Global CLT industry in 2020

Growth beyond the Alpine Region

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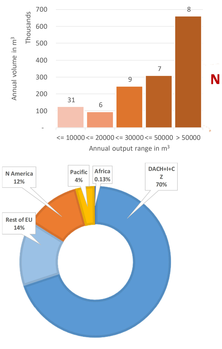
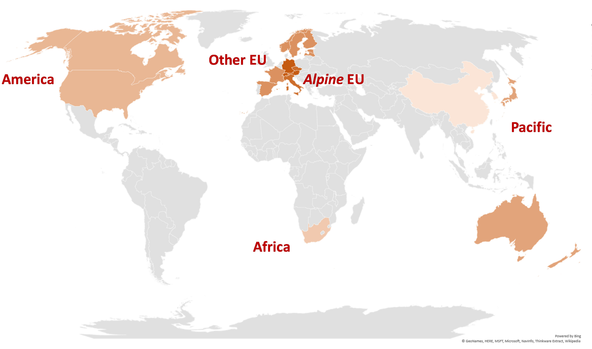
Abstract

At the threshold of 2020, the cross-laminated timber (CLT) industry continues its incredible growth across the globe. The total output of the industry in 2020 is projected to reach 2 million cubic meters. The only continent where no new CLT plants come on line or are at least planned in 2020 is Antarctica. Although many new CLT lines were recently deployed outside of the Alpine region from where the industry evolved, Alpine countries still account for over 70% the output volume and nearly 62% of the annual per-shift capacity. And yet, after more than 25 years of CLT technology development, the industry still feels young and no less intriguing. The goal of this presentation is to provide updated insights into the global CLT industry structure, output potential, production profile, internal diversity, competitiveness, innovativeness, and perceived barriers to further expansion, including the unknown effects of the COVID-19 pandemic. The presentation is based on two global CLT industry surveys, 46 plant tours, and supplemental information from secondary sources. These results are intended to provide insights for potential entrants and stakeholders into the CLT manufacturing sector, including businesses along its extensive supply chain.

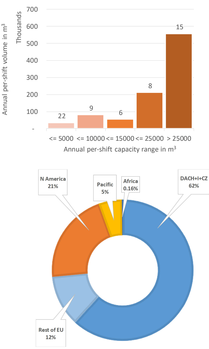
Total output



CLT producing regions



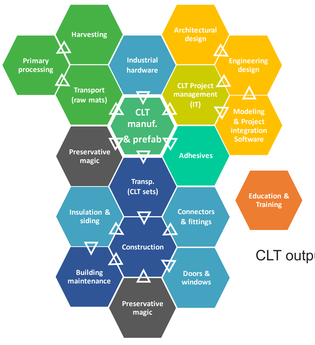
Per-shift capacity



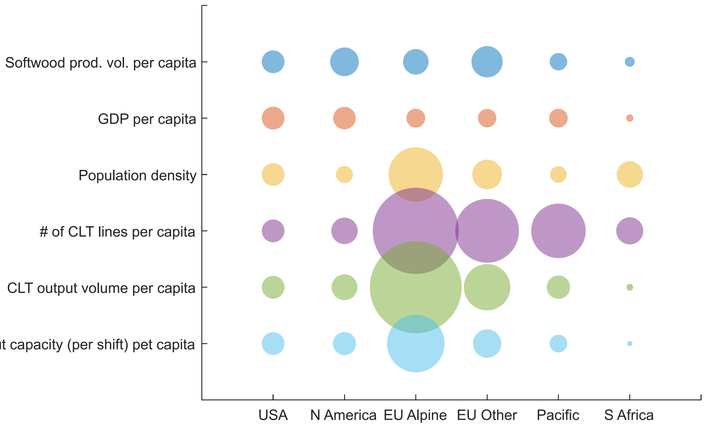
Organic development of the global CLT industry over the last 25 years has produced substantial diversity in manufacturing processes, levels of automation, scales of operation, products and services options as well as in market strategies.

The development has not followed typical commodity-oriented forest products industry models and it is difficult to provide an adequate precedent.

Most CLT companies show some level of vertical integration within their complex value chains.



Gauging the relative potential of CLT producing regions



Gauging the potential for the capacity of individual regions is notoriously difficult. Substantial differences exist between regions in terms of

- the size and strength of their economies,
- robustness of construction markets,
- size & complexity of forest products sectors,
- density of population etc.

However, a very rough estimate may be arrived at by using a set of substitute gross indicator metrics widely available for individual countries and possible to summarize for regions.

The metrics used in this study included the volume of softwood production (2018 data, FAO 2020), GDP (2018 data, World Bank 2020), population density (based on 2018 population and area data, FAO 2020), number of CLT lines, annual CLT output volume in 2019, and CLT per-shift production capacity all summarized by regions.

All metrics except population density are expressed per capita.

To facilitate an assessment of the potential of the US, the relative metrics their values are reflected by the area of the bubbles for a given metric and region with the values for US in the first column are the reference unit for other columns.

Summary and Conclusions

Overall, at the threshold of 2020s the CLT industry continued its exponential growth across the globe. There has been substantial growth in the number of new, high capacity lines in regions outside Alpine Europe and an increase of production coming out of that region. After 25 years of development, the industry still feels very young and as exciting as ever. However, that upbeat picture is clouded by the pandemic triggering tectonic shifts in global economies and leaving us with more questions and unknowns than answers.

Acknowledgements

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