Energy Conservation is a Waste*

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As usual, sweltering summer heat which will be coming up soon will have utilities calling on customers to conserve electricity. Meanwhile, President Clinton's budget calls for a 20% increase in spending on energy conservation, for a total of \$708 million. Mr. Clinton's budget writers say this investment will save consumers and businesses over \$10 billion annually by 2005.

But a little perspective is in order. In describing its budget two years ago, the federal government said that its efficiency programs would save the nation \$30 billion annually by 2005. Somehow \$17 billion of those "savings" have already disappeared. The government is unable to supply any evidence for its latest claims.

The truth is that energy conservation is virtually always a bust. Consider the experience of England in the 19th century, when the coal mines seemed to be emptying. Then the father of quantitative economics, Stanley Jevons, observed that greater efficiency produces more energy use, not less. Jevons pointed out that Watt's steam engine was much more efficient than its predecessor, the Newcomen engine. Because Watt's engine was so efficient, demand soared. The engine ushered in the Age of Steam, and world coal use skyrocketed.

The lesson resonates today. Governments around the world continually trot out new schemes to reduce energy use and promote efficiency. Yet, as the Swedish economist Lennart Hjalmarsson notes, "I have not managed to find one single evaluation of energy conservation programs published in a scientific journal that shows the program has managed to reduce growth in electricity demand at a national or regional level and the program has been cost-effective."

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The prime American example of this futility is government regulation of automobile gas mileage. Prompted by the Arab oil embargo of 1973, Congress mandated a doubling of gas mileage. What happened? Gasoline consumption rose from 1973 to the 1990s, as the roads were flooded with energy-efficient cars. Huge sport-utility vehicles crowd parking lots, also thanks to more efficient engines.

The ostensible reason behind the push for conservation is to put off the day when the last barrel of oil gushes out and the last lump of coal is hauled up. But if these resources were truly running out, we would not see their prices fluctuate and decline. If the premise behind conservation were true, prices would always rise. In fact, North Sea Brent crude oil has dropped \$6 a barrel this year alone.

But some environmental groups actually wish to hasten the day when we run out of energy. Greenpeace, which for years has demanded ever-greater government intervention to promote conservation, declared in Amsterdam on July 4: "We call for an immediate halt to exploration of coal and oil." Greenpeace had discussions with senior management of Royal Dutch/Shell; sad to say, no one captured on film the looks on the oil executives' faces.

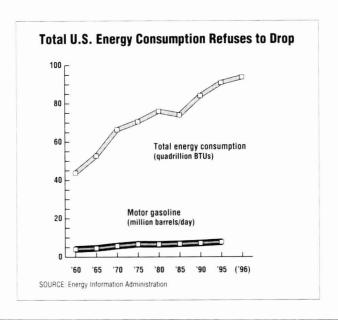
Conservation fails because it takes no account of economics or human nature. Conservationists imagine the world as akin to a laboratory experiment with two engines, A and B. If we improve engine A's efficiency, the fuel saved can be devoted to running B longer.

I am not engine B. When I purchase a vehicle, I may go for a Lincoln rather than a Taurus. I might reason that the extra fuel cost compared to income wouldn't be that much, on the order of \$3 a week. And if you trade in a BMW for a Kia, more gasoline is available for the rest of us. When a commodity becomes more plentiful, its price generally drops.

The combination of greater engine efficiency and rising disposable income has produced a true golden age of motoring. If the typical disposable income in the 1950s were entirely devoted to buying gasoline, the average person could drive about 75,000 miles a year. By the mid-1990s, that figure had risen to about 350,000 miles. That means it's entirely logical to buy Toyotas with V6 engines instead of the sewing machine-style four-cylinder engines of the 1970s, and to fill the driveway with vehicles that can't fit into the garage.

In the same way, what is "saved" by installing special light bulbs is often "wasted" on new hot tubs, exterior lighting and a host of other energy uses, as homeowners assume that their electric bills will drop off substantially.

In spite of these and dozens of other clear failures, the claims for conservation to solve virtually all our national energy dilemmas continue. Few if any are valid. While each of us can reduce energy use in one or two areas, we find that the nation gradually uses more. The government is called in to solve the problem. But "waste" is in the eye of the beholder: The government can no more outlaw it than it can mandate joy.



ABOUT THE AUTHOR

Dr. Herbert Inhaber received his Ph.D. in low-temperature physics from the University of Oklahoma. He has written eight books, including Why Energy Conservation Fails (Quorum Books), on which this article is based; Energy Risk Assessment (Gordon & Breach), Environmental Indices (Wiley-Interscience); Physics of the Environment (Ann Arbor Science); Slaying the Nimby Dragon (Transaction Publishers); and How Rich is Too Rich? (Praeger). He is a Fellow of the American Nuclear Society, serves on its Board of Directors, and is Chair of its Public Policy Committee.

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