

Solar-panel-equipped landed houses for sale in Jakarta Metropolitan Area**~A first for a Japanese company, to accelerate carbon neutral design~**

Sumitomo Forestry Co., Ltd. (President and Representative Director: Toshiro Mitsuyoshi; headquarters: Tokyo; hereinafter, Sumitomo Forestry) is pleased to announce that it will begin construction and sales of landed houses (single family homes) with solar panels as a standard feature in the city of Bogor, a suburb of Jakarta, Indonesia. In collaboration with local real estate development company PT Olympic Bangun Persada (OBP), the company plans to sell a total of 151 units. This is the first time for a Japanese company to sell landed houses with pre-installed solar panels^{*1} in the entire subdivision in Indonesia and the first time for Sumitomo Forestry to sell such houses outside of Japan.^{*2} Utilizing this initiative as a springboard, we will work to accelerate the standardization of carbon neutral design in Indonesia and other Asian countries.

■Project outline

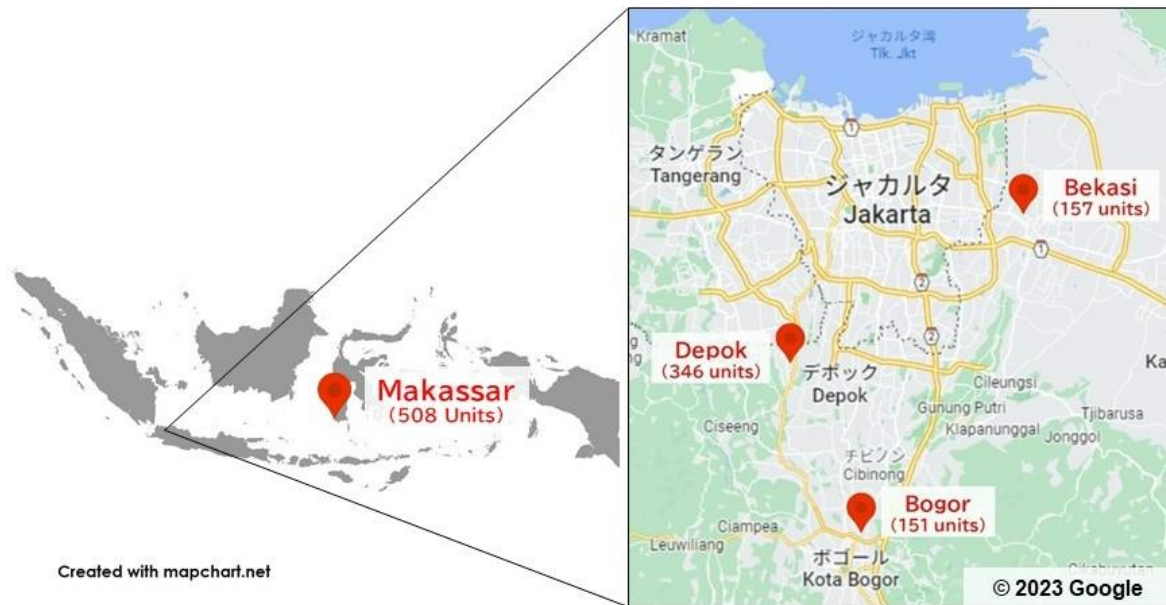
The developer is a joint venture company to be established in November 2023 by OBP and PT. Sumitomo Forestry Indonesia, a Sumitomo Forestry Group company. OBP is operated by the owners of The Olympic Furniture, a major Indonesian furniture manufacturing and distribution company that has worked with our Timber and Building Materials Business. Starting with this project, we will expand our collaboration in real estate development.

Bogor is located approximately 40 kilometers from central Jakarta, about an hour's drive by toll road. In recent years, Bogor has been attracting increasing attention as a comfortable living environment thanks to its accessibility to Jakarta, its lush natural environment and relatively cool climate. Since Bogor has been developed from the Dutch colonial period, there are very few large areas remaining for development in the center of the city. In conjunction with the redevelopment of a former factory site of a furniture manufacturing and distribution company, this project will entail the development of 151 landed houses for sale on an approximately 3.2 ha plot of land. Targeted for families who commute to central Jakarta for work or school, sales are scheduled to begin in August 2024 and construction will begin in December 2024 with the aim to complete in 2027.

Utilizing our expertise in the Japanese housing business, we will propose floor plans that consider flow line within house and incorporate storage space. Based on the Ryouonbou^{*3} natural heating and cooling design concept, we will create comfortable living environments by building shading devices and deep eaves to block the sun, using natural ventilation and plants to control the temperature of the indoors and premises, and creating energy with solar power panels, which are a standard feature in this project. All these efforts will help to reduce CO₂ emissions during occupancy (operational carbon). In addition, instead of bricks, which emit a large volume of CO₂ during manufacturing, we will use autoclaved aerated concrete blocks,^{*4} which have low environmental impact, to reduce CO₂ emissions during construction (embodied carbon). With these initiatives, we will seek to obtain EDGE^{*5} certification, which evaluates the environmental performance of buildings.

■Sumitomo Forestry Group's real estate operations in Indonesia

The Bogor project is the fourth Sumitomo Forestry project to develop and sell landed houses in Indonesia, following developments in Bekasi, Makassar and Depok, bringing the total number of units developed by Sumitomo Forestry in Indonesia to 1,162 units.^{*6} The housing demand in Indonesia is expected to remain strong with rapid economic development and stable population growth forecasted to continue. However, social problems, such as traffic congestion and water pollution in urban areas, also remain as challenges. Sumitomo Forestry is committed to supplying safe, reliable housing that helps resolve these social issues while contributing to better living environments.



The Indonesian government has set out a goal of achieving net zero emissions by 2060 and is working to develop environmental standards and laws in the construction sector. Sumitomo Forestry has long been working to reduce both embodied and operational carbon by adopting energy-saving designs (such as shading devices and deep eaves) and eco-friendly building materials (such as LED lighting and water-saving toilets). To accelerate our decarbonization efforts with the decision to install solar panels as a standard feature in landed houses, we decided to install solar panels for the project in Depok City which we have announced in February 2023 and begin construction in 2024. We will continue to promote environmentally conscious developments to help contribute to the achievement of the country's goals.



Solar panels also standard on detached houses for sale in Depok City

Sumitomo Forestry Group is engaged in a broad range of global businesses centered on wood, including forestry management, the manufacture and distribution of wood building materials, the contracting of landed houses and medium- to large-scale wooden buildings, real estate development, and wood biomass power generation. One of our business policies in our long-term vision, Mission TREEING 2030, is advancing globalization, and towards this aim, we will continue to promote real estate development both in Japan and overseas to strengthen our revenue base and realize our long-term vision.

- *1 Based on a company survey (as of November 2023). For landed house sale development projects in Indonesia being undertaken by Japanese companies, we define "standard installation of solar panels" as landed houses in the entire subdivision being pre-equipped with solar panels.
- *2 Sumitomo Forestry Group company Henley Properties Group installs solar panels on its custom-built landed houses as a standard feature, but this is the first time Sumitomo Forestry has installed such panels on landed houses for sale overseas.
- *3 Sumitomo Forestry's design method harnesses the power of nature, such as wind, sun and greenery, to create a comfortable feeling, such as a gentle breeze in the summer or the warmth of the sun in winter. By taking into consideration the surrounding environment of the site and creating a design that takes advantage of wind, sunlight, and greenery, we are striving to create comfortable housing that does not heavily rely on air conditioning equipment.
- *4 Lightweight, aerated concrete manufactured using the autoclave curing technique, which means high-temperature, high-pressure and high-humidity curing.
- *5 A building environmental certification system developed by IFC, a World Bank affiliated organization, that operates primarily in developing countries. The amount of energy used in construction, the amount of energy used during occupancy and the amount of water used must be at least 20 percent lower than their respective amounts in buildings built to local general specifications.
- *6 Related press release 1: Landed housing operation in Bekasi https://sfc.jp/english/news/pdf/20171102_E.pdf
 Related press release 2: Landed housing operation in Makassar https://sfc.jp/english/news/pdf/20211006_02.pdf
 Related press release 3: Landed housing operation in Depok https://sfc.jp/english/news/pdf/20230201_02.pdf

■Property overview (planned)

Location	Jl. Kaum Sari No1 RT01 RW05 Cibuluh Bogor Utara Bogor
Number of units	151
Total floor space	31,857 m ²
Structure/Floors	Reinforced concrete frame structure / Two floors
Start of sales	August 2024
Construction start	December 2024
Completion	2025

■PT Olympic Bangun Persada

Headquarters	Jl. Kaum Sari No1 RT01 RW05 Cibuluh Bogor Utara Bogor
Representative	Norman Edward Sebastian (President Director)
Establishment	May 2016
Business description	Real estate development
No. of employees	81 (as of December 31, 2022)

[REFERENCE MATERIAL]

Sumitomo Forestry's operations in Indonesia

- (1) Landed housing business
- (2) Forest and peatland management business
- (3) Timber distribution and building materials manufacturing business

(1) Landed housing business

In Indonesia, Sumitomo Forestry has been involved in four landed housing development projects. With a proven track record on projects in the suburbs of Jakarta and the island of Sulawesi, the company has a total of 1,162 units under development, including this current project in Bogor. While the conditions for promoting environmentally conscious housing development are not as advanced as in Europe, the United States or Japan, Sumitomo Forestry is going beyond developing properties for profit to supply high-quality housing that suits the different environmental conditions of Indonesia through environmentally conscious design, master plan proposals that harness the surrounding natural environment and our own design and construction technologies.

1st Project : Bekasi, a city near Jakarta / 157 units (2017~)

Sumitomo Forestry's first housing development project in Indonesia won the Gold Property Award's Best Premium Housing Award 2021 in the residential category, which recognizes outstanding housing and real estate in Indonesia. In collaboration with local real estate development company Pt. Summarecon Agung Tbk, Sumitomo Forestry developed 157 units on an approximate 44,000 m² site.

*Press release: https://sfc.jp/english/news/pdf/20171102_E.pdf

2nd Project : Makassar, Sulawesi / 508 units (2021~)

This is the first large-scale housing development project undertaken by a foreign company in Makassar. In addition to construction, we proposed the master plan for the entire area that reflected the surrounding environment and landscape. We are aiming to acquire EDGE certification, which evaluates the environmental performance of housing. This project is being jointly developed by three companies – Sumitomo Forestry, Pt. Summarecon Agung Tbk, which collaborated with us on the 1st project, and PT. Mutiara Properti Cemerlang, a local real estate development company. The site area is approximately 140,000 m². Sales commenced in June 2023.

*Press release: https://sfc.jp/english/news/pdf/20211006_02.pdf

3rd Project : Depok, a city near Jakarta / 346 units (2022~)

Utilizing our design and construction technologies developed in Japan and overseas, Sumitomo Forestry will supply safe and comfortable housing that is resilient to natural disasters. As with the 2nd project, we will work on an environmentally conscious development with the aim to acquire EDGE certification. Working in collaboration with local real estate development company PT. Graha Perdana Indah, we will develop an approximate 57,000 m² site. Construction is scheduled to begin in January 2024 and completion is slated for 2026. As with the 4th project in Bogor, we have decided to install solar panels as a standard feature.

*Press release: https://sfc.jp/english/news/pdf/20230201_02.pdf

4th Project : Bogor, a city near Jakarta / 151 units (2023~)

As a new step toward realizing a decarbonized society, we are installing solar panels as a standard feature, a first for a Japanese company in Indonesia. As with the first three projects, we are utilizing know-how acquired over the years in our Japanese custom-built housing operations to further reduce the environmental burden of construction by using building materials that have low CO₂ emissions during manufacture. Working with local real estate development company PT Olympic Bangun Persada, we are aiming to begin construction in October 2024.

*Press release: https://sfc.jp/english/news/pdf/20231127_02.pdf



1st Project
Summarecon Bekasi

Exterior view of the clubhouse
open to residents



2nd Project
Summarecon Makassar

Development area (artistic rendering)



3rd Project
Housing jointly developed with GPI

(artistic rendering of completed project)

(2) Forest and peatland management business

Sumitomo Forestry owns or manages approximately 290,000 ha of forest around the world (about 48,000 ha in Japan and 239,000 ha overseas). Through a forest fund established in the United States, we plan to acquire an additional 130,000 ha of forest land, bringing our total to about 420,000 ha. In Indonesia, we own or manage 171,000 ha. Sumitomo Forestry Group has set out a goal increase the forest area we own or manage to 500,000 ha by 2030. In Kalimantan, we are working with the government to manage tropical peatlands. We are also developing next-generation forest management technologies using Sumitomo Forestry's ground measurement data and IHI's satellite weather observation data.

Peatland management

Sumitomo Forestry manages approximately 155,000 ha of tropical peatland in Kalimantan. The world's peatlands cover more than 50 million ha (about 1.3 times the land area of Japan) and store approximately 1,190 trillion tons (more than 10 times the global carbon emissions in 2017). In recent years, fires have broken out in peatlands around the world, including in Indonesia, due to lower groundwater levels and drier peat. Through many years of research and surveys in Indonesia, Sumitomo Forestry has developed a peatland management model to manage groundwater levels and is working with the Indonesian government to properly manage peatlands. This peatland management technology has won high regard at COP and other international conferences, by international organizations and by developing nations that have peatlands.

*Press release: https://sfc.jp/english/news/pdf/20201209_02_en.pdf

NeXT FOREST project in collaboration with IHI

The NeXT FOREST project aims to develop methods to manage the world's tropical peatlands by combining Sumitomo Forestry's forest and tropical peatland management technologies acquired through its experience both in Japan and overseas with IHI's satellite data, weather observation and forecasting technologies acquired through its space development efforts. In addition, the project seeks to create high-quality carbon credits by developing highly accurate methods to evaluate and monitor the amount of CO₂ absorbed by forests. In June 2023, in collaboration with IHI and Recursive Inc., we announced an AI model that predicts groundwater levels of tropical peatlands, which we plan to use in our consulting services for other countries and companies.

*NeXT Forest special website: <https://www.ihico.jp/csr/english/nextforest/index.html>

*Related release (AI model): https://sfc.jp/english/news/pdf/20230627_01.pdf

Mangrove forest management

Sumitomo Forestry manages 9,738 ha of mangrove forests in Kalimantan, Indonesia. Carbon captured and stored in the marine ecosystem is called blue carbon. We are building a mangrove forest management model that will fix blue carbon and help nurture a rich ecosystem. Sumitomo Forestry is working to conserve biodiversity over a wide area that expands from Indonesia's forests to its inland peatlands and mangrove forests along the coast.

Press release: https://sfc.jp/english/news/pdf/20230222_01.pdf



Peatland managed in Indonesia



Mangrove forest



Monitoring peatland groundwater levels

(3) Timber distribution and building materials manufacturing business

Sumitomo Forestry's overseas manufacturing operations first began in Indonesia when we established PT. Kutai Timber Indonesia in 1970 and began plywood manufacturing operations in 1974. Currently four Group companies manufacture and sell plywood, particle board (PB), flooring/staircase components, furniture, musical instruments and other products while Sumitomo Forestry Indonesia handles the distribution of timber and building materials.

*Timber and Building Materials Distribution Business: <https://sfc.jp/english/business/timber/>

KTI (PT. Kutai Timber Indonesia)

Established in 1970, KTI began manufacturing plywood in 1974, building materials in 1992 and PB in 2008. With a focus on plywood using natural wood and planted wood, we manufacture PB using wood building materials and scrap wood. Manufacturing capacity for plywood and PB is about 120,000 m³ per year for each. Working with a local forestation cooperative, we are creating a sustainable forest management system and from 1999, have begun planting fast-growing trees. Through social forestry, where we distribute tree saplings free of charge to local residents and purchase the mature trees they grow at market prices, we are striving to contribute to the environment, society and economy.

*KTI website: <https://www.kti.co.id/en/home/>

RPI (PT. Rimba Partikel Indonesia)

RPI manufactures PB primarily for Indonesian and Japanese companies. Manufacturing capacity has risen to approximately 100,000 m³ per year. Established in 1990, it began factory operations in 1992. Currently, it is working to expand production and sales of low-formaldehyde products, low-pressure decorative melamine laminate boards and other high-value-added products. Like KTI, RPI is involved in the forestry business, as well.

AST (PT. AST Indonesia)

AST is primarily involved in the OEM manufacture of wood building materials for Japanese companies, furniture, electronic pianos and other electronic musical instruments. Established in 1996, it began operations of its second factory in 2021. It is adept at manufacturing high-quality building material products and other that use not only wood, but also combine plastic, fabric, metal and other raw materials.

SRP (PT. Sinar Rimba Pasifik)

SRP manufactures interior building materials for houses (solid and composite flooring, staircase components and wall panels) and wooden furniture for primarily Sumitomo Forestry Group. SRP was established and began manufacturing operations in 2009. It began supplying interior building materials for houses in 2018.



Plywood
(PT. Kutai Timber Indonesia)



Staircase components
(PT. Sinar Rimba Pasifik)



Factory interior
(PT. AST Indonesia)