Record Nr. UNINA9910847072803321 Autore Dincer Ibrahim Titolo Renewable Energy Options for Power Generation and Desalination [[electronic resource] /] / by Ibrahim Dincer, Mert Temiz Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2024 **ISBN** 3-031-53437-9 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (375 pages) Altri autori (Persone) **TemizMert** Disciplina 621.042 Soggetti Renewable energy sources Water Hydrology Electric power-plants Wind power Solar energy Renewable Energy **Power Stations** Wind Energy Solar Thermal Energy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1: Fundamentals -- Chapter 2: Energy, Environment and Nota di contenuto Sustainable development -- Chapter 3: Renewable Energy Sources --Chapter 4: Thermal energy Generation -- Chapter 5: Power generation -- Chapter 6: Desalination Methods -- Chapter 7: Traditional Energy Systems -- Chapter 8: Integrated Energy Systems -- Chapter 9: Future Directions. Sommario/riassunto This book examines simultaneous power generation and desalination driven by renewable energy systems. It covers all renewables, including solar, wind, geothermal, hydro, ocean and biomass as well as waste sources. This book also includes thermodynamic fundamentals, concepts, and system design, analysis and assessment studies, along with illustrative examples and case studies, for sustainable applications. It further provides an ample opportunity to learn more

about cutting-edge technologies and newly developed systems for power generation and desalination. Covers the most up-to-date systems, technologies and applications; Augments research presented with case studies, illustrate examples and problems; Includes utilization and discussion of exergy-based analysis and assessment methods.