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COUNCIL OF BUSINESS & INDUSTRIES
OF WEST CONTRA COSTA COUNTY



June 24, 2022

Ms. Rajinder Sahota
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Subject: Comments on the Draft 2022 Scoping Plan

Dear Ms. Sahota:

The undersigned organizations appreciate this opportunity to comment on the California Air Resources Board's (CARB) Draft 2022 Climate Change Scoping Plan. Our coalition consists of organizations that represent California's manufacturing, commercial, industrial, agricultural, transportation, construction, and energy sectors. The coalition is committed to working with CARB, other state regulatory agencies and interested stakeholders to implement cost-effective, feasible policies and regulations that protect California jobs and the economy while also working to meet the state's emissions and carbon neutrality goals.

The continued success of California's emission reduction strategies, our prominence as an international leader in climate policy, and our position in the global economy, is a delicate balance. The state's economy is being shaped by our climate policy-- as such, California businesses must factor California climate policy into their multi-year and multi-decade planning efforts. Clear market signals and a predictable and stable regulatory environment—one not prone to routinely shifting compliance targets—is critical for industry to sustain steady progress toward carbon neutrality while protecting competitiveness, profitability, and the livelihood of our employees.

Across all identified scoping plan alternatives, including CARB's preferred Alternative 3, there are significant challenges associated with energy reliability, cost containment, matters of equity and varying degrees of reliance on technologies that are still in the very early stages of research and development. The gravity of these challenges is illustrated by CARB's decision to reject both 2035 alternatives. While we appreciate the work CARB has done to date and the continued engagement with stakeholders throughout the 2022 Scoping Plan Update development process, our coalition remains deeply concerned with the Draft Scoping Plan and Alternative 3 as presented.

The coalition sees opportunities to remedy our concerns through further changes to the 2022 Draft Scoping Plan, and we offer the following comments and proposed revisions for your consideration.

Reference(s) to Achieving Carbon Neutrality Prior to 2045

Our coalition was disappointed by the multiple references to achieving carbon neutrality prior to 2045. CARB staff previously eliminated both 2035 Scoping Plan alternatives, because they represented implausible pathways that maximized emission leakage, eliminated California jobs, threatened in-state economic stability, and would have led to a net increase in global GHG emissions. These alternatives were also the most likely to discourage international cooperation, and thus would have diminished California's impact on global climate policy and emissions reductions.

The 2035 alternatives would have eliminated entire essential California industries, relied upon full or near-full scale electrification, completely ignored the raw material sources and production required to facilitate a sustainable transition to net-zero carbon emissions, and sacrificed energy reliability during a time of unprecedented growth in energy demand and despite expectations of more frequent supply interruptions. Given the unprecedented build out of new zero-carbon energy resources needed to meet 2045 carbon neutrality targets, 2035 ambitions have been logistically infeasible from the onset of this process. Even assuming supply chain and production capacity constraints could be eliminated early in the Plan implementation period, barring a monumental effort to reform the environmental review and permitting process for green energy and associated transmission projects—not to mention a tidal shift in local attitudes toward the siting of such projects—the state will be hard pressed to meet 2045 targets, much less targets set for a decade earlier.

The 2022 Draft Scoping Plan did not scope a feasible alternative for earlier than 2045. It is yet to be seen whether even a 2045 alternative is feasible, but CARB’s own data-driven analysis has demonstrated that earlier attainment of carbon neutrality is immensely unpredictable and impractical. Advancing this Scoping Plan Update with notions of achieving carbon neutrality in an earlier timeframe would be a mistake. Stakeholders have already been distracted for more than a year by a misguided evaluation of infeasible alternatives when CARB should have been focused on identifying the most cost-effective alternatives to achieve the 2045 targets. We strongly recommend that all references to achieving current targets in an earlier timeframe should be removed from the document.

Reference(s) to “Carbon Free” California

CARB has defined carbon neutrality as emissions sources being equal to emissions sinks, not as absolute zero emissions from all sources. This definition is in alignment with the United Nations’ Intergovernmental Panel on Climate Change (IPCC) definition of carbon neutrality which seeks “to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases.” However, the Draft Scoping Plan references a “carbon free” California and implies that this document is the roadmap to achieving that result.

*Today, we have a chance to re-envision California’s future and set the state on a path to be **carbon free by 2045** while advancing equity [...]¹*

All other references to *carbon free*, or similarly *zero carbon*, are in the context of energy generation and even these references disregard the life cycle carbon emissions inherent in renewable energy resources. As matter of consistency, and to lessen future ambiguity related to how *carbon neutrality* is defined by the 2022 Scoping Plan, such statements either need to be conformed to the IPCC definition of carbon neutrality, or removed from the document.

Energy Infrastructure Expansion and Ratepayer Impacts

The 2022 Draft Scoping Plan relies on an unprecedented expansion of California’s electrical infrastructure that is already demonstrating major deficiencies. CARB has identified that California’s carbon-neutral future will have to include a transition in our existing energy production, distribution and transmission infrastructure while also underscoring challenges of energy reliability and resiliency. In addition, CARB acknowledges a need to identify and address market barriers.

¹ Draft 2022 Scoping Plan, pg. 3.

Given the many uncertainties of this transition, and the long-term planning horizon for this iteration of the Scoping Plan, CARB should endeavor to explicitly identify those barriers so state agency and legislative decision makers and all impacted stakeholders can work together on strategies to overcome them.

The degree of electrification required by the preferred alternative will necessitate an unprecedented level of cooperation and resource investment by multiple state agencies and the legislature to achieve the 2045 goal. It is no longer sufficient to broadly indicate that challenges exist on the trajectory to a carbon-neutral California. Rather, CARB must take steps to secure the necessary commitments. While “permitting wait times,” “local ordinances,” and “interconnection agreements” are noted uncertainties, more could be done to identify known impediments, such as the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA) and various other statutes, permitting requirements and energy policies governing grid interconnection that can be misused to thwart development of clean energy resources.²

It's critical that this effort clearly identify known impediments. On average, solar installations require approximately 5 acres per megawatt (MW)³ while wind requires roughly 0.75 acres per MW⁴. These estimates do not account for energy storage systems that will need to be paired with renewables to provide 24-hour reliability. Renewable energy developments with large infrastructure footprints face a much greater risk of delays due to the above-noted factors, and the more protracted the delay, the greater the risk investors will pull out and the project will be abandoned. A large project footprint can also force tradeoffs that diminish greenhouse gas reduction benefits, such as reducing the acreage of natural and working lands available for carbon sequestration.

There is little indication California is truly committed either to the ambitious build out of renewable energy resources or to the expansion of California's electrical backbone that will be required to achieve 2045 targets. The Newsom Administration has asserted that “the effects of climate change threaten the health and safety of Californians, as well as the State's access to clean and reliable energy [...]”⁵ Yet, given California's litigious environment, even the most beneficial projects are far from assured, and absent significant regulatory streamlining California's future electrical infrastructure transition will not succeed.

Our coalition is also concerned that CARB's preferred alternative downplays future ratepayer impacts, and the analysis needs further refinement in key areas. California's complex existing system of natural gas and electricity infrastructure, coupled with the revenue requirements of investor-owned utilities, rate base, rate structure, distributed energy resource incentives and byzantine California Public Utility Commission (CPUC) rulemakings defy generalized statements of cost impacts, cost savings or comparisons to other jurisdictions. References to customer costs associated with zero-carbon energy projects outside of California are inaccurate and misleading for purposes of forecasting future energy rates in California. It is already abundantly clear that

² <https://www.latimes.com/environment/story/2021-12-21/biden-administration-approves-two-solar-farms-in-california-desert>

³ Green Coast. (2019). Solar Farm Land Requirements: How Much Land Do You Need? <https://greencoast.org/solar-farm-land-requirements/>

⁴ Gaughan, R. (2018). How Much Land Is Needed for Wind Turbines? <https://sciencing.com/much-land-needed-wind-turbines-12304634.html>

⁵ Governor Newsom Emergency Proclamation. July 30, 2021. <https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf>

energy rates for Californians far outpace the rate of inflation, and that trend is expected to continue for the foreseeable future.⁶ By 2030, bundled residential rates are forecast to be approximately 20%, 40%, and 70% higher for SCE, PG&E and SDG&E customers respectively, than they would have been if 2013 rates for each IOU had only grown at the rate of inflation.

CARB needs to clearly disclose the likely electrical ratepayer impacts of the proposed alternative. Californians already pay among the highest prices in the nation for electricity and these cost pressures are a significant threat to the state's plans to electrify transportation systems, residential, commercial, and industrial properties. California's energy bills are projected to further increase as utilities work to harden their distribution infrastructure against wildfire risk, replace conventional generation infrastructure with renewables, add grid-scale energy storage capacity, electric vehicle charging stations, and fully electrify all new and existing buildings. CARB does identify the \$30.5 billion estimate from the California Independent System Operator (CAISO) relating to future capital for transmission planning. However, it fails to acknowledge an estimated \$45.5 billion total incremental revenue requirement between 2021 and 2030 for California's investor-owned utilities.⁷ That revenue can only come in the form of dramatically higher energy prices for California homeowners and businesses.

The impacts of CARB's electrification agenda on energy consumers are far more complicated than presented in the Draft Scoping Plan. CARB's analysis of these impacts should be more transparent, especially in terms of foreseeable direct cost increases for wholesale and retail energy consumers, and how those costs will adversely impact economic activity and individual well-being.

Carbon Capture and Carbon Removal Strategies

The 2045 alternatives necessarily consider carbon removal technologies and projects to meet emission reduction targets. If the 2022 Scoping Plan is truly intended to establish a viable trajectory toward carbon neutrality, then the debate surrounding carbon capture, utilization, and storage (CCUS) needs to fundamentally shift. There is no further purpose in discussing whether engineered carbon removal will need to be used to meet California climate goals – that question has been asked and answered repeatedly by E3 and other climate policy experts and scientists world-wide, and the unambiguous answer is YES. CARB must now pivot to creating a practical regulatory structure and incentives to encourage rapid development and deployment of CCUS, identifying high priority sites for early investment, and charting a course for more wide-spread adoption. California can ill-afford for CARB to arbitrarily foreclose or constrain promising technologies. Instead, CARB must embrace the broadest possible suite of options to reduce emissions. Among the common core features of these alternatives is engineered carbon removal, including direct air capture, CCUS, and other carbon removal or sequestration approaches. Carbon capture will be necessary to achieve significant emissions reductions from hard-to-decarbonize sectors.

While there is value in greater utilization of carbon sinks, including California's natural and working lands, carbon capture is more easily quantified and definitively more permanent, particularly given California's wildfire-prone landscapes and drought. Carbon removal projects and technologies

⁶ UTILITY COSTS AND AFFORDABILITY OF THE GRID OF THE FUTURE: AN EVALUATION OF ELECTRIC COSTS, RATES AND EQUITY ISSUES PURSUANT TO P.U. CODE SECTION 913.1. https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/office-of-governmental-affairs-division/reports/2021/senate-bill-695-report-2021-and-en-banc-whitepaper_final_04302021.pdf

⁷ Ibid, pg. 65-66.

create opportunity for circular economies in California and would protect higher-wage industrial jobs, some of which can be readily transitioned to these projects. California is particularly well-suited to engineered carbon removal projects given our innovative spirit, environmental ambition, technological brain trust, geography and geology.

Future Role for Cap and Trade

California's Cap and Trade Program needs to be a core component of California's strategy to achieve carbon neutrality, not just a backstop. Cap and Trade is the primary engine for innovation in GHG emission reduction technologies, and half of the revenues generated by the Greenhouse Gas Reduction Fund are spent on measures benefitting disadvantaged communities. This reality conflicts with CARB's statement that "the Cap-and-Trade Program will likely play a reduced role depending on how uncertainties play out and if new prescriptive policies or legislation is introduced for this decade." (emphasis added). CARB should not assume that these factors will result in a reduced role for Cap and Trade, nor encourage new initiatives along these lines. Furthermore, CARB identifies as a strategy for Cap and Trade success to "Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program." We agree that this recommendation is worth pursuing. However, it is unclear how reducing the role of Cap and Trade would lead to a more successful program.

Staff Preferred/Proposed Scoping Plan Alternative

CARB has selected Alternative 3 as the preferred scenario. While carbon neutrality by 2035 was a great political headline, the request that CARB evaluate pathways to achieve carbon neutrality nearly a decade sooner than Governor Brown's Executive Order was unfortunate because it was never practical and ignored the reality of the challenges that must be overcome to achieve the goal. Instead, it became an impediment to evaluating a reasonable range of cost-effective alternatives.

From the beginning of this process, the undersigned businesses and organizations have called for use of an optimized model to identify the least regret pathways to achieve carbon neutrality. Instead, CARB and the administration imposed arbitrary constraints on the process, ultimately leaving stakeholders with only two alternatives to inform the 2022 Scoping Plan Update. That is not a sufficient foundation for this update, given the 20-plus year planning horizon, the impact this update will have on future legislative and regulatory actions, and the many significant challenges California will face in the future because of those actions.

CARB's modeling to date supports two important conclusions: 1) there are major potential improvements in air quality and public health outcomes for every scenario modeled and 2) there are major differences among the scenarios in terms of their potential economic impacts. The Rhodium economic analyses of PATHWAYS confirms that Alternatives 1 and 2 were infeasible. Too many resources were spent on evaluating the infeasible. Given limited time and resources, CARB should have conducted a more in-depth evaluation of Alternative 3, Alternative 4 and at least one cost-optimized alternative. Instead of the best available data and science informing the most sustainable outcome –the data has been assembled and interpreted to support a pre-determined outcome.

Though more measured in its approach, Alternative 3 still represents a very significant challenge for California, and only appears less challenging when compared to others that were never feasible to begin with. It is also unfortunate that Alternative 4, the so-called "business/industry

alternative” was so branded. California business and industry was never presented with the opportunity to propose their own alternative, nor did it ever formally or informally endorse Alternative 4. Given the noted limitations and lack of a more robust comparison of additional cost-optimized 2045 alternatives, California industry has very little confidence in either Alternative 3 or Alternative 4.

We recommend that CARB work with business groups over the next few months to identify additional information that can be used to support either development of a cost-optimized alternative or refinements to CARB’s proposed alternative that can achieve California’s 2045 emission reduction targets with the least possible impacts on emissions leakage, jobs, consumers and the California economy.

Partnering with the Private Sector

It is absolutely critical that California collaborate with private industry on climate mitigation strategies and scale investments for the deeper economy-wide decarbonization efforts that this plan requires. Steady policy signals are one way to ensure commitments of financial capital and investment in other sectors. Unfortunately, commitments to uninterrupted and steady policy objectives have waned, leaving industry to broadly defend against disruptive Legislative activities that create highly volatile market dynamics. Uncertainty in climate policy increases investment risk – investment that must expand quickly for California to meet its climate goals and during period of rapid inflation and economic uncertainty that has not been witnessed in more than forty years.

CARB and the California Legislature must endeavor to avoid proposals that create unpredictable and unsustainable policies relating to achieving carbon neutrality. Proposals that constrain the development and deployment of climate mitigation technology, establish interim dates and attainment standards, and failing to provide regulatory flexibility must be avoided. At the same time, California must openly support innovation and drive investment in the sectors that are essential to creating the strategies and products needed to facilitate the transformation to carbon neutrality.

California’s businesses and industries are not the villains in the state’s battle against climate change but play a vital role that will be crucial to our ultimate success. These industries are held to higher standards of workplace safety, environmental regulation and policies designed to limit climate impacts than industries located anywhere else in the world. If the products so critical to California’s shift to a carbon-neutral economy are not created here, or worse still are abandoned because the policy trajectory is unsustainable, then the state will have accomplished nothing more than shifting California’s GHG emissions to jurisdictions that lack our environmental protections and climate aspirations. Thus, also discouraging otherwise interested jurisdictions from following our lead.

Conclusion

The undersigned organizations consider the 2022 Draft Scoping Plan as an important opportunity to meet state climate goals, export state values across the globe, and preserve California’s economic engine. California industry has proven itself to be a willing partner in the state’s climate efforts, but to find a win-win solution that simultaneously promotes climate stewardship, equity, jobs, and a healthy economy will require further refinements to the proposed alternative.

Thank you for your consideration of our comments. We look forward to further opportunities to engage with you, CARB staff, and other interested stakeholders as the 2022 Scoping Plan continues to unfold.

Respectfully,

CALIFORNIA MANUFACTURERS & TECHNOLOGY ASSOCIATION

AFRICAN AMERICAN FARMERS OF CALIFORNIA
AGRICULTURAL COUNCIL OF CALIFORNIA
AMERICAN PISTACHIO GROWERS
ASSOCIATION OF MANUFACTURERES BAY AREA
BETTS COMPANY
CALIFORNIA APPLE COMMISSION
CALIFORNIA ASSOCIATION OF WINEGRAPE GROWERS
CALIFORNIA BLUEBERRY ASSOCIATION
CALIFORNIA BLUEBERRY COMMISSION
CALIFORNIA BUILDING INDUSTRY ASSOCIATION
CALIFORNIA BUSINESS PROPERTIES ASSOCIATION
CALIFORNIA BUSINESS ROUNDTABLE
CALIFORNIA CITRUS MUTUAL
CALIFORNIA FARM BUREAU
CALIFORNIA FOOD PRODUCERS
CALIFORNIA FRESH FRUIT ASSOCIATION
CALIFORNIA METALS COALITION
CALIFORNIA RESTAURANT ASSOCIATION
CALIFORNIA WALNUT COMMISSION
CALIFORNIANS FOR AFFORDABLE AND RELIABLE ENERGY
CENTRAL CALIFORNIA ECONOMIC DEVELOPMENT CORPORATION
COUNCIL OF BUSINESS & INDUSTRIES OF WEST CONTRA COSTA COUNTY
FAR WEST EQUIPMENT DEALERS ASSOCIATION
INDUSTRY BUSINESS COUNCIL
INDUSTRIAL ENVIRONMENTAL ASSOCATION
NISEI FARMERS LEAGUE
OLIVE GROWERS COUNCIL OF CALIFORNIA
SAN JOAQUIN VALLEY MANUFACTURING ALLIANCE
TRILLIUM
VALLEY INDSUTRY & COMMERCE ASSOCIATION (VICA)
WESTERN GROWERS ASSOCIATION
WESTERN PLANT HEALTH ASSOCIATION