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Titolo	The Physics of Stocks and Flows of Energy Systems : Applications in Energy Policy / / by Hassan Qudrat-Ullah
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Descrizione fisica	1 online resource (88 p.)
Collana	Understanding Complex Systems, , 2191-5326
Disciplina	333.79
Soggetti	Energy policy Sociophysics Econophysics Energy Policy, Economics and Management Data-driven Science, Modeling and Theory Building
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Energy Policy Making: A Complex, Dynamic Task -- Modeling and Simulation in Service of Energy Policy: The Challenges -- Meeting the Challenge: Energy Policy Modeling with System Dynamics -- Understanding the Physics of Stocks and Flows -- On the Modeling of Key Structural Process of Energy Systems -- On the Modeling of Key Structural Process of Energy Systems -- Finale.
Sommario/riassunto	Using a system dynamics approach, this book illustrates the physics of fundamental accumulation processes (stocks and flows) across the demand and supply sectors of energy systems. Examples of system dynamics simulation models are presented where these accumulation processes are driving the behavior of the system. Based on these modeling efforts, two cases (the socio-economic and environmental implications of the energy policy of Pakistan and the dynamics of green power in Ontario, Canada) are analyzed and discussed. By studying the dynamics of the fundamental structures of an energy system, the reader gains an enhanced understanding of the stocks and flows of complex systems as well as their role in energy policy. This book is of use to managers and practitioners, teachers, researchers, and students

of design and assessment of policy making for complex, dynamic  
energy systems.

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