

California's Proposed Climate Action Plan as per CARB is a Disappointment

Efforts of a Coalition and my comments and observations.

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June 20, 2022

The California State Government has asked the state agency CARB (California Air Resources Board) to come up with a plan of how the entire state can achieve Carbon Neutrality (Greenhouse Gas Emissions equal to Greenhouse Gas Absorption) by the year 2045. As of this date (June 2022), CARB has proposed a scenario (Alternative 3) to do this by 2045 in their Draft Scoping Plan.

As outlined in CARB's Draft Scoping Plan, this proposed alternative will NOT achieve the emissions reductions expected. After describing the overall situation we face, I first present the online comments I formally submitted on June 18, 2022. I then describe in summary, the contents of the letter an informal "Coalition" sent to CARB, explaining what their disappointment is what CARB should not do and emphasizing in their letter what they would like CARB to do. I did sign this letter and added the name of my informal group, Brighter Climate Futures, and do fully support their efforts.

OVERALL PICTURE

1. California Governor Gavin Newsom appears to be pulling back on promises he made regarding solutions to the climate crisis. His budget seems to be focusing on wildfires, resilience and some training but not addressing the central aspect of emissions reductions from fossil fuels. That is despite joining the global Beyond Oil and Gas Alliance (BOGA) at COP26 in Glasgow, November 2021.
2. There are some good bills or legislation in the California Legislature this year that are going through their process and many groups are trying to champion the ones they like. I am helping Sierra Club and 350 Bay Area in these activities. But, in my estimation, in terms of direct quantifiable emissions reductions and energy transition changes, these bills do not do more than about 5% of what is needed. My efforts to get the legislators to write more meaningful legislation failed (these are in about the same content as the comments I submitted to CARB – see below) – I am still learning how the whole process works. We need to organize mor effectively here.
3. Now CARB has watered down their strategy and is coming up with a proposed scenario that avoids doing the most important things like directly reducing fossil fuel emissions and is instead engaging in greenwashing.
4. On June 23, 2022, the informal coalition and other groups have organized a rally in the capital Sacramento outside the CARB headquarters, where CARB will decide what their final Scoping Plan 2022 will be.
5. It appears that we have no option but to organize more effectively at every level. I am open to suggestions and am willing to cooperate with others in doing so – please let me know.

My proposal – Get fossil fuel emissions down to zero.

Reducing Emissions from all fossil fuels to zero is the surest method. Counting on emissions absorptions through Carbon Capture and Storage (CCS) technologies or by Natural Working Lands (NWL) is a false hope that is only intended to prolong the use of fossil fuels. CCS technologies have FAILED nationally despite billions of dollars being spent and there is not ONE demonstration site that has been successful. CCS and Direct Air Capture (DAC) are technologies should only come into play AFTER fossil fuel emissions have been reduced to zero, to start reducing the concentration of CO₂ in the atmosphere. Even then, they should only use renewable energy to power them – no fossil fuels should be allowed that only add emissions of their own.

My Online Comments on CARB Scoping Plan 2022 – submitted on June 18, 2022**Subject: Zero Fossil Fuel Emissions by 2045 – 40% down by 2030**

Dear CARB,

Your Draft Scoping Plan 2022 does not address the need for quantitative reductions in Greenhouse Gas emissions from fossil fuels by 2045. This the surest way to guarantee that California will meet its goals - other methods like natural working lands and even Carbon Capture and Storage will not get us to zero emissions with a high degree of reliability.

Here is what I propose:

As per California Goals Greenhouse Gas emissions need to be down 40% by 2030 and 100% down by 2045. From the current emissions of about 400 MMTCO_{2e} (million metric tons of carbon dioxide equivalent) we need to be at ZERO MMTCO_{2e} by 2045.

To meet these goals the approach should be simple (current percent % greenhouse gas emissions appear within parentheses for all sectors):

1. Electrical Energy (11% in state, and 8% imported – to 0.0 % by 2045): Replace all large natural gas power plants with solar or wind plus battery – use smaller natural gas power plants for base load. As electrification of all sectors proceeds, pursue the same strategy for all added electric energy - eventually replacing the small natural gas power plants with green hydrogen power plants.
2. Transportation: (37% down to 0.0% by 2045): Begin to replace all gasoline and diesel vehicles with EVs and fuel cell vehicles – devote all resources to establishing infrastructure for Solar charged EVs and Hydrogen produced from solar, wind or geothermal. Starting from about 31 million fossil fuel vehicles today - begin replacing

fossil fuel vehicles at the rate of 1.35 million vehicles per year so all such vehicles are off the road by 2045.

3. Industry (21% down to 0.0 by 2045): Electrify all energy uses and what cannot be electrified, power that with green hydrogen produced mainly by solar.
4. Agriculture (8% down to 0.0 by 2045): Electrify all diesel tractors and harvesting machines and incentivize developing fuel cell tractors.
5. Commercial & Residential (9% down to 0 by 2045): All new homes and buildings to be 100% electric with rooftop solar and then each year retrofit all structures to replace all natural gas uses with electric and pure green hydrogen – produced onsite.
6. Green Hydrogen: Do the R&D and establish solar (plus wind and geothermal) energy based water electrolysis so as to produce green hydrogen for all sectors of the economy at a lower cost.
7. Other GHG emissions: Curtail methane emissions from all sources – fossil fuels, animal agriculture, kitchen bio-waste, off road engines and other sources. Curtail nitrous oxide emissions from all sources – fossil fuels, nitrogen fertilizer, off road engines and other sources.

If you can schedule me, I can present to you a quantitative, actionable and time bound plan of how to do this. Thanks!

Hari Lamba

Brighter Climate Futures

(The above was submitted to CARB online on June 18, 2022)“

Coalition’s Response to CARB’s Proposed Alternative 3

(An informal “Coalition” that signed onto a letter was of about 45 organizations including the Sierra Club, 350 Bay Area and Brighter Climate Futures)

This response may be summarized in the following five points:

1. **No Fossil Fuels: Phase Out Oil Drilling and Refining**
2. **Clean Our Power Sector: No New Gas Plants (not the added 10 GW, or Giga Wats of new natural gas power plants being proposed by CARB)**
3. **Clean, healthy transportation for all**
4. **Electrify our buildings**
5. **No Climate Dead Ends - Stop Over-Relying on CCS and Hydrogen**