

reviews

AN author with the technical knowledge and presentational skill of John Maddox needs no introduction or recommendation to readers in the field of energy. His experience as science correspondent of the *Guardian*, Editor of *Nature* (1966–73), and his frequent contributions to radio and television on topical scientific subjects fit him well to project himself 'beyond the energy crisis'. Those who have read his earlier work, particularly *The Doomsday Syndrome*, will want to get hold of this new one*.

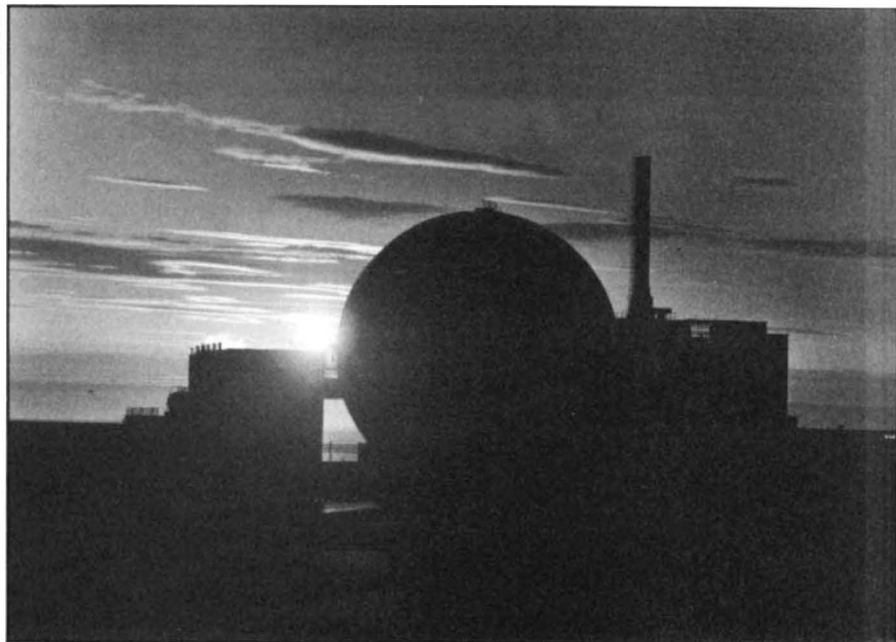
There are no visual illustrations or tables in the book but the words are well chosen and the sentences crisp and vivid. He prepares a launching pad for the main verbal discussion of energy market forces, success by the OPEC oil cartel and the problems of heavily oil-dependent customers by considering the "history" of energy supply and use.

In describing the patterns of energy consumption Maddox ensures that the reader need not be technical to enjoy and understand the presentation. He explains the units for energy and power clearly for the layman and is constantly bringing in something of interest for the specialist—for example, that the Second Law of Thermodynamics was the test advocated by C. P. Snow for the literacy of non-scientists. Both would of course know now about the heavy dependence of many countries on imported oil, but perhaps not the detail of it for specific countries; nor might they have fully appreciated the financial problems arising for many industrial and developing countries alike whose development processes are postponed when oil supply is restricted.

Maddox the realist comes through as he assesses the coal, oil, gas and nuclear energy supply prospects (the new lodes to work) and weighs their advantages and disadvantages. Why not have the best of both worlds and rely instead on new sources of energy free from hazards—solar, geothermal, thermonuclear? The short answer—serious doubts about the cost and the feasibility of meeting growing demand for energy by these means. He concludes that the contribution they will make to future energy supplies will be negligible for several decades and may always be small.

When discussing the policies fol-

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Rising to the occasion

lowed by the energy hungry, advanced or industrial countries Maddox asks why their governments should have been so naive in failing to follow the precepts of elementary economic textbooks, and concludes that they simply did not look far enough ahead to protect their interests against an oil supply cartel or shortage. He criticises their foolishness in not having seen the signs, for example, from events in Iran during the Moussadegh period 1952–54, but he is a bit unfair to say that the British decision to initiate the 1955 nuclear power programme because of the fear for the security of oil supplies was wrong. With hindsight it should have been doubled again by 1960 while sticking with the Magnox system, with which design and construction experience had been gained; and again in 1965 with only one Advanced Gas-cooled Reactor Power Station innovation being allowed as a lead into the commercial field. The early Arab Israeli wars were a sufficient pointer to the necessary British energy strategy.

Variation in tempo is a feature of the book, especially as the international monetary problems of today are left behind. The cost of and benefit from insulating a house in Britain enters the discussion. In suggesting that it could be much better to import oil, even at OPEC prices, than to improve the efficiency of energy consumption

Maddox fails to put a value on independence from a cartel which might act again for purely political reasons.

Looking beyond the energy crisis to the coming decades the realist Maddox again emerges, seeing it as unthinkable that Britain would consider the unemployment that a sharp decrease in energy consumption would cause more acceptable than the small risks of reactor accidents; just as developing countries would not settle for slower economic growth or reduced agricultural output for the sake of keeping nuclear power at bay.

Clearly, there is an interesting way ahead, with the possibility that the oil consumers might reduce their oil consumption by 10 to 15% to bring the divergent interests of OPEC members to the surface and/or diversify their energy resource investments, or apply import duties and quotas as a means for encouraging a more equitable, lower price to be set for oil. Clearly, the energy crisis is not over; how can it be when our industrial revolution of more than a century ago is still spreading round the world with a voracious energy appetite. The oil crisis is today, the uranium crisis may be tomorrow; both are seen by Maddox as "merely occasions for the exercise of that blend of courage and realism on which industrial society is founded."

G. R. Bainbridge

* *Beyond the Energy Crisis*. By John Maddox. Pp. 208. (Hutchinson: London, 1975.) £3.95.