

September 17, 2021

# Re: 2022 Climate Change Scoping Plan Update, Scenario Input Questions

To the Environmental Justice Advisory Committee,

The Asian Pacific Environmental Network, Communities for a Better Environment, The Center on Race, Poverty & the Environment, Leadership Counsel for Justice, and Accountability, The Center for Community Action and Environmental Justice, Environmental Health Coalition, the Central Coast Alliance United for a Sustainable Economy, People Organizing to Demand Environmental and Economic Rights, and Physicians for Social Responsibility - Los Angeles, and Comite Civico del Valle submit the following responses to the Scenario Input Questions provided by CARB at the Scenarios Workshop. This letter also details the gaps in the Scenario Input Questions; areas of concern that the questions do not adequately address. Our organizations look forward to the EJAC's consideration of our responses.

# Scenario Input Questions: Responses

#### 1. Increase ambition in 2030?

<u>Answer</u>: Option B (Aim to exceed SB 32 2030 target; see response to Question 2 below for carbon neutrality)

<u>Reason</u>: It is important to focus on the 2030 target first, in addition to 2045 targets. For 2030 targets, California should strictly rely on well-established and proven emissions reductions strategies and not carbon sequestration.

Focusing on neutrality, however, does not meet the state's equity goals. As CARB's own consultants have concluded, CARB must instead commit to at least 80% emission cuts by 2045 first to even begin considering neutrality as realistic. Science calls for carbon neutrality by mid-century, and CARB's modeling shows neutrality is achievable by 2045, with up to 92% direct reductions in GHGs.

We emphasize that those consultants did not count any CCUS claims as direct emission reductions, and CARB must also not. CARB must prioritize environmental justice and pollutants with adverse health impacts to meet the intent of AB 32, SB 32 and AB 197. Carbon is the co-pollutant. By only focusing on carbon emissions and not attending to the need to reduce local air pollution we leave many direct health benefits off the table.

We also recommend modeling that isolates all direct measures and how quickly they can reduce emissions, and focus on scaling that as soon as possible. CARB must also include sectors, such as agriculture and petrochemical production in direct emission reduction strategies if we are to meet and exceed our climate targets.

### 2. Achieve CN in 2045, 2035, or other year?

<u>Answer and Reason</u>: Carbon Neutrality must be achieved *first*, through direct emissions reductions across all sectors. Assuming such, 2045 is a backstop, in which case CARB should aim for 2035. Carbon neutrality should not be achieved through carbon offsets, CCUS, and other unproven and market-based "techno-fixes."

#### **B. Role of Engineered Carbon Removal**

#### Answer: Option A (Exclude CCS)

<u>Reason</u>: Decades of fossil fuel pollution and delays in taking action have led to the need to remove carbon, but should not be accomplished through engineered methods that perpetuate the fossil fuel supply and demand chain. Instead, CARB must prioritize direct emission reductions, as mandated by AB 197. Environmental Justice communities seek other solutions that protect public health, and increase community and climate resilience. For instance, CARB should assess the viability of hempcrete as an alternative to the cement industry and agroecology as an alternative to the current practices of the agricultural industry.

#### 3. With fossil fuel combustion (e.g., industry, electricity generation, refineries). Yes or no?

#### Answer: Option A (Exclude CCS)

<u>Reason</u>: For oil refineries and electricity generation, CARB should rely on decarbonization and advancing energy democracy, and a fossil fuel phase out instead of combustion plus capture and sequestration.

#### 4. With industrial process emissions (e.g., cement). Yes or no?

<u>Answer</u>: No. CCUS should not be used as part of California's climate change or emissions reductions strategies, including where feasible for industrial process emissions such as cement manufacturing.

<u>Reason</u>: CARB must consider additionality, permanence, and accountability. For instance, CARB must build in mechanisms to account for potential inaccuracies or overestimating storage duration in order to meet statutory targets. CARB must also prevent process emissions from being "offset" elsewhere. How do we make sure that emissions remain sequestered for their intended duration, when many companies are likely to no longer exist at that point, and if emissions are leaking, who is accountable?

### 5. Is there any role for biomass for energy?

<u>Answer and Reason</u>: CARB must adhere to the precautionary principle. As such, CARB must largely exclude combustible biomass-derived energy and fuels from the scenarios, particularly in areas of non-attainment of air quality standards, and must assume swift adoption of the most regenerative, sustainable, non-combustion uses for biomass, such as composting and soil incorporation. So called "alternative fuels" including biogas and biodiesel derived from biomass are deceptively named "near zero," "low carbon," "zero carbon," "renewable," and even "green." In the analysis of scenarios, CARB must assume that polluting bioenergy production will perpetuate localized and discriminatory pollution burdens, and must not incorporate polluting biomass and bioenergy production in the Scoping Plan scenarios.

In order to protect Environmental Justice communities, the Scoping Plan and future rulemakings should apply parameters to the application of biomass to energy. These should include the following:

- there is no role for biomass conversion to energy in places or using methods that impact air quality in environmental justice communities
- there is no role for policies that incentivize production of waste

There may be limited applications of biomass usage for energy in closed looped systems and / or in industries or rural/forested areas where clean energy is not practical, provided that both of the above conditions are met.

# 6. Compensate for these remaining emissions with direct air capture with sequestration? Or, what is the alternative?

Answer: No direct air capture with sequestration.

<u>Reason</u>: How do we compensate for the remaining emissions and impacts in a way that does not extend the life of fossil fuels production? Do we have to rely on technologies that require so much public investment and are not centered on achieving health and community benefits?

Alternatively, our natural working lands can offer equitable solutions. For instance: healthy soils, changing farming practices to better sequester carbon in soils; tree planting; and other natural lands management. CARB must ensure that these solutions do not simply amount to being equivalent to offsets.

### C. Carbon Free Electricity Grid

### 7. Do we accelerate the 2030 RPS target?

# Answer: Option A (Adopt the SB 100 No Combustion Scenario)

<u>Reason</u>: We request that CARB adopt the No Combustion Scenario in the SB 100 Joint Agency Report. Related to the above questions, CCS/engineered carbon removal at stationary sources only extends the life of natural gas fired power plants and other fossil fuel infrastructure.

### 8. What year do we have a zero carbon electricity grid?

Answer: See above.

# 9. Any role for biomass combustion to generate electricity?

Answer: No.

# 10. Any role for combustion of renewable natural gas (RNG) or renewable hydrogen to replace fossil gas for reliability?

<u>Answer</u>: There is a potential need for limited amounts of renewable hydrogen for certain highenergy industrial processes and potentially in long-haul trucking fuel cells, but this requires further environmental and *lifecycle impacts* and health impact analysis. For local trucking, we support 100% zero emission vehicles, focusing limited resources on infrastructure investments supporting electric transportation

<u>Reason</u>: Renewable hydrogen would be clean - it would be generated using zero emission renewable energy such as solar or wind, using hydrolysis to split water molecules into hydrogen and oxygen, for limited uses when intensive energy sources are needed which can't otherwise be provided directly by renewable solar or wind. Needs may include hydrogen fuel cells for long haul trucking, and potentially hydrogen use for certain high-energy industrial processes.

It is important for CARB and other state agencies to evaluate the safety, health impacts and other potential impacts of this production.

We oppose "blue" hydrogen, or any hydrogen generated from fossil fuel feedstocks (such as methane reforming), natural gas, or fossil-fueled energy. This is an unnecessary source of continued, harmful fossil fuel use.

#### **D. Vehicle Fleet Electrification**

Zero Emission Vehicle (ZEV) EO (N-79-20) 100% sales of light-duty vehicles are zero emission by 2035 11. Change?

Answer: Yes, change to 2030

<u>Reason</u>: We support 100% ZEV sales by 2030 (light duty, medium duty, heavy duty, and transit buses).

# All drayage trucks are zero emission by 2035 12. Change?

Answer: Yes, change to 2030

<u>Reason</u>: The definition of "drayage" is limited and CARB can do better. For instance, the Port of San Diego is aiming for all heavy-duty trucks to be 100% ZEV by 2030.

# All heavy/medium duty vehicles are zero emission by 2045, and off-road vehicles by 2035, where feasible 13. Change?

Answer: Yes, change to 2030

<u>Reason</u>: Given the advancements in technology, heavy/medium duty vehicles could be ZEV before 2045.

Low-income communities often don't have the resources to purchase ZEVs. To address this, CARB should focus on improvements to public transit, biking, and pedestrian lanes in urban areas. CARB could also provide resources (subsidy, financing schemes, etc.) for income-qualified consumers to access ZEVs. Ultimately, the build out of ZEV infrastructure in disadvantaged and unincorporated communities must be resourced to keep pace with the 2030 target and must only occur according to the vision and values of the local community.

Without these initiatives and protections, this policy will pose a great burden to families who already struggle with the high costs of living of California. We provide additional pertinent responses in I. Residential and Commercial Building Decarbonization, below.

#### E. Vehicle Miles Traveled (VMT)

### 14. Increase ambition of per capita VMT reductions?

#### <u>Answer</u>: Yes

<u>Reason</u>: Framing goals through VMT is limited. Instead, CARB should require higher direct emission reduction targets for Metropolitan Planning Organizations, 25% GHG emission reductions by 2035. CARB should also guarantee that reliable and affordable mass transit will be a central strategy for solutions to reduce transportation sector emissions.

The Scoping Plan must assume and direct accelerated investment into long-lasting VMT reduction strategies like transit and transit operations, active transportation (biking, pedestrian travel), inclusionary zoning, and just local development that brings goods and services close to communities that would normally travel outside the community for everyday needs. CARB must input into the scenarios, just community development policies that will increase access to essential goods and social services within neighborhoods. Additionally, land uses and goods movement practices that intensify the need for heavy duty trucks must be reinvented and adapted to reduce the embedded VMT in delivered goods.

#### F. Petroleum Fuels

#### 15. Change extraction phase out date, what date?

#### Answer: Yes, end Oil Drilling in CA by 2035

<u>Reason</u>: Phase out should also start as soon as possible, and include protections for workers and tax-base replacement for county and local governments.

#### 16. Any phase down of refinery operations to supply CA fuels?

#### <u>Answer</u>: Yes

<u>Reason</u>: Phase out should also start as soon as possible and target 90 to 100% phase out by 2045, with a proportional target by 2030. CARB's own modeling (*Achieving Carbon Neutrality*) showed that at least 80-92% direct cuts in fossil fuel production including in refineries are necessary and achievable. CARB should also include Just Transition goals in its planning. CARB should also move away from CCS or any other measures that incentivizes the shift from fuel production to other petrochemicals and feeds stocks for plastics.

# 17. Do we produce any in demand renewable fuels from waste biomass in-state at converted refineries?

#### Answer: (See response to question 5)

<u>Reason</u>: In addition, the central question is not if the state should produce renewable fuels from waste biomass at converted refineries, but if the surrounding communities have had this vision for the development of their neighborhood in the first place. The goal of many EJ communities is to decommission refineries on their terms. Local community members are working now to determine the sustainable, climate-resilient uses for that land based on their community priorities and needs.

The object of California's climate policy must *not* be to automatically overrule local community vision and planning as local permitting processes for potential conversions will facilitate community engagement in a more accessible level and with more granular detail than the CARB AB 32 Scoping Plan process can provide. By automatically replacing these facilities with only potentially somewhat lesser polluting--but still very polluting--"renewable" fuel plants, CARB would likely be making a long-lasting and highly invasive decision to entrench production that may continue to affect communities for decades to come with the related risk of becoming a stranded asset. CARB should not unilaterally subject EJ communities to a new form of disproportionate pollution burden and create new negative impacts in EJ communities elsewhere, which did not at all stem from communities' values or decision making.

#### G. Methane

# 18. How should we use biogas captured from dairies and landfills – electricity generation, industrial heat, transportation fuel, other?

Answer: We must not further the use of biogas from dairies and landfills in state climate policy.

<u>Reason</u>: Dairy biogas does not constitute clean energy and must not be included in California's climate change mitigation policy. Dairy biogas relies on the production, consolidation, and storage of polluting, wet manure. Any incentives designed to sustain or increase biogas production implicates ongoing, unsustainable dairy practices and manure management that exacerbate air and water pollution from dairy operations, including from the production, storage, and application of manure. Additionally, CARB's and other agencies' branding of biogas as "clean" and "zero carbon" allows the fossil fuel industry to brand and market its product as clean, and serves as an excuse to critically delay our complete transition to truly clean energy. The extremely expensive taxpayer and ratepayer incentives targeting dairies are only available by virtue of the fact that the dairy industry's GHG emissions are unregulated, unlike other industries that emit GHGs including the potent methane, such as, for example, the waste sector. Instead of subsidizing continued and expanded pollution from the dairy industry, Scoping Plan scenarios must include regulatory approaches to emissions reductions from dairies and must assume eliminated rate-payer and tax-payer subsidies that prop up the factory farms and fossil fuel industry.

The Scoping Plan must require dairies to significantly reduce methane from manure and

enteric emissions by directing policy to responsibly regulate herd sizes. California must prohibit schemes that monetize manure for "renewable" energy production, which only incentivizes the expansion of mega-dairies and the production of more manure.

Gas from landfills may be appropriate for limited applications and must not allow for continued or expanded impacts on disadvantaged communities through collection or processing of manure.

#### H. Woody Biomass and Solid Biomass Waste

#### 19. How should we best utilize solid biomass waste?

- Produce renewable hydrogen for use in zero emission fuel cells?
- Produce liquid fuels?
- Produce RNG for industrial or electricity sector?

Answer and Reason: See Response to Question 5.

#### I. Residential and Commercial Building Decarbonization

#### Answer and Reason to Questions 20, 21, 22 and 23:

As part of the transition to electric appliances and all electric buildings, it is critical to prioritize energy democracy in building decarbonization strategies. We must design programs so as to not place more barriers and burdens on low income renters and communities. This can be achieved through the following actions:

- Ensure Affordability and Remove Barriers to Accessing Clean Appliances. The vast majority of the people we represent are renters who live in older buildings, multifamily affordable housing, or mobile homes. Upfront costs are one of the most significant and prohibitive barriers that prevent lower income households from accessing clean energy technologies (e.g., electric appliances). Lack of upfront capital and credit further restricts household ability to transition. Working class communities of color are already burdened by pollution and economic insecurity; they must not also be saddled with high prices for new appliances during the transition towards a decarbonized economy. Additionally, lower income people of color are disproportionately in dilapidated homes with outdated electricity infrastructure. It is critical that decarbonization strategies build in funding and incentives to ensure that people living in older homes can take advantage of advances in clean energy.
- Promote High-Road Jobs, Workforce Development, and Family-Sustaining Wages. Building decarbonization strategies must support high-road labor and job quality standards, including family-sustaining wages and employer-provided benefits, career pathways, and safe and healthy working conditions.

 Protect Lower Income Households Against Harms. Amidst worsening housing unaffordability, there is a critical need to explicitly embed tenant protections and antidisplacement requirements for existing residents in the design of any program deploying new technologies and upgrades in order to safeguard against gentrification and protect renters from rent increases and related pressures.

Overall, CARB must place a greater focus on incentives offered and other methods to address the barriers to participation in such programs, given that BIPOC communities will be the last in line to adopt ZEV or zero emission strategies. Current incentives and subsidies programs are a start and should be supplemented. Similarly, CARB should also expand on its current efforts and further target investment in clean energy job development.

#### J. Industry (Manufacturing, Construction, and Agriculture)

# 24. What to do with industries that can't electrify due to technology availability? (cement, glass, steel, etc.)

<u>Answer and Reason</u>: California is a state of innovation. Instead of investing millions, if not billions of dollars in engineered carbon capture false solutions, CARB should promote alternative materials R&D, startup incubation, subsidies for new clean materials (for instance, hempcrete and mycelium-based building materials instead of cement and many more). Similar to how we have subsidies to renewable energy, these new materials also deserve their category of subsidies.

#### Scenario Input Questions: Gaps

Finally, our organizations emphasize some emissions of concern that are not included in the Scenario Input Questions. There is a noticeable lack of questions and strategies pertaining to pesticides, healthy soils practices, and natural soil sequestration within the agricultural sector. The Scoping Plan must address toxic and warming emissions from agricultural industries, including emissions from pesticides, animal agriculture, and agricultural waste management. Synthetic pesticides contribute significantly to greenhouse gas emissions when applied, severely damage the microbial processes in soil that allow it to stably and naturally sequester carbon, and are produced from highly polluting and atmosphere-warming petrochemicals, such as ethylene, propylene, and methane. Solutions like integrated pest management, sustainable herd sizes and crop types, and locally based agricultural and food delivery systems must be integrated as assumptions in the Scoping Plan scenarios, in addition to regulatory strategies to directly reduce emissions.

Also, it is important for CARB to clarify the baseline. What is the current baseline CARB is using? What assumptions are the baseline estimates based on? For example, how is CARB considering the impacts and lifestyle changes as a result of the COVID-19 pandemic? Does CARB factor in energy consumption/demand differences? Similar to the recession analyses the

previous EJAC was asking for after the 2008 recession, how will the COVID-19 pandemic affect the baseline estimates and overall analysis moving forward?

It is also important for CARB to detail our progress towards the 2030 target without additional measures. What evaluation has been done of current measures and their effectiveness to meet our climate and equity goals? Has any analysis been done, for example, on causality between emission trends and specific measures outlined in previous scoping plans?

This requires revisiting CARB's treatment of Cap-and-Trade in the 2017 Scoping Plan, which defined it as a direct emission reduction measure, in direct conflict with the law. Similarly, what analysis has been done on oversupply in Cap-and-Trade? That was promised in the 2018 regulations, and again last year by Secretary Blumenfeld when he committed to a full review of the program. Given that Cap-and-Trade accounted for 50% of the projected emissions reductions in the 2017 Scoping Plan, this analysis would have a key role in any modeling moving forward.

Sincerely,

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