph for the sector and EJAC recommendations should be listed in each section, rather than just in the EJAC Appendix. Where an EJAC recommendation is not directly incorporated into a particular section, that material should be annotated to direct readers to the associated EJAC recommendation in the Appendix.

Overarching Issues

Economic Opportunity	
17	Maximize job and economic benefits for Californians. Develop a just transition for workers and communities in and around polluting industries with a pathway for them to be first in line for jobs in the green economy. Include a section in the Scoping Plan on healthy, well-paid jobs and broad economic benefits, especially targeted for EJ communities, for jobs that don't require a worker to sacrifice his or her health in order to support a family, as is currently common. These efforts must emphasize capacity building in the community and outline fair hiring practices and policies, and be first focused on transitioning workers from polluting industries. Incorporate just transition into the economic analysis, including the impacts and costs of job gains as well as losses. Ensure that the analysis is conducted at a neighborhood scale, not just for environmental justice communities. Be explicit about lifting up EJ communities to benefit from Scoping Plan and investments, in both the overall strategy and by sector.
18	Benefits from Scoping Plan implementation must be accessible to Environmental Justice communities. Vouchers to help access new technologies, geographic distribution of resources and investments to disadvantaged communities, and transparent/accessible engagement in any planning and decision-making processes are essential.
19	Build in incentives and support for compliance. Incentivize behaviors that protect and improve disadvantaged communities; both on a large scale (e.g., industry and agriculture) and at a community level (e.g., completing communities with paved roads, sidewalks, bike/pedestrian paths, and planting trees). Explore effective strategies for change without incentives.
20	Ensure that AB 32 economic reviewers come from various areas around the state to represent insights on economic challenges and opportunities from those regions. The Environmental Justice Advisory Committee must choose at least half of the members. Ensure that the EJAC receives ready and timely notice of and access to any economic reviews, in time to give advice to and guide the process.
21	Provide an economic analysis of a carbon tax that is built to be equivalent with Cap-and-Trade. Include in that analysis a scenario where some revenue from the tax is used to give monthly dividends to affected households.
22	Provide an economic analysis of a clean energy economy.
23	Factor in the social cost of carbon in all scenarios. Show the Social Cost of Carbon ($SCCO_2$) price for Cap and Trade in 2020 and beyond.
24	Conduct a full study of the Carbon Tax and Cap-and-Tax scenarios, at least at the level that Cap-and-Trade was modeled, so that scenarios are being compared fairly. Health costs need to be included in the $SCCO_2$. Use the $SCCO_2$ price in all scenarios to increase the price of carbon. Outline additional uses of climate funds to include a just transition fund for workers and impacted communities, and a dividend to protect low-income consumers from price spikes.
25	Include a "just transition" fund for workers and communities (1) as a place to put the revenues and proceeds (across the board) and (2) to include in the scenario analysis. Include the just transition fund in main strategy, and in the economic analysis where revenue can be invested here.
26	Include an alternative scenario that addresses the fee tax dividend cost structure.
27	In the employment discussion within the public health section of the scoping plan, include that idea that new jobs must be safer, with less exposure to harmful chemicals and emissions,

Overarching Issues

	if they are to achieve the other benefits mentioned in the section.
	Long-Term Vision
28	The Scoping Plan must not be limited to examining interventions and impacts until 2030, or even 2050. What we do today and for the next 30 years will have impacts for seven generations, so our planning and analysis must have a longer-term scale to prevent short-sighted mistakes and rather reach our long-term vision. We request that all policies and analyses include this long-term vision. a. Leave fossil fuels in the ground b. Do not create new infrastructure that relies on fossil fuels, including natural gas, fracking, pipeline development, crude oil shipments and processing c. Just transitions model of moving toward local living economies that prioritize the well-being of communities
29	The EJAC expects to see the largest proportion of reductions of greenhouse gases take place in California in the future. ARB must prioritize actions and investments in California EJ communities before looking at other Californian communities or outside of California.
30	Achieving our 2030 targets will require more effective implementation and creative innovation than we have ever done before. The Scoping Plan must prioritize whenever possible the innovation of new technologies or strategies to reach even deeper emissions cuts. These innovations must put EJ communities first in line for environmental and economic opportunities.
31	The Scoping Plan must present a vision for and analysis of the clean energy economy, as well as the jobs that go with it.
32	Through establishment of formal collaborative partnerships with community-based organizations and non-profits, ARB should develop a statewide community-based air monitoring network to support regulatory efforts and to monitor neighborhood scale pollution in disadvantaged communities including the California-Mexico border region. The network should integrate real-time monitoring using low-cost monitors, a community designed website and mobile application for visual display and downloadable data, citizen science, crowdsourcing, and community science. To ensure best practices and inform community engagement and regulatory efforts, a multi-stakeholder taskforce comprised of internal and external stakeholders should be developed including key players in two successful community-based air monitoring networks located in San Ysidro and Imperial County. ARB should provide advice, technical support, data analysis, and funding to develop and sustain the network. This will include any necessary community training to ensure capacity and sustainability. Data collected will be used to understand the nature and extent of air quality in that community, inform residents on air quality in their neighborhood, issue health advisories, and address any data gaps. To support existing and future community-air monitoring networks, supplemental environmental projects (SEPs) must be invested in disadvantaged communities by funding low-cost monitor initiatives. ARB should consider a carbon tax that funds monitor installation and maintenance at the neighborhood scale throughout California, including schools to support STEM curricula and environmental outreach efforts.

Industry	
	Equity
1	State in the Scoping Plan that it is a priority to reduce emissions in EJ communities, and to ensure no emissions increases happen there, and specify the strategies that are achieving this. Through standardized metrics, ensure that emission reductions from AB 32 activities are being achieved, especially in EJ communities. Include an analysis on where/how GHGs are increasing and specify strategies to prevent and reduce those emissions, especially in EJ communities; these strategies include no trading, no offsets, and no free allowances in those communities. Continue OEHHA emissions study on EJ communities, including facilities with emissions increases that used offsets and received free allowances.
2	Use a "loading order" for Industry similar to the one that is used by the California Energy Commission for supplying demand, such as: (1) reduce fossil fuel use (extraction, operations, supply, feedstock source), (2) reduce emissions through efficiency (technology, innovations), (3) controls to prevent emissions increase. Always prioritize the approval and use of the most efficient and low-carbon technologies, facilities, and projects over high-polluting ones. This could be implemented for the LCFS.
3	Address localized impacts of short-lived climate pollutant emissions, such as black carbon from all sources.
4	A big design flaw of Cap-and-Trade is having an ambiguous economy-wide cap. Eliminate Cap-and-Trade, replace it with a non-trading option system like a carbon tax or fee and dividend program. In addition: a. Increase enforcement of existing environmental and climate laws, increasing penalties for violations in DACs. b. Establish a state run "Carbon Investment Fund" allowing the private financial sector to invest in Carbon Futures. Pay dividends through enforcement fines, permit fees and carbon tax receipts. c. Better coordinate climate pollution and local criteria pollutants programs. d. Place individual caps on emission sources, rather than using a market-wide cap. Set up a per-facility emissions trigger that will tighten controls when a certain level is reached. Include language in Scoping Plan on facility caps. e. Establish a moratorium on refinery permits. f. Set goal of 50% emissions reduction in Oil and Gas sectors by 2030. Aggressively reduce emissions from these sectors, including fugitive and methane emissions from extraction and production. g. Put emissions caps on the largest polluters. h. If Cap-and-Trade continues, do not give out more free allowances. i. Do not exempt biomass burning activities. j. Do not allow regulated entities to apply for California Climate Investments funding. k. Increase the floor price to the real price of carbon; use the highest price offered, not the lowest. Incorporate industry's externalized costs into the cost of carbon (as is done with the mitigation grant program at Port of Long Beach). Calculate the cumulative impacts so they can be mitigated. Ensure that polluting facilities are paying the societal costs of their emissions, rather than externalizing them.
5	The Scoping Plan Economic Analysis must consider carbon tax, command and control regulation, and Cap-and-Dividend or Fee-and-Dividend. Cap-and-Trade must be eliminated. The price of carbon must be increased, with the resulting funds invested in local communities to ensure all benefits from a greenhouse gas free future. Provide a full analysis of carbon tax and cap-and-tax.

Industry	
6	Expand the definition of *economy* to include costs to the public (e.g., U.S. EPA social cost calculator). Include health care costs in social cost of carbon. Conduct an economic analysis that would account for the cost to public health (beyond cancer, respiratory and cardiovascular diseases) and environmental burdens from greenhouse gases. Include the Integrated Transport and Health Impacts Model (ITHIM) in the analysis. Ensure that ARB coordinates with other state agencies in this effort.
7	Ensure that the Adaptive Management tool is adequate for real-time monitoring and intervention. Provide real-time air data to communities from local emitters. There must be at least two EJAC members on the Adaptive Management work group. To demonstrate how the tool can help communities, complete an Adaptive Management analysis for Kern County.
8	To address tension between workers and community members who live in polluted areas, there needs to be access to economic stability and a just transition to the new clean economy. Ensure that workers in Environmental Justice communities whose livelihood is affected from a move to cleaner technologies have access to economic opportunities in that new clean economy and that local businesses continue to employ workers from that community. Include a just transition fund in the use of any climate funds.
9	Do not commit California to continuing Cap-and-Trade through the Clean Power Plan. Since carbon trading cannot be verified, ensure that the Clean Power Plan power purchases are from sustainable, renewable power plants.
10	Eliminate offsets. However, if this recommendation is not accepted and offsets are used, they must offset the emissions in the area where the emissions occur. Offsets must be in the state; do not allow out-of-state offsets. Actions and investments taken by industry to reduce emissions need to be reinvested in the communities where the emissions have occurred. Any benefits from greenhouse gas reduction measures must affect California first. In addition to California emissions, also consider activities that can reduce pollution coming from across the Mexican border, to reduce emissions in the border region. Do not pursue or include reducing emissions from deforestation and forest degradation (REDD) international offsets in the Scoping Plan. ARB should commit to evaluate the emissions impacts of offsets and free allowances in EJ communities, including if Cap-and-Trade is extended/chosen, and then publish this study and consult with the EJAC.
11	Do not allow out-of-state forest offsets—offsets should apply to in-state urban forests.
12	Add AB 197 and SB 350 as a Known Commitments for this sector and remove "Develop a regulatory accounting and implementation methodology for the implementation of carbon capture, and sequestration projects" as a potential new measure. Include detail in Scoping Plan of how AB 197 implementation will work to reduce emissions, especially for EJ communities.
13	Delete the word "unlikely" from the following sentence on page 55 of the Scoping Plan: Implement Adaptive Management to monitor for and address any unlikely increases in toxic or criteria pollutant emissions due to implementation of the Cap-and-Trade Program. Include ARB's response to the CEJA and OEHHA reports in the Scoping Plan and a commitment to prevent emissions increases, especially in EJ communities.
14	Commit to reducing oil. This includes a moratorium on new or expanded fossil fuel infrastructure, limiting oil and gas exports now to close that loophole, and placing quality controls on feedstocks so as to not import extreme oil (tar sands, Bakken crude).
Coordination	
15	ARB needs to examine ways to increase its partnerships with and oversight over air districts using its existing authority. Local air districts need to be held accountable to the same

Industry	
	standards as ARB. Promises need to be documented and strictly enforceable. If an air district chooses to have stronger standards than ARB, that air district must have the power to enforce those stronger standards without interference from ARB.
16	Stop "passing the buck" from agency to agency and fix the problems. All agencies need to take responsibility for all pollutants. Coordinate efforts among agencies when necessary, and among local governments and communities. Implement the following measures: a. Improve community and neighborhood level air pollution monitoring. b. Add EJ members to all agency boards and committees. c. Tier pricing for allowances for facilities in EJ communities, making it more expensive to pollute in those communities. d. Improve communications about air quality between polluters and schools and nearby residents, both for individual accidents and in terms of overall facility emissions. Develop a cooperative, productive discourse. e. Provide easily accessible and immediate notification to schools and nearby residents in the event of a facility accident; current notification is much too slow. Develop and make accessible tools like the real-time air quality advisory network (RAAN) phone application, so residents can access real-time air quality information at the neighborhood level. f. Establish better coordination between enforcement agencies. Expand air quality night enforcement so that all communities have around-the-clock enforcement to address off-hours violations.
17	Delete the following sentence: "Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry." CAPCOA is creating a new carbon market that EJAC has raised concerns about, and it should not be authorized by being in the Scoping Plan.
Partnership with Environmental Justice Communities	
18	Create a thorough air quality monitoring system and deputize the community to participate in that network through databases, apps, and community science. Fund a program to provide communities with the tools and training they need to participate. Identify the pockets not being monitored and also the hot spots. ARB must take a greater responsibility for monitoring. Ensure that all monitoring covers both greenhouse gas pollutants and criteria pollutants, to expand the state's databases and accurately characterize all communities, so that CalEnviroScreen can more reliably identify areas that qualify for funding. Make monitoring transparent and accessible. Include language in Scoping Plan committing to improved air monitoring.
Long-Term Vision	
19	The Industry sector must present a vision of how California is transitioning to a clean energy economy, with clean businesses that will not harm disadvantaged communities. This vision must focus both on the environment and the economy, including the jobs and taxes that will come from a transition to a clean energy economy. For example, analyze the gaps between jobs lost in fossil fuel industry and jobs gained in cleaner industries.
20	Explore scenarios for maintaining local jobs when refineries shut down. Include a just transition fund for workers.

Energy, Green Buildings, Water	
Equity	
1	Develop aggressive energy goals toward 100% renewable energy by 2030 to reach emissions reduction sooner, especially if other sectors lag or increase emissions. Increase 2020 reduction target to 50%, aiming up to 100% reduction by 2050.
2	California must fully practice the state's energy loading order: prioritize all cost-effective energy efficiency, then demand response, and finally renewables and distributed generation. These priority strategies, in combination with energy storage, must be fully utilized prior to the use of natural gas power plants.
3	Expand rooftop solar in EJ communities, including desert communities. Use brownfields for solar. Include community-owned solar and expanded rooftop solar in the Scoping Plan.
4	Remove special considerations or exemptions for investor-owned utilities, and instead require them to develop power that is the most clean and efficient, and under the same rules and structure as their counterparts.
5	Imported electricity must not be considered renewable beyond the percent of renewable energy production (the renewable portfolio) currently existing in the exporting state. There must be no double-counting or incentives to encourage other states to burn fossil fuels. Set a goal of the 2030 inventory being 40% below 1990 levels for in-state GHG emissions.
6	Do not use Cap-and-Trade (or carbon trading, offsets) for the Clean Power Plan. The Clean Power Plan must ensure power is generated from sustainable, renewable sources. If the Clean Power Plan is discontinued, continue to measure progress toward cutting emissions in its absence.
7	Do not provide energy credits for biomass burning or count it as renewable energy. Make wood chips available from dead trees to use as mulch in gardens (don't burn it).
8	Carbon capture and sequestration power plant projects using captured carbon dioxide for enhanced oil recovery must not be certified as projects that sequester carbon for the purpose of carbon credits of any kind. Also, injection of carbon dioxide for sequestration purposes shall not take place without the express permission of all surface landowners above the zone of sequestration in order to qualify for carbon credits. Facilities that use carbon capture and sequestration for oil recovery must offset the greenhouse gas amounts by the carbon content of that recovered oil.
9	Climate investments and energy solutions (building retrofits, weatherization, tree planting, solar, microgrids, etc.) must serve entire disadvantaged communities, rather than just individual buildings or homes. Other populations of note include: fixed-income, seniors, people with chronic conditions, and other low-income residents. In the Scoping Plan, specify clearly how these goals will be achieved.
10	Develop innovation hubs for disadvantaged communities in order to support innovations, development and use of clean energy and weatherization, like low-cost solar cell stacking.
11	Upgrade residential building electrical systems to support clean energy upgrades in urban, rural and unincorporated communities. Increase progressive types of code for future upgrades. State funds for clean energy technologies in disadvantaged communities must allow for funding for maintenance and upgrades necessary for clean energy technologies. Create green development bank to fund energy efficiency programs in disadvantaged communities.
12	Prevent and mitigate negative land use impacts from energy projects, including increased dust from clearing land, sprawl, displacement, increased traffic, and understanding costs of these emissions projects.

Energy, Green Buildings, Water	
13	Set a moratorium on new oil and gas operations (refineries, power plants, fracking wells, etc.). Include guidance for strong health-based standards, buffer zones around locations affected by emitting facilities, and capture and measurement of leaking methane.
14	Phase out natural gas-based appliances and technologies, and transition to electric and solar thermal technologies. Offer energy efficient household appliance upgrades to low-income residents in particular. In the Scoping Plan, specify clearly how these goals will be achieved.
15	Support tree planting and green infrastructure in communities to reduce energy use for cooling buildings. Such infrastructure could include cool roofs or permeable surfaces to cool community and reduce energy consumption.
16	Set and enforce greenhouse gas reduction targets for existing buildings and improve building codes. Broaden the definition of a "green building" to include retrofits of existing buildings in disadvantaged communities. Identify and implement best practices for retrofitting existing buildings.
17	Set goals for new and green buildings: all new constructions to be zero net energy (ZNE) by 2020, with none using natural gas or biogas. Include affordable housing buildings in ZNE goals.
18	Develop standards and support the construction of "living buildings" (regenerative buildings that more closely follow natural ecosystems, with features such as solar, water capture, efficient and affordable transportation options, etc.) within disadvantaged communities.
19	Provide direction to industry on best practices for rapidly moving toward widespread design and construction of green buildings within disadvantaged and low-income communities, and incentivize developers to adopt the standards and implement them. Ensure that building or retrofit costs are not passed along to low- and moderate-income tenants by providing tax incentives, or by adopting policies that prevent having those costs passed on to them. Share energy savings with renters.
20	Make pumping of water by the State Water Project in California 100% renewable by 2030, with consumers of the water paying for renewable energy installation and production along the project right-of-ways.
21	If geothermal energy is developed, ensure that it is benefiting, and not harming, the local community.
22	Identify the energy use and reduction goals for the proposed California Water Fix and Eco Restore project (formerly the Bay Delta Conservation Plan), including the pumps at Tracy (the single largest energy user in California).
23	Encourage regional self-sufficiency and conservation to maximize water supply through water recycling and rainwater capture, low-impact development, end-user education, and use of native plants, and by enforcing the proper use of landscape water. Provide resources to help low-income households install grey water designs for landscape irrigation.
24	Prioritize pollution prevention in all AB 32 projects and regulation. The provision and distribution of affordable, safe drinking water for all must be the highest priority. ARB is subject to code enforcement of making water available.
25	Stop investing in dirty energy. Eliminate subsidies and financing for fossil fuels and in technologies such as corn-based biofuels, agricultural methane, biomass burning, waste-to-energy, or other unsustainable technologies that result in negative impacts on EJ communities. Use funds instead for clean energy projects in EJ communities.
26	Discuss Green Buildings as its own sector in the Scoping Plan and include a discussion of appropriate building material.

Energy, Green Buildings, Water	
27	Support a market push to adopt electrification or other cleaner sources for heating.
28	Quantify the emissions produced by the delivery of safe drinking water to communities and individuals that don't have safe drinking water.
Coordination	
29	The California Energy Commission (CEC) must evaluate all renewable energy projects under the renewable portfolio standard (RPS) for lifecycle emissions and co-pollutants to ensure they do not create new problems in overburdened communities. The CEC must render ineligible those technologies that increase local air quality burdens without direct and current 200% mitigation of all air quality impacts within ten miles of the project location. The CEC must ensure that imported renewable energy, including that from tribal lands, is consistent with California requirements.
30	Prioritize the siting of renewable energy, grid storage, microgrids, and community choice aggregation projects within communities identified by CalEnviroScreen. EJ communities need to be able to reap the environmental and economic benefits of these energy projects. Pilot 10–100 microgrid projects in EJ communities. The California Energy Commission must prioritize and maximize clean energy research and development investments in disadvantaged communities through its Electric Program Investment Charge (EPIC) Program and actively engage those communities in developing the investment plan for that work. Ensure that power companies do not disincentivize neighborhood-level renewable energy generation through taxes and feeds.
31	Avoid and mitigate any increased emissions from energy operations, and prioritize disadvantaged communities in this effort. The California Independent System Operator ("CAISO") must not pursue regionalizing the energy market if there are negative impacts like natural gas plant emissions increases or health effects on disadvantaged communities. Ensure an effective and aggressive adaptive management plan if there is grid regionalization. Prevent negative unintended consequences with strong inter-agency coordination between the Air Resources Board, California Public Utilities Commission (CPUC), California Energy Commission (CEC), CAISO, and local air districts, and in related proceedings and policy discussions.
32	The California Energy Commission (CEC) must provide guidance to state and municipal energy agencies to lower the barriers to pursuing deep energy retrofits to upgrade homes, businesses, and public institutions in low- to moderate-income communities. This can happen through the CEC's SB 350 Barrier Studies and any related follow-up studies.
33	Mandate local jurisdictions to install energy-efficient alternatives in community buildings (e.g., shopping malls, recreation centers) as they do in government buildings.
34	Coordinate federal, state, and local agencies to create a one-stop shop for residential, commercial, and industrial energy efficiency and renovation programs. Focus on the whole house rather than on one aspect at a time, so that multiple programs can be more easily accessed, and on retrofitting the whole community to leverage economies of scale. Make homes more energy efficient before installing renewables. Establish pilot projects to retrofit substandard low-income housing with federal Housing and Urban Development (HUD) funding.
35	Implementing agencies must build training partnerships with local institutions that have a proven track record of placing disadvantaged workers in career-track jobs (such as community colleges, nonprofit organizations, labor management partnerships, state-certified apprenticeship programs, and high school career technical academies).

Energy, Green Buildings, Water	
36	ARB must identify itself as a coordinating agency/liaison that can identify the programs that homeowners can use to upgrading homes to accommodate solar, and streamline access to those programs for homeowners.
Partnership with Environmental Justice Communities	
37	Increase literacy about clean energy programs and services, especially for people in geographically, linguistically, and/or economically isolated communities. Use trusted sources of information such as community-based organizations, school curricula, outreach to immigrant communities in-language and employ culturally appropriate and multigenerational messaging techniques.
38	Identify, implement, and standardize metrics to track energy savings, quantify energy reductions, conduct post-project assessments to ensure accountability, and survey local activities to determine if strategies are working (or not). Use EJ residents as a resource for data collection.
39	Promote more education to water end-users about ways to conserve water and energy.
40	Identify and evaluate community-based technologies that cut energy consumption and save money.
41	To ensure a just transition, ARB must support access to the resources environmental justice communities need to conduct innovative programs.
Economic Opportunity	
42	Promote the development of community-driven clean energy projects that hire from disadvantaged communities, prioritize community ownership of (and equitable access to) clean energy technologies, maximize energy bill reductions for low- and moderate-income communities within disadvantaged communities, and prioritize anti-displacement strategies. For climate projects, employ project labor agreements, best-value contracting and local/targeted hire goals to provide access to career-track construction jobs for disadvantaged workers. In consultation with state workforce agencies, direct implementing agencies of climate programs to develop specific goals to train and facilitate employment of workers from disadvantaged communities. Use CalEnviroScreen, other robust screening tools, and local unemployment data to identify and prioritize communities for job creation programs.
43	ARB shall work with appropriate state agencies to identify and develop data and criteria for measuring economic and employment co-benefits resulting from AB 32-related public investments. Develop measurable targets and a process for determining if those targets are met. To improve transparency, report progress or lack of progress to the community regularly. Provide better oversight of climate change investments to ensure they benefit all EJ community members.
44	Maximize carbon reduction and energy savings by directing implementing agencies to promote the highest quality work, standards for participating contractors, and minimum training and skills for workers.
45	Provide scholarships for college work in relevant clean energy fields.
46	Develop incentives, rebates, and financing mechanisms to accelerate equitable access to clean energy technologies in low-income households, apartment buildings, small businesses, and other community-serving facilities such as community centers, churches, health clinics, schools, parking lots, local industry buildings, and community-based organizations. Surplus energy can be invested back into the community or to cleanly fuel industrial facilities. Eliminate landlord signature for energy improvements or rebate application programs; obtaining a signature can be difficult and landlords sometimes increase rent after upgrades.

Energy, Green Buildings, Water	
47	Develop incentives and phase in requirements for renters and landlords to provide energy efficiency upgrades and provide upgrades that enable buildings to use renewable energy technologies and water capture. Update building and zoning codes to support renewables. Enable builders to fast-track a project if it includes solar. Follow U.S. Department of Housing and Urban Development (HUD) program guidelines so landlords cannot raise rents due to improvements.
48	Lower finance barriers and increase access to low- and no-interest energy efficiency financing for the low- to moderate-income single-family, multifamily, and small business sectors. This includes credit enhancements, interest rate buy downs, rebates, low-interest loans, and supporting the use of alternative measures of creditworthiness to provide greater access to affordable capital.
49	If federal tax credits for residential solar installations are discontinued in the future, California must make up the difference with state tax credits and rebates.
50	If federal tax credits for small business solar installations are discontinued in the future, California must make up the difference with state tax credits and rebates.
51	Protect low-income households from energy price spikes.
52	Include language about creating economic opportunity from fee and tariff programs for families and small businesses to sell renewable energy.
53	Include solar, wind, and wave/tidal power as alternatives to fossil fuel.
54	Stress partnerships with State Water Resources Control Board, the California Labor and Workforce agency, and other agencies.
55	The Scoping Plan must include discussion of a tiered system wherein locals are hired for local renewable projects first, and that the system will be designed to hire those with employment barriers (such as a history in the justice system) first.

Transportation

Overarching Principles

We envision a California where all communities breathe clean air and have access to safe, affordable, clean transportation options. The following recommendations will help to achieve this vision. The themes present in this Transportation Section that can be lifted up as overarching principles are:

a. Access to clean transportation technologies
b. Meaningful investments in disadvantaged communities
c. Capturing economic benefits in disadvantaged communities
d. Coordination of state and local agencies
e. Reporting on actual impacts of programs, particularly community level impacts
f. Robust community participation

Equity

1	The top priority for transportation planning and investments is to reduce vehicle miles traveled (VMTs) and implementing changes such as increasing access to affordable, reliable, clean, and safe mobility options in disadvantaged communities.
2	Examine mobility regionally, as there are different challenges and opportunities in different areas of California, and include specific language of how the process for examining different regional mobility issues around the state would happen. For example, reduce transportation emissions along the border with Mexico by focusing on cross-border commuting. Reduce the

Transportation	
	long border wait lines and idling by increasing lanes for walking and biking, providing zero-emission bus and shuttle options, and after these other options are exhausted, increasing transportation infrastructure to support traffic. Conduct mobility need assessments through SB 350 studies.
3	Expand transit services to provide neighborhood-level access, use different vehicle sizes and types to ensure economies of scale, sustainability, and accessibility to disadvantaged communities. Increase access to buses and trains for youth, students, elderly, those seeking medical care, and low-income riders. Employ free or discounted transit passes for these groups. Prioritize funding for buses in areas where buses are relied upon more by low- and moderate-income commuters in disadvantaged communities.
4	Define *infrastructure* not just to include highways, freeways, new fueling stations, and roads, but also sidewalks, bike paths, and green infrastructure. Invest in multi-modal and shared transportation instead of building new freeways. Furthermore, state and local government agencies must not count building freeways as a GHG reduction strategy.
5	Ensure that there is sufficient infrastructure to support new and current low emission vehicle types (i.e. bikes, electric vehicles, etc.). Ensure that plans for bike lanes include those not only within a city but also between cities, and that inter-city paths include space for golf carts if appropriate. The state must strengthen and identify more opportunities to fund and mandate local land use decisions that support a low-carbon future and protect the health of local residents.
6	Promote more community-friendly land use planning that prioritizes the health and economic wellbeing of environmental justice communities and is developed in close consultation with community members. We recommend the following community-friendly land use planning strategies: a. Design and implement new incentives, beyond tax credits, to encourage infill and mixed-use development over sprawl. Develop and implement land use, building code, and permitting changes to streamline planning. b. Increase support for use of cleaner, safer sidewalks and bike paths. Better lighting, increased distance or barriers from roadways and freight railways. Increase bike and path/sidewalk sweeping. c. Ensure that the placement of bus garages, terminals, and hubs does not disproportionately impact environmental justice communities and pursue measures to reduce environmental impacts from these facilities. d. Promote and fund projects that create clean, safe, and accessible mobility pathways and networks for environmental justice community members, particularly more sensitive populations such as youth, elderly, and those with health problems. Mobility options must include more active transportation options such as bike paths and sidewalks. e. Improve existing transit resources, including increasing the number of bus stops where needed, developing intelligent and connected bus stops, and improving bus stop infrastructure (e.g., covered and better lit bus stops with more benches). Transit planning and maintenance must prioritize safety and coordinate with last mile initiatives. Transit planning must also prioritize efficiency and support routes that promote accessibility, reduce health impacts from criteria pollutants, and lower GHGs. f. Plan for dedicated bus lanes on the freeway to promote the efficiency and use of public transportation. The buses themselves must be cleaned more frequently and must integrate more easily with other mobility options such as biking and

Transportation	
	trains/trolleys to help increase user satisfaction and ridership.
7	Target truck fleets and vehicle fleets with electrification and cleaner, sustainable fuels to achieve the quickest, most significant reductions in emissions. The state must increase the fleet turnover target to at least 40%.
8	Actively support and implement California Cleaner Freight Coalition's recommendations to California's Sustainable Freight Action Plan.
9	Develop strategies that ensure small independent trucking companies and concerns are incentivized to transition to zero or near-zero emission vehicles as well as more efficient truck technologies.
10	Restrict truck routes and travel times and limit new trucking operations to reduce vehicle miles traveled to reduce their operational impacts in disadvantaged communities. Increase air monitoring and enforcement of these requirements.
11	Support sufficient charging and refueling stations along freight corridors.
12	Increase the required reduction of carbon intensity of fuels under the Low Carbon Fuel Standard from the current 10% to 30% by 2030 and ensure that 95% of renewable fuel is electricity, not biogas.
13	Eliminate the assumption in the Low Carbon Fuel Standard Life Cycle Analysis (LCFSLCA) that methane is a necessary by-product of dairies. This will eliminate the awarding of avoided methane emissions credits to dairies. Instead, methane emissions must count as an emissions debit against the fuel. Conduct a new LCFSLCA using standard methodologies applied to all organic and artificial chemical energy sources.
14	Promote clean and renewable energy sources to power vehicles. Plan electric vehicle programs and electricity supply together. Increase coordination among energy and transportation agencies to help ensure the success of supporting initiatives.
15	Study the emissions reduction benefits from increasing gasoline prices.
16	In support of state electric vehicle goals, such as SB 1275, the state must develop and provide funding for a program that ensures deep penetration of electric vehicle use and charging capacity in disadvantaged communities. This must include a pilot program that does the following: a. Funds demonstration program placing new and used electric vehicles, along with associated charging and maintenance infrastructure, in at least seven low-income and disadvantaged communities at the residential level, to evaluate best practices and accelerate their integration in these communities statewide. b. Ensures a proper diversity of population density: urban, suburban, and rural areas. c. Prioritizes areas with aging infrastructure. d. Focuses on expanding access to electric vehicle use in schools in disadvantaged communities.
17	Accelerate ownership and access to zero-emission vehicle technologies, through the following strategies: a. Universal application and point-of-sale rebates or vouchers for new and used electric vehicle and other clean energy programs in place by June 2017. b. Rebates for used electric vehicles available (outside of Enhanced Fleet Modernization Program (EFMP) and Plus-up project) by June 2017. c. A minimum of 20% of non-luxury multi-unit dwellings have electric vehicle charging stations (or stubs) by 2020. d. A minimum of 25% of state investments in electric vehicle charging station

Transportation	
	infrastructure occurs within disadvantaged communities. e. ARB's "Electric Vehicle Car sharing Program" funds at least 50 projects by 2020. f. Employment and Education Shuttle rebates to fund at least 20 ZEV or hybrid vanpooling and carpooling (including support for charging infrastructure) projects that support community-serving workforce training programs and employment by 2020. g. At least 20 "last-mile" free electric shuttle/bus programs providing transportation to community-serving facilities (e.g., clinics, community colleges, community centers, hospitals, government facilities, job centers, shopping centers) in place by 2020. There must be a regionalized effort to promote integrated solutions connecting community members from public transit to their destination. h. All school districts in disadvantaged communities have electric school bus fleets by 2020. i. Provide incentives to small-businesses (particularly those heavily reliant upon goods movement) for the purchase or use of zero-emission medium- and heavy-duty vehicles. j. Support and finance zero-emission truck and bus initiatives outlined in SB 1204. k. Call for an infrastructure to support 4 million zero-emission vehicles by 2020. l. Provide incentives for rural and suburban transportation networks.
18	Ensure that clean transportation infrastructure and mobility options are available in rural, indigenous, and small communities. Specifically: a. Fund and support clean transportation options for low-density communities with less cars and transportation resources. Vanpooling, community-driven ride-sharing (i.e., Green Raiteros in Huron, California), more frequent buses, and bus routes are examples of more mobility options that are more targeted for rural and small communities. b. Target clean mobility incentives to farmworkers who may not have vehicles or need smog tests for polluting vehicles.
19	Improve access to transportation options (active transport, mass transit, ride-sharing) through the following recommendations: a. Promote more effective outreach and information sharing about zero-emission vehicles and other clean mobility options, as well as information about daily air quality conditions. 1. Work with the car industry and ethnic ad agencies on advertising and more targeted campaigning in multiple languages. 2. Get information out through a cell phone application that is free and available in multiple languages. 3. Work with community-based organizations to ensure that this information is available to community members who do not have access to a smart phone. b. Promote and fund community-driven, community-owned, affordable and accessible ZEV shared mobility options in environmental justice communities.
20	All SCSs and transportation project analyses, policies, and investments must include metrics around displacement and gentrification. Non-displacement of residents must be met as part of the permitting process and before awarding funds, and methods for enforcement must be identified.
21	California must promote a culture shift to more efficient and clean mobility options such as mass transit, sustainable communities (SB 375), and active transportation. Streamline and

Transportation	
	promote widespread access to clean mobility options using the following recommendations: a. Promote and incentivize telecommuting as a way to reduce vehicle miles travelled, particularly for communities that have been displaced from areas closer to their work. b. Decrease vehicles idling by working with appropriate stakeholders to retime traffic lights, develop adaptive traffic management systems using real-time data, promote the use of signage or other efforts to reduce idling at drive-throughs and other businesses. c. Partner with businesses and provide outreach, education, and incentives to encourage truck drivers and companies to reduce emissions, reduce idling, and promote more a more efficient use of medium- and heavy-duty vehicles. d. Encourage more ride-sharing by employers.
22	The state must support research on the following topics: a. Growth regional growth projections with an assessment of clean mobility needs in the future. b. Updated and more targeted, scaled down science on the cumulative impacts of pollutants within environmental justice communities. c. Unintended consequences from clean transportation policies and investments on low-income individuals and environmental justice communities (e.g. displacement, impacts on vehicle miles traveled). d. Impacts of road use fees to generate revenue and discourage driving.
23	Achieve a low carbon fuel standard through increased electrification, not biodiesel.
24	Promote electrification of heavy duty vehicles and a statewide infrastructure to support it; until that technology is mature, install compressed natural gas (CNG) stations at existing filling stations up and down the state, to support those businesses through the transition and support a cleaner fuel infrastructure. Support conversion of heavy duty vehicles to CNG.
25	The transportation emissions inventory needs to include off-road emissions from sources such as off-road construction and agricultural equipment.
26	Clearly state in the Scoping Plan what the targets will be for SB 375 funding and emphasize additional funding to MPOs.
Partnership with Environmental Justice Communities	
27	Through robust community participation, ground-truth the actual impacts of program planning and implementation. Emphasize overall the need for communities to drive transportation changes, including the transition to electrification. Strategies include the following: a. Conduct and prioritize community needs, network analysis, and mobility assessments. Transportation agencies and planning groups must be mandated to address mobility gaps in EJ communities and for seniors, low-income populations, and people with disabilities. Include language about ensuring that transportation plans are density-relevant for each community. b. Conduct regional equity analyses when evaluating and implementing transportation options to support projects that benefit disadvantaged communities and prevent adverse secondary effects in disadvantaged communities (e.g., the Los Angeles FasTrak program which resulted in more vehicles on artery streets, creating even worse air quality problems for those communities). c. Conduct equity analyses in transportation projects to ensure that investments go to those most impacted by pollution and economic disparities.

Transportation	
	d. Benchmark and track where projects are implemented to measure the emission reduction progress and economic return in disadvantaged communities. e. Measure emissions reductions by per capita VMT.
Coordination	
28	ARB must work with the California Energy Commission through its EPIC and ARFVTP funding sources must support the advancement of clean transportation innovations within environmental justice communities and must engage community-based organizations in investment plan development.
29	Sustainable Community Strategies (SCSs) must be improved in the following ways: a. SCS compliance with ARB greenhouse gas reduction targets must only be based on documented land use and transportation changes. b. ARB setting strong target for all Metropolitan Planning Organizations. Eliminate the "5 and 10" default for Regional Transportation Plans (RTPs). c. Metropolitan Planning Organizations must only be allowed to authorize implementation of projects that are included in the most recent SCS. d. Transit agencies must be required to adhere to projected routes and costs in the adopted SCS unless alternatives demonstrate increased emission reductions while maintaining or improving access to alternative transportation choices. e. Implementation of SCSs must prioritize investments in disadvantaged communities. f. ARB must consider California Transportation Plan 2040 and Regional Transportation Plan Update guidelines (see also section on improving coordination).
30	Strengthen oversight by state of local government activities. ARB must provide detailed guidance on local zoning to carry out climate and air quality priorities. Furthermore, state agencies need to give local transit authorities more direction about anti-discriminatory Title VI expectations, to promote more equitable funding of transit options, especially regarding fare increases and route changes that may limit access to transit.
31	Financially support transit operations and restoration of transit service and routes and expansion of services where lacking in disadvantaged communities.
32	Establish better interagency coordination among state, federal, and local agencies when planning projects and awarding funding. The following outline specific opportunities for improving coordination: a. Coordination must be transparent and actively seek community and stakeholder input. b. ARB must consider the California Transportation Plan 2040 and Regional Plan Update guidelines in developing and implementing its own planning documents, including the Scoping Plan. c. ARB must improve coordination with California Environmental Protection Agency (CalEPA) and the United States Environmental Protection Agency (U.S. EPA) to promote better scientific research on pollution impacts within environmental justice communities and pursue initiatives to prevent harmful cumulative impacts. d. ARB, California Public Utilities Commission, and California Energy Commission must better coordinate electricity planning and the planning of program supporting electric vehicle use to help maximize the use of renewable electricity for transportation, to ensure infrastructure needs are met for electric vehicles, and to better understand opportunities for renewable integration efforts. e. CalTrans and local governments must prioritize greenhouse gas reduction and public

Transportation	
	health and safety in funding activities and policies. f. Specify incorporation of EJAC recommendations in Scoping Plan so they are used in interagency collaboration.
Economic Opportunity	
33	Prioritize the advancement of economic benefits such as job and workforce training opportunities in disadvantaged communities. Build skills and capacities locally, so infrastructure can be maintained and further advanced.
34	Technical Assistance and Marketing, Education, and Outreach (ME&O) – The state must dedicate funds toward helping less-resourced communities and small businesses take advantage of clean transportation investment opportunities. It is important to develop community-specific technical assistance and ME&O plans to maximize efficacy of outreach efforts. Reinforce that resources/funding need to go to the communities that have, through experience and expertise, contributed to those models. Funding should not go to out-of-area consultants, but local people who have the expertise.
35	Job Placement and Training – The state must dedicate resources for community-based organizations that support clean energy career pathways for disadvantaged community members. These pathways must include but not be limited to: job placement, apprenticeship opportunities, and building skills that are transferable to a broad set of clean energy jobs. Include language in the Scoping Plan discussing the clean energy economy, including opportunities for training, jobs, access for all Californians in all communities, renters, and landlords.
36	Ownership and Access – The state must support the increased access to and ownership of clean energy and clean transportation technologies and mobility options in disadvantaged communities (discussed in more detail above).

Natural and Working Lands, Agriculture, Waste	
Coordination	
1	ARB and other state agencies (including the California Public Utilities Commission, California Energy Commission, Office of Environmental Health Hazard Assessment, Department of Toxic Substances Control, and CalRecycle) must undertake a process to examine the growing evidence that biomass and biogenic carbon have real and significant climate impacts, examine the long-distance transport contribution to overall greenhouse gas impacts of burning biomass material, and examine assumptions of health and environmental impacts from burning various materials considered to be biomass, including the impacts of biomass ash. Ash from burning biomass, urban wood waste, and other materials has been found to be dumped on California agricultural land in recent years, and this ash has been found to be contaminated with dioxin and other health-threatening chemicals. Before pursuing increased burning of biomass in California, ARB, the Natural Resources Agency, and related agencies must investigate where ash from the existing burning of biomass is ultimately being dumped, the environmental justice impacts and impact on agriculture, and the cost of biomass ash handling in California. This is of growing importance as new EPA regulations allow for the increased burning of waste and biomass at industrial facilities (i.e. industrial boilers, cement kilns), and as material deemed to be biomass are exempt from compliance obligations under California's Cap and Trade program. ARB must reexamine the assumption that burning biogenic carbon doesn't matter because it is replaced by growing biomass. The time scales necessary to recapture the carbon are too long.

2	Establish better coordination between ARB, Caltrans, the California Energy Commission, CalRecycle, the Department of Toxic Substances Control, and other agencies whose purview include Natural Lands, Agriculture, and Waste-related emissions. Together, these agencies must be available for consultation with EJAC to support plan and policy development.
Equity	
3	Data Collection – timely and comprehensive data collection is essential to avoiding negative impacts and ensuring co-benefits. Such data must include: a. emissions from forestry and wood products, since forest management is a net source of greenhouse gases. b. wildlife habitat (including agricultural land) to facilitate conservation and link to the greenbelt. c. metrics to quantify the greenhouse gas benefits of managing natural and working lands. Achieve consensus on how to measure greenhouse gas emissions reductions from activities in natural systems. Discuss and agree upon these metrics with the interagency working group and community stakeholders.
4	No credits must be given for landfill or for biodigestors for greenhouse gas avoidance. The state's biomass garbage and all other incinerators, including but not limited to gasification, will be treated like other carbon-intensive industries and pay for all carbon emissions under California's Cap and Trade program. At a bare minimum, the state must align with the requirements of the EPA's Clean Power Plan (CPP) on this point. The CPP clearly recognizes that carbon dioxide emissions from burning the fossil fuel-based portion of garbage (i.e., plastics) must be counted. CPP also acknowledges that incineration undermines waste prevention programs, which have significant climate benefits. Beyond this minimum accounting requirement, the state already recognizes the benefits of using compost (from food, paper, wood, yard waste, and other natural materials in the waste stream) to store carbon in the soil. Thus, the carbon dioxide emissions of burning such materials must also be counted in the state's Cap and Trade program. Additionally, the state must revoke all existing incinerator carbon credits. Disincentivize and discourage locating biomass and digesters in disadvantaged communities or in close proximity to housing and do not site biofuel facilities where fossil fuel facilities currently exist. Do not promote the use of landfills and dairies becoming energy producing facilities as a way of sequestering carbon. There are huge natural gas reserves now, to the point where some is flared. Landfills and dairies should not be used to produce more to sell. If natural gas is produced at these facilities, it must be used to power the site and vehicles at the site.
5	Healthy Soils – a critical element to land and waste management is soil regeneration. Strategies include: a. Implement climate action plan goals for urban agriculture and community gardens with integrated composting strategies. b. Research and market development for creation, storage, and application of compost for environmental health protection and carbon sequestration, the composting of woody materials together with manure, and agricultural land application of mulch from excess woody materials. c. Promote urban hydroponics and aquaponics. d. Ban agricultural burning of waste; Provide a baseline credit for applying carbon back to soils. e. Promote composting by providing education and assistance to implement composting in all communities. Support the expansion of infrastructure for composting where necessary, and map out the mechanisms for composting in each

	community. Share best practices between municipalities to ensure all residents have access to programs. Incentivize neighborhoods to compost food waste from schools and at the community level. Establish communication plans that show Californians how to compost and motivate people. f. Promote biologically intensive (regenerative organic) agriculture for the variety of agricultural, environmental, and economic benefits it provides, and to rebuild soil g. Stop overgrazing h. Do not strip forest waste from the mountains to feed biomass plants or transport dead trees to other locations for processing; instead, sequester the carbon on site through chipping and burying, and ensure that it is not at the cost of disadvantaged communities. Include the idea of sequestration in trees. i. Manage forests to maintain a solid canopy and replant open areas immediately. j. Build clean air, water, and healthy soil consciousness aggressively. k. Mandate that all communities balance natural and working lands to sequester carbon and uptake pollution to replenish natural systems. l. Develop a simple metric for soil carbon or soil organic matter (SOM), to set up a meaningful reward system for carbon farmers who meet an obvious threshold of SOM or carbon sequestration. m. Conduct analyses of removing materials from the forest; incorporate input from native communities and others.
6	Waste diversion – a. Establish waste diversion programs like "pay as you throw," where people pay per pick up amount b. To minimize emissions from waste and recycling trucks fleets, establish more efficient routes and use cleaner fuels. c. Enforce the mandate that commercial buildings have recycling programs. Provide incentives for recycling and mandate local recycling. d. Set composting as the primary goal for incentivizing waste diversion. Waste needs to be composted and recycled as close as possible to its point of origin and/or collection. Communities must take full ownership of their waste and not export it to disadvantaged communities, and must recognize that impacts stem from not only the waste, but also the use of diesel trucks to carry the waste away. Encourage the use of waste as a resource and support infrastructure investments that maximize recycling and composting programs. Establish regulations that landfills must be included in the city plans, so that environmental justice communities do not become the repositories of this excess waste. Finished compost can be exported where it's needed to support forestry and agriculture focused carbon sequestration goals. Waste must be diverted to its highest and best uses and California waste must be processed in California. e. Divert dairy waste as fertilizer and for carbon sequestration before it can be converted to methane. f. In the Scoping Plan's Waste discussion, add specific language that local communities need to take ownership of the waste they create and deal with it in their own communities, not export it. The goal should be 100% diversion from landfill. If allowed to export waste, assess a fee.
7	Waste from "renewable resources" like geothermal need to be evaluated, managed, and waste and other externalities must be considered, in the determination of renewable energy sources. Do not use or provide financial support or investment to gasification and biofuels as

	qualifying renewable options.
8	Develop more local agricultural processing centers so food is not being trucked long distances. Introduce a scoring system for food that indicates food-miles traveled. Encourage local food processing of food and meat, and educate people on the greenhouse gas reduction benefits of not eating meat. Establish public financing for healthy, environmentally sound food sources.
9	Restrict sprawl— a. Use productive lands for production. Do not use usable agricultural lands for solar and wind farm projects. Such projects produce only a few, short-term jobs and the electricity is sent to large population centers, which results in farmworker displacement and a net job loss. Recognize that with new agricultural technologies, lands seen as "marginal" are greatly reduced. If solar or wind farms are created, provide job training locally for long-term, well-paying jobs operating and maintaining those technologies. b. Encourage less driving. c. Support lifecycle analyses of sprawling developments to determine long-term economic and societal costs versus infill projects, to identify actual costs. d. Support local training, education, and incentives for architects, planners, engineers, and developers to design and develop infill building projects rather than sprawling developments. Provide incentives such as guarantees for a more streamlined planning and approval processes for infill projects. e. Protect greenspace and expand it in disadvantaged communities, insure equity though better enforcement of SB375/SCSs. f. Identify, develop, and implement policy tools to prevent the current trend of gentrification and displacement of local residents, businesses and people of color, pushing residents and people of color out of their communities. Do not provide greenhouse gas reduction funds for improvement projects that will displace current local residents, businesses, and nonprofits.
10	Encourage watershed inventory and awareness. We need better infrastructure and drainage in low-income communities to eliminate pooling polluted water on neighborhood streets and property; and that addresses the high pollution levels that lead to asthma and other illnesses.
11	Integrate urban forestry within local communities. Revise the goal of increasing tree canopy by 5% by 2030 to 40% by 2030, consistent with the Forest Service 40% baseline for a healthy urban forest. Conduct research to identify methods of achieving that increase given drought conditions. Include urban tree and greenspace maintenance, not just planting/creation.
12	Build biomass, do not burn biomass. Instead of incinerating biomass from trees and municipal solid waste, which puts more carbon dioxide into air immediately, we recommend ARB expand its work to identify and support methods for returning that carbon to the soil, such as composting biomass together with manure, and not using manure for fuel production. Investigate the growing evidence of carbon sequestration benefits from applying compost to grasslands (resources include the Marin Carbon Project and UC Berkeley Dept. of Environmental Science researchers). Additional benefits of such measures are the reduction of methane and nitrogen oxides, reduced synthetic fertilizer imports, and reduced water use. Do not allow subsidies for biomass burning or consider it as a renewable resource. Cultural and prescribed burns are acceptable. Work with other agencies to develop a "loading order" that prioritizes non-incineration methods of dealing with biomass

	in the Scoping Plan. Support repair of fractured ecology by incorporating biomass back to the land.
13	Identify and establish effective methods for implementing food rescue programs, with quality controls to avoid dumping inedible food on communities; divert expired food to composting. Identify strategies for getting edible food to those who need it. Incentivize these programs and promote communication plans for projects, so all communities have access to successful plans.
14	Push innovation on measuring waste and learning how to conduct activities. Overcome infrastructure barriers in dealing with waste.
15	Perform a complete lifecycle analysis of dairy and other bio-digester technology and related infrastructure investment. If biogas from dairies is converted to bio-methane, ARB must mandate that vehicles servicing digesters and converters utilize that gas as a primary fuel source. This is a better use of the fuel than building new pipelines and related infrastructure to transport the gas to other locations.
16	Expand the definition of "urban forestry" to include "rural desert urban forestry," "rural/urban interfaces," and "rural desert communities," so those areas can qualify for funds to support tree planting.
17	Support community land trusts to address gentrification and preserve affordability and access.
18	Research and identify alternatives for dumping biosolids (sewage sludge) in disadvantaged communities. Pilot a program to explore and demonstrate better options.
19	Regulate the dairy industry and give them a debit for methane emissions not avoided, along with credits for methane capture (negative carbon credit). This will help provide an accurate accounting of their inputs and outputs.
20	Call out greenbelts as an example of urban growth boundaries.
21	The 40% reduction of dairy methane shown in the Scoping Plan is not likely to happen by 2030, but it is a critical part of reaching the goal. Provide an alternative plan of how that methane would be reduced without it.
22	Provide an analysis of deforestation—what is happening now and how emissions from current deforestation can be avoided. This should also include how much California forests are decreasing from logging. Separate those losses from wildfires and burning.
23	State an annual reduction of 5 million metric tons of CO_2e from this sector.
24	Provide urban greenery projects to create natural barriers between housing and industry polluters.
25	Quantify natural and working lands.
26	Provide green transportation hubs.
27	Use recycled water in development.
28	Provide agricultural job training, access to land for innovative pilot projects, and a just transition for agricultural workers.
Economic Opportunity	
29	Quantify potential local jobs created from regenerating forests, both urban and rural. Include jobs for maintenance of all green environments, and increase funding to support local workforce development in support of this industry. Fund green infrastructure technician training and tree care maintenance jobs for green space.
Partnership with Environmental Justice Communities	
30	In consultation with all stakeholders including tribal councils and local communities, design and implement healthy forest management strategies that ensure sustainability of the

	existing forest canopy and decrease extreme wildfire events.
31	ARB must implement a public outreach and education campaign on the climate and co-benefits of urban agra-forestry, as well as the myriad benefits of urban greening in creating livable, healthy communities.
32	Continue to work with local communities and other stakeholders to refine metrics and tools that better quantify the greenhouse gas benefits and co-benefits of managing natural and working lands, including urban green spaces and trees. Achieve consensus on how to measure greenhouse gas emissions reductions from activities in natural systems.
33	Include cultural (tribal) and prescribed burning in the natural and working lands discussion. For balance, coordinate forest discussions and actions with all stakeholders, including the Karuk, Yurok, Maidu, Tule River, and other tribes, as well as federal and state officials (including California's Tree Mortality Task Force) and environmental groups such as Friends of the Earth and the Center for Biological Diversity. Tribes must be at the forefront of those conversations.

California Climate Investments	
Long-Term Vision	
1	Emphasize regulations that force the advancement of clean technologies. Ensure that near-term technologies do not adversely impact communities and long-term investments moves towards zero emissions.
Equity	
2	Greenhouse Gas Reduction Fund projects must be transformative for disadvantaged communities, in ways defined by each community themselves. California climate investments must take a place-based, regional approach focused on the unique needs of the people of each region, and prioritize projects that boost regional capabilities and economies. The state must support the ability of communities to use technology to communicate progress to the state. These projects must never result in displacement.
3	Within SB 535, further prioritize attention and funding for disadvantaged communities that experience increased greenhouse gas emissions despite implementation of AB 32 programs.
4	Create a formula for funding allocations that ensures investments are equally distributed across DACs in California.
5	To ensure adequate and continued funding of programs, EJ communities must have access to additional funding beyond Cap-and-Trade and the Greenhouse Gas Reduction Fund.
6	No funding must be given to fossil fuel-based industries or any regulated entities under AB 32.
7	Increase accountability of all grantees with regard to reductions claimed for their Greenhouse Gas Reduction Fund (GGRF) funded activities. Provide tools and training so communities can monitor progress based on data.
8	Develop qualitative, early displacement indicators.
9	Provide information on whether or not greenhouse gases from high-speed rail construction are being mitigated, and identify the enforcement mechanism for that.
10	GGRF program needs to leverage funding to support local agency funding.
11	Investments must directly benefit those nearby the facilities affected by the facilities that are paying for offsets.
12	California Climate Investments must be local investments addressing local needs identified and chosen by the community.
13	Provide more access to funds for urban forestry, a sustainable transportation infrastructure, and clean drinking water.

Economic Opportunity	
14	Spend Greenhouse Gas Reduction Funds (GGRFs) to incentivize local economic development so people can get well-paying local jobs closer to their homes and avoid displacement. Also incentivize local contracting to substantially involved community-based organizations so communities can build capacity at the local level. Community-based organizations must be required to demonstrate community support before receiving funds. Create a system that allows nonprofit organizations to earn points or access to the funds for providing improvements in Environmental Justice communities. For example, larger projects could include nonprofits as part of their proposals, or nonprofits could tap into Cap-and-Trade funds to help supplement their grants.
15	Provide rebates on commuter bicycles, like there are for hybrids.
16	Include discussion on job creation and transition for sustainable green jobs in communities, breaking out benefits by race and income level.
Partnership with Environmental Justice Communities	
17	The EJAC must help with outreach, accountability, and helping agencies prioritize investments. We must also inform the funding guidelines and investment plan.
18	The Greenhouse Gas Reduction Fund (GGRF) program staff representatives must attend EJAC meetings to provide information and gather input from EJAC members. ARB climate investment staff must identify ways to provide information to EJAC communities and gather community feedback in response. Insure community outreach and engagement is empowered to hold agencies accountable to help them prioritize activities and continually inform guidelines as they relate to ay investment plan.
19	Innovation must come from both the communities involved and ARB. ARB must support K–12 and local college educational programs that educate students about climate change and teach them how to use tools to address it (e.g., students wearing technology that shows the air quality). ARB must work with schools and local colleges to support environmental literacy and sponsor multigenerational understanding of climate change and its impacts on the larger community. Funds gathered through polluter violation fees must be used to pay for educational programs in the affected communities.
20	Provide technical assistance to environmental justice communities so they can better access funding and resources. Ensure that the RFP language is clear and provide translation assistance if necessary. Develop a transparent process where local stakeholders work with the funders, make the decisions, and reap the benefits. Require greater accountability for the funding.
21	Environmental justice communities must be a part of the decision-making for the grants, so that expertise and enduring relationships in those communities are valued and considered. Ensure that RFPs and rating scores account for enduring community relationships. Evaluation tools for funding need to be permeated by the understanding of equity. Review the grant guidelines and programs, to make sure that environmental justice communities define the benefits to the community and individuals.
22	Focus on local jobs and local entities to conduct the projects; make sure that the jobs are going to those in the community. Ensure that environmental justice nonprofits that connect projects with their constituents are paid, and that their compensation is budgeted into the process.