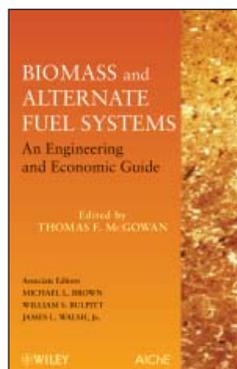


# Books

## **BIOMASS AND ALTERNATE FUEL SYSTEMS: AN ENGINEERING AND ECONOMIC GUIDE**

**Edited by Thomas F. McGowan, Michael L. Brown,  
William S. Bulpitt, James L. Walsh, Jr.,  
John E. Wiley & Sons, Inc., Hoboken, NJ, 264 pages,  
\$90, Apr. 2009, ISBN: 978-0-470-41028-8**



As the world deals with an energy and fuel crisis marked by escalating costs and tightening supplies, the need for renewable, alternative energy systems has never been greater. This book presents tactics for adjusting to this difficult situation by using renewable sources of fuel for industrial applications.

Biomass and alternative fuels offer cleaner, sustainable ways to produce energy. They can also greatly reduce operating costs, and

are mostly carbon-neutral. This comprehensive volume explains the characteristics of renewable fuels, especially biomass and wood, and the cost-effective and environment-friendly methods of handling, storing, burning and converting these fuels to produce heat, steam and power.

The book is an expansion of “The Industrial Wood Energy Handbook,” published in 1984 by a team from the Georgia Institute of Technology, and significantly broadens the scope of the earlier work to include agricultural feedstocks and the use and production of liquid fuels such as ethanol from cellulosic (noncorn) feedstocks. Up-to-date information is presented on fireside slag treatment (an important component of wood and agricultural combustion systems), the furnace grate systems that are at the heart of many biomass and wood combustors, and hot-oil and hot-air systems.

Chapters cover sustainable biomass yields, the basics of greenhouse gas calculation methods, and limiting emissions with pollution control equipment. Readers also receive an overview of environmental, health and safety issues, including Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) regulations.

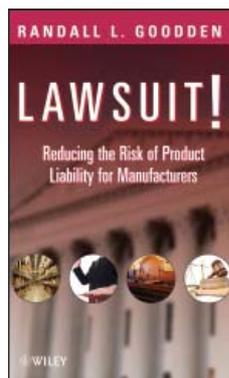
In addition to biomass, the book discusses alternative fuels such as wood, biogas, reclaimed oil, used tires, cooking oil, solid wastes, and coke. Case studies show readers how to reap the benefits of biomass and alternative fuels by choosing the right fuel and installing and operating the right energy system to meet their organizations’ needs.

Along with the practical facets of choosing and installing equipment for biomass and alternative fuel conversion and

pollution control, the economics of biomass and alternative fuels are also explored — with instructions on evaluating the impact of capital, operating and production costs; information on supply chains; an economic analysis of biomass combustion systems; and calculation methods for comparing the costs and greenhouse gas/carbon emissions of conventional and alternate fuels. Current cost and equipment vendor data are included as well.

## **LAWSUIT: REDUCING THE RISK OF PRODUCT LIABILITY FOR MANUFACTURERS**

**Randall L. Goodden, John E. Wiley & Sons, Inc.,  
Hoboken, NJ, 359 pages, \$80, Jan. 2009, ISBN:  
978-0-470-17797-68**



Product engineers and management teams strive to design and manufacture safe and reliable products, with an eye on adherence to known industry and regulatory standards. Still, recalls of unsafe products in the U.S. abound, and many recalls are followed by lawsuits against manufacturers, distributors and importers.

While the legal process of handling a liability lawsuit may be the domain of attorneys, corporate leaders and managers who desire

protection from legal threat need to understand the legal issues and underlying concepts.

In this book, product liability expert Goodden shares his experience, along with comprehensive advice for anyone producing items to be sold.

The book explains in detail the key issues management teams need to understand, as well as the procedures and processes that companies must follow, to reduce the possibility of a product liability lawsuit — including having the best defenses in place in the event of an unavoidable action.

Step-by-step instructions with examples describe how to implement risk-reduction procedures. Other examples include case-study lawsuits that underscore the need for a rigorous risk-reduction program. Guidelines for complying with government product-safety requirements are also provided.

The book covers both U.S. and international law, making it appropriate for manufacturing companies around the world. In addition to the key principles of avoiding product liability lawsuits, the book identifies best-practices that can help make companies more profitable by being less wasteful and, at the same time, help ensure successful new product launches.