


Renewable Energy: Sources for Fuels and Electricity


Renewable Energy: Sources for Fuels and Electricity was commissioned by the United Nations in 1990 with the aim of providing significant input to the United Nations Conference on Environment and Development (UNCED) held in Rio in June 1992. A basic premise of the book is that the oft stated conference goal of sustainable development requires a structural change in the world’s energy system. This book outlines a plan for such change.

Renewable Energy is not easy reading at over 1100 pages. Rather, it should be considered a reference book for renewable technologies. Fortunately, the first chapter, written by the editors, four experts in the renewable energy field, outlines the basic plan for a renewable energy future. This analysis relies on the detailed technical information contained in the subsequent 22 chapters, which cover the range of renewable energy technologies, including wind, hydro, biomass gasifiers, and hydrogen to chapters discussing implementation strategies, such as moving utilities toward renewables. The individual chapters do vary in quality, but this is expected in any compilation volume, and it is unlikely that any reader will want to read every chapter.

The analysis presented in this book indicates the magnitude of changes by 25% of their 1985 levels. Note that the Intergovernmental Panel on Climate Change (completed at the Rio Summit), will require reducing emissions by at least 60%. To create this scenario, the world is divided into regions with custom regional plans for achieving a target. This allows each region to rely on those best match its need and given resources. For the USA, the plan calls for an immediate move away from coal and oil resources toward biomass, wind, and solar resources. This is contrasted with China, which is much of its near term development on the use of resources.

Many will undoubtedly think the renewable energy scenario presented is fairly unrealistic. The authors themselves probably agree with this criticism and provide amendment for the changes that would have to occur for such a plan, from technological and economic breakthroughs and the key technologies, to the active participation of governments in crafting policies that foster this renewal.

Considering the size and comprehensiveness covered, this book is a bargain at just $45.00 in hardcover, making it a must buy for those interested in energy resources, from fields ranging from engineering, economics, and public policy. This low price is possible because Island Press, a nonprofit publisher that receives foundation support to bring books dealing with the use of our natural resources to the market.—THOMAS E. DRENCHEN, Department of Agricultural, Resource, and Environmental Economics, Cornell University, Ithaca, NY 14853

Farm Land Erosion: In Temperate Plains, Environment and Hills


Land erosion has, until recently, been a more or less ignored facet in many European countries. However, changes in crop production have resulted in larger fields, larger areas devoted to single crop production, and, as a consequence, larger areas exposed to serious productivity loss through soil erosion. In recognition of these changes, 47 papers presented at the International Symposium on Farm Land Erosion held in Chasseneuil, France, 25-29 May 1992, are published in this book. The book is politically sensitive and includes contributions from European countries, Canada, Taiwan, Brazil, Indonesia, and others.

Although the conference was held in France, the papers are written in French; the rest are given in English. I retain a summary written in the alternative language. The index indicates most editing efforts were apparently reserved for form, but this is expected in any compilation volume.

Wicherak’s introductory editorial gives a complete description of the task ahead for those who wish to seriously confront the risks of climate change.