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Nota di contenuto	1. Sustainable technologies -- 2. Capacity -- 3. Efficiency -- 4. Constraints -- 5. Dependability -- 6. Cost structure -- 7. Break-even analysis -- 8. Basic financial analysis of technology -- 9. Valuation of commercial projects -- 10. Accounting for environmental benefits -- Appendices -- About the author -- Notes -- References -- Index.
Sommario/riassunto	This book leads the reader into a professional feasibility analysis for a renewable energy or energy efficiency project. The analysis begins with an understanding of the basic engineering description of technology in terms of capacity, efficiency, constraints, and dependability. It continues in modeling the cash flow of a project, which is affected by the installed cost, the revenues or expenses avoided by using the technology, the operating expenses of the technology, available tax credits and rebates, and laws regarding depreciation and income tax. The feasibility study is completed by discounted cash flow analysis, using an appropriate discount rate and a proper accounting for inflation, to evaluate the financial viability of the project. The elements of this analysis are illustrated using numerous examples of solar, wind, and hydroelectric power, biogas digestion, energy storage, biofuels, and energy-efficient appliances and buildings.