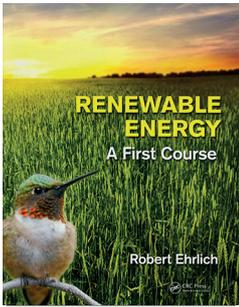


RECENSIONI



R. EHRlich

RENEWABLE ENERGY
A FIRST COURSE

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The panorama of publications on renewable energy is enriched by a new text: "Renewable Energy, A First Course", written by Robert Ehrlich and published by CRC Press. The book is a simple but wide introduction to the world of the energy in general and of the renewable ones in particular, addressed to the beginners of this fascinating and complex field. One might think that there are already many introductory volumes on the subject and that a new book is not really needed, but this statement does not apply, in my opinion, to Ehrlich's book. If we just look at the topics discussed by the author, they are, almost inevitably, the same of many other publications: what is energy, what forms of traditional and renewable energy are available, what is a sustainable development, and other critical points of the energy problem in general. But what distinguishes the volume of Ehrlich from others is the constant stimulus to ask the why of things, to ask questions, to have a critical approach, not trivially notional, to the concepts and issues proposed to the reader. A reader who is not an expert or graduate in scientific fields such as engineering, physics or chemistry, but a student at the last year high school or early years college, having the first approach to the vast and complicated system production and use of the renewable energies. A system that requires not only scientific knowledge of various kinds, but also economic, political and social. The first chapter of the book of Ehrlich is based only

on questions! Scrolling through the index we see that all the paragraphs of chapter 1 have a question mark. Also, at the end of each chapter several problems are proposed, not difficult, but requiring the reader to concretely reflect on what he/she just read. The book then develops a simple and logical sequence of the various arguments, starting from fossil fuels in chapter 2 and nuclear power in chapters 3 and 4, treating the basic science (chapter 3) and the technology (chapter 4) separately. Chapters from 5 to 8 treat biofuels, geothermal energy, wind power and hydropower respectively, dealing with those forms of renewable energies which are not strictly classified as solar energy. This very important type of renewable energy source is introduced in chapter 9 along with basic principles on solar irradiation and greenhouse effect. Thus, chapter 10 focuses on solar thermal basic and technology, while chapter 11 is fully dedicated to photovoltaics. The 3 final chapters of the book bring the reader to the other critical problems: energy conservation and efficiency (chapter 12), storage and transmission (chapter 13) and, last but not least, legislation, policy and public opinion regarding renewable energies.

I found this book rigorous, simple and stimulating, in summary a very good first approach to the field of the renewable energy.

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