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Soggetti	Power resources Energy policy Nuclear engineering International relations Environmental economics Natural Resource and Energy Economics Energy Policy, Economics and Management Nuclear Energy International Relations Environmental Economics
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Nota di contenuto	Introduction -- Nuclear Physics and Reactor Technologies -- Nuclear Power: A System Good Analysis -- The System Good Nuclear Fusion – Organizational Approaches and Two Case Studies on Magnetic Confinement Fusion -- Nuclear Power and Geopolitical Conflicts – An Overview and a Classification of Nuclear Countries World-Wide -- Nuclear Power Plays: Complexities of Armament, Disarmament, and (Non-)Proliferation of Nuclear Weapons -- Game Theoretical Considerations of Nuclear Armament -- Assessing Market Concentrations in the Nuclear Fuel Supply Chain -- Nuclear Diplomacy: Analyzing Russian Foreign New Build Projects -- Economics of Nuclear Fission Power Plants – A Levelized Costs of Electricity Approach -- The First Nuclear Century: A Long-term Analysis of Nuclear Reactor

Development in the US (1939-2024) -- Uncovering Hidden Nuclear Subsidies and Other Forms of State Support -- The Economic Value of Plutonium -- Partitioning and Transmutation – Technical Overview and Discussion of Critical Issues.

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Sommario/riassunto

This open access book offers a comprehensive overview of nuclear technologies and the nuclear supply chain. It explores nuclear energy as a critical resource through economic, geopolitical, and social lenses, assessing its potential role in combating climate change. The book also addresses key challenges, including nuclear waste management, decommissioning, and back-end operations. By examining both historical hurdles and future policy and industry obstacles, it provides valuable insights for policymakers, researchers, and industry professionals navigating the evolving landscape of nuclear energy.

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