

1. Record Nr.	UNINA9910583487503321
Autore	Sørensen Bent <1941->
Titolo	Renewable energy : physics, engineering, environmental impacts, economics and planning // Bent Srensen
Pubbl/distr/stampa	London ; ; San Diego, Calif., : Academic P., 2017 London : , : Academic Press, , [2017] 2017
ISBN	0-12-802390-2 0-12-804567-1
Edizione	[5th ed.]
Descrizione fisica	1 online resource (xxix, 1026 pages) : illustrations (some color), maps (some color)
Collana	Gale eBooks
Disciplina	333.794
Soggetti	Renewable energy sources
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1. Renewable energy resources -- Part II. Renewable energy technologies -- Part III. Renewable energy impacts: planning for sustainability and climate change aversion.
Sommario/riassunto	Bent Sørensen's Renewable Energy: Physics, Engineering, Environmental Impacts, Economics and Planning, fifth edition, continues the tradition by providing a thorough and current overview of the entire renewable energy sphere. Since its first edition, this standard reference source helped put renewable energy on the map of scientific agendas. Several renewable energy solutions no longer form just a marginal addition to energy supply, but have become major players, with the promise to become the backbone of an energy system suitable for life in the sustainability lane. This volume is a problem-solving tool for engineers, researchers, students, consultants, and planners currently working in the field, as well as a detailed map of the renewables universe for those looking to expand into new technological specialties, offering the most comprehensive coverage of the subject available. The book has been structured around three parts in order to assist readers in focusing on the issues that impact them the most for a given project or question. PART I covers the basic scientific principles behind all major renewable energy resources, such as solar, wind, and biomass. PART II provides

in-depth information about how these raw renewable sources can actually be converted into useful forms, transmitted into the grid, and stored for future utilization. Finally, PART III undertakes the aspects of energy planning, environmental impacts, and socio-economic issues on regional and global levels. In this new edition, Sørensen presents his audience with updated data about renewables market penetration, current insights on climate change, the most recent available technology for renewable energy conversion, transmission and storage, and revised planning scenarios and the future outlook.

---