

Ferguson: Energy Matters

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Visualizing Climate Success

One of my all-time favorite bumper stickers instructed us to “Visualize Whirled Peas,” a clever spoof on the New Age notion that even world peace could be achieved if only we would envision it. However, as with any good spoof, there was a seed of wisdom hidden inside.

“What would success look like?” is a useful question to ask yourself when faced with a challenge. Success in any endeavor is unlikely without a clear view of the goal.

I admit to considerable confusion as to how the plethora of committees, studies, reports, plans, and other bureaucratic processes are supposed accomplish the challenging task of cutting greenhouse gas emissions in response to global warming. So I made a trip to Sacramento this week to talk to the California Air Resources Board staff about progress on California’s plans to dump less carbon dioxide and other greenhouse gases into the atmosphere.

As I understand it, CARB is in the process of gathering recommendations that will be refined into a “scoping plan”—a draft of which is due out about June 2008. After the inevitable whining and complaining, a final version of the plan is to be released at the end of 2008.

As you know, global warming rhetoric is replete with talk of market mechanisms, carbon credit trading, offsets, etc, etc, etc. I was pleased to hear that the Air Board has not lost sight of the fact that limiting global warming requires that we burn less coal, petroleum, and natural gas.

Global warming success is not the development of a plan, the institution of a market in which to trade emission credits, or verification of emission offsets. To succeed in limiting global warming, we must burn less fossil fuel. California climate success looks like a state that relies less on fossil fuels for its energy supply.

Visualizing climate success is, of course, only the first essential step. The next is to understand why we burn fossil fuels in the first place. To summarize briefly:

- Coal is burned to make electricity.

- Petroleum is burned as transportation fuel.
- Natural gas is burned to make electricity and provide heat.

One way to burn less fuel is to use less energy for these tasks by making our power plants, vehicles, homes, and businesses more efficient.

California's growing population tends to increase demand for energy, however. The state must improve efficiency rapidly just to avoid burning *more* fossil fuel. To actually *reduce* combustion of fossil fuels, California also will have to replace substantial amounts of fossil energy with non-fossil energy.

To visualize climate success, we must be able to envision replacement of energy from coal, oil, and gas with energy from the sun, wind, and the Earth.

Fortunately, we know how to generate California's electricity from its plentiful renewable energy resources. Companies from around the world are lined up to do so. Technology is commercially available, and Wall Street is prepared to invest tens of billions of dollars. The California Independent System Operator is overwhelmed with requests for renewable projects to be connected to the grid. The Bureau of Land Management is swamped with lease applications. The public is supportive and the cost is affordable.

The Renewable Energy Transmission Initiative (RETI) is in the process of deciding what and where upgrades are needed to the state's electricity grid in order to implement this vision.

I am not sanguine about the feasibility of displacing transportation fuels made from petroleum any time soon, but we know what climate success in the electricity sector looks like.

What's missing is a decision by the State of California to pursue success in the electricity sector.

The Air Board has yet to exercise its authority under AB 32 to say "Go for it!"

The hope is that the decision to replace substantial amounts of coal-fired power with solar and other renewable energy resources will be made soon. California can begin making real reductions in greenhouse

gas emissions from the electricity sector as soon as it decides once and for all to do so. We know what success looks like.

Now if we could visualize whirled peas.....

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Opinions expressed by DrF are not necessarily those of any organization with which he is affiliated.