



Tectus Group Takes Center Stage at BEX Asia 2023 in Singapore with Green Construction Solutions

SINGAPORE – 5 September 2023. Tectus Group, a global leader in the construction and engineering industry, is set to exhibit its innovative solutions at BEX Asia 2023, taking place from September 6 to 8 in Singapore. Tectus is highlighting its brands BBR, Screening Eagle, and Moderna Homes, showcasing a future-focused approach to sustainable construction.

Visitors can explore Tectus' groundbreaking offerings at booth AE07, housed within the Singapore Green Building Council (SGBC) pavilion.

On Friday, Gianni Moor, an Executive Member of Tectus Group, will be presenting a pivotal talk titled, "Quantifying the Impact of Modern Construction Technologies on Upfront Embodied Carbon."

Highlighting the Environmental Impact of the Built Environment

The building and construction sectors combined have been identified as the single largest contributor to CO2 emissions, accounting for 40% of the global total annually. An increasing proportion of the built environment 's impact is due to embodied carbon emissions - those stemming from the sourcing, manufacturing, transporting, and installation of the materials and components that make up a structure, and include the lifetime emissions across construction, maintenance, repair, replacement and eventual demolition.

Gianni Moor said:

"The statistics are staggering, with the cement industry's contribution of 8% of global emissions alone exceeding that of most nations, superseded only by the giants China and the USA. It is anticipated that embodied carbon will represent half (50%) of the emissions from new construction until 2050, making it a vital focus for decarbonization, without which the Paris Climate Agreement goals cannot be met."

As global calls for environmental accountability grow louder, businesses are now pivoting to robust Environmental, Social, and Governance (ESG) KPIs, with ambitions to reach a net-zero economy by 2050.

Green Building Rating Systems, along with ESG frameworks, have emerged as game-changers, bolstering environmental stewardship while ensuring corporate accountability. Global initiatives such as LEED and Singapore's Greenmark Building Certification Scheme have found success, with green buildings even attracting higher rent premiums.

Tectus' Carbon Initiative contributing to Reducing the environmental impact of the built world

Tectus contributes to lowering embodied carbon, leveraging its 80 year history in construction & engineering alongside its pioneering and entrepreneurial spirit to protect, maintain and responsibly grow the built world, through the BBR network offering leading certified post-tensioning systems applied extensively in the construction and maintenance of buildings and infrastructure globally, Moderna Homes who has pioneered high-rise modular construction in Singapore with steel hybrid

modular construction techniques, and Screening Eagle Technologies promoting asset efficiency and longevity through sensors, software and data for digitalized asset condition monitoring and preventive maintenance.

Bruno Valsangiacomo, Tectus Group Chairman said:

"Tectus Group takes a holistic approach to asset lifecycles and emissions, offering proven solutions to maximize safety, sustainability, and efficiency in construction. Furthermore, by enabling stakeholders to proactively inspect, monitor, and maintain structures, Tectus aims to enhance the longevity, health, and net present value (NPV) of assets."

Tectus carried out three seminal studies to understand how modern construction methodologies can curtail CO2 emissions.

1. The first study considered post-tensioning technology in buildings, revealing a substantial 50%+ reduction in CO2 emissions versus conventional construction techniques, growing to 73% when combined with recycled materials.
2. The second study examined Prefabricated Prefinished Volumetric Construction (PPVC) modules. The findings indicated that Steel-Hybrid PPVC technology could reduce emissions by a significant 61% in contrast to Reinforced Concrete PPVC modules in combination with recycled materials.
3. The final study focused on increasing the lifespan of infrastructure through efficient inspection and maintenance programs, integrating advanced Non-Destructive Testing (NDT) tools and cloud technology.

Tectus' research underscores the potential of cutting-edge construction technologies, along with supply chain adjustments and asset maintenance, to drastically reduce embodied carbon.

With the dual benefit of addressing climate change and offering economic advantages, green construction technologies are the way forward.

For more information, please explore:

- **BBR Singapore:** www.bbrnetwork.com - Renowned for post-tensioning, maintenance, repair, and retrofitting services.
- **Moderna Homes:** www.homesmoderna.com - Pioneers in Prefabricated Pre-finished Volumetric Modular Construction (PPVC) technology.
- **Screening Eagle:** www.screeningeagle.com - Provides a technology platform for inspection of the built environment, merging powerful portable sensors with intelligent software to generate reliable inspection data for construction and asset maintenance decisions.

About Tectus:

Tectus Group, a Swiss family-owned multinational, focuses on reducing embodied carbon in construction, real estate, and specialized engineering. Emphasizing CO2-efficient methods, we strive to enhance longevity and asset health, thereby increasing Net Present Value (NPV) and contributing to a responsibly maintained and grown Built World.

<http://www.tectusgroup.com/companies/engineering-construction/tectus-carbon-initiative/>

About BBR :

The BBR Network is recognized as the leading group of specialized engineering contractors in the field of post-tensioning, stay cable, geotechnical and construction engineering in over 50 countries. Synonymous with engineering excellence in the built environment, the BBR Network can provide a full range of services combining innovation focused, centralized technology leadership with dedicated local expertise backed by an international network of strong partners.

BBR VT International is the Technical Headquarters and Business Development Centre of the Global BBR Network and located in Switzerland. Together with the BBR Network members, BBR offers diverse services meeting the needs of local markets while using the very latest best-in-class, internationally approved and CO2 efficient technologies.

With an 80-year track record of excellence and innovative approaches – and thousands of structures built using BBR technologies – BBR is committed to improving the way we build and maintain with solutions to responsibly grow and safeguard the built world.

<https://www.bbrnetwork.com/>

<https://www.linkedin.com/company/the-bbr-network/>

https://www.youtube.com/channel/UCIJR-4os_ka5D3cSqr8_Nbw

About Screening Eagle Technologies:

With a mission to protect the built world with software, sensors and data, Screening Eagle Technologies is transforming the market with a digital-first, connected tech approach, combining intuitive software and powerful portable sensors to deliver reliable data for construction and asset maintenance decisions. Our technology supports field to cloud digitalization through inspection software and workflow solutions, efficient condition assessment through real time analytics and collaboration, and delivers asset longevity & NPV for asset owners through data intelligence.

Leveraging 65+ years of innovation expertise with established brands and worldwide standards, and powered by data from intelligent and autonomous inspection, Screening Eagle is committed to realizing its vision of predictive healthcare and that democratizes inspection, promotes asset sustainability, and enhances long-term value for asset owners.

<https://www.screeningeagle.com>

<https://www.linkedin.com/company/screening-eagle-technologies-ltd>

<https://www.youtube.com/c/ScreeningEagleTechnologies>

About Moderna Homes

Moderna Homes is a champion of and specialist in modular high-rise construction in Singapore and the region, spearheading the next lap in modular construction.

As the pioneer of steel hybrid Pre-Fabricated Pre-Finished Volumetric Construction (PPVC), Moderna has built Singapore's first public high-rise development using PPVC, and has delivered many successful public & private projects across diverse segments, including:

- Hotels & hostels
- Nursing homes
- Schools
- Commercial & residential building
- Highrise apartments & condominiums

Moderna creates economic and social value compared with traditional construction in time saved, environmental footprint and reduced costs, as well as enhanced quality. Through eliminating the bulk of construction work on-site, Moderna has been able to demonstrate major improvements in labor productivity, along with significantly shortened construction times and lower embodied carbon and waste.

For media inquiries please contact:

Hemera Beretta

Tectus AG | Beustweg 12 | 8032 Zurich | Switzerland

hemera.beretta@fincoord.com