



## Letter to the Editor

### To the Editor:

It's startling to see in the *Fortnightly* such nonsense as Andrew Rudin's "Feel-Good Electric Waste" (April 1). He argues that since more efficient use of electricity has merely reduced rather than reversed growth of kilowatt-hour consumption—because the services provided grew even faster—efficient use is bad for the environment and "has not worked." Indeed, it makes us "just waste more electricity, only more efficiently than before."

A partial solution is better than none, not worse, and customers presumably want and value the greater and better services they got from fewer kilowatt-hours than they would otherwise have used. Contrary to Rudin's misleading Chart 1, which omits population and economic growth, efficiency's achievements are substantial, carefully and independently measured, and documented by an enormous amount of literature. They're illustrated in California by nearly flat per-capita electricity demand for 20 years starting in the late 1970s while economic activity almost doubled; peak savings totaling 10 gigawatts (a fifth of 2000 pool demand) by the early 1990s; and 1997-2000 electric intensity reduction nearly four times as fast as the rest of the country (4.4 percent/year vs. 1.2 percent/year). Without these savings, generation and pollution would have been far higher, especially with the 3:1 leverage from electricity to fuel.

Rudin argues that using electricity at all is a waste, so the only real way to save energy and protect the environment is to buy less stuff and turn things off—to experience abnegation by using fewer of the services electricity provides. That's largely how many Californians undid five to 10 years' demand growth in the first half of 2001, but not everyone would choose to make a habit of it.

We should indeed consider the full implications of our choices, and strive to meet nonmaterial needs by nonmaterial means. But for those who want to use judiciously the services of a modern society, at least cost to ourselves and the planet, a sound alternative (which I've chosen in my own life) is to choose more benign sources and improve end-use efficiency at a combined rate even faster than the growth of services provided. Polluting generation or even total electricity demand could then decline, just as the 5.2 percent/year gain in U.S. oil productivity achieved during 1977-85 (gross domestic product up 27 percent, oil use down 17 percent).

This will need policy support, not just lip service. For starters, the 48 states that reward distribution utilities for selling more kilowatt-hours rather than for reducing customers' bills should correct that perverse incentive. And national policy should allow ways to save and to produce electricity to compete fairly, in the same markets, at honest prices. Combined with 60 to 80 known ways to convert implementation obstacles into business opportunities ("*Climate: Making Sense and Making Money*," [www.rmi.org/images/other/C-ClimateMSMM.pdf](http://www.rmi.org/images/other/C-ClimateMSMM.pdf), pp. 11-20), this should achieve both Rudin's environmental goals and most people's lifestyle preferences, which I, for one, am uncomfortable trying to choose for them.

*Amory B. Lovins*  
CEO, Rocky Mountain Institute  
Old Snowmass, Colo.