

1. Record Nr.	UNINA9910788178103321
Autore	Herriott Scott R.
Titolo	Feasibility analysis for sustainable technologies : an engineering-economic perspective // Scott R. Herriott
Pubbl/distr/stampa	New York, New York (222 East 46th Street, New York, NY 10017) : , : Business Expert Press, , 2015
ISBN	1-63157-028-5
Edizione	[First edition.]
Descrizione fisica	1 online resource (318 p.)
Collana	Environmental and social sustainability for business advantage collection, , 2327-3348
Disciplina	628
Soggetti	Sustainable development - Management Feasibility studies
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 (pages 285-293) and index.
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.