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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1 Why do we need sustainability? -- chapter 2 Why is the current world system unsustainable? -- chapter 3 Patterns of development -- chapter 4 Sustainable development and economic, social and political structures -- chapter 5 Technology: the culprit or the saviour? -- chapter 6 Measuring sustainability -- chapter 7 Sustainable development and the company: why, what and how? -- chapter 8 Design and sustainable development -- chapter 9 Innovation processes -- chapter 10 Technology for sustainable development.
Sommario/riassunto	"It is crucial that engineers - from students to those already practising - have a deep understanding of the environmental threats facing the world, if they are to become part of the solution and not the problem. Is there a way to reconcile modern lifestyles with the compelling need for change? Could new improved technologies play a key role? If great leaps in the environmental efficiency of technologies are needed, can

they be produced? Engineers are in a privileged and hugely influential position to innovate, design and build a sustainable future. But are they engaged or uninterested? Are they knowledgeable or ignorant? This book has been developed by a number of committed educators in European engineering departments under the leadership of Delft University of Technology and the Technical University of Catalunya to meet the perceived gap between what engineers know and what they should know in relation to sustainable development. The University of Delft decided as long ago as 1998 that all of its engineering graduates, working towards careers as designers, managers or researchers, should be prepared for the challenge of sustainable development and, as such, should leave university able to make sustainable development operational in their designs and daily practices. The huge amount of knowledge gathered on best-practice teaching for engineers is reflected in this book. The aim is to give engineering students a grounding in the challenge that sustainable development poses to the engineering profession, the contribution the engineer can make to attaining some of the societal and environmental goals of sustainability, and the barriers and pitfalls engineers will likely need to confront in their professional lives. Concise but comprehensive, the book examines the key tools, skills and techniques that can be used in engineering design and management to ensure that whole-life costs and impacts of engineering schemes are addressed at every stage of planning, implementation and disposal. The book also aims to demonstrate through real-life examples the tangible benefits that have already been achieved in many engineering projects, and to highlight how real improvements can be, and are being, made. Each chapter ends with a series of questions and exercises for the student to undertake. Sustainable Development for Engineers will be essential reading for all engineers and scientists concerned with sustainable development. In particular, it provides key reading and learning materials for undergraduate and postgraduate students reading environmental, chemical, civil or mechanical engineering, manufacturing and design, environmental science, green chemistry and environmental management."--Provided by publisher.