



**River Publishers**

## Energy Conservation Guidebook, Fourth Edition

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Efficient energy management and effective conservation procedures have been very important considerations for our society for many years. An oil embargo in the 1970s and early 1980s brought about a new awareness of energy conservation. Because of various factors like loss of tax credits and efficiency standards imposed by the government, public interest dropped considerably in regard to energy conservation. A revival in energy conservation among the general public occurred following the Persian Gulf War in the early 1990s.

What does the 21st century hold? Conflicts in the Middle East, high prices for petroleum, and increasing population worldwide will all be significant influences on energy and its conservation. Considerable discussion of climate change, global warming, and increased concerns in regard to our electricity supply have provided motivation for building energy demand to be more flexible. Energy Management and Conservation, Fourth Edition, provides a very practical discussion of how energy can be managed and saved in most types of buildings. This edition not only updates the previous edition but adds updated content concerning energy cost reduction/going green to improve the environment. The authors of this book have written several books that use the systems approach. Through the use of the systems approach, the reader will be able to grasp how different parts of a building fit together to form a unit that uses energy efficiently. This text provides a thorough and practical discussion of the operation of systems that are found in most types of buildings. Each system is discussed with energy management and conservation in mind/going green to save money and improve the environment. There are many ways to manage a building to accomplish efficient energy conservation. Several of the chapters have checklists at the end to summarize ways of conserving energy that relate to the chapter.

Important changes in this edition include coverage of governmental requirements from agencies such as Environmental Protection Agency (EPA), United States Department of Energy (USDOE), and American Society of Refrigerating, Heating and Air-Conditioning Engineering (ASHRAE), updated as of 2022 standards. Instrumentation updates include types of sensors and the concept of "smart" devices such as meters. Addition of computer building maintenance management systems and new updates for renewable energy resources are included. Enhancements to existing systems content (such as variable frequency drives for pumps) have been carefully added.

River Publishers Series in Energy Sustainability and Efficiency

# ENERGY CONSERVATION GUIDEBOOK

FOURTH EDITION



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