

June 21, 2022

To: CARB
From: Muriel Strand, P.E.
Re: Draft 2022 Scoping Plan

Having followed the 2022 scoping plan update process from the beginning, attending and commenting on most of the workshops, I see clearly that this final draft represents a great deal of earnest and honest effort by knowledgeable and committed state staff from many agencies, with CARB staff as project lead.

“The staff-proposed scenario that forms the basis of this Draft 2022 Scoping Plan is the alternative that most closely aligns with existing statute and Executive Orders. It is the proposed alternative because it best achieves the balance of cost-effectiveness, health benefits, and technological feasibility. This said, as the CARB Board and other stakeholders carefully consider the Draft 2022 Scoping Plan, they might find there is value in importing aspects of other alternative scenarios in order to improve upon the staff-proposed alternative.”

Naturally, the staff-proposed scenario generally reflects the status quo perspective of the state legislature and of most progressives, an unrealistic expectation of grafting our fossil fuel lifestyles - BAU - onto PVs, windmills, and batteries, etc. Sadly, these assumptions and existing legislative mandates - not to mention the sustained and substantial work required to assemble this impressive draft plan - have apparently limited explicit consideration of various simple and affordable alternatives.

While politicians and activists alike want to see California as a leader in overcoming our fossil fuel addiction, the basic strategy of electrifying everything is not a plan that can truly free us from fossil fuel use. Nor can it scale up nationally, let alone globally. What’s missing is a clear and specific notion of a post-fossil-fuel culture and society, a future with a radically different alternative infrastructure that’s far more efficient in real terms. That’s the leadership we all need.

In “Climate - A New Story,” Charles Eisenstein explains that we have used fossil fuels in many ways that damage the Earth, of which global warming due to increased CO2 concentrations is but one. In my initial comments almost a year ago, I listed the 18 policies developed by Eisenstein that would heal our Earth, recommendations that go far beyond netzero and yet I believe are the most effective policies to achieve and retain netzero: <https://www.arb.ca.gov/lists/com-attach/19-sp22-kickoff-ws-AmFUMwZ1AjNWDwIw.pdf> I urge everyone to read his book, “Climate - A New Story,” which explains the many reasons for his systemic recommendations: <https://charleseisenstein.org/books/climate-a-new-story/>

There is a wide philosophical and conceptual contrast between our current culture and the truly ecological culture which I believe is the most adroit and practical way to achieve netzero. A deep understanding of that biological perspective can effectively inspire the necessary confidence among ordinary people to make the fundamental changes needed to arrest and reverse climatic and biological chaos. This 2-page chart summarizes that contrast: <https://bio-paradigm.blogspot.com/>

Citizens who have such a clear and specific vision are better prepared and able to make major changes such as substantial reductions in VMT; they may also make other preferable consumer choices that would, for example, reduce VMT from Amazon deliveries and other supply-chain vehicles. Such technological simplification also offers opportunities for substantial reductions in refrigeration processes and in emissions of agricultural and industrial toxics.

Please also refer to my comments of March 24, 2022, as that summary is still very relevant to an alternative vision for the final draft of the Scoping Plan: <https://ww2.arb.ca.gov/applications/public-comments?p=comm&s=bccommlog&l=22spcarbonneutrality>

Many of the EJAC recommendations seem to be hoping for this kind of fundamental and affordable change, although they too are largely framed in the context of the current system rather than a radically different system that would be based directly on the natural biological world. Envisioning such a different world is not easy, but necessary when our current system of fossil fuel addiction is killing the Earth. The absence on the EJAC of one very low income stakeholder group, namely, homeless people, underlines the need for deep reform. Reconstructing our society so that there is a meaningful place for everyone would be a wise preparation for the climate refugees who are already on the move.

Simply grafting our current fossil fuel lifestyles onto nonrenewable harvesters of renewable energy and on hopes for CCS ignores all the low-hanging fruit available from fundamental societal and technological change. We need models, and there are few, though most of the ingredients are already available in scattered sources. We can benefit from historical and prehistorical information resources such as traditional ecological knowledge from all continents. Fortunately, there are also contemporary examples we can imitate, small experiments scattered around the world, where eco-pioneers are living and working out how to thrive so differently: <https://ecovillage.org/>

GDP/GSP estimates also suffer from a problem I only discovered very recently in Mariana Mazzucato's informative account of economic history: "The Value of Everything: Making and Taking in the Global Economy" <https://www.publicaffairsbooks.com/titles/mariana-mazzucato/the-value-of-everything/9781610396745/> Mazzucato reports that the financial sector (banks, mutual funds, hedge funds, private equity, etc.) was only inducted into the national accounts and the GDP in about 1970, whereas before that only tangible, 'real' production was included. Since then, the nominal 'value' of the financial sector has grown and crowded out an increasing portion of the rest of the economy by persistent value extraction masquerading as value creation.

The real value, and cost-benefit analyses, of climate strategies can be best evaluated by consistent use of the metrics of kwhr and GHG emissions reductions rather than just monetary prices and imputations alone, which latter are subject to human confusion. Such analysis also offers clarity that may reconcile stubborn political-legal arguments about CEQA analyses. Moreover, monetary cost accounting obscures the relationships between energy costs and staff costs, since a major portion of staff costs arises from our energy-intensive fossil-fuel lifestyles.

The scoping plan update draft refers to plans to spend substantial sums on helping low-income Californians acquire EVs, heat pumps, induction cooktops, etc., not to mention overdue energy conservation upgrades on their overpriced rental units. How can a portion of this substantial sum be redirected to enable ordinary Californians to choose instead the relocalized, cost-effective, cooperative, biological, ecovillage alternative they may prefer?

Strong support for strategies such as urban farming can be expected to increase total carbon sequestration in working lands, while simultaneously shrinking supply chains and travel in ways that residential infill alone cannot. Cap-and-trade investments could go far in realizing these alternative possibilities. There may be a role also for investment by pension funds such as CalPERS and CalSTRS.

Would it be better to retain existing gas appliances in low and middle income housing rather than replace diesel with methane from landfills and unhealthy CAFOs for freight movement? We must prioritize; which uses of methane are most beneficial for Californians of limited means? Many of the commodities and products that comprise current cargoes could be preempted by relocalized production, or are simply unnecessary.

A back-of-the-envelope calculation indicates that the amount of energy that I (an elder living alone who cooks from scratch and never eats out) use in a typical month to cook on my gas stove is about the amount of energy in a gallon of gas. Do we really need to make a bogeyman out of residential natural gas cooking? The negawatts of energy conservation available from maximum relocalization can dwarf the energy costs and emissions required for current supply chains; their disappearance need not cause any deprivation. As well, reducing the need for pavement frees up land for additional natural carbon sequestration.

Success in achieving netzero in a decade or two will, as noted, depend on effective action by cities and counties. State agencies can help achieve this by integrating state expertise in various disciplines in a 'wrap-around' approach that clarifies ways local governments can plan and act holistically.

As a Sacramento Environmental Commissioner in the early 1990s, I saw firsthand how challenging it was for local governments to reconcile competing interests, real constraints, and ambitious policy goals. (The policy goals were decapitated.) State and federal staff can offer informational economies of scale with solutions for the resource and supply constraints that confront local jurisdictions as we transition from fossil fuel scale to humanscale.

But our basic needs - clean air and water, healthy food, and comfy shelter - can only actually be used at the local level. Radical relocalization will be more effective than grafting our fossil fuel intensive lifestyles onto the various optimistic fossil energy substitutes in this plan. Trusting and relearning interdependence with dependable and traditional ecological sources is the path to longterm economic and ecological equilibrium.

Thank you for the opportunity to comment.