

January 27, 2022

For immediate release

Sumitomo Forestry Co., Ltd.

Sumitomo Forestry to Visualize Carbon Emissions of Buildings and Aim for Decarbonization of the Construction Industry

~ Signed contract as sole distributor of One Click LCA software in Japan ~

Sumitomo Forestry Co., Ltd. (President and Representative Director: Toshiro Mitsuyoshi; Headquarters: Chiyoda-ku, Tokyo; hereinafter Sumitomo Forestry) announced it has signed an agreement with Finland-based One Click LCA Ltd to be the sole distributor in Japan for One Click LCA, a software for the visualization of carbon emissions and other aspects of buildings.

One Click LCA is a software used in 130 countries, centered on Europe, that complies with more than 50 types of environmental certifications in the world, including ISO and EN standards. Through life cycle assessment (LCA) that evaluates environmental impact across the entire life cycle, it can calculate embodied carbon—CO₂ emissions and such arising from raw material procurement to processing, transportation, construction, retrofitting, and demolition that are incurred as part of construction—based on data of individual materials being used at construction sites. It is said that approximately 37%* of global CO₂ emissions come from the construction industry. Through collaboration with One Click LCA Ltd, Sumitomo Forestry will undertake the visualization and reduction of CO₂ emissions in Japan's construction industry.

The visualization of embodied carbon is making progress in European countries, and there are increasingly more cases where developers, owners, financial institutions, investors, tenants, and others with high environmental awareness actively choose buildings with low environmental impact. On the other hand, in Japan, initiatives for the visualization and reduction of embodied carbon are not as widespread as that for operational carbon, which comprises CO₂ emissions from energy use during occupancy. The visualization of embodied carbon of buildings—which serves as an index during building selection by companies and investors within and outside Japan—is extremely important for achieving carbon neutrality in the construction industry.

Sumitomo Forestry will reach out to housing and real estate industrial organizations and others to build a platform for the calculation of embodied carbon using One Click LCA. For the conduct of more accurate LCA, the company will establish a support system for manufacturers of timber and building materials toward attainment of Environmental Product Declaration (EPD), which is an environmental certification label for materials. Sumitomo Forestry will promote the spread of environmentally-friendly buildings that aim to achieve net zero carbon buildings through the consulting business for carbon reductions.

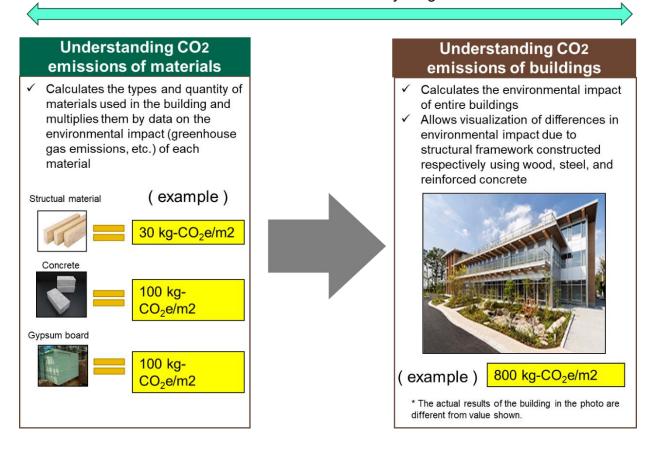
* Source: Global Alliance for Buildings and Construction, "2021 Global Status Report for Buildings and Construction"



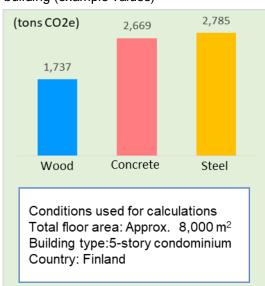
< Concept of One Click LCA software >

Relationship between materials and carbon emissions of buildings

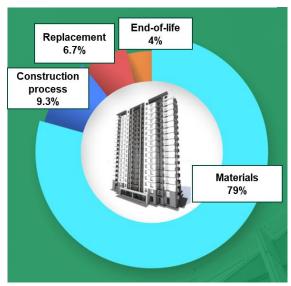
One Click LCA covers everything



- Example of visualization of carbon emissions of buildings (embodied carbon)
 - * Calculation results of CO₂ emissions by building (example values)



* Ratio of CO₂ emissions (embodied carbon) by building life cycle stages





< Businesses that Sumitomo Forestry Propels >

- (1) Sale One Click LCA in Japanese-language software and Support for EPD development
 - One Click LCA Ltd and Sumitomo Forestry jointly adapt One Click LCA to Japanese market.
 Sumitomo Forestry provides customer support in Japanese. With the aim of accumulating EPD data, we will help timber and building materials manufactures to acquire EPD certificates.

(2) LCA Promotion Activities

Sumitomo Forestry cooperate with environmental certificate bodies and public offices along with making approach to various related parties such as general contractors, property developers, financial institutions, and design offices in order to promote LCA and environmentally-friendly buildings. We will promote transparency and reduction of carbon emissions, etx., which will lead to increasing of the asset value of buildings with major construction methods such as reinforced concrete construction and steel frame as well as wooden construction. Sumitomo Forestry will also use this software to establish environmentally-friendly construction and development businesses in Japan and overseas.

(3) Entry into LCA consulting business

- Sumitomo Forestry will provide outsourcing service for the generation of LCA reports as well as offer various proposals that lead to carbon offset.

A team specializing in LCA will be established within Sumitomo Forestry for this business and work to bring the level of LCA initiatives in Japan up to international standards.

< Background of Agreement >

The Government of Japan has declared its aim of achieving carbon neutrality in 2050, and countries which participated in the climate change summit held in April 2021 have set ambitious greenhouse gas reduction targets to be achieved by 2030. Amid such developments, measures in response to climate change are being undertaken with greater speed in Japan and overseas, including the announcement by Japan to significantly raise its target to 46% reduction against levels in fiscal 2013 from the previous target of 26%.

Approximately 70% of CO_2 emissions from the construction sector globally comes from CO_2 emissions arising from energy use during occupancy (operational carbon), with the remaining 30% being CO_2 emissions created in the processes from raw material procurement to processing, transportation, construction, retrofitting, and demolition (embodied carbon). As the reduction of operational carbon advances with the promotion of zero energy houses and buildings in the future, embodied carbon is expected to increase in proportion.

To reduce embodied carbon, it is important to visualize CO₂ emissions by process (during new construction, retrofitting, and demolition), part (roofs, floors, walls, openings, etc.), and structure (wood, steel, and reinforced concrete) and make CO₂ emissions an index for building design as well as structure and material selection.

One Click LCA calculates carbon emissions and carbon storage in buildings easily, reliably and quickly, and it is the best software for Sumitomo Forestry aiming to promote the utilization of wood and carbon neutrality in the entire construction industry.



<Overview of One Click LCA>

Company Name: One Click LCA Ltd.

Year Founded: 2001

Business Details: Business in construction/manufacturing LCA software and platforms

Representative: Panu Pasanen (Chief Executive Officer)

Location: Helsinki, Finland

<Environmental certifications in the world that One Click LCA complies with</p>



Sumitomo Forestry undertakes a wide range of businesses in Japan and overseas, from forest management to timber procurement, processing, distribution, construction, and biomass power generation by using unused forest resources and construction debris as fuel.

Going forward, the Sumitomo Forestry Group will continue to contribute to the achievement of the Sustainable Development Goals (SDGs) and carbon neutrality by working to enhance its public benefit value which consists of environmental and social values, such as suppressing greenhouse gas emissions, preserving biodiversity, and securing labor safety and employment, in addition to the economic value generated by its business activities.