

Lana

Economics of Transition, means and Strategies for Resilient Systems

Lana

Hosted by: Caterina Plenzick

Project Information (EN)

Wool from hazardous waste to resource

Mountain sheep wool is a resource that has lost value in Europe in recent decades. Especially in mountainous regions such as South Tyrol, where sheep farming is strongly rooted in tradition, large quantities of wool accumulate, which is a hazardous and difficult waste to dispose of and which burdens farmers' costs. The Lana project experimentally investigates the possibilities of innovative use of pre-consumer wool waste for the bio-assembly of mycelium-based composites to be applied in architecture. The material-based design research was translated into material prototypes, an experimental material-technology setup and application demonstrators. Furthermore, the feasibility of the concept was illustrated by designing a synergies framework between local suppliers, based on a safe and efficient circular use of local resources.

Image List

Filename	Caption	Credit
caterina-plenzick-lana-2023-small_1696513889.jpg	Application for the bio material	Caterina Plenzick
lana-caterina-plenzick-wool-myzel-material-exp-small_1695211974.jpg	Material research	Caterina Plenzick
lana-caterina-plenzick-wool-myzel-local-synergy-small_1695211992.jpg	Local manufactures synergy	Caterina Plenzick
lana-caterina-plenzick-wool-myzel-small_1695212031.jpg	Wool, Myzelium and material sample	Caterina Plenzick
lana-microscope-woolfiber-caterina-plenzick-small_1695212824.jpg	Wool fibre under microscope	Caterina Plenzick

The images above are included in the ZIP under /images.