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Energy Systems Transition: Digitalization, Decarbonization, Decentralization, and Democratization provides a thorough multidisciplinary overview of the operation of modern green energy systems and examines the role of 4D energy transition in global decarbonization mitigation efforts for meeting long-term climate goals. Contributions present practical aspects and approaches with evidence from applications to real-world energy systems, offering in-depth technical discussions, case studies, and examples to help readers understand the methods, current challenges, and future directions. A hands-on reference to energy distribution systems, it is suitable for researchers and industry practitioners from different branches of engineering, energy, data science, economics, and operation research. Presents practical aspects and approaches to real-world energy systems Looks at state-of-the-art technology developments Offers case studies emphasizing worldwide application.

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