

Pine Consulting

<u>Team Member Name</u>	<u>Year</u>	<u>Major</u>
<i>Gino Gandzior</i>	<i>2025</i>	<i>Finance</i>
<i>Natalie Odén</i>	<i>2025</i>	<i>Finance</i>
<i>Tricia Possell</i>	<i>2024</i>	<i>Accounting</i>

Advisor(s): [Christine Cahill](#)

Topic Title: Eco-Timber Implementation Program at Hilton

Audience: Board of Directors of Hilton Hotels & Resorts

Sustainable Development Goal

SDG #9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Executive Summary

According to the agreement made at the 2015 UN Climate Change Conference (COP21) in Paris, it is necessary to reduce carbon emissions by 43% by 2030 in order to keep the global temperature increase below 1.5 degrees Celsius. Recent UN reports show that the building and construction sector accounted for 37% of energy and process-related CO2 emissions in 2021. While energy efficiency has improved greatly in recent years, running energy consumption like heating and cooling still contributes to 26% of global emissions. Even though the actual emissions from construction and materials at 11% are significantly lower, it is a driver of climate change that one should not neglect.

Hilton is a leader in the global hospitality industry; however, they have not recognized the problem of construction with energy intensive materials. In order to fulfill its goal of 75% carbon reduction by 2030, we advise the Board of Hilton to partner with Hochtief and its US subsidiary, Turner Construction to construct hotels with Cross Laminated Timber (CLT). CLT is proven to have a 40% lower carbon footprint than timber over its lifespan in addition to having enormous potential to reduce construction costs. The lightweight structure of CLT allows 30% shorter construction time compared to concrete and steel. CLT buildings have a construction space per floor of 4-7 days, compared to the 21-30 days of conventional concrete. Turner has a standing working relationship with Hilton, as well as significant experience building with CLT. In conclusion, Hilton's collaboration with Turner Construction to adopt CLT presents numerous opportunities: significantly reducing carbon emissions while lowering construction costs and allowing Hilton to reach its ESG goals.