

Building for the future

Stephanie Boxall finds inspiration in a guide showing how we can design our way towards a circular economy

The Re-use Atlas: A Designer's Guide Towards a Circular Economy

Duncan Baker-Brown

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The *Oxford English Dictionary* defines 'atlas' as both "a collection of maps in a volume" and "one who supports or sustains a great burden", after Atlas, the mythological Titan who was condemned to hold up the sky for eternity.

This atlas is primarily aimed at architects, designers and anyone working in or studying the building industry, showing them how to adapt their practices and techniques to support a planet struggling with the effects of the climate crisis and environmental damage. If, as the book tells us, over 60% of all waste generated in the UK comes from the construction industry, and globally the construction and habitation of buildings consumes over 50% of raw materials harvested every year, then that industry carries a heavy burden of responsibility. But, like all good maps, *The Re-Use Atlas* sets out to show the way towards a future in which that same industry can support the Earth's recovery.

The book includes 39 case studies illustrating different ways of recycling, reusing and reducing waste, and finally, creating projects that produce zero waste during their lifetime. Describing one, author Duncan Baker-Brown writes: "When biologists describe how a healthy natural ecosystem functions, they often point out that 'waste' from one part of the system is 'food' for another." And this seems to me to be the essence of the philosophy of work he is encouraging the construction industry to embrace.

In his preface, architect and industrial analyst Walter R. Stahel discusses the differences between linear and circular economies,

University of Brighton Waste House Project (detail),
courtesy of BakerBrown



leaving us in no doubt about the significance of the building industry in addressing the question of how we move from one to the other: "[It] is the industrial economy's biggest consumer of material resources, and the biggest producer of waste," he writes.

But things are changing. Positive initiatives, such as the new UK Net Zero Carbon Buildings Standard, launched in October 2024, are already in place, and the industry is full of passionate individuals working to turn the juggernaut around. For the book, Baker-Brown invited contributions from fellow practitioners and academics, and interviewed over 100 people, all dedicated to protecting resources while making life warm, dry and comfortable – and beautiful – for the rest of us, and coming up with extraordinary ideas for how to do it.

There are inspirations in every section: an apartment block in the Netherlands salvaged and retrofitted rather than being demolished, allowing the residents to stay in a place they loved. Another in Paris where the precast concrete cladding system was replaced with fully glazed winter gardens. And an installation for a community art gallery in New York where temporary towers were built out of bricks 'grown' using chopped-up corn stalks and mushroom mycelium.

I was taken with the idea that, as mines become increasingly empty, buildings themselves can become mines. Describing another case study, the author brings home why this is so important: "This building may in time become a valuable material resource for future generations who may not have access to the raw materials we tend to take for granted today," he writes.

A practising architect and environmental activist, Baker-Brown is also an academic and a co-chair of the RIBA (Royal Institute of British Architects) Climate Action Expert Advisory Group. He is responsible for several pioneering projects, including the Brighton Waste House, which was constructed almost entirely of discarded materials in 2014 and continues to be a pedagogical tool.

This updated edition of the book, originally published in 2017, is twice the size of the first, and is not a book to curl up with and read in one sitting. But Baker-Brown's engaging writing style and passion for the subject make it much more than a practical guide. It's clearly aimed at architects and designers, but it has important things to say to policy- and decision-makers at all levels, and, indeed, anyone concerned with the future of the planet and how we live on it.

Global events can make the world seem a dark place at times. But if we are looking for a light to shine into the gloom, I suggest this might be an excellent place to start. Baker-Brown writes: "I believe ... that design *will* save the world, or at least be the catalyst that allows huge populations of humans to live in harmony with it." R

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