

Energy Economics with Eyes Open

by Ashton J. Pecquet and Gary M. Pecquet

Energy is a scarce resource. No one was ever able to have all the energy he wanted. It is neither free nor a gift of nature. Someone must spend labor, wealth, and time to find, produce, and use it. In short, energy is an economic problem.

Of course, energy is a vital economic resource. It is needed for power, transportation, industry, and almost every other human endeavor. It is the lifeblood not only of a modern society, but of any society. This importance, however, does not remove energy from the scope of economics; it only makes economic analysis all the more essential.

The many dimensions of the energy problem can be illustrated by asking a few questions. How much energy do we want and what are we willing to give up for it? Do we want to work longer hours or divert capital from other uses to get more energy? From which sources should our energy come? We can obtain it from coal, oil, natural gas, nuclear reactors, electric batteries, windmills, horses and mules, or from any combination of these sources. But which combina-

tion and in what proportions? Where do we want to use our energy? We can use it in industry, transportation, or heating, or we can have some of each. But how much? And which specific industries, modes of transportation, and methods of heating should we use?

These questions present us with a problem, because there are an infinite number of answers to each question. The best answer can only be found when we are able to compare the costs and benefits of each alternative available to us. And since we are dealing with heterogeneous resources, costs and benefits can only be compared with the aid of a common denominator—a price. With this in mind, let us examine alternate social systems to find the one best equipped to economize our energy.

First, there is complete socialism. Its defining characteristic is the public ownership of all the means and resources of production. In light of the collapse of the Soviet Union and its satellites, the suggestion of a pure socialist economy seems foolish. But why *must* socialism fail? Did the Soviet planners merely suffer from poor judgment or is there a systemic flaw in a publicly owned economy? About 80 years ago, Ludwig von Mises, in his great work *Socialism*, explained why totalitarian central planning cannot economize resources. By examining a system that fails, perhaps we can find the necessary ingredient for a successful economic system.

Gary Pecquet (gpecquet@aol.com) is an economist and C.P.A. in the greater New Orleans area. He wrote the original version of this article as an undergraduate for the 1973 Ludwig von Mises Memorial Essay Contest. His father, Ashton Pecquet (1929–2000), a chemical engineer for Kaiser Aluminum and LaRoche Chemicals, revised the paper in 1991 without his son's knowledge. It was only recently discovered.

Under a system of only one voice, no buying or selling among resource owners is possible. Buying and selling presuppose more than one voice, more than one man or group, seeking gain. Without the buying and selling of resources there can be no resource prices under socialism, except for meaningless arbitrary ones used for bookkeeping. Because there can be no resource prices, the relative values of heterogeneous raw materials, assortments of capital goods, and different types of labor cannot be found. Costs and benefits cannot be compared between resources. The socialist directors would not know if they are profiting or losing. They would not know by performing an action if they were serving consumers better or worse. Hence, socialism does not provide a method for economizing our energy.

To illustrate the dilemma of a socialist, I shall recall the childhood game “pin the tail on the donkey.” Each participant was blindfolded and told to pin a donkey tail on a donkey’s picture. The one coming closest to the place where the tail should go—the optimal spot—won the contest.

Without prices a socialist is blindfolded also. If you were a socialist director, how would you direct the economy? You have every economic resource at your disposal, but you cannot know which ones are more expensive and by how much. You are blindfolded to price—to the cost of attaining your objectives.

Copying the Market

You can use as a gauge the prices of other nations that have markets. But that is cheating—do not look under the blindfold. If a domestic market is evil, why copy a foreign one? Besides, prices are never exactly the same in different nations or localities.

You can also compute your relative cost from the past prices of your own nation. But this is not only cheating, it is also foolish. A changing world must have changing prices. How far could technology advance if the 1890 horse-and-buggy price were still used as a guide? The 1910 automobile price? The 1974 oil price?

Finally, you can use labor hours (or some other input variable) as costs. This is not cheating, but you will still have the same difficulty. The labor-hour method neglects the kind of labor (highly technical, skilled, or unskilled), the costs of raw materials, and the length of time required to complete each alternative project. Moreover, no measure of historical costs, however complete, can account for the value of consumer goods because potential demanders value commodities according to their individual preferences and circumstances. You will still be blindfolded. You will still be unable to find the optimal uses and sources of energy.

The second social system up for discussion is capitalism. Under this system, everyone is an economic actor. You will not be presented with the responsibility of directing the nation’s entire productive output, but because there is buying and selling of every economic resource, prices enable you to compare costs and benefits. (You may now take off the blindfold.)

Since each economic participant acts only when he expects benefits to exceed costs, you buy energy only when you expect to receive more satisfaction from it than from alternative uses for the money. If you and other economic actors want more energy than is currently offered in the market, you will have to give up other goods to obtain it. Prices for energy will rise and the prices of the goods consumers decide to give up will fall. If the supply of energy decreases, energy prices will also tend to rise and the prices of other goods will fall. In either case, higher prices will encourage energy companies to produce more, consumers to use less, and industry to search for new energy-saving techniques. This additional energy produced and saved will cause energy prices to fall relative to other goods that have not increased in supply.

Conversely, a more plentiful supply of oil tends to make oil prices fall. The need to economize oil slackens compared to other vital raw materials.

This is how the market solves the energy problem of today. But tomorrow’s energy solution may require new answers. It may

require the increase of present oil, coal, and natural gas supplies. It may be that new energy sources, such as nuclear and solar power, can replace or supplement our present ones. But whatever tomorrow's answer will be, it will never be a permanent one. The verdict must change day to day.

Energy-producing businessmen are not omniscient; they must speculate about future needs and conditions based upon their practical experience and sound judgment. For example, entrepreneurs must anticipate the demand for their products and secure reliable sources of raw materials in the face of constant disruptions in supply. The most adventurous entrepreneurs sink huge investments into potentially new energy saving/producing technologies long before their profitability becomes apparent. When they are correct, they prosper. When they err, they lose. But when a businessman suffers from poor judgment, he soon discovers his mistake on the corporate balance statements. A socialist director does not. A blindfolded director has no prices to compare benefits and cost. A "greedy" capitalist does.

The Mixed Economy

But America today is a mixed economy. It is neither a pure socialist nor a laissez-faire market system. American would-be regulators believed that market prices were all right for relatively unimportant and plentiful goods; but when an essential good (energy) is acutely short, nothing less than price controls, rationing, and an energy department would do. Price controls were enforced during the Great American Energy Shortage 1973–1981. Two different times in the '70s, American motorists resembled Soviet shoppers queuing up for many hours in search of a few gallons of gasoline. It was no coincidence that gasoline lines disappeared after President Reagan accelerated the decontrol of prices in 1981.

But why did American politicians and economic planners impose price controls if they only produced hardship? Part of the answer is the medieval notion of "fair prices." "Fair prices" were once thought to depend on the

cost of production only. Goods were supposed to sell at cost regardless of the quantity of goods demanded by consumers. Consequently, "fair prices" tend to be below market prices. They discourage production and encourage consumption—prolonging the very crisis that the price controls were established to alleviate. Price controls are the economic equivalent of blood-letting in medicine.

American economic managers were in a better position than Soviet central planners. They had prices at their disposal. The trouble with the energy planners was not that they could not compare costs and benefits, but that they did not allow the economic actors to do so. Since their function was to set prices different from those established by cost-and-benefit-comparing economic actors, they deliberately set prices unrealistically. They intentionally missed the donkey. For want of blindfolds American planners deliberately closed their eyes.

The long gasoline lines of the '70s have disappeared, and no one proposes that the United States adopt price controls today. Nonetheless, the Department of Energy and its billions of expenditures survived, and there are those who lament that "we do not have an energy policy." But the free market itself is an energy policy.

What present-day economic planners mean by "an energy policy" is an active federal government that plots the energy course for the entire nation. Ecology-minded planners, for example, favor government-mandated fuel economy standards for American automobiles to discourage consumption. The production of oil and coal would also be severely restricted to save resources for the future. Once again, we are faced with opponents of the price system.

The value of our resources depends on many factors influencing producers and consumers. The advancement of human knowledge itself determines what we regard as economic resources. Shortly before the American Civil War, the major source for lighting was whale oil. Were whales finite? Certainly. Was there a maximum number of them that could be harvested each year? Of


course. Did the shortage of whales doom the human race to perpetual darkness? Never.

The answer is that entrepreneurs discovered and marketed substitutes when whale oil became too expensive by the 1840s. Soon, kerosene lamps fueled by crude-oil derivatives became economically viable. Crude oil, once considered a nasty nuisance by Texas farmers digging water wells, became a valuable economic resource. Human knowledge transformed the energy potential of mankind and incidentally saved the whales.

Imagine what course industrial history would have taken if the government of the 1840s had imposed price controls on whale oil. Or if the government had placed heavy taxes on the profits of energy entrepreneurs. Or if the government had required fuel-conservation standards that limited the size of railroad engines. Or if the government had invested heavily in alternative energy sources that were not cost effective. Those practices, at best, would have wasted resources and acted as a nuisance to businessmen, and, at worst, may have imposed serious barriers to economic progress.

The proper role for government is to recognize private property rights to all the vital resources in the economy and to protect these rights by providing a proper judicial forum whereby individual owners can sue transgressors and polluters for damages. The marketplace itself, however, must determine the proper paths for energy development because entrepreneurs properly compare the relative benefits and costs of each possibility. Government policy managers ignore market prices and tend to lock the economy into a path of their own, choosing blindness to economic reality.

The market never locks the entire economy into the straitjacket of a Central Plan. As the needs and capabilities of people change, prices change. Unlike either socialism or interventionism, the market fosters change by allowing businessmen to disagree with the status quo and embark on plans of their own. Only with this freedom can new and better paths be discovered. Precisely because the market does not send everyone down the same road today, we can solve the energy problems of tomorrow. □



Julian Simon, a maverick who changed our thinking *Save 25%*

A LIFE AGAINST THE GRAIN
The Autobiography of an Unconventional Economist

Julian Simon was the most wonderful man, a kind and caring person, a prodigious worker and original thinker devoted to liberty. He has probably done more than anyone to counter powerful doomsayers. He showed that increased population makes possible greater prosperity, that immigration brings important economic benefits, and that we don't need government to save us from catastrophe—because humanity continues to see progress, as measured by lifespan, environmental quality, and living standards.

In this much-anticipated autobiography, Simon chronicles his humble beginnings in Newark, New Jersey, his painful shyness growing up, his studies at the University of Chicago, his mail order ventures, and other experiences which prepared him to be a scholar with an independent spirit.
ENB379 (hardcover) 372p.

\$39.95
LF PRICE ONLY \$29.95
(plus \$2 shipping & handling)

Order toll-free & save: 1-800-326-0996, Dept. IOL

L'ASSISEZ FAIRE BOOKS

938 Howard Street, #202 • San Francisco, CA 94103

Orders out to you in 24 hours — Satisfaction guaranteed

World's largest source of books on liberty • Check our website: www.laissezfairebooks.com