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For immediate release

Sumitomo Forestry Co., Ltd.

# First Foray into Europe: Sumitomo Forestry to partner in Environmentally-Friendly Six-Story Timber Office Building Development Project in London. - Achieving net zero carbon for 60 years by carbon stock of timber -

Sumitomo Forestry Co., Ltd. (President and Representative Director: Toshiro Mitsuyoshi; Headquarters: Chiyodaku, Tokyo; hereinafter "Sumitomo Forestry") announced that we have established a joint venture with British real estate developer Bywater Properties (Principal: Theo Michell; Headquarters: London, UK; hereinafter "Bywater") in the development of an environmentally-friendly six-story timber office building project in London. This is the first time that Sumitomo Forestry has branched out into the housing and real estate business in Europe.

In this project, carbon emissions during construction ('embodied carbon' from processes such as raw material procurement and manufacturing of building materials, construction, and demolition) will decrease by approximately 80% compared to a typical reinforced concrete construction. Moreover, this advanced approach expects to achieve a carbon negative position at the time of completion when accounting for the carbon offset inherent in the timber structure. The building is designed to save and create energy, and in combination with the use of renewable energy, realize net zero carbon for the next 60 years even with the added carbon emissions from the use of the building (operational carbon). \*1

The total project expense will be approximately 48 million GBP (about 7,488 million JPY<sup>\*2</sup>) and construction is expected to be completed in early 2024. This project has received a New London Architecture Award in 2020<sup>\*3</sup> and a World Architecture Festival Award in 2021<sup>\*4</sup> for its advanced low-carbon construction plan. It will also aim to obtain the highest level "outstanding' in the leading global sustainability assessment "BREEAM", the leading health and well-being assessment "WELL", and the highest digital connectivity and smart technology rating in the "WIRED SCORE" assessment.

Sumitomo Forestry is working on the development of medium and large-scale timber structures overseas to achieve net zero carbon, and taking steps towards the realization of a decarbonized society. We have already announced our participation in a project to develop a 15-story timber office building in Melbourne, Australia in October last year, and this UK project is the second challenge on that journey. We will deepen our expertise in advanced environmental responsiveness and medium-scale timber structures in Australia and Europe in order to develop "net zero carbon construction" globally.

- \*1 Based on the British standard for assessment of environmental performance of buildings (BS EN15978)
- 2 1 Pound sterling (GBP) = 156 Japanese yen (conversion with the exchange rate as of February 10, 2022)
- \*3 This award is given to projects with designs contributing the environment and life in London. The Lord Mayor of London also supports the award.
- \*4 This architectural award program has been held since 2008 to honour outstanding architecture around the world. This project won the Climate Energy & Carbon award in a special category.



Conceptual image of project

Concept of carbon calculation in this project

The carbon calculation follows the British standard to assess the environmental performance of a building (BS EN15978) <sup>\*5</sup>. The carbon stored in timber can be subtracted from life cycle carbon emissions of a building on the condition that timber is designed to be reused after the building is demolished and procured from sustainable forests<sup>\*6</sup>. This approach is also approved by the Royal Institution of Chartered Surveyors (RICS)<sup>\*7</sup> and the UK Green Building Council (UKGBC)<sup>\*8</sup> on the condition that carbon emission and stock are presented separately.



The figure on the right indicates the profile of expected

carbon emissions for this project. It is estimated that ① carbon emissions during construction, ② together with offsets from the carbon stored in the timber structure, ③ shall achieve a carbon negative position at the time of completion. Net zero carbon emissions will be achieved for about 60 years even after adding operational carbon by energy consumption from the use of the building.

In this project, Dr. Joe Jack Williams supervises the Life Cycle Assessment (LCA) which evaluates the environmental impact of the project across its entire life cycle. Dr. Williams is an environmental researcher from a British architectural design firm FCBStudios, which is actively working on sustainable, low-carbon architecture.

- \*5 BS EN stands for British Standard European Norm. It is the UK national standards based on the European standards.
- \*6 FSC certified wood, PEFC certified wood, etc.
- \*7 RICS is an international institution of surveyors in the fields of land, real estate, and architecture established in the UK. It offers counsel and proposals to various national governments as a neutral party.
- \*8 UKGBC is part of the World Green Building Council (WorldGBC) network, which is a member of the United Nations Global Compact. The UK council has more than 600 member organizations.
- Project scheme and our efforts in Europe

In addition to forming "Paradise 11 Limited" as a JV with Bywater, Sumitomo Forestry has established "SF Paradise Member Limited" as an investment entity for this project, and "Sumirin UK Limited" as the main company to oversee our business in the UK. It is the first time for us to establish a local subsidiary in the UK.

Sumitomo Forestry has steadily supplied high-quality wood products for housing from Europe to Japan since we opened a representative office in Amsterdam, the Netherlands in 1995. In Europe there is a persistent shortage of housing due to the concentration of population in cities. Moreover, there are a growing number of architectural projects with environmental certification as well as development projects of medium and large-scale timber buildings with CLT (cross laminated timber) structure. Therefore, we have been conducting extensive market Happiness Grows from Trees



Dr, Joe Jack Williams Engineering Doctorate · School Design(University College London). His specialisms include predicting, measuring and mitigating carbon impacts of architecture.

research on the matter.

The UK and EU have set a goal of net zero greenhouse gas emissions by 2050 and there is a movement to build and refurbish environmentally friendly buildings. Because Europe leads the world in medium and large-scale timber architecture, it offers a highly significant market to enter.

Sumitomo Forestry aims for the development of "net zero carbon architecture" by combining energy saving and creation technologies with the carbon absorption and fixation properties of forestry and timber. By doing so, we are able to move toward generating new revenue sources while realizing a sustainable society. We will establish further networks based on this project and develop medium and large-scale timber structures with low environmental impact in the UK and Europe. We will also contribute to a decarbonized society and expand our business in the medium- and long-term horizon.



# Conceptual image of project of project

### Property characteristics

The following are planned for the building in this project: improvement in energy-saving performance (outer walls with high thermal barrier capacity, blinds against solar radiation), in-house power generation (photovoltaic generation equipment on the roof), and reuse of electric power generated by deceleration of elevators.

An attractive office environment promoting wellbeing will be offered by exposing wooden surfaces on beams, pillars, and ceilings in the building which will allow the mood and warmth of wood to be experienced, a ventilation system that takes in fresh air from the neighboring lush parks and exhausts indoor air to the railroad tracks, and a ceiling height that gives a sense of spaciousness.

This will be a landmark timber building facing major traffic routes in London. It has already attracted a substantial amount of attention and we are receiving inquiries from prospective tenants including charity organizations, universities, and medical institutions.

#### Location

The project site is located on the south bank of the River Thames, and area which is currently undergoing large scale redevelopment in London. Offices, multi-family housing and retail stores are being redeveloped around this area. New development is expanding in the Battersea/Vauxhall area, into which the UK Headquarters of Apple Inc. and the U.S. Embassy have moved, as well as in the area around Waterloo station which has the largest number of annual passengers in London. The new building is conveniently located near the Westminster area on the north bank of the Thames with many government offices (Security Service MI5 and MI6, Home Office, Ministry of Justice, Department for Transport, Department for Education, Department for Business, Energy and Industrial Strategy, etc.).

<Project overview>

Name	Paradise Project
Location	Lambeth area, London
Overview	6-story timber office building
Building area	7,445 m <sup>2</sup>
Start of construction (planned)	September 2022
Completion (planned)	April 2024
Total project cost	Approx. 48 million GBP (Approx. 7.488 million JPY)



# ■About Bywater

The founder and the Chairman Mr. Richard Walker founded Bywater Properties with Mr. Theo Michell in August 2008 in London, UK after having worked at a major real estate services company. Bywater is a real estate developer mainly specialized in development, planning, and management of offices. The company operates in major UK cities such as London, Manchester, Glasgow and Belfast, Northern Ireland. Mr. Walker is also Managing Director of Iceland Foods Ltd, which is a supermarket chain with about 1,000 stores in the UK. He campaigns against deforestation due to palm oil production and plastic waste in the supermarket industry while he advocates reduction of greenhouse gas emissions in the construction industry through his support of Bywater. He is engaged with environment impacts in both industries. Sumitomo Forestry is considering further cooperation with Bywater after this project.



Conceptual image of project

Contribution to the spread of LCA in Japan through this project

As per the announcement on January 27, 2022, Sumitomo Forestry has partnered with One Click LCA (Helsinki, Finland) to resell LCA software in Japan to visualize carbon emissions and other aspects of buildings. We will contribute to the spread of LCA use in the Japanese market by utilizing the state-of-the-art knowledge such as the visualization and reduction of embodied carbon obtained through this project in Europe, which leads the world in the field of decarbonization.