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WHY CERTIFICATIONS AREN'T THE BE-ALL, END-ALL FOR SUSTAINABLE WOOD USE



While renewable in principle, choices as to origin, kind and use determine whether wood qualifies as a sustainable material. Design practitioners share their vision for the material's role in the near future, and what challenges and opportunities they see ahead.

We **cannot take forests and their wood for granted**. Forests are increasingly at risk by a combination of factors, among them climate change, the rising demand for wood, illegal logging and clearcutting. The renewability of wood differs according to region, different legacies and laws in forest management, tree species and the kind of wood, whether solid or engineered. As it becomes increasingly important to know which choices support greater sustainability, there are some common themes to be watched when it comes to wood use.

Looking beyond the certificate

For one, **certificates may be misleading**. Architect Albrecht von Alvensleben, who owns a forest and runs the design label **Bullenberg**, puts certificates into perspective: 'A monoculture may be certified even though, in my view, it does not qualify as sustainable forest management. This includes, in addition to cultivating the timber, tending to the forest as habitat of many living species and protecting the soil, water cycle and more.' He refers to spruce monocultures in Germany's Bavaria and Harz regions as an example. 'They grew very fast while producing very good wood: but what had worked for many years has become too vulnerable, with rising temperatures and less rain, and collapsed.'



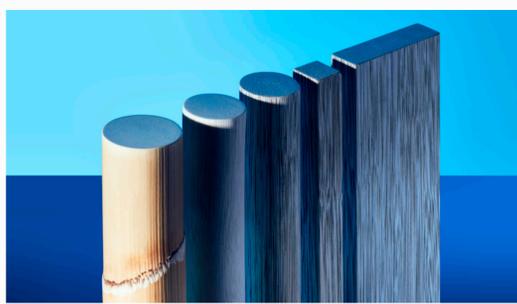
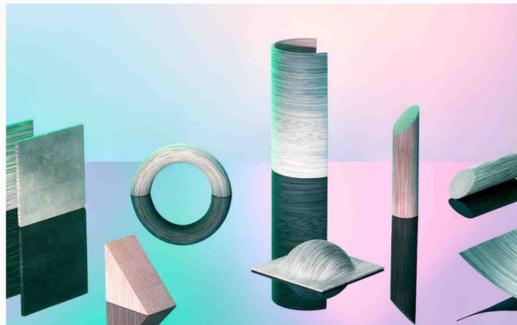
Architect Albrecht von Alvensleben, founder of design label Bullenberg, stands in his family-owned forest, which has recently been PEFC certified.

He lost large areas to storm damage and bug plagues himself. To finance the expensive removal of wood from windthrow and subsequent reforestation with different tree cultures, he had his forest **PEFC certified**, as a requirement to apply for funding. 'We pay a significant amount per year to be certified simply to continue to work the way we already did before,' he explains. In this case, the certificate gives credit to an already sustainable practice, as is common in Germany, where forests are regulated more strictly than by certificates like the **ESG**, for instance.

Embracing material innovation

In other parts of the world, reforestation isn't a reliable promise, as short-term gains outweigh long-term investments. What's cultivated and subsidized in one place stands in the way of bigger profits in others – think of palm oil, mining and cattle. Large areas of primary forest are being **lost to clear-cutting and burning every year**. This is what makes a new material like Karuun® interesting. It is derived from the fast-growing rattan plant which requires an **intact rainforest to prosper**, thus harvested by hand. Karuun is made from rattan's cellulose fibres and comes with a range of properties in **blocks, as veneer or 3D nonwoven fabric**. It may replace wood as well as plastics.

By buying and using rattan, the makers – a design-led start-up in Southern Germany – provide an incentive to conserve forest resources and sustain those ecosystems. Rather than buying into costly certification, 'they demonstrate their sustainability on their own terms on their website **where you can trace the entire supply chain** from the product back to the individual farmer harvesting the plant in Indonesia', as Tobias Petri, CEO of **Holzrausch**, points out. By adopting Karuun for Holzrausch's projects, his interior firm helps to introduce the new material to a wider audience.



Derived from the rattan plant, new material Karuun has the potential to replace wood and plastic use.

Another way to meet the rising demand for wood while promoting sustainable practices is to look towards new engineered woods. Alvensleben watches current research efforts into new wood composites such as wood foam, wood concrete and wood-metal composites closely. 'One day, new wood composites like a **metal-wood foam** will allow us to turn one cubic m of wood into 20 cubic m of construction material, helping us use wood in more intelligent and more efficient ways. The results may make the shape of light construction planes for building or insulation. Some of these new composites use lignin as natural glue and are 100 per cent biodegradable.'

He may not have any immediate use for this research in his own practice, which centres on solid oak, but the opportunities this holds for him as forest owner are evident. 'Material innovations will allow us to utilize wood that we were not able to process previously, like storm-damaged wood that we have to remove at great cost from the forest without being able to make profit from it.' He observes: 'In an industry geared towards standardization and privileging monocultures, where sawmills are built for logs of certain diameters and cannot process a broken trunk, these are unused potentials that give scope for future development.'

Therefore, when working with wood, designers are well advised to look beyond certificates and prevailing practices and adopt further strategies. This may mean to choose woods that are not necessarily certified but of alternative renewable origin, **to use the entire tree instead of only the best cuts**, in a zero-waste approach, or to embrace novel material innovations that use wood more efficiently. By doing so, designers can exert considerable influence in making interior design a greener industry. These strategies will remain important even **as prices are coming down**, since wood will continue to be in high demand as a game-changer in the drive towards carbon-neutrality.

Cover image: Bullenberg's Arx Table is made from solid oak planks.

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