

1. Record Nr.	UNINA9910830079503321
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Titolo	Applied industrial energy and environmental management / / Zoran K. Morvay, Duesan D. Gvozdenac
Pubbl/distr/stampa	Chichester, West Sussex, U.K. ; , : Wiley, , 2008 [Piscataway, New Jersey] : , : IEEE Xplore, , [2009]
ISBN	1-281-93951-X 9786611939519 0-470-71437-9 0-470-71438-7
Descrizione fisica	1 online resource (458 p.)
Collana	Wiley - iee
Altri autori (Persone)	GvozdenacDuesan D
Disciplina	658.2/6 658.26
Soggetti	Factories - Energy conservation Industries - Energy conservation Environmental protection
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 and index.
Nota di contenuto	About the Authors -- Preface -- Introductory Chapter: Framework for Energy and Environmental Management in Industry -- 1. Introduction -- 2. Energy Use by Industrial Operations -- 3. Environmental Impacts of Industrial Operations -- 4. End Use Energy Efficiency -- 5. Efficiency of Using Raw Materials -- 6. Global Energy Policy Framework -- 7. Energy and Environmental Policies -- 7.1 Integrated Pollution Prevention and Control (IPPC) -- 7.2 Energy Markets Deregulation and Liberalization -- 7.3 Consumers' Choice in the Liberalized Energy Market -- 7.4 Emissions Trading -- 7.5 Compulsory Energy Efficiency Programs -- 7.6 Voluntary Programs -- 8. Industries' Self-Motivation for Effective Energy and Environmental Performance -- 9. Environmentally Responsible Investing -- 10. Where to Look for Energy and Environmental Performance Improvements -- 11. Bibliography -- Part I: Energy and Environmental Management System in Industry (EEMS) -- 1. Introducing the Energy and Environmental Management System -- 1.1 Introduction -- 1.2 Definition of terms -- 1.3 Energy

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Sommario/riassunto

Industrial energy systems channel fuels and power into a variety of energy types such as steam, direct heat, hot fluids and gases, and shaft power for compressors, fans, pumps, and other machine-driven equipment. All of these processes impact the environment and are impacted by external energy and environmental policies and regulations. Therefore many environmental management issues are closely related to energy use and efficiency. Applied Industrial Energy and Environmental Management provides a comprehensive and application oriented approach to the technical and managerial challenges of efficient energy performance in industrial plants. Written by leading practitioners in the field with extensive experience of working with development banks, international aid organizations, and multinational companies, the authors are able to offer real case studies as a basis to their method. The book is divided into three main parts: . Part one describes Energy and Environmental Management Systems (EEMS) in current use and management techniques for energy and environmental performance improvement. . Part two focuses on the engineering aspects of industrial energy management, describing main industrial energy systems and how to analyse and improve their energy performance. . Part three is the TOOLBOX on an accompanying website, which contains data, analytical methods and questionnaires as well as software programs, to support the practical application of the methods elaborated on in the first two parts of the book. This book will be a valuable resource to practising energy and environmental management engineers, plant managers and consultants in the energy and manufacturing industries. It will also be of interest to graduate engineering and science students taking courses in industrial energy and environmental management.
