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Book Review

Annual Review of Energy, Volume Two
Edited by J. M. Hollander, M. K. Simmons and D. O. Wood, Annual Reviews Inc., Palo Alto, 1977, 522 pp., $17.50.

The Annual Review of Energy, dedicated to a continuing review and discussion of the significant issues related to energy, published by Annual Reviews Inc., is now in its second volume.

The eighteen papers written by specialists from different countries are of great importance not only for people involved in energy research but to all researchers from any field. The volume contains much useful information regarding the production, resources and consumption of energy in different countries.

The second volume of the review is divided into two different parts, the first containing an analysis of the issues that define the international and global aspects of energy and the second dealing with regional perspectives on energy.

The first part of the volume, containing ten papers, deals with five main subjects related to the world energy system and resources, global economic and political issues, energy and technology, environment and safety, and energy conservation.

The first paper of the review deals mainly with economic development and the demand for energy, the relation between the process of urbanization and the evolution of final energy, and the structure of the global energy system.

International energy trade and prospects in the long run for oil, natural gas, coal and uranium is the next subject properly discussed in the review.

In the paper related to the world energy resources a general overview of coal, oil, gas, nuclear, geothermal and solar energy resources is given.

The problem related to the import of energy by the industrialized countries and the impact of energy price and supply on their economies is authoritatively discussed in another chapter of the review.

The role of multinational oil companies in world energy trade, how they serve as a market balance and buffer between exporting and importing countries is the subject of the next paper.

One of the chapters provides an introduction to the science of marketing, summarizing also the important research groups and organisations presently involved in the development and application of energy models.

Energy consumption for food production is the subject of another paper showing that the exponential increase in the human population is directly related with the use of fossil energy.

In the paper dealing with the impact of production and use of energy on the global climate emphasis is on possible causes of climatic changes and possible future climatic changes caused by increased energy production.

The important problem of international nuclear safeguards and the need for energy conservation are the subjects of the last two papers of the first part of the review.

The second part of the volume deals with the perspective on energy of the main producing and consuming nations namely, Central American Countries, People's Republic of China, European Community Countries, India, Japan, Organization of the Arab Petroleum Exporting Countries, Sweden, and Union of Soviet Socialist Republics, except the U.S.A. which was discussed in the first volume of the review.

As can be noticed from all the articles published in part two, the main principles of the energy policy of almost all the countries discussed in this volume of the Annual Review are: the total demand for energy to be reduced as far as possible; to increase production of energy from indigenous sources; to find new indigenous energy sources; the dependence on imported sources of energy to be reduced as much as possible; to expand hydroelectric and nuclear capacity substantially.

The Review ends with useful conversion tables providing multiplicative factors for converting from one energy or power unit to another.

There is no doubt that any reader interested in energy conversion and consumption will find valuable information in this book.

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