

Preface

This book presents the basic concepts and terminology used in designing and constructing green buildings, based on state-of-the-art design and construction practices in 2007. It is designed for you, the intelligent reader, who may not be actively engaged in architecture or building engineering, but who needs a quick introduction to the rationale for green buildings and the language of the field. It will also be useful for public officials; for those dealing with green building or sustainability requirements from within or outside your company, organization or agency; for those whose livelihood depends on financing, building and marketing commercial development projects, and new residential subdivisions or multifamily projects; for real estate brokers and agents; for people in the finance, insurance and real estate industries; for senior executives in universities, government agencies and large corporations who want to understand what all the fuss is about; and for anyone who has an interest in turning the design, construction and operation of buildings into a more environmentally responsible activity.

Green building enthusiasts have made this phenomenon a major part of the design and construction industry over the past ten years. Since 2000 the number of green buildings has grown from a handful to more than 5,000 projects in the US and over 400 in Canada actively seeking certification of one kind or another at the end of 2006.¹ This is the fastest-growing phenomenon to hit the building industry since the Internet and perhaps since air conditioning. I saw a need for a quick and accessible guide to green buildings that could be used by a wide variety of people, one that is technically accurate and up-to-date, without requiring a professional or technical background.

The following chapters address several key questions: What is a green building? Why are green buildings and green developments important for the environmental and economic challenges we face early in the 21st

century? What are the important new sustainable technologies that are influencing the building industry? How do green products and green buildings actually get designed and built? What can I do in my company, my home and my city to further the “green building revolution”?

Throughout the text, I rely on published data, current through early 2007. Most of this information is available from sources such as the US and Canada Green Building Councils, from papers at green building conferences, from the Internet or from business or trade media. I have examined several public and proprietary surveys, and I have benefited from personal conversations with green building leaders to round out the roster of topics important to understanding green buildings, green products and green developments in the United States.

I have spent most of my career engaged in energy and environmental affairs, working to make our current economy and way of life more appropriate to long-term sustainability. As a student in California in 1970, I helped organize the first Earth Day, and I helped create the first state-level agency to promote solar energy, also in California. For the past ten years, I have been involved in building design and construction on a daily basis, and I’ve been active in the green building movement since 1999. I see my role as a communicator between green building professionals and the larger business and governmental public. I conceived of this book as a way to accelerate the understanding of the importance of green buildings in addressing the climate-change challenges of the early 21st century.

Each of us has an important role to play in transforming the building and development industry into one that produces what most people say they want from it: energy- and resource-efficient, environmentally sound, healthy, comfortable and productive places to live, work, learn, experiment and play. I hope this book will help you to play a role in this great undertaking. Thanks for your interest, and may you read this book profitably! I welcome any other feedback, directed to me at: jerry@greenbuildconsult.com, or via my business website, www.greenbuildconsult.com.

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