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Soggetti	Renewable energy sources Electric power production Environmental engineering Biotechnology Bioremediation Energy storage Energy policy Energy and state Renewable Energy Electrical Power Engineering Mechanical Power Engineering Environmental Engineering/Biotechnology Mechanical and Thermal Energy Storage Energy Policy, Economics and Management
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Nota di contenuto	Introduction: Basic Definitions -- Energy Sources -- Mechanical Energy and Electrical Energy -- Internal Energy and Enthalpy -- Energy Balances -- Energy Balances -- Energy Production -- Energy Conversion -- Energy Storage -- Energy Coupling -- Sustainability in Energy Technologies -- Renewable Energy -- Energy Management and Economics.
Sommario/riassunto	This revised and updated 3rd edition of the book allows readers to develop a practical understanding of the major aspects of energy. It

also includes two new chapters addressing renewable energy, and energy management and economics. The book begins by introducing basic definitions, and then moves on to discuss the primary and secondary energy types, internal energy and enthalpy, and energy balance, heat of reaction and heat transfer. Each chapter features fully solved example problems and practice problems to support learning and the application of the topics discussed, including: energy production and conversion; energy conservation; energy storage; energy coupling; sustainability in energy systems; renewable energy; and energy management and economics. Written for students across a range of engineering and science disciplines, the book provides a comprehensive study guide. It is particularly suitable for courses in energy technology, sustainable energy technologies and energy conversion & management, and offers an ideal reference text for students, engineers, energy researchers and industry professionals. A updated solutions manual to this textbook's problems is available to course instructors on request from the author and online on www.springer.com.