Trimble and One Click LCA Collaborate to Provide Embodied Carbon Calculations for Different Phases of Construction Projects

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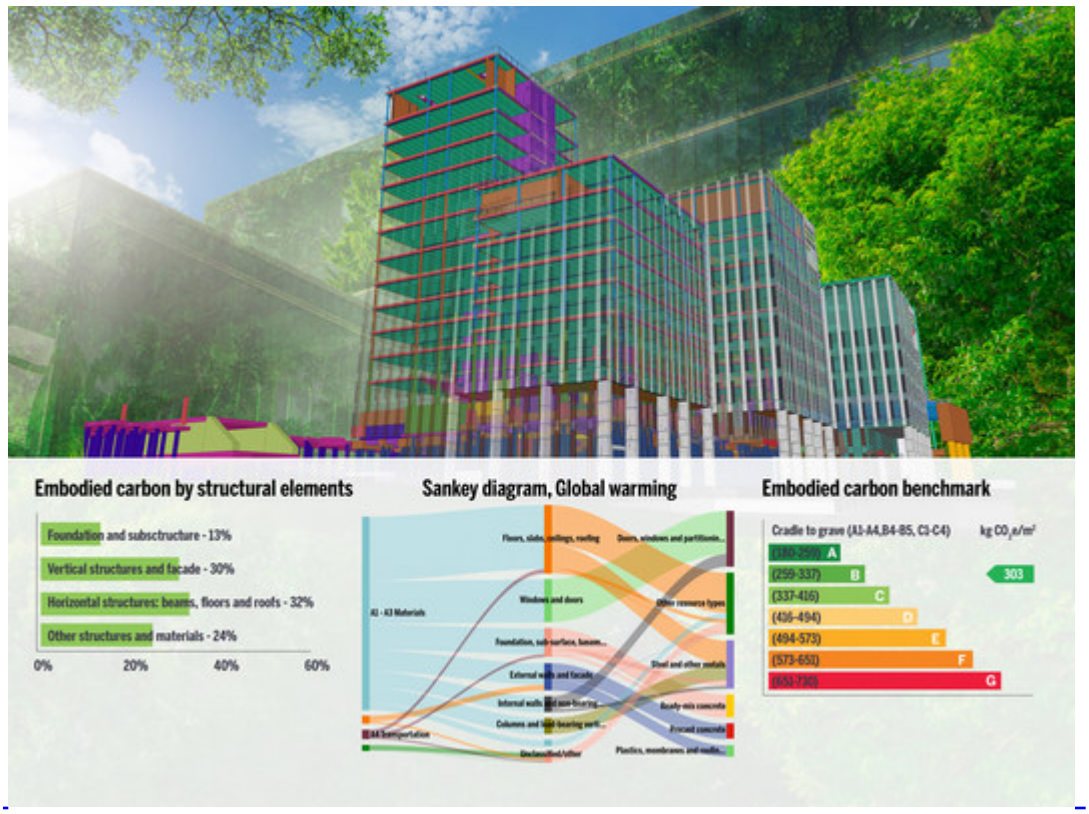
Collaboration to Help Move the Needle Toward a Net Zero Future for Construction

SUNNYVALE, Calif. and HELSINKI, Oct. 8, 2021 /PRNewswire/ -- Trimble (NASDAQ: TRMB) announced today that it has entered into a collaboration with One Click LCA that enables users of Trimble's Tekla Building Information Modeling (BIM) software to calculate carbon emissions at different phases of a project, helping to move the needle toward a net zero future for construction.



From early analysis and design through to finished construction, combining constructible data from Trimble's Tekla software with One Click LCA and its extensive Environmental Product Declarations (EPD) database allows the embodied carbon emissions of materials in a design—down to every nut, bolt or rebar—to be calculated for their entire lifecycle. Tekla users will have access to a One Click LCA carbon assessment tool, in an integrated configuration with the Tekla software platform, for free until the end of 2021.

Structural elements are responsible for up to 70 percent of a building's embodied carbon footprint, making cutting the carbon emissions of any structural design critical in the Race To Zero emissions, as outlined in the COP26 UN Climate Change Conference goals.

Low-Carbon Structures

One Click LCA's automated lifecycle assessment software helps users calculate and reduce the environmental impacts of building and infrastructure projects, products and portfolios. By combining the functionality with Trimble's Tekla BIM software, the two companies make it easier to design and build the low-carbon structures that are urgently needed in the race to zero emissions. Calculating embodied carbon—the amount of carbon dioxide emitted into the atmosphere from creating and maintaining all the materials that form a building—is a relatively new concept. For many structural experts—whether engineers, designers, builders or fabricators—it is fast becoming critical to their work. Across the construction sector, there is a growing demand for managing carbon performance. Governments of countries such as the Netherlands, France, UK, Sweden, and Italy and other authorities have started to require declarations of embodied carbon, which are expected to have mandatory emission limits in the future.

This cooperation builds on the existing integration of One Click LCA with Tekla® Structural Designer, Tekla Structures and with the Trimble Connect™ collaboration platform for seamless data exchange. Trimble Connect comes in multiple subscription versions, including a free version, with all versions supporting the integration with One Click LCA tools.

The Tekla Structures integration was performed by Sweco, a leading construction consultancy, in collaboration with One Click LCA. Sweco has used the combined solution in an ambitious project to design a carbon-neutral sports venue.

Commenting on the collaboration, Ossi Kujala, structural designer at Sweco Structural Engineering, said: "At Sweco, we aim to be a role model in

sustainability, taking responsibility for and being part of the solution to society's sustainability and carbon reduction challenges. One Click LCA's integration with BIM data is a practical way to evaluate the carbon impact during a building's lifecycle. We are currently working on a low-carbon project, using Tekla Structures for structural design, and One Click LCA to evaluate lifecycle impact. One Click LCA's integration with Trimble has helped us to obtain easy early-stage carbon assessments of each design option. The integration also simplifies the process of material quantity estimates after design changes with a high level of accuracy, meaning that we can maintain up-to-date quantity estimates and lifecycle information with little effort."

"This collaboration empowers structural engineers, fabricators, contractors and other stakeholders to systematically and effectively decarbonize their projects," said Panu Pasanen, CEO of One Click LCA. "Carbon and lifecycle assessment data is essential for carbon reductions, specifying cost- and carbon-optimal solutions and achieving regulatory and certification compliance. One Click LCA can be used to calculate environmental impact in order for projects to comply with BREEAM, LEED, DGNB, and over 50 other certification schemes, standards and requirements. The data can also be seamlessly combined with data from other design disciplines. We are very excited to partner with Trimble and scale up decarbonization with our tools."

"Sustainable construction will soon no longer be a choice, but a prerequisite," said Jari Heino, vice president and general manager, Structures at Trimble. "Carbon performance management will be part of value engineering in the future. Tekla Structures already helps to minimize the material waste and reduce unnecessary rework. Integrations with a best-of-breed automated lifecycle assessment software such as One Click LCA enable our Tekla customers to use the constructible data to calculate the carbon footprint at any phase of the project and deliver accurate final declaration to the authorities."

COP26

The Race to Zero is the main theme of COP26, the 26th UN Climate Change Conference of the Parties summit. It echoes the message of the latest Intergovernmental Panel on Climate Change (IPCC) report, which underlined that net zero needs to be achieved by 2050 to limit global warming to 1.5 degrees.

About One Click LCA

One Click LCA is a leading Life Cycle Assessment and Environmental Product Declaration (EPD) generation software for the construction industry. One Click LCA helps to decarbonize building and infrastructure projects, to create product EPDs, to benchmark low-carbon products and projects and to create corporate greenhouse gas reports. It is used in more than 120 countries, includes the world's largest construction sector database and supports over 60 standards and certifications. For more information visit: www.oneclicklca.com.

About Trimble Construction

Trimble is developing technology, software and services that drive the digital transformation of construction with solutions that span the entire architecture, engineering and construction (AEC) industry. Empowering teams across the construction lifecycle, Trimble's innovative approach improves coordination and collaboration between stakeholders, teams, phases and processes. Trimble's Connected Construction strategy gives users control of their operations with best-in-class solutions and a common data environment. By automating work and transforming workflows, Trimble is enabling construction professionals to improve productivity, quality, transparency, safety, sustainability and deliver each project with confidence. For more information, visit: construction.trimble.com.

About Trimble

Trimble is an industrial technology company transforming the way the world works by delivering solutions that enable our customers to thrive. Core technologies in positioning, modeling, connectivity and data analytics connect the digital and physical worlds to improve productivity, quality, safety, transparency and sustainability. From purpose-built products to enterprise lifecycle solutions, Trimble is transforming industries such as agriculture, construction, geospatial and transportation. For more information about Trimble (NASDAQ: TRMB), visit: www.trimble.com.

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SOURCE Trimble

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