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Autore	Petrecca Giovanni
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Power and Energy Measurement Units and Techniques -- World Energy Demand -- Utility Plants and Renewable Sources -- Electrical Substations -- Boiler Plants -- Electric Distribution Systems From Facilities to End Users -- Thermal Fluid Distribution Systems -- Cogeneration Plants -- Facilities–Pumps and Fans -- Facilities–Gas Compressors -- Facilities–Cooling Systems -- Facilities–HVAC Systems -- Facilities–Lighting.-Heat Exchange and Recovery in Process and Facilities -- Waste and Energy Recovery.- Energy Management Strategies for Control and Planning -- Education in Energy Conversion and Management -- Economic Analysis of Energy-Saving Investments -- Conclusions.
Sommario/riassunto	This book provides an overall view of energy conversion and management in industry and in buildings by following the streams of energy from the site boundaries to the end users. Written for an audience of both practitioners and faculty/students, Energy Conversion and Management: Principles and Applications presents general principles of energy conversion and energy sources, both traditional and renewable, in a broad range of facilities such as electrical substations, boiler plants, heat and power plants, electrical networks, thermal fluid distributions lines and insulations, pumps and fans, air

compressor systems, cooling plants, HVAC, lighting, and heat recovery plants. The book also examines principles of energy auditing and accounting, the correlation between energy and environment, and includes detail on the economic analysis of energy saving investment and education in the field of energy. This book also: · Explores a broad array of power generation and distribution facilities around the concept of energy conversion, from traditional and renewable sources, correlating many apparently disparate topics · Elucidates fundamental formulas and information-rich figures to help readers in solving any practical energy conversion problems · Emphasizes a holistic perspective on energy conversion and management with a vision of each application as a system beyond its individual elements · Includes a set of Key Performance Index using metrics applicable to energy systems brought into operation over the past 30 years · Gives a set of basic formulas and data that are the essentials of energy conversion and that everybody involved in these fields should perfectly know · Adopts a writing style accessible to technicians and managers in the field of energy conversion while maintaining sufficient rigor and coverage for engineers .