STORA ENSO’S NEW HQ – A BLUEPRINT FOR SUSTAINABLE OFFICES

Stora Enso are experienced leaders in the global bioeconomy. They are a provider of renewable products in packaging, biomaterials, wooden construction and paper, and one of the largest private forest owners in the world.

The new building will house Stora Enso’s head office, a hotel and public spaces for city residents to enjoy the maritime location. It is designed by Anttinen Oiva Architects and developed by the Finnish Mutual Pension Insurance Company Varma. It is located in Helsinki, Finland on the sea front.

The new building will showcase the design opportunities offered by wood products and is being built with Stora Enso’s mass timber building solutions, mainly CLT (Cross Laminated Timber) and LVL (Laminated Veneer Lumber).

The design of the building features undulating shapes inspired by nature and brings the natural landscape into the urban development. Upon completion in 2023, the building will be a healthy and inspiring workplace for 450 of Stora Enso’s employees. The WELL standard has been followed throughout the building’s design.
As companies strive to reduce their GHG emissions to meet global climate goals, reducing the embodied carbon in their real-estate portfolio is a practical way to do so. Timber has lower embodied carbon than traditional building materials such as steel and cement and can be substituted in its place.

Research is showing that incorporating wood and other natural materials into our buildings can reduce stress and contribute to good mental health. Bringing nature indoors through exposed wood and other natural materials can have a positive impact on our health. Exposure to wood is correlated with a drop in cortisol, the primary hormone linked to negative impacts of stress.

Wooden buildings can often be fabricated offsite allowing for quick assembly onsite. This also comes with additional benefits of reduced noise, pollution and accidents on site during construction.

Source(s): Tsumetsugu et al., Physiological effects in humans induced by the visual stimulation of room interiors with different wood quantities, 2006

...could result in a substantial climate positive impact

7,849.4 tCO₂e

**S H I N K:** The harvestable forestry coverage in Savonia could support up to 53,172 similar buildings, saving up to 148,643,105 tCO₂e. That harvestable forestry coverage would also have a sink potential of 4.8MtCO₂e/y.

**S T O R A G E:** The building will store 5054.4 tCO₂e.

**S U B S T I T U T I O N:** Using engineered timber solutions CLT and LVL in the structure reduced the emissions by 2,795 tCO₂e in a cradle to gate approach in comparison to a traditional building made of steel.