**California's Greenhouse Gas Goals and Deep Decarbonization**

Comments on Board Item 20-12-5

Reading between the lines of this impressive report from Energy + Environmental Economics, I surmise that it reflects **the general and very optimistic assumption that we will be able to graft our fossil fuel lifestyles onto nonrenewable harvesters of renewable energy such as PVs and windmills**, as well as by various relatively superficial conservation and carbon capture measures. I am skeptical.

**I believe that lifestyle change—even social engineering—will be a wise, indeed essential, supplement.** Assuming otherwise seems an inaccurate and entitled attitude that tends to obscure substantial opportunities to reduce energy use and GHG emissions. Radical revisions in our lifestyles need not entail serious deprivation.

**Since fossil fuels provide precisely physical energy and power, I suggest that measures and designs which focus precisely on our basic physical needs offer the most effective and timely approach to energy conservation and GHG emissions reductions.** In particular, such focus is key to identifying jobs that are truly sustainable.

**Our basic physical needs are: clean air and water, healthy food, cooking, comfy shelter, and plenty of sleep and exercise.** These should be explicitly our highest priority, and their most direct and simplest access should be a primary design principle. (Of course, we also have metaphysical needs, which we have always received from the ecology and from the people in our societies and families.)

At various points, the report refers to the costs of various possible strategies for GHG emissions reductions and decarbonization. **Reckoning such costs in units of kwhr and GHGs, in addition to dollars, offers improved accuracy in selecting the most effective strategies, and I urge the Board to adopt such parallel accounting practices.**

**One simple concept which offers an opportunity to practice lifestyle change would be to end leafblower use**, and indeed all landscaping devices which accomplish tasks that are well within human muscular capability. A simple proposal for such a transition is outlined here: <http://motherearthhome.blogspot.com/> and need not threaten anyone’s economic security. If we cannot even manage to give up leafblowers, we deserve to be toast.

While this report may not address or include research in the area of natural and working lands, I am confident that the Board will be considering how the information in this report can be coordinated with the related information and considerable potential of natural and working lands to be managed in ways that support energy conservation and GHG emissions reductions. And I am confident that inclusion of the design principle of prioritizing our basic physical needs will optimize these goals.

Muriel Strand, P.E.