

Sustainable Construction

Sandy Halliday - Review by Philip Webber

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Sandy Halliday, who gave an inspiring talk at SGR's annual conference in 2008 (see p.19), has managed in this book to bring together the latest knowledge across the enormous field of sustainable construction in a way that is meaningful for architects, clients, engineers, and finance professionals.

This is a crucially important topic: the highly inefficient structures in which we live and work are a major reason why climate change emissions are so high. The current norm is poor, unsustainable buildings that are bad for people's health, well-being and wealth, and which, in their construction and use, damage the environment in the short and long term.

In this book Professor Halliday highlights a comprehensive range of holistic solutions using an enormous number of practical and inspiring case studies. Each is presented with detailed costs, design information and humour. The 14 chapters contain a huge amount of really useful information covering policies and measures to drive sustainability, appraisal tools, costs, materials, heating, electrical installations,

ventilation and cooling strategies, construction processes and urban ecology.

The scope also extends to several emerging or cutting-edge approaches to building design – for example, the use of permeable materials and sacrificial design elements, and the ability to replace and dismantle across the whole life cycle. The ethic implicit in the text is that a building must respect its users, its various uses and the environment in which it sits in order to function practically, ecologically and financially. This approach is most unusual, in my experience. It comes from a perspective of deep ecology and sustainability, yet Halliday makes this seem obvious, sometimes simple, necessary and aesthetic.

With the growth in awareness and use of BREEAM (the Building Research Establishment Environmental Assessment Method) and the Code for Sustainable Homes there is much more awareness these days of the need to reduce the negative impacts of buildings. The professional approach to this vital topic is,

however, very limited and in my view fractured, and there is a great need for guidance that is accessible, inspiring and understandable for all the key players involved in getting buildings built, rebuilt and commissioned. I think this book achieves this. The style is neither worthy nor clunky, and combines with the excellent case studies and photographs to offer a refreshing change from the approach taken by many in the profession.

Overall, I think Sandy Halliday has produced an indispensable guide covering this huge field and I recommend this book to anyone seriously thinking of building almost anything. It should pay for itself several times over. I very much hope that it can be part of a sea change in building design and approaches to the built environment and ecology.

Dr Philip Webber is Head of the Environment Unit, Kirklees Metropolitan Council, West Yorkshire. He is also Chair of Scientists for Global Responsibility