



Communication Tower

Bechtolsheim, Germany

Introducing the first sustainable wooden communication tower in Germany!

At Stora Enso we are on a mission to replace non-renewable materials with renewable products. This 30 m sustainable communication tower is our latest example of what is possible to create with a tree and lays an important foundation for a more renewable future.

For this innovative new use of sustainable wood, Stora Enso proudly partnered with EcoTelligent - a Finnish-based start-up company committed to adding sustainable wooden elements to communication towers and mitigating fossil fuel extraction.

Most communication towers today are built using vast amounts of steel or concrete, which are energy intensive to create and transport. But this tower is made with hyper-efficient and sustainable laminated veneer lumber (LVL) by Stora Enso.

LVL is a mass timber product that, pound for pound, is twice as strong and can easily support heavy telecommunication equipment. Unlike steel and concrete, LVL is relatively lightweight to transport and can be assembled in modules on-site without heavy-duty equipment.

Most importantly, LVL is a renewable material with a minimal carbon footprint. The wood for one tower is 6.804 m³ of LVL. This would take 1 second to grow back on a summer day in European forests.

In addition to the lower carbon footprint, the wooden tower blends in with the natural environment. This has increased the acceptance of large infrastructure towers among the local community- a significant factor for many residents.

The tower is EcoTelligent's 'Ecopol' design and is a free-standing, triangle-shaped support structure for mobile antenna and device technology. It has a life cycle expectancy of 30 years of use.

This tower is the first of more to come in Germany. The installation of the second Ecopol tower is expected to take place in Leiwen, Germany, in the third quarter of 2023; further locations in Germany and across Europe are also being considered.

General

Delivery year
2023

Building type
Others

Area (m²)
30



Photo credit: EcoTelligent Oy



 **Products**

Products
Sylva™ LVL Beams and Columns

Product quality
LVL

Product volume (m³)
6



Photo credit: EcoTelligent Oy

 **Team**

Architect
Stora Enso Partner: EcoTelligent Oy

Main contractor
Vantage Towers AG

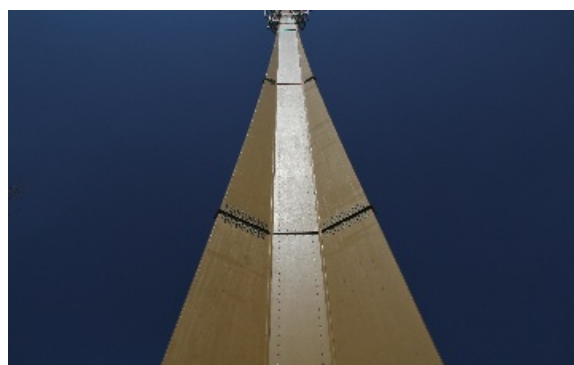


Photo credit: EcoTelligent Oy



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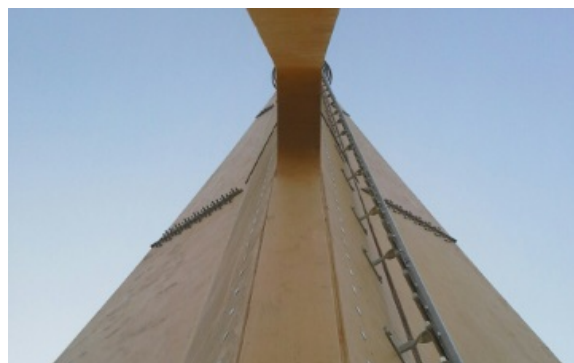


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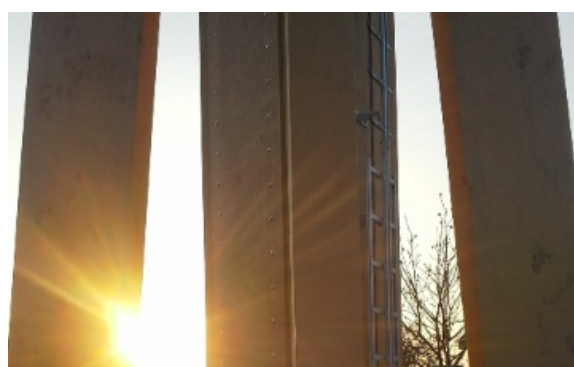


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