

July 8, 2021

To: California Air Resources Board

From: Muriel Strand, P.E.

Re: **2022 Scoping Plan**

A. General Comments

The assumption implicit in California's climate change process is a continuation into the future of our present technology and lifestyles, usually based on extrapolations of recent trends in population, energy use, GDP, etc.

While replacements, such as PVs and windmills, for current energy supply levels receive intense attention, the energy conservation potential of certain systemic changes is often cursory. Changes such as systematically shortening supply chains for basic needs, prioritizing basic needs over common but optional appliances, and substituting adroit ergonomic mechanisms for many ordinary machines, all offer underappreciated potential.

How can we best support citizens in taking responsibility and exercising autonomy in ways that extract fossil fuel fat from our lives while averting deprivation? One policy that would assist citizen-consumers in using market signals to reduce CO2 emissions would be to require all products and services to be priced at the retail level in kwhr and GHGs as well as in dollars.

As a single individual, I lack the bandwidth to develop a coherent and complete scenario that meets all the legislative and regulatory specifications staff have helpfully listed. However I hope that my comments and ideas may be useful in developing one or more of the scenarios that appear next year in the final scoping plan.

My perspectives and suggestions are described in detail here:

https://www.researchgate.net/publication/256048802_Sustainable_Investment_Means_Energy_Independence_From_Fossil_Fuels

and here:

https://www.researchgate.net/publication/333581837_Is_it_true_that_'Small_Is_Beautiful'

In "Climate – A New Story," Charles Eisenstein makes a very persuasive case that much of the ecological challenge we confront is due not just to burning fossil fuels, but that we have used—and misused—that fossil fuel power in many ecologically damaging ways. A summary of his book can be found here: <https://www.youtube.com/watch?v=8IO6Y5baPO0>

He ends the book with a list of key societal/global actions (pp. 273-4, quoted verbatim below) that would right our earthship. It's not news that getting individuals and large-scale organizations to go in the same effective direction is tricky. A wicked problem as they say. So I have set myself the challenge of brainstorming ways to connect individual action/s with these large-scale goals. And I invite staff and the public to have a go; creative ideas may well emerge.

1. Promote land regeneration as a major new category of philanthropy: fund demonstration projects, connect young farmers to land, and help farms transition to regenerative practices. Provide public funding and government support for this transition as well by shifting agricultural subsidies away from conventional crops.
2. Institute a global moratorium on logging, mining, drilling, and development of all remaining primary forests, wetlands, and other ecosystems.
3. Expand the land protected in wildlife refuges and other reserves. When possible, enlist local and indigenous people n protection efforts to align their livelihood with ecological health.
4. Establish new ocean marine reserves and expend existing ones, with the goal of placing a third to half of all oceans, estuaries, and coastline into no-take/no-drill/no-develop sanctuaries.
5. In the rest of the oceans, establish strict bans on driftnets and bottom trawling
6. Ban disposable plastic bags for retail purchases. Phase out plastic beverage containers in favor of a refillable bottle infrastructure.
7. Reconstitute the World Bank to serve ecological healing rather than development. Start by declaring the amazon and Congo rainforests global treasures, purchasing the external debt of countries where the rainforests grow, and canceling the debt at a rate equivalent to the potential income from now-banned logging, mining, and drilling in those areas.
8. Promote afforestation and reforestation projects globally with an emphasis on ecologically appropriate native species.
9. Establish an “eco-corps” to address youth unemployment and restore ecological health by planting trees building water retention features on public land, deconstructing dams, etc.
- 10 Change building codes, sanitation codes, and zoning regulations to allow high density development tiny homes composting toilets, aquaculture wastewater treatment, etc. Nullify all land use covenants that prohibit vegetable gardens
11. Reintroduce and protect keystone species such as beavers, wolves, and cougars.
12. Carry out water restoration projects worldwide through water retention landscapes (swales, ponds, check dams, etc.), regenerative grazing and horticulture, and the strategic removal of dams, canals, and levees.
13. Relocalize food the system and promote economic localization generally, first by nullifying free trade treaties and replacing them with “fair trade treaties” that protect local economic sovereignty.

14. Institute a negative-interest financial system through international agreement to impose liquidity fees on bank reserves, along with complementary measures such as Georgist land taxes and other anti-speculative taxes.

15. Apply pollution taxes to make companies internalize the social and ecological costs of toxic waste, radioactive waste, air pollution, and water pollution.

16. Impose a deposit system for most manufactured goods so that manufacturers have an incentive to create durable, repairable products with easily recoverable materials.

17. Turn away from pesticides.

18. Demilitarize society.

B. Comments on Emissions from Natural & Working Lands

I recommend to your attention the recent book, “Smokescreen: Debunking Wildfire Myths to Save Our Forests and Our Climate,” by Chad T. Hanson

<https://www.kentuckypress.com/9780813181073/smokescreen/>

Hanson makes a persuasive case that what ‘everybody knows’ about wildfire is mostly inaccurate and inconsistent with many actual empirical observations. Related to this is the unwieldy problem of precisely and accurately estimating carbon input and output by natural and working lands.

Eisenstein has some well-taken comments about this situation where qualitative indicators are crucial and also more subtle than quantitative calculations:

<https://www.youtube.com/watch?v=hA02iUxfMmY>

I believe that quantitative calculations will be insufficient unless there’s a widespread qualitative understanding of the validity of Eisenstein’s list above. Procedures that are only quantitative, especially complicated ones, are quite vulnerable to people gaming the system.