

January 18, 2008
To: ETAAC
From: Muriel Strand, P.E.
Re: ETAAC Report Discussion Draft of 12/21/07

I think the report has made great strides in the latest rewrite. The new front end with the strategies, opportunities and principles really integrates and focuses the discussion.

In line with the request that commenters include specific language, I have some suggestions and comments both specific and general.

On page 1-1, the report says “Better methods of moving people and goods throughout the state are another golden opportunity...”

I suggest: “Better methods of facilitating people’s access to the goods and services they need, throughout the state, are another golden opportunity...” At a time when Caltrans is reportedly preparing a long list of road-building projects, we need to refocus the public discussion on roadway conservation, that is, conservation of roadway use and of vehicle movement.

On page 1-2 the report says “A chief challenge is to simultaneously address socio-economic challenges that accompany the price signals necessary to develop a more sustainable energy economy.”

I suggest adding: “Prices traditionally rise in order to allocate scarce desirable goods. But prices also reflect social opinion, expectations, and consensus, not just physical plenty or scarcity. Here and now, when lifestyles rely on energy-intensive economic activity and energy prices are rising, the short-term challenge is to extract energy use from the current methods for the production of basic needs such as food and water. And the long-term challenge is to simultaneously support the growth of distributed economic activities that provide food and water directly and locally. Moreover, a definition of economic efficiency as maximizing needs met (e.g. food and water), for a given input of energy resources, will support success in meeting the long-term challenge.

Addressing these challenges offers more than a few co-benefits, golden opportunities for buffering the side effects of existing economic inequalities as well as other problems, when we are wise enough to choose real benefits over financial profits. ”

I believe we are entering an economic phase where the relationships between money and energy will be changing substantially. Thus, accounting of any kind should state both in parallel, a new kind of double-entry bookkeeping. And the energy units can be divided into fossil/nuclear & renewable to provide good information and transparency to every homo economicus and femina economica. As noted, “centralized” decision-making limits flexibility; it also limits individual and local creativity.

For example, on page 1-3, the report says “These “early actions” by the private sector could proceed at a faster pace if the potential economic benefits of early actions were made explicit.” I suggest adding a phrase at the end of the sentence: “...were made explicit in terms of both monetary *and* energy benefits. And nearby, I suggest “The actual economic (monetary and energy) value of “credits” for early action...” The private sector includes consumers, and informing them about how their actions can be effective will facilitate early and constructive action, as I suggest in my closing paragraph below.

According to Strategy #3, “Stimulating innovation in new technologies is the goal of RD&D. Broadly speaking, there are two ways to foster innovation: by funding RD&D directly or by requiring improved performance in the marketplace. In the energy sector, where new technologies are often very capital intensive and integrated into complex production systems, a balanced approach that uses both methods is

clearly desirable.”

I suggest: “Stimulating innovation in both new technologies, and in traditional but dormant technologies, is the goal of RD&D. In the case of traditional energy technologies, innovation can mean renewing old skills and also improving on them directly. Broadly...”

And: “In the energy sector, whether innovative technologies are very capital intensive or simple and distributed, they may require integration into complex production systems, so a balanced approach that uses both RD&D methods is clearly desirable.”

As with the definition of economic efficiency above, performance goals should be based primarily on meeting needs like food and water, directly and locally.

Co-benefits are mentioned in general at various points in the introduction. Such co-benefits as improved health (and reduced costs) available through replacing fuel use with muscle action; through replacing packaged preserved foods with fresh nutritious local foods; and through replacing economic specialization of labor with a balance for all of physical and mental tasks—all should be explicitly mentioned somewhere in the report.

For Opportunity #1, one new type of financing that I would like for investing my deferred compensation funds is the sort of rebirth of traditional technologies mentioned above, but this sort of thing is far from the mass financial market. Similarly, I think such investments would be a good thing for CalPERS to do with my retirement capital, and an excellent balance to direct international investment.

Opportunity #3, of rethinking transportation by fixing cars, does not sound like a long-term perspective. I suggest: “Local government land use planning decisions will need to be coordinated with state-wide priorities to encourage food-oriented residential and commercial development.”

The general principle of establishing a level playing field speaks of new and emerging technologies. But for performance standards, re-emerging and simple technologies should be given equal consideration.

The general principle of addressing environmental justice concerns notes “ETAAC recognized the need to develop solutions that do not shift burdens of compliance to disadvantaged communities suffering from historic pollution trends. Where the effects of policies and technologies can be clearly discerned, they are identified in this report. In other cases, further evaluation of any Environmental Justice effects may need to occur when specific implementation measures are developed by CARB or other agencies or organizations”

I suggest that somewhere in the report it should be noted that conservation measures and simple traditional technologies, as well as direct local production of needs such as food and water, are almost automatically environmentally just.

And lastly, there’s something missing! The previous draft contained a general policy of increasing consumer education and choice. I sincerely hope its absence was an oversight, as I believe that gathering information for consumers—which is often difficult for them to assemble and present meaningfully on their own—is extremely important. I believe most people are sincerely motivated to act, and in a situation where price signals are problematic and erratic, solid *accessible* information based on physics and engineering is worth its weight in gold.