
In Review

That '70s Show

REVIEWED BY RICHARD L GORDON

Energy Myths And Realities: Bringing Science to the Energy Policy Debate

By Vaclav Smil

213 pages; AEI Press, 2010

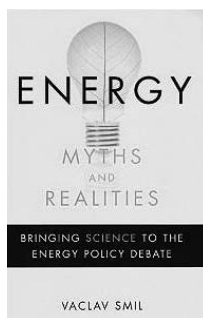
In the new American Enterprise Institute book *Energy Myths and Realities*, veteran energy commentator Vaclav Smil tackles energy mythology. The effort is welcome in several respects. Foremost, the book provides the insights of a careful, experienced observer into the arrant nonsense that is routinely presented in calls for radical changes in energy consumption practices.

The book reminds us how much energy policy drivel simply recycles the discredited ideas of the 1970s. Those ideas, in turn, were largely assembled from the dustbin of much older energy fantasies. In short, much low-lying fruit is easily picked, and Smil does so nicely.

The book represents a welcome return of AEI to the energy battles. In the wake of the oil price rises of the 1970s, AEI, under the leadership of William Mitchell of the University of Michigan, sponsored a series of pamphlets that beautifully skewered the nonsense of that day that is the nonsense of today. (Disclosure: I contributed to two of those pamphlets and wrote a third.)

The one significant flaw of Smil's book is that he shows confusion about energy conservation mandates. He presents ukases about the myths that he has chosen not to treat, but still scatters suggestions for such mandates throughout the book. Thus, AEI's return is not a full-

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blown revival of its original broad-based anti-intervention outlook.

Most of the book is devoted to debunking seven “myths” — or more specifically, envisioned technologies that in reality

are unlikely or impractical, and predicted disasters that in reality are unlikely to occur. Rather arbitrarily given the history, Smil divides the myths into two groups: three from the past and four that are now “in the headlines.” The old-timers are electric cars, nuclear energy, and so-called “soft energy.” The headline subjects are peak oil, carbon dioxide sequestration, liquid fuels from plants, and wind.

The core of the refutation is that these alternative energy concepts literally collapse under the weight of their overstated promise. The resources needed in order for these energy sources to be deployed broadly are so vast and time consuming to assemble that massive adoption would at best be very slow and most likely would not happen at all. Curiously, Smil concentrates on the sheer physical barriers to action. That speed prohibitively increases costs is left tacit.

Myths of the past | The electric car story goes back to the early history of the automobile when internal combustion, steam, and electric drive competed for supremacy. Smil recounts that Henry Ford was working for Detroit Edison when he began thinking about designing a gasoline-powered car. He left Detroit Edison and started his own company in the face

of the Edison company's conviction that an electric car would prove preferable.

Then and now, internal combustion prevails because of the limitations of battery capacity. The further problem that electric cars would require an enormous increase in electricity generation capacity has lessened somewhat because of improved technology, but the infrastructure requirements still are formidable and unlikely to be avoided by relying on consumers to recharge their cars only when normal loads are low.

Smil notes the enormous problem of moving from the low-performance, high-cost electric cars presently available to the production of large numbers of cheaper, better electric cars. Beyond design issues is the gigantic task of constructing the facilities to produce batteries and generate additional electricity. He prefers internal combustion with higher gas mileage.

His nuclear discussion nicely conveys the history of pushing civilian nuclear power, which was initially undertaken mainly to prove that good, peaceful uses of nuclear research existed. This led to a rush of orders for nuclear plants starting in the late 1960s and ending a decade later, followed by cancellation of many of those orders. Smil correctly blames the collapse on nuclear energy's costs proving to be far higher than expected.

He recognizes that the nation's spate of nuclear plant production produced safe facilities that can operate 95 percent of the year. Smil suggests that the combination of safety fears and the long lead times in construction will slow a nuclear revival. Here his neglect of economics is problematic. The evidence, as defective as it is, suggests that nuclear remains uneconomic so long as limits on carbon dioxide emissions are not severe. Nuclear, however, appears a far more attractive alternative to fossil fuels than solar, wind, or biofuels as a response to greenhouse gas controls. Thus, the fate of nuclear depends on how

vigorously such greenhouse gas emission controls are pursued.

The treatment of soft energy nicely skewers that super charlatan of energy nonsense, Amory Lovins. For more than three decades, Lovins has peddled the magic elixir of soft energy — small, nonpolluting energy sources that can be consumed in homes and business. He unabashedly asserts the practicality of these energy sources in the face of continued abject failure. In short, he is the quintessence of the poverty of standard energy discourse. Smil is content to skewer the substance of Lovins' vision. The main exception is arguing, correctly, that Lovins misunderstood the Robert Frost poem that Lovins uses to advocate a soft "path."

Headline myths | In treating peak oil, Smil starts by depicting efforts in the 1990s to curtail oil use out of concern for future scarcity, but then he turns to the long history of forecasts of oil depletion. He points out the central defect of such claims: the invalid pretense of knowledge of ultimately recoverable oil reserves. His neglect of economics is problematic in his handling of the unrealism of claims that oil output will suddenly nearly vanish. Economics clearly indicates that such sharp decreases will not occur because of the profitability of hoarding. Such hoarding has not occurred since 1973. Smil further weakens his case by calling for consumption management instead of noting that higher prices will screen out the less valuable uses.

In contrast, his technological approach is sufficient to skewer assorted hare-brained schemes such as underground sequestration of carbon emissions in order to prevent or offset greenhouse gas emissions, as well as unlikely but modish energy sources such as fuel from plants and wind power. A discussion of the realities of those options makes clear that they cannot be broadly, rapidly, and economically adopted. One chapter nicely contrasts the wind-power pipedreams of T. Boone Pickens and Al Gore with the lessons of past energy transitions.

In the wind and transition chapters, his treatment of U.S. electricity interconnec-

tion is jarring. He correctly conveys that the winds are not near existing transmission lines. He implies that some sort of stupidity must be to blame for this, when in fact it is the result of prior absence of economic incentives to extend lines. In short, he succumbs to the cost-ignoring reasoning that the book is implicitly criticizing.

Book notes | I have two complaints about the book at the mechanical level. First, Smil hews largely, but not completely, to metric measures, including the use of joules (roughly BTUs, with the decimals shifted) rather than calories (oil-equivalent tons, again with decimals shifted). Second, the referencing is problematic.

He relies on endnotes that are predominantly brief source citations. Even in a book for general audiences, name-date citations in the text would be preferable. The literature inclusion is idiosyncratic. The sole reference to economic analysis is a *Regulation* article by M.A. Adelman ("The Real Oil Problem," Spring 2004). Even the citations of those being criticized is spotty.

Thus, we have a readable, sensible survey of why a massive energy transformation is problematic. The book does a good job of relaying the academic literature on new energy technologies. It is a healthy corrective to the special pleading that has marred the U.S. discussion of energy. **R**

More Efficient Justice?

REVIEWED BY GEORGE LEEF

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The Pursuit of Justice: Law and Economics of Legal Institutions

Edited by Edward J. Lopez

320 pages; Independent Institute and Palgrave Macmillan, 2010

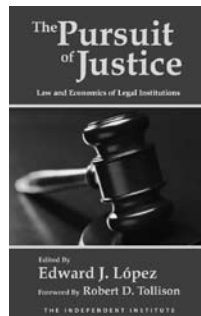
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Nearly everyone agrees that one of the "public goods" that government must supply is a system of justice. Even the most ardent minimal-state libertarians generally agree that the administration of justice is a core function of government. Perhaps because of that agreement, little critical analysis has been given to the U.S. justice system. The kinds of efficiency questions that are routinely asked of other (and more controversial) governmental activities are seldom asked with respect to the justice system.

The Pursuit of Justice, edited by San Jose State economics professor Edward J. Lopez, goes a long way toward rectifying that omission. The book consists of his introduction and 11 original essays that will undoubtedly open many eyes to the serious problems that plague our efforts at

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ensuring just treatment for all citizens. As Clemson economist Robert Tollison points out in his foreword, the book gives us a "public choice" view of our justice system — a view that concentrates on the

incentives of the individuals and institutions that run it, for example the American Bar Association. Is the ABA dedicated solely to seeing that justice is maximized, or will it sacrifice some justice to achieve maximum income for its members? (I will discuss that question in some detail later in this review, but the reader can probably guess the answer.)

Government and punishment | Unfortunately, there is not space enough here to consider each of the essays in full, although all are very worthy efforts. Instead, I will highlight a few of my favorites.

George Mason University Ph.D. student Nicholas Curott and Fayetteville State University economics professor Edward Stringham lead off the book with an essay