

1. Record Nr.	UNINA9910367569203321
Autore	Antunes Carlos Henggeler
Titolo	Optimisation Models and Methods in Energy Systems / Carlos Henggeler Antunes
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2019 Basel, Switzerland : , : MDPI, , 2019
ISBN	9783039211197 3039211196
Descrizione fisica	1 electronic resource (192 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Challenging problems arise in all segments of energy industries-generation, transmission, distribution and consumption. Optimization models and methods play a key role in offering decision/policy makers better information to assist them in making sounder decisions at different levels, ranging from operational to strategic planning. This book comprises nine papers addressing problems such as the selection of offshore wind farm locations, a model for the analysis of regional energy system management and emission reduction potential, the management of building microgrid networks in islanded mode considering adjustable power and component outages, the portfolio optimization of power generation assets, a graph theoretic approach to optimal firefighting in oil terminals, a university building test case for occupancy-based building automation, the prospects of a meshed electrical distribution system featuring large-scale variable renewable power, a generation expansion planning model for an integrated energy system considering feasible operation region and the generation efficiency of combined heat and power, and the consideration of wind power generation in Brazil's long-term energy planning model.</p>