Record Nr. UNINA9910808243303321 Autore Martinez Daniel M. <1976-> Titolo Valuing energy for global needs: a systems approach / / Daniel M. Martinez and Ben W. Ebenhack New York, NY:,: Momentum Press Engineering,, 2016 Pubbl/distr/stampa **ISBN** 1-60650-265-4 1 online resource (xii, 207 pages): illustrations Descrizione fisica Collana Environmental engineering collection Disciplina 333.79 Soggetti Energy conservation Power resources Sustainable development Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. 1. Energy's role and value -- 2. The value of energy resources -- 3. Nota di contenuto Value added and lost in energy services -- 4. Economic energy value --5. Resources and environmental costs -- 6. Social impacts -- 7. Framework for a new value metric -- Index. Sommario/riassunto This book serves as a starting point for energy engineers, sustainability managers, political leaders, and properly informed citizens to explore the net value added by energy systems. Since some resources deplete and some new technologies will require time to emerge, the book takes the reader through the range of costs and benefits, considering the contexts of geography, human needs, and of time. The book takes a particularly close look at the underdeveloped world that currently lacks access to modern energy, and which is crippled by its dependence on dirty, inefficient biomass fuels to meet bare subsistence needs. The authors provide evidence for the reality that energy provides tremendous social value, ranging from the most basic survival to development, to great luxury, inevitably, at a cost. Based on this evidence the reader will be well-equipped to ask the questions: Which energy resources should be abandoned and which should be embraced

as we strive for a sustainable future?