

Abstract

Europe Goes Green

The purpose of this presentation is to provide an overview of green building construction in Europe. At the UN-Paris conference in 2015 countries accepted the challenge to fight Green House Gas emissions (GHG) during the next decades in an attempt to stop global warming. In Europe the aim is that all future new buildings aim at nearly zero-energy consumption and be highly material efficient whilst the existing building stock will be refurbished at a rate of 2% annually. Numerous international scientific studies have found that timber-framed buildings result in lower GHG emissions than their steel and concrete counterparts. For green building construction (relative) new timber products conquer the market such as cross laminated timber products. CLT products allow fast and cost effective execution of the building while structural limitations and disadvantages of the traditional timber frame construction are overcome. Examples of (high rise) multi-storey timber structures are presented. These steps forward were ministered by the development of innovative timber connections like self-tapping screws and reinforced connections. Case studies and examples are shown what can be achieved using these.