

Book Reviews

Social and Technological Choices

Energy and American Values. IAN BARBOUR, HARVEY BROOKS, SANFORD LAKOFF, and JOHN OPIE. Praeger, New York, 1982. xvi, 240 pp. Cloth, \$26.95; paper, \$12.95.

This is not an ideal moment to publish a book on energy policy. A glut of petroleum on world markets, falling oil and gasoline prices, the Reagan administration's disdain for energy planning, the public's apparent boredom with the "moral equivalent of war"—all have combined to undermine interest in this once fashionable topic. No doubt present apathy about the matter will be short-lived. When energy prices begin skyrocketing again, we may rue the day when careful thinking about energy went out of style. In the meantime the lively, useful analyses offered in *Energy and American Values* could well be overlooked.

The study is a collaborative project of four scholars gathered at the National Humanities Center in North Carolina: Ian Barbour, a physicist and professor of religion and philosophy; Harvey Brooks, a professor of technology and public policy; Sanford Lakoff, a political scientist; and John Opie, a historian of technology and the environment. Though each of the participants wrote drafts of the chapters in his area of expertise, the book avoids problems of scatter that often afflict collections by several authors. Beginning from different standpoints on energy and social values, the writers worked to achieve consensus and offer their findings as a unified whole.

Almost all of the energy studies written during the past decade set out to weigh important alternatives—oil, coal, solar, nuclear, and so on—from the exclusive (perhaps obsessive) standpoint of economic and engineering efficiency. The implicit notion seemed to be that people who disagree on everything else might nevertheless endorse a good recipe for efficient energy. An important strength of *Energy and American Values* is to transcend such narrowness to examine a very wide range of human needs, ideals, commitments, and conflicts involved in energy choices.

The first two chapters present a colorful overview of patterns of energy use in

the nation's history. "As late as 1850 wood supplied more than 90 percent of the fuel used for energy in America, mostly for heating" (p. 5). Through a rapid process of development, the increasing use of coal, petroleum, and hydroelectric power helped transform an agrarian society into a thoroughly industrial one. In the popular imagination, material "abundance" fueled by expanding energy resources came to be seen as a boon synonymous with democracy itself.

During the past decade, however, Americans' traditional optimism about energy and the common good has experienced a series of shocks. Oil shortages, environmental pollution, the accident at Three Mile Island, and other such problems have sparked a series of heated controversies in social philosophy and public policy. The book examines these issues in detail, drawing upon a wealth of theoretical and practical sources. What ought to be the role of government as compared to business firms and consumers in making choices about energy? When risks are involved in particular forms of energy production, how can we make equitable judgments about the distribution of those risks? Should our society reject certain kinds of energy systems as threats to individual freedom while embracing other systems on the grounds that they realize the democratic promise? As they approach questions of this kind, the authors acknowledge the challenge posed in the work of Amory Lovins. Renewing the split between Jeffersonian and Hamiltonian ideas of American life, Lovins has sharpened the political and cultural dimensions of our energy problems.

The volume's primary contribution is to clarify matters seriously debated during the past decade, giving the most important viewpoints their due. In its even-handed approach to such issues as conservation, nuclear proliferation, renewable versus nonrenewable resources, and the obligations of this generation to future ones, the book would make an excellent college textbook. Though the writers avoid imposing their viewpoint on the reader, their arguments convey a number of strong opinions,

ones that are, to use the book's own metaphor, distinctly Hamiltonian. Thus, several chapters diligently investigate a host of dangers and social problems that might arise were society to adopt energy decentralization and the "soft energy" path. For example, the writers anticipate "an erosion of centralized energy networks as decentralized sources are phased in, which will degrade the energy services available to the poor and to central city residents and increase costs" (p. 133). The underlying message is that, though Lovins and other critics have raised some interesting questions, their proposals are neither practicable nor politically sound.

At the same time, the book seeks to bolster confidence in nuclear power, economic growth, and the ability of scientific and technical progress to solve social problems. Environmentalists will be interested to learn that "from a strictly ecological viewpoint nuclear power is almost certainly the most benign of all the main available or prospective energy supply technologies" (p. 138). Those worried about risks to health and safety from coal and nuclear power are asked to remember the great improvements in material welfare that stem from the expansion of our technological civilization. Though the writers favor steps toward conservation and an increasing use of sustainable resources, they see no particular need for social reform. What is important now is to develop a "mix of supply technologies," to "diversify risks" and "keep our options open" (p. 113). Toward this end, Barbour, Brooks, Lakoff, and Opie advise, existing institutions in our society, public and private, will serve us well.

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An Arena of Applied Research

Agricultural Research Policy. VERNON W. RUTTAN. University of Minnesota Press, Minneapolis, 1982. xiv, 370 pp. Cloth, \$32.50; paper, \$13.95.

The subject this volume promises to address is a complex one of major importance to both rich and poor countries. The book, moreover, promises to focus on its institutional dimensions, a task not frequently attempted by economists, and it is written by an individual whose record as scholar, researcher, research administrator, and adviser to govern-