## Buildings

## Wood-Hybrid Building System up to 30 Stories



PD
ENVIRONMENTAL
The LifeCycle Tower improves CO2 balance by up to $90 \%$, resource efficiency up to $50 \%$, and ensures high recyclability and flexible usage.

## ifloi

## social

Production of system elements by regional companies saves time and resources, creates new jobs and business opportunities for SMEs, and reduces dust, dirt, and noise on site.

## W゙

ECONOMIC
Forty percent of global resource consumption is caused by the building industry, according to Cree.


Deployed in Austria

"WITH THE LIFECYCLE TOWER WE FOLLOW AN OPEN-SOURCE APPROACH WHICH MEANS TO GLOBALIZE KNOWLEDGE AND LOCALIZE VALUE CREATION."
hubert rhomberg, ceo cree


#### Abstract

$\rightarrow$ The LifeCycle Tower is a sustainable building system for wood-hybrid, multistory construction up to 100 meters and 30 stories.


The Cree timber building system, LifeCycle Tower, is based on achieving sustainability through material selection. The unenclosed wood structure provides a comfortable living and working environment, saves resources, and promotes health. According to Cree, buildings can reach 30 stories and construction times are cut in half.

Building layout, outside façades, surfaces, and interiors are individually planned by architects, while system components such as slabs, columns, inside façade, and building services ensure the building's quality and functionality. The technology is open source in order to scale the solution globally.

Why a Sustainia100 solution?
The concept is a new development and state-of-the-art building system for urban sustainable architecture because of its resource efficiency, with an exposed wood load-bearing structure, system approach and off-site prefabrication of system elements. An eight-story office building in Austria shows the technological, ecological, and economic advantages of the hybrid-timber construction system.


