



California Council for Environmental and Economic Balance

101 Mission Street, Suite 1440, San Francisco, California 94105
415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

June 24, 2022

The Honorable Liane Randolph
Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Comments on the 2022 Proposed Scoping Plan

Dear Chair Randolph:

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we appreciate the opportunity to comment on the recent California Air Resources Board (CARB) Draft 2022 Scoping Plan (Scoping Plan, Proposed Plan, or Proposed Scenario). CCEEB is a non-profit and non-partisan coalition of business, labor, and public leaders that advances balanced policies for a strong economy and a healthy environment. CCEEB spent several years developing carbon neutrality principles¹ and has for the last decade been an integral stakeholder when major climate change and air quality legislation and regulations are being considered. Our membership is committed to building the energy systems needed to and deliver low, zero, and negative carbon solutions to all Californians.

CCEEB appreciates that the Proposed Plan will be the most ambitious to date, with a planning horizon spanning more than twenty years into the future that must assess every potential technology, energy, and fuel deployment pathway for each sector of California's economy. California's climate goals, paired with carbon neutrality, are among the most ambitious and aggressive in the world. These policies call for a fundamental transformation of the way of life as we know it in California – which is why it is so important that everyone fully understands the path ahead of us.

As ARB considers the Proposed Scenario, CCEEB wants to highlight critical questions for this deliberation:

- Is the Proposed Scenario the most cost-effective and technologically feasible?
 - What are the cumulative impacts, specifically the societal costs?
- What are the potential constraints of the modelling that underlies the Proposed Plan and how do these constraints influence the Proposed Scenario?
- How will ARB and its agency partners work together to ensure technology neutrality is allowed to meet our goals?
- How is California going to build the necessary infrastructure at the scale required to achieve carbon neutrality with our state policies and bureaucratic requirements in a timeframe to achieve our 2030 mandate and 2045 goal?

¹ [CCEEB's Carbon Neutrality Principles](#)

The State's goals and policies are required to balance the aggressiveness of its environmental goals with economic and technological realities. Even without the current, and evolving, sociopolitical and economic factors at play, ensuring that the energy systems that will be built to meet the Proposed Plan are affordable, resilient, and robust will be an enormous task.

As a society, we must carefully allocate our resources to provide essential and critical services to the citizens of California. The scope, scale, cumulative costs, and core infrastructure needs must be known to ascertain if the Proposed Scenario or any of the other scenarios truly meet the technological feasibility and cost-effectiveness principles of California's climate policies. It does not matter what scenario is selected by the board if there is no strategy to pay for it and build it.

The Proposed Scenario is one of many that can achieve carbon neutrality by 2045. Every individual, community, company, and interest have their own preference and desires for the future. We must recognize that the Scoping Plan is just that, a plan, with complexities and blind spots that are not predictable. This is a pathway to achieving carbon neutrality, there are many potential options not explored that can be more cost-effective and provide more flexibility for choice and consumer adoption. The Proposed Plan and other planning exercises performed by the California Energy Commission and California Public Utilities Commission affirm that we cannot achieve our climate goals without economic harm and substantial stranded assets for households and businesses. CARB should strive to minimize these impacts through adoption of a plan that minimizes job and economic losses.

The only thing that is certain is the enormity of implementation and the need to act. CCEEB believes the Proposed Plan needs to clearly describe the scale of carbon neutrality and convey to the public and policy makers the cumulative health, environmental, economic, job, infrastructure, and land use impacts as best we can predict them today. The Scoping Plan needs to provide the necessary flexibility and optionality to achieve California's ambitious climate change goals.

Cost-effective and technologically Feasible? California's Core Principles

California's foundational climate policy Assembly Bill 32 (Núñez, Chapter 488, Statutes 2006) states:

*"It is the intent of the Legislature that the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that **minimizes costs and maximizes benefits for California's economy**, improves and modernizes California's energy infrastructure and maintains electric system reliability, maximizes additional environmental and co-benefits for California, and complements the state's efforts to improve air quality."*

*"The state board shall adopt rules and regulations in an open public process to achieve the **maximum technologically feasible and cost-effective** greenhouse gas emission reductions from sources or categories of sources, subject to the criteria and schedules set forth in this part."*

AB 32 provisions related to the Scoping Plan further state the intent is, *"to facilitate the achievement of the **maximum feasible and cost-effective reductions** of greenhouse gas emissions by 2020."*

CARB is using the term *"technologically feasible"* to relay that the plans are "feasible" to implement within the specified time period. CCEEB does not believe modeling assesses what can be achieved within these time frames. Without a full assessment of the barriers, policies, and capital needs of what can actually be implemented, how can any of the modeling results be viewed as accurate? For example, we can model what it takes to build a water treatment plant in a 6-month timeframe that assesses costs, materials, land-

use, and workforce needs. However, what utility does the model serve if regulation and political barriers to build this plant do not allow for a 6-month construction window?

We urge CARB to assess state and local policies to determine what barriers exist that will delay projects necessary to achieve our goals. Additionally, CARB should look at the bureaucratic scale necessary to permit the sheer number of projects necessary to achieve the Proposed Scenario. The scope and scale of the Proposed Scenario will require an unprecedented public and private investment in infrastructure with projects and land-use activities that will encounter significant bureaucratic requirements and political headwinds. Policies intended to protect the environment are also the biggest risk to feasibility of achieving the scale of construction needed to build the systems necessary to achieve California's climate goals. Cost-effectiveness and minimizing costs are mentioned throughout AB 32 and other climate legislation. Beyond statutory mandates, the feasibility of meeting these aggressive targets is dependent on doing so in a way that uses available, commercially deployable technologies on a rapid timeline and that minimizes the disruption to economic stability.

Through this lens, CARB has landed on the Proposed Scenario. And while we can argue at length about each assumption from every scenario, we should also recognize that Scenarios 1 and 2 are simply not feasible. They are certainly not cost-effective. Most importantly, the permanent job losses and economic impacts of Scenarios 1 and 2 would be unprecedented. This should not be acceptable to the CARB nor the public.

Reframing the Economics

CCEEB agrees with the California Municipal Utilities Association's (CMUA) comments from May 3, 2022,² and wants to emphasize the reframing of the Rhodium analysis on the permanent job and economic losses from each of the modelled scenarios:

- Alternative 1
 - In 2035 - 385,000 jobs lost and \$35 billion loss in state economic output
 - In 2045 – 190,000 jobs lost and \$29 billion loss in state economic output
- Alternative 2
 - In 2035 – 270,000 jobs lost and \$16 billion loss in state economic output
 - In 2045 – 190,000 jobs lost and \$26 billion loss in state economic output
- Alternative 3
 - In 2035 – 80,000 jobs lost and \$6 billion loss in state economic output
 - In 2045 – 120,000 jobs lost and \$3 billion loss in state economic output
- Alternative 4
 - In 2035 – 85,000 jobs lost and \$3 billion loss in state economic output
 - In 2045 – 170,000 jobs lost and \$16 billion loss in state economic output.

CMUA's letter goes on to state, "...that Alternative 3 is forecast to cause the smallest loss in jobs and the smallest reduction in state level economic output, Alternative 3 would still reduce California's jobs growth rate by 85.71% in 2045 and would reduce the growth rate of the California economy by 3.33% in 2045. It is crucial that our stakeholders and policymakers have an accurate understanding of the magnitude of these potential negative impacts so that they can effectively design and support programs to mitigate them."

² May 3, 2022, California Municipal Utilities Association's Comments on the Initial Air Quality & Health Impacts and Economic Analyses Results Workshop

To understand the scope of these economic and job losses CARB should fully publish the cumulative costs to achieve each scenario as well as the cumulative job losses. The presentation of data in the Proposed Plan may lead the public and stakeholders to believe these impacts are minor and absorbable. CCEEB urges CARB to reframe the environmental, economic, and jobs data, to the extent possible, to provide monthly, yearly, and cumulative totals.

In addition to the cumulative data, we believe the scope and scale of the infrastructure needed to achieve this goal is underrepresented. Achieving carbon neutrality, in the most basic terms, is building energy infrastructure to support reliable, resilient, and cost-effective decarbonized energy that can serve the needs of a state with one of the world's largest economic outputs. It is important to convey the totality of the core infrastructure needs to anchor the societal costs, as ratepayers support our electric system.

Beyond the capital necessary to build this infrastructure, the largest barrier to achieving carbon neutrality will likely be the time to site, plan, permit, and build infrastructure. Existing permitting timeframes for transmission lines, renewable energy projects, and core infrastructure projects do not support the feasibility of the 2035 timelines and pose a major barrier to even the proposed 2045 timeline. Our suggestions for remedying this potential roadblock are presented later in this letter.

Modeling – Assumptions and Constraints

The concerns with the process followed to develop the Scoping Plan expressed by many stakeholders centered on the heavy reliance on user-driven/defined modeling. The use of proprietary modeling and not knowing the assumptions or other inputs requires faith in the operators.

This modeling exercise is not cost-optimized and relies on user-defined consumer adoption and commercialization numbers. Because of this, we cannot tell if the Proposed Plan is the most cost-effective scenario. Our inability to fully analyze the modeling further complicates the public's ability to trust the results. We believe CARB staff and the modelers wrestled with the decisions for each input based on almost two years of workshops and input. However, we must recognize that markets and consumer behavior over 22 years cannot be predicted with any certainty by an individual or a group.

As previously alluded to, CCEEB is concerned with how the data is presented. For example, as mentioned above, the economic data was framed in such a way as to diminish the impacts on year over year job losses. Why only look at costs in a single year as opposed to cumulatively? In addition, the health data is presented for only January and July, instead of monthly and cumulative. The outcomes of the Proposed Scenario need to be fully vetted by the Board, and for the Board to do so, board members and all stakeholders need to understand the breadth of its impacts. CCEEB would urge CARB to clarify the of cumulative impacts over the baseline scenario.

Approach for Analysis: *Performance Standards vs Technological Mandates*

We believe the technology-centric approach for this Scoping Plan may lead to CARB selecting winners and losers. Analyzing technologies requires making assumptions about cost-curves and consumer adoption that are highly variable. Our transition to carbon neutrality is highly reliant on the uptake of new technologies supported by significant infrastructure upgrades. By selecting technology winners and losers, CARB is potentially sending a market and policy signal that may preclude important and needed technologies.

CCEEB believes we need an "everything and..." approach toward technologies needed for carbon neutrality. We are concerned the current approach will limit innovation to the "box" created by the

selected scenario. Technology neutrality is critical to creating competitive forces that will drive down the costs of the policy decisions supported by the Scoping Plan. CARB should avoid making decisions that mandate market share and block competitive technologies with great promise for decarbonization. We support a market-based approach based on supportive policies that allow flexibility and technological development. The Proposed Plan is a result of user defined modeling that inherently chooses technologies and assumptions for those technologies within the model. Even thoughtful and informed assumptions by CARB and their contractor may imbed bias that led to the selection of one solution over another.

Prior Scoping Plans focused policies and how they would achieve specific emissions outcomes. This approach provided clarity in what different policies are expected to achieve, which sent a market signal that encouraged competition for solutions and innovation. CARB should provide a more robust discussion in the Proposed Plan of how existing performance standards will drive the technological adoption necessary to achieve the modeled outcomes.

Building the Foundation for Carbon Neutrality

CCEEB's business and labor members are ready to build the foundation of a carbon neutral economy that benefits Californians, our communities, and our environment. But to meet the 2045 timeline, we need a workforce at a scale that can build and maintain the transmission and distribution networks of wires and pipelines, a workforce we have at the ready.

The Scoping Plan needs to connect policies with infrastructure needs. California policy has siloed rules from incentives, often delegating incentive spending to agencies, boards, departments, commissions, and offices who are not responsible for administration of the regulation. For example, CARB recently adopted Advanced Clean Cars 2 and is developing the Advanced Clean Fleet rule, but the California Energy Commission is responsible for charging infrastructure and hydrogen refueling basing pace of buildout criteria not connected to the needs of achieving regulatory compliance. This inherent tension between regulation and incentives has created challenges that will only be exacerbated by the needs of achieving the Proposed Scenario.

We cannot afford to delay infrastructure due to challenges of layered bureaucracy at the state or local levels due to incompatible incentive structures or competing regulatory requirements. The pace of decarbonization occurs more drastically over time so we urge CARB to propose a process to resolve these inconsistencies and address barriers in the near term.

We need the Scoping Plan to paint this picture to clarify the policy and market needs to clearly delineate the foundations to achieve this overwhelming buildout. We urge CARB to assess the scale of building the Proposed Plan. While there is a substantial amount of information provided in the Draft Scoping Plan and appendices, we request spreadsheets to accompany the tables and graphs for economics, energy, and technology uptake. A clearer picture of these needs will allow CCEEB and other stakeholders to better understand the Proposed Scenario.

Conclusion

The Scoping Plan is a technical exercise with many nuances, necessitating an unprecedented level of stakeholder and interagency coordination. The Proposed Plan will require a societal shift at the same time it demands an unprecedented commitment of capital, materials, labor, and bureaucratic resources to achieve carbon neutrality. We look forward to working closely with ARB board members, staff, the EJAC, and other stakeholders to further refine the Proposed Plan to achieve carbon neutrality.

Thank you for your consideration of our comments. We look forward to discussing them or answering any questions you may have at your convenience. Please contact me or Jackson R. Gualco, Kendra Daijogo or Mikhael Skvarla, CCEEB's governmental relations representatives at The Gualco Group, Inc. at (916) 441-1392 should you have any questions or comments.

Sincerely,

A handwritten signature in blue ink that reads "William J. Quinn". The signature is fluid and cursive, with the first name being the most prominent.

WILLIAM J. QUINN
CCEEB President & CEO

cc: Honorable Members of the California Air Resources Board
The Environmental Justice Advisory Committee
Ms. Rajinder Sahota
Mr. Matthew Botill
The Gualco Group, Inc.