# Exploring sustainable architecture at the V&A's Material Cultures exhibition



An innovative exhibition titled "Material Cultures: Woodland Goods" is currently addressing the intersection of architecture and ecological sustainability at the Victoria and Albert Museum (V&A) in London. The display, which showcases unique creations by the ecological design studio Material Cultures, aims to highlight the potential of utilising every aspect of timber production and challenge conventional practices in the building industry.

The co-founder of Material Cultures, Paloma Gormley, described the organisation’s approach as “like nose-to-tail eating, but for trees,” emphasising the importance of making the most of all elements of trees, from their bark to natural resins. She noted the vast waste present in traditional timber production and stressed, “It all has value.” The exhibition features a variety of materials, including plywood stools using slabs of compressed bark, sheet materials made from pine needles and sap, and decorative panels of silver birch bark embellished with dried moss, showcasing a creative repurposing of natural resources.

Established in 2019, Material Cultures was formed by Gormley along with Summer Islam and George Massoud, who aim to shift architectural practices towards more sustainable methods. As Gormley highlighted, “There’s a culture of negligence built into our industrialised system.” This sentiment echoed the group's belief that buildings, often treated as standalone entities, are intrinsically linked to landscapes of extraction that require responsible oversight. The trio is advocating for a bio-regional approach that prioritises local, plant-based materials.

In a significant evolution of their philosophy, the trio's first completed project—a community hub on a three-acre site in Wood Green, north London—demonstrates their vision in action. Collaboratively designed with Studio Gil, this £2.8 million project includes three structures made from lightweight timber frames filled with locally-sourced straw, clay from the site mixed with sand and chalk, and insulation made from recycled materials, such as foamed glass from car windows. These designs are built with an understanding of their environmental impact, with Gormley mentioning the significant carbon savings achieved through methods that do not require firing materials.

The community hub is also a collaborative venture with local organisations such as the Ubele Initiative and Organic Lea, who were involved in the construction process, helping to foster community ties and develop practical skills among members. “It was great for building community cohesion,” said Yvonne Field, founder of Ubele, highlighting the positive aspects of community involvement in the project.

In addition to the Wood Green site, Material Cultures has been active at another community site, Pasteur Gardens, where they developed a demonstrator project for low-carbon homes. This building utilises natural materials like "light earth" in its construction, offering heat and humidity regulation benefits. The team is committed to educating others in natural building methods and plans to launch a school focused on both regenerative farming and plant-based construction techniques.

Looking towards the future, Material Cultures has aspirations of establishing a “land lab” on a former farm in Essex to facilitate further experimentation and learning. "We’re trying to bring agricultural and building practices closer together," Gormley explained. Through these projects and initiatives, the studio aims to foster a deeper understanding of sustainable building practices, challenging current constructions reliant on petrochemical materials.

The ongoing discourse surrounding the intersection of architecture, agriculture, and environmental sustainability continues to gain importance, particularly in light of the built environment’s significant contributions to carbon emissions. As this exhibition and project portfolio illustrates, new methods of environmental engagement and material usage are emerging as critical components of future architectural practices.

Source: [Noah Wire Services](https://www.noahwire.com)