Community Environmental Council
BOLD CLIMATE ACTION
ACCIÓN CLIMÁTICA AUDAZ

2020 California Nonprofit of the Year

June 14, 2022
Liane Randolph, Chair
California Air Resources Board
1001 I St.
Sacramento, CA 95814

Dear Chair Randolph and CARB Board Members,

The Community Environmental Council (CEC), founded in 1970, has worked for over 50 years to pioneer environmental solutions in California. For the last 15 years we have focused on building on-the-ground momentum to reverse the threat of the climate crisis, working most closely in Ventura, Santa Barbara, and San Luis Obispo counties. Our programs work across energy, transportation, and buildings to mitigate carbon emissions, sequester carbon in natural and working lands, advance environmental justice, and build climate resilient communities.

CEC is generally supportive of the Draft 2022 Scoping Plan and California's goal to reach carbon neutrality by 2035, but finds the alternatives analysis as overly conservative. It does not reflect the ability of zero emission technologies to scale more quickly. It also does not reflect the potentially long and risky high fossil fuel price environment we are now in due to Russian oil and gas being shunned. The Climate Crisis is urgent and California has the ability to move markets, lead the world toward climate stability, and reap the benefits of the new clean energy economy. CEC urges CARB to update modeling and accelerate actions to reach Carbon Neutrality by 2035 through the following scenarios:

- **CARB should model a scenario of a standard of 100% ZEV sales by 2030. This is needed to achieve California's 40% reduction in GHGs by 2030 goal, and rapidly reduce GHG emissions in the transportation sector and lead to an earlier feasible date of carbon neutrality.**

- **CARB should model accelerated building electrification targets. Rather than all new appliances being sold be zero emissions by 2035 for residential and for 2045 commercial, CARB should model 100% zero emission appliances by 2030 for residential and 2035 for commercial.**

- **CARB should model accelerated renewable and zero carbon electricity procurement in line with SB 1020 (Laird), which sets a target of 90% by 2035, 95% by 2040, and 100% by 2045.**

- **CARB should install a technical advisory committee comprised of Natural and Working Lands (NWL) experts in order to inform modelling that**

captures the actual sequestration potential of California's NWL. NWL carbon sequestration should be prioritized over Carbon Capture and Storage.

- **CARB's reliance on Carbon Capture and Storage instead of more rapid phase-out of fossil fuel extraction and production continues to place undue burdens on environmental justice communities.**

California has the potential to more quickly reduce fossil fuel usage, which would improve conditions in fenceline communities. California can also capture more carbon in natural and working lands rather than rely on risky carbon capture at fossil fuel plants. CARB's draft Scoping Plan should envision the way to get to a zero carbon California by 2035 and model more ambitious scenarios, rather than use assumptions based upon existing legislation and an overreliance on risky, expensive, polluting Carbon Capture and Storage.

California's top export in 2020 was $5.6 billion in electric cars, as Tesla became the world's most successful electric automaker. California now has an industry of 34 ZEV manufacturers and 360 ZEV related businesses.[1] Our clean tech and circular economy businesses are also pioneering building electrification strategies, ways to develop and integrate more renewable electricity into the grid, and advanced Natural and Working Lands strategies to sequester carbon. The Draft 2022 Scoping Plan should reflect this progress and ambition to showcase California's ability to quickly reduce carbon emissions and export our ideas and businesses around the world.

1. **CARB should model a scenario of a standard of 100% ZEV sales by 2030. This is needed to achieve California's 40% reduction in GHGs by 2030 goal, and rapidly reduce GHG emissions in the transportation sector and lead to an earlier feasible date of carbon neutrality.**

The Clean Cars regulation was successful in early years, and pushed automakers to bring new ZEV models to market and at times offer them with affordable pricing. Currently, automakers are producing much higher numbers of ZEVs than the regulations require and are banking credits.

Requiring automakers to meet higher targets for ZEVs is the most important way California can spur the ZEV market and make sure ZEVs are affordable for all Californians, especially low-moderate income drivers. Setting targets too low risks oversupply of credits. From CARB's Clean Cars II Initial Statement of Reasons:

> *As described in the 2017 Midterm Review, staff estimated minimum compliance with the existing ZEV regulation to be nearly 8-percent of new vehicle sales as ZEVs and PHEVs by the 2025 model year. Manufacturers have thus far over-complied with the regulatory requirements, already selling nearly 12-percent of new vehicles in California as ZEVS and*

[1] https://cal.streetsblog.org/2021/10/01/ca-to-vastly-increase-investments-in-zero-emission-vehicles-and-infrastructure/

PHEVs in 2021 model Year (ISOR, pg. 25)…As written, manufacturers are already over-complying and amassing significant credits, which do not expire. (ISOR, pg. 26).

While the staff proposal seeks to reach 68% ZEVs by 2030, and 100% by 2035, many automakers will have already surpassed these goals and have banked significant credits. From the ISOR pg. 37:

- Volvo is going all electric by 2030
- Fiat is going all electric by 2030
- Mercedez Benz is going all electric by 2030 where feasible
- GM is going all electric by 2035
- Tesla has been all electric since 2013

Global automakers are producing high percentages of ZEVs for Europe and China, and leaving the US behind. California can reach much higher than 68% ZEV sales by 2030. Norway has already reached 92% ZEV sales in recent months, and went from 5.6% in 2013 to 86% ZEVs in 2021, in an era of much smaller ZEV model availability than now and future years. California should target 100% ZEV sales by 2030. If this is not possible, California should establish interim targets of 75-90% ZEVs by 2030 or our way to 100% ZEVs by 2035.

Californians face high gasoline costs and other significant barriers to EV adoption, especially low-moderate income households. Lower income households spend a disproportionately large share of income on transportation. Lower cost EVs, particularly used EVs, are an attractive option to reducing transportation costs. The fastest way to get more used ZEVs into the market is to increase sales of new ZEVs. Increased new ZEV sales also lead to decreased used ZEV prices as supply rises to meet demand.

More than twice as many used vehicles are sold each year than new vehicles, and used ZEVs are a very effective way for Californians to reduce fuel and maintenance costs. If CARB were to accelerate interim targets and require 100% ZEV sales by 2030, millions of additional used ZEVs would be available by 2030, and multiple millions more used ZEVs would be available by 2035. This would provide more equitable access to ZEVs and allow more low to moderate income Californians to reduce their transportation costs.

2. **CARB should model accelerated building electrification targets. Rather than all new appliances being sold be zero emissions by 2035 residential and 2045 commercial, CARB should model 100% zero emission appliance sales by 2030 for residential and 2035 for commercial.**

CARB's zero emission appliance sales targets are overly conservative. The US already installs 4 million heat pumps per year, and Norway has a 60% market share of heat pumps.[2] The global heat pump market is very mature with dozens of manufacturers.

[2] https://www.carbonbrief.org/guest-post-how-heat-pump-sales-are-starting-to-take-off-around-the-world/

55 cities in California, including large ones like Los Angeles, San Jose, and San Francisco have passed all-electric ordinances for new construction,[3] some of which ban natural gas entirely. The California 2022 Building Code Update was strongly all-electric preferred, encouraging at least one heat pump appliance. The 2025 Building Code Update is expected to require all-electric construction.

Contractors have ample time to learn how to install heat pumps for both new construction and the retrofit market. Strong action by CARB, such as a ban on natural gas appliances by 2030 for residential and 2035 for commercial will create a market signal and push contractors to expand their zero emission appliance businesses.

3. **CARB should model accelerated renewable and zero carbon electricity procurement in line with SB 1020 (Laird), which sets a target of 90% by 2035, 95% by 2040, and 100% by 2045.**

California can and must develop new renewable electricity sources much faster. Higher percentages of renewable electricity will leverage accelerated zero emission vehicle and appliance sales to lead to much quicker decarbonization in California.

New renewable contracts in recent years have been led by Community Choice Aggregators, as large investor owned utilities such as PG&E, SCE, and SDG&E experienced departing load. They have thus had higher and higher percentages of renewable contracts to serve their smaller load and not needed to procure much renewable electricity to achieve their SB 100 goals of 60% renewables by 2030. SB 1020, being considered by the California Senate right now, sets a target of 90% renewable and zero carbon electricity procurement by 2035 and 95% by 2040.

California has vast solar, offshore wind, and geothermal resources that can be more fully utilized. With the devastating, climate change exacerbated drought and overdrafting of many aquifers, many already disturbed agricultural lands could be used for solar farms. Recent reports have found as many as 535,000 acres in the Central Valley alone may be need to left fallow by 2040, due to overdraft and drought.[4] Solar farms can be more lucrative and less risky than growing crops and could be an easy way to replace agricultural economic impact with energy revenue. Building solar farms in previously disturbed land is also much environmentally preferred to building them in pristine ecosystems.

4. **CARB should install a technical advisory committee comprised of NWL experts in order to inform modelling that captures the actual sequestration potential of California's NWL. CARB's current model lacks transparency on how and why reference datasets were chosen. We urge CARB to incorporate the input of a technical advisory**

[3] https://www.sierraclub.org/articles/2021/07/californias-cities-lead-way-pollution-free-homes-and-buildings
[4] https://thecounter.org/california-san-joaquin-valley-farmland-groundwater-aquifer-drought/

committee to address this issue and the following concerns:

Research has shown that soil carbon stocks are much deeper than the recommended analysis depth of 30 CM, but CARB's chosen models do not incorporate this research, undermining the potential for NWL sequestration in this proposed scenario.

Soil carbon stocks are dramatically underrepresented throughout CARB's models, also negatively impacting the potential for NWL sequestration in this proposed scenario.

Reports, such as the Climate Center's "Setting an Ambitious Sequestration Goal for California's Working Lands" suggest that California NWL can sequester up to 100 MMT annually. This stands in stark contrast to CARB's proposed scenario, which models NWL as a net source of emissions.

5. **CARB's reliance on Carbon Capture and Storage instead of more rapid phase-out of fossil fuel extraction and production will continue to burden environmental justice communities. Treating fenceline communities as sacrifice zones needs to stop.**

CEC is a founding member of the Central Coast Climate Justice Network (CCCJN), along with CAUSE and 14 other members and allied organizations. CCCJN's mission is to advance restorative actions and systems change centering on communities who bear the greatest burden of climate change impacts. The vision is to create a more resilient and just region in the face of climate change by leading a just transition away from fossil fuels while transforming current social, economic, and environmental systems and conditions.

CEC endorses the letter Environmental Justice organizations sent to the White House Council on Environmental Quality[5], noting that "CCS/CCUS is an "end of the pipe" solution that attempts to remove carbon dioxide after fossil fuels have been extracted, transported, processed, and burned, causing harm to communities and ecosystems at every stage. True environmental justice requires addressing the root causes of the problem by leaving fossil fuels in the ground and reducing emissions expeditiously."

CEC also endorses the statement and recommendations of the California Environmental Justice Alliance, who "Slam California's Draft 20-year Climate Plan, Say it Paves the Way for Billions in Public Subsidies to Fossil Fuel Corporations."[6] CEC agrees with the recommendations to phase out oil extraction by 2035, oil refining by 2045, and a more rapid deployments of ZEVs including medium and heavy duty truck ZEVs, as well as an increase in VMT reductions and no CCS on polluting fuel sources. They note that "despite decades of attempts by fossil fuel corporations, carbon capture technology has failed to produce results. In the United States, big polluters have attempted 39 CCUS projects. Over 80% of these CCUS projects never opened or shut

[5] https://www.ienearth.org/environmental-justice-organizations-post-comments-on-carbon-capture-and-storage-to-the-white-house-council-on-environmental-quality/
[6] https://caleja.org/2022/05/press-release-2/

down. None of these projects met their promised emissions reductions. In most cases, carbon capture projects resulted in more emissions than the projects captured."

CARB should reduce reliance on CCS, and instead boost efforts to capture carbon in natural and working lands, which have many important co-benefits for drought, nature, and agricultural workers.

In summary, CARB's draft 2022 Scoping Plan is limited in that it looks mostly to existing programs or statute to model scenarios to achieve carbon neutrality by 2035. In doing so, it places a risky overreliance on CCS, which places undue burdens on environmental justice communities. The draft 2022 Scoping Plan should consider a scenario where California moves more quickly to reduce fossil fuel usage, and sequesters carbon in natural and working lands. This approach will lead to a more equitable path to carbon neutrality by 2035, with significant benefits for environmental justice communities, natural and working lands, and all Californians.

Sincerely,

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