



ENERGY

RESOURCES, UTILISATION, AND POLICIES

by Sir John Horlock

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The purpose of this volume is to describe succinctly and simply the forms of energy, energy resources and utilisation. It gathers together information found in larger more complex books and less accessible reports and discussion papers. It is authoritative on methods which will reduce the amount of carbon dioxide discharged to atmosphere, leading to global warming. This book discusses the nature of energy and the “bound” chemical energy available to us in fossil fuel reserves and in uranium. The conservation of energy and the conversion of chemical energy into useful forms, in power plants for work and in heating devices for useful heat, are described. The implications for power plant design of the problem of CO₂ production are explored. The attractions

of using renewable resources to produce work and heat are described. A discussion of energy policies, national, European, and worldwide concludes the book.

Sir John Horlock is an authority on turbomachinery and power plants. His books on axial compressors, axial turbines, and actuator disk theory are widely used in many countries around the world, and his more recent books, on combined heat and power, combined power plants and advanced gas cycles (all published by Krieger), are frequently referenced. He was Harrison Professor of Mechanical Engineering at Liverpool University 1958-1967 and professor of engineering at Cambridge (1967-1974) where he founded the Whittle Laboratory. In 1974 Sir John became vice-chancellor [president] of Salford University. He subsequently became vice-chancellor of the UK's Open University, from 1981-1990. He has since been treasurer and vice president of the Royal Society.

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