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Soggetti	Operations research Political planning Energy policy Energy and state Operations Research and Decision Theory Public Policy Energy Policy, Economics and Management
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Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Environmental Policies in the Power Sector -- Chapter 3. Features of Power Sectors -- Chapter 4. Analysis of Power System Operations with Non-Dominant Firms -- Chapter 5. Analysis of Power System Operations with a Dominant Firm and an Oligopolistic Industry -- Chapter 6. Investment in New Power Plants under Environmental Policies -- Chapter 7. Sustainable Transmission Investment -- Chapter 8. First-Best Policy and Decentralized Mechanisms.
Sommario/riassunto	This book covers game-theoretic approaches to analyzing policies for environmental regulation in the power sector. The scope includes operational and investment decisions in imperfectly competitive electricity markets as well as transmission planning and policy design. Given this context, this book synthesizes equilibrium and bi-level modeling to address challenging research questions such as: • How are

power-plant operations affected by carbon policy, such as cap-and-trade (C&T) systems? • How does market power in electricity generation affect market outcomes and CO₂ emissions? • How does a strategic firm with first-mover advantage manipulate both electricity and C&T permit prices? • How does a strategic firm with first-mover advantage invest in new generation capacity under a C&T system? • How does sustainable transmission planning adapt to an imperfectly competitive power sector? • How should a renewable portfolio standard (RPS) target be revised in an imperfectly competitive power sector? This book includes plenty of illustrative examples to facilitate the concepts' comprehension. It is intended to make equilibrium and bi-level models adapted for policy assessment accessible to graduate students, academic researchers, industry practitioners, and policy analysts.
