Santander Bank, London: Raising Head Heights, Lowering Embodied Carbon

Eddie Jump
Director, Thornton Tomasetti
W. H. ARENA, VIENNA
NEUBAU SPORTS ARENA, WIEN, GERMANY
N. MCCADDEN PLACE, LA, USA
TIMBER HYBRID
GAME CHANGERS
PROJECT LEIGH, BOTTLE, UK
44% OF THE EMBODIED CARBON OF RC FRAME
LETI

Business as usual 2020 target 40% reduction over baseline

2030 target 65% reduction over baseline

Whole life net zero target

Key

Energy Use Intensity (EUI) targets outlined in the LETI Climate Emergency Design guide as well as 100% renewable energy supply must be met

- 30% recycled
- 50% recycled
- 0 kgCO2eq
- 100% recycled

Embodied carbon target (Building Life Cycle Stages M-AS) includes Substructure, Superstructure, MEB, Fassade & Internal Finishes.

Embodied carbon target, as above, also including quarresation.

Thornton Tomasetti

© Council on Tall Buildings and Urban Habitat
AHEAD OF THE GAME

Structural embodied carbon kgCO2e/m²

Delivering 74% Below Business as Usual expectations in 2019

65% of total in substructure and superstructure
NEXT STEP?
NEXT STEP?

FUTURE
NEXT STEP?

- LONG SPANS
- ACOUSTIC PERFORMANCE
- IMPROVE AESTHETICS
NEXT STEP?
NEXT STEP?
-24% below LETI Embodied Carbon targets for 2030

-78% below LETI Embodied Carbon Targets for 2030 including Sequestration
THANK YOU
Images

St Clare’s College, Oxford - View Pictures Ltd.
Rothschild Estate at Waddesdon – Chris Honeywell
Project Leigh, Jack Carter Architects