The Materials Book

“We want to believe what we see. As it is easier to see a structure than its consequences, we generally do not see its emissions. Thus, warning about the risks posed by something invisible might not be very compelling. Environmentally, we are all standing on a thin arch; we will only ‘see’ the consequences if it collapses.”¹

Ruby Press
Making Timber Great Again: Laminated wood can be an economical choice even for mainstream projects

Laminated wood panels combine the superior qualities of timber—low weight, flexibility, and strength—with characteristics typically lacking in wood: evenness, availability in large formats, and resistance to moisture. They’re easy to process and install, and the wide choice of colors and textures makes them an interesting, budget-friendly finishing even in projects that don’t look like typical “eco-architecture.”

Example: “Maxplatte” laminated wood panels by FunderMax, seen in Torstraße 84, Berlin

Contributed by: Kuehn Malvezzi Architects, Germany
With the world’s population growing by 2.6 people per second, by 2050 we will need twice as many homes, highways, streets, and schools — all kinds of built infrastructure — if we are to maintain our standard of living. This will require vast quantities of construction materials and untold emissions of carbon dioxide for building new structures as well as heating, cooling, and maintaining them over the decades. While people in construction have a growing sense of the environmental toll of their business, the shift toward more sustainable standards can seem frustratingly slow. Yet the good news is that the scale of the industry means construction can be both a problem and a solution, as even small changes in the way we build can have an outsize impact on global carbon output.

This book offers essays, case studies, and a catalog of building materials by more than sixty architects, engineers, and scientists from the world over on the environmentally mindful and socially responsible use of materials and resources. The ideas range from centuries-old traditions to newly developed biomaterials, from low-tech artisanal methods to advanced digital technologies, from incremental shifts to massive, top-down changes. There’s no single solution, no silver bullet, but rather a palette of ideas that, taken together, can serve as a guidebook for those who want to build in a better way — not in some distant future, but right now.