Special Feature

Unlocking the Potential of Wood to Boost the Growth of the Sumitomo Forestry Group

This section introduces the Sumitomo Forestry Group's Renovation and Leasing Housing Business and MOCCA (wood use integration) Business. Aiming for further growth, both businesses are meeting social needs that include improving the seismic resistance and energy-saving performance of existing homes as well as promoting the use of wood construction and wood materials in the non-housing sector.



Our Way to Growth

The Sumitomo Forestry Group's

Renovation and Leasing Housing Business Strategies

The Group is strengthening the Renovation Business and the Existing Home Renovation Business to meet the need for safe, secure and energy-efficient housing stocks, while accelerating the business expansion in our Renovation and Leasing Housing Business.

The Status of the Domestic Stock Housing Market

According to the Ministry of Internal Affairs and Communications' Housing & Land Survey, of the approximately 57 million housing units in Japan in 2008, the stock of detached houses with residing households amounts to about 27 million units, at least 90% of which are constructed from wood. In addition, it is estimated that around 10 million of these existing houses were built before the revision of seismic resistance standards in 1981. Accordingly, the need to renovate existing houses is increasing rapidly.

Energy consumption in Japan's residential sector is on an upward trend mainly due to the increasing demand for lifestyles that are comfortable and convenient. In new houses, basic performance in such areas as heat insulation and air sealing have increased significantly in tandem with a step-by-step strengthening of energy conservation standards, while the introduction of such environmentally sound equipment as solar power systems has moved forward. In contrast, there are many existing houses that were constructed prior to the establishment of the first energy conservation standards in 1980.

In light of these issues facing existing houses, the Japanese government formulated its *New Growth Strategy* in June 2010. This strategy advocates shifting to housing policies that emphasize existing houses rather than building of new ones in line with structural changes in society as the Japanese population and number of households decline. In addition, this strategy aims to promote the revitalization of housing investment underpinned by domestic demand. Through these measures, this strategy sets forth a policy of further expanding the stock housing market, which is currently worth approximately ¥10 trillion (comprising a renovation market of around ¥6 trillion and an existing home resale market of about ¥4 trillion). Since the Great East Japan Earthquake, further growth of the stock housing market has been anticipated as the need for safe, seismic resistant and energyefficient homes increases.







housing were built before the revision of seismic resistance standards in 1981.

Source: Ministry of Internal Affairs and Communications, Housing & Land Survey

Strategies of the Group's Renovation and Leasing Housing Business

In addition to the steadily growing Renovation Business, the Group will undertake measures that emphasize the existing home resale market.

The Group has worked to expand in the renovation market by allocating management resources to strengthen the operations of Sumitomo Forestry Home Tech Co., Ltd., a subsidiary that specializes in renovation. Looking ahead, the Group will undertake initiatives to expand its businesses with the aim of achieving ¥100 billion in annual net sales as early as possible.

In the existing home resale market, we will promote the Real Estate Brokerage Business and the Real Estate Management Business, while focusing on developing the Existing Home

Expanding the Renovation Business

The Group's strengths in the Renovation Business lie in industry-leading technologies and expertise cultivated in the construction of custom-built wooden detached housing as well as design and proposal capabilities for living spaces that feature the plentiful use of wood. Leveraging these strengths, we will meet the need for safe, secure and energy-efficient homes. To this end, we are developing wide-ranging product lineups in such areas as renovating traditional Japanese-style houses, renovation that enables smart house functions and condominium renovation. We also utilize tools for explaining to customers in an easy-to-understand manner renovation effectiveness and Renovation Business, which resells existing renovated homes including detached housing and condominiums.

Sumitomo Forestry Group's Renovation and Leasing Housing Business



installation costs (including charts that clarify seismic resistant and energy-efficient performance and solar power system installation simulations). We also provide enhanced inspection systems and follow-up services.

To expand the Renovation Business, we will proactively augment this business's sales offices and personnel mainly in Japan's three largest metropolitan areas. Moreover, we will expand marketing activities including advertising to improve the level of recognition of the Group's *Reforest* renovation brand and highlight the Group's technological strengths.

The Strengths of the Group's Renovation Business

The Group's unique strengths are underpinned by its broadranging expertise in the areas of wood and wooden housing. This includes original renovation technologies and proposals featuring the plentiful use of wood, both of which utilize knowledge accumulated in the Custom-Built Detached Housing Business. Furthermore, with numerous members of the sales staff being fully qualified architects, a key characteristic of the Group is its full complement of highly specialized employees.

Energy-Efficient and Heat Insulation Renovation



We offer optimal heat insulation renovation proposals for every part of a house, including windows, ceilings and floors. To this end, our specialist engineers conduct detailed inspections of problem areas using thermographic cameras that penetrate every nook and cranny.

The Group's Original Seismic Resistant Renovation Technology



The Group has verified the reliability of its numerous originally developed seismic resistant renovation technologies based on the results of large-scale seismic tests on actual structures. As a result, our homes can withstand seismic waves twice as strong as the Great Hanshin-Awaji Earthquake.

Sumitomo Forestry's Tsukuba Research Institute



The Tsukuba Research Institute conducts R&D into advanced renovation technology that involves various testing and verification methods. The results of research on the safety and livability of homes accumulated in the Custom-Built Detached Housing Business are utilized in the Renovation Business.



Renovation of Traditional Japanese-Style Homes The Group boasts leading technologies and performance in Japan regarding the renovation of traditional Japanese-style homes that are over a century old.



Smart Reforest

Smart Reforest proposes renovations aimed at eliminating lighting and heating expenses by installing environmentally sound equipment based on improving the basic functions of housing through seismic resistant and heat insulation renovations.



Condominium Renovations

With the concept of integrating the attractive qualities of wooden houses into condominiums, we realize comfortable residential spaces through the use of wood that are tailored to each owner's lifestyle.

Promoting the Existing Home Renovation Business

The surplus housing supply in Japan is growing as the number of existing homes surpasses the total number of households. Against this backdrop, the remodeling of existing homes by specialist architects has attracted attention in recent years. In response, Sumitomo Forestry established the Renovation Department in April 2012 as a business that resells renovated existing homes, offering customers new options in addition to purchasing new residences. This involves renovating detached housing, condominiums and other existing homes so they can be used again, thus boosting asset value.

The Existing Home Renovation Business helps create quality existing housing from the perspective of improving structural performance while contributing to the development of a low-carbon, recycling-oriented society by focusing on being environmentally friendly. Anticipating the growth of the existing home resale market, the Company currently purchases properties targeting condominiums and wooden detached housing its home resale business. In addition, we are enhancing our support systems for renovated homes, which includes designing maintenance plans and conducting periodic inspections. Concentrating on Japan's three largest metropolitan areas, we are developing the Existing Home Renovation Business by strengthening cooperation among Group companies, including Sumitomo Forestry Home Service Co., Ltd., which engages in real estate brokerage services, Sumitomo Forestry Residential Co., Ltd., which undertakes real estate management, and Sumitomo Forestry Home Tech Co., Ltd.





Forest Haven HYOTANYAMA Forest Haven HYOTANYAMA is a renovation project that resells high value-added structures used as company housing with a focus on raising children.

Leveraging the Group's Strengths to Expand the Existing Home Renovation Business

The Existing Home Renovation Business (resale of renovated homes) is an upstream-to-downstream business in the stock housing market that extends from property purchasing and home inspections to remodeling work that enhances

property value and performance, sales and property management. Each Group company will work together to leverage its specialized expertise and, in turn, create quality existing housing.



Our Way to Growth

The Sumitomo Forestry Group's **MOCCA Business**

Generating New Value through the Greater Use of Wood

The MOCCA (wood use integration) Business promotes various uses for wood through a wide range of businesses. Tapping into the potential of wood, these businesses extend from promoting wood construction and wood materials in non-residential building structures to disaster reconstruction efforts.



Riku Café (Rikuzentakata City, Iwate Prefecture)

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Three-story fire-resistant elderly care facility

An interior view of the facility

Government Measures Promoting the Use of Timber

Japan's forests, mainly which were planted after World War II, are ready to be harvested. However, there are concerns about the progressive desolation of these woodlands, which have been left unmanaged as Japan's forestry industry declines. In 2009, the Japanese government formulated the Forest and Forestry Revitalization Plan as a policy to fundamentally improve domestic forests and forestry. Targeting a wood self-sufficiency rate of more than 50% by 2020, the Japanese government took the initiative in implementing the Act for Promotion of Use of Wood in Public Buildings* in October 2010. Through these actions, the government has signaled its intention to do everything possible to promote the use of wood in public buildings. Anticipating the wider, forward-looking use of domestic timber resources in particular, the Group established the MOCCA (wood use integration) Department in April 2011, while the MOCCA Business commenced operations to promote the use of wood construction and wood materials in the non-housing sector. *Act for Promotion of Use of Wood in Public Buildings

The Japanese government has established a basic policy for promoting timber usage in public buildings and clarified the direction it will take with regard to encouraging, to the greatest possible, the use of wood construction and wood materials. To this end, this act also encourages the proactive initiatives of regional public organizations and private companies in line with this basic policy.

MOCCA Business Initiatives

In November 2011, the MOCCA Business completed its first project with the construction of a wooden, three-story fire-resistant elderly care facility, which is the first of its kind in Tokyo's 23 wards. Making abundant use of wood in its interiors and exteriors, this facility was selected by the Ministry of Land, Infrastructure, Transport and Tourism's initial wooden building development promotion business in fiscal 2010 for being a pioneering project in the area of large-scale wooden structures that use a significant amount of timber.

In cooperation with local residents, businesses and universities, the *Riku Café* was built in December 2011 based on Sumitomo Forestry's *MOCCA HUT* temporary wooden structure, which uses local Tohoku timber. The *Riku Café* serves as a gathering place for residents of Rikuzentakata City, Iwate Prefecture, which was heavily damaged by the Great East Japan Earthquake.

Continuing from fiscal 2010, our proposals for designing and building wooden elderly care facilities as well as constructing the *oto no ha Café* (a commercial facility that uses Japan's first-ever 100% fire-resistant engineered wood) were selected by the Japanese government in September 2012 as wooden building technology leadership business projects for fiscal 2012. In addition, we are steadily accumulating successes as we extend our operations to the non-housing sector, which includes receiving an order to build a wooden child care facility in December 2012.

Riku Café, a Temporary Facility

Both striking and inviting, the *Riku Café* is a temporary wooden structure created out of the desire of local residents for a place to gather in the heart of their disaster-stricken community. Although many temporary structures are made from iron frames, this wooden building features attractive exteriors that make it easy to understand why the *Riku Café* is so beloved. In addition, the interiors are characterized by posts and beams that convey the innate warmth of wood. The *Riku Café* was built with regionally grown timber in an effort to support the recovery of disaster-affected industries and promote environmental friendliness. The comfort and heat insulation performance enabled by the café's

wooden interiors have received positive ratings from customers.

> Interior view of the *Riku Café*







Child care facility (six, two-story wooden post-and-beam buildings)

Commercial facility (oto no ha Café) (Photo Courtesy) KAJIMA CORPORATION, Otowa Building Ltd., K-PROVISION Co., Ltd., SLYME CORPORATION

Further Promoting the MOCCA Business

In July 2012, Sumitomo Forestry concluded a Community Reconstruction Cooperative Agreement with Higashimatsushima City, Miyagi Prefecture to help clarify this city's concept of an environmental community of the future. To this end, we will provide multifaceted support to achieve a municipal wood construction concept that encourages the creation of new timberbased industries.

As a renewable natural resource, wood possesses capabilities as a strong and durable material that brings people comfort while holding promise in the area of health. Actively leveraging these characteristics in various areas—including elderly care, educational and medical facilities—we will create a sustainable society that promotes the harmonious coexistence of wood and people.

Operating wide-ranging businesses focusing on wood, the mission of the Sumitomo Forestry Group is to accelerate growth through businesses that contribute to society and people by

tapping into the possibilities of wood and, in turn, increasing its value.



A health clinic built using MOCCA HUT temporary construction in Higashimatsushima City

Fire-Resistant Structural Technology, the Key to Popularizing Non-Residential Wooden Buildings

The key to adding greater value to wooden buildings is to bring out their woody feeling while retaining essential fire-resistant performance. In particular, the traditional *Arawashi* construction method utilizes the visibility of wooden posts and beams in rooms to enhance their woody atmosphere. The Group will promote the development and introduction of new wood construction technologies that bring out the woody feel of posts and beams in semi- and fully fire-resistant buildings, which are required to be more fire resistant than regular buildings. In so doing, we are working to popularize non-residential wooden buildings that feature interiors that make abundant use of wood.



An interior image that uses the Arawashi construction method

The Commercial Facility oto no ha Café uses Japan's First-Ever 100% Fire-Resistant Engineered Wood

The oto no ha Café, which opened for business in Tokyo in May 2013, is a wooden structure that brings out the feel of wood. Located in a region with strict fire-safety regulations, this café uses fire-resistant engineered wood* to realize its woody atmosphere while remaining in compliance with these regulations.

The core of the cross-section is composed of engineered cedar while the surrounding outer layer consists of engineered wood treated with fire retardant. Tohoku-grown cedar supplied by Sumitomo Forestry was used to build this café, contributing to the revitalization of the domestic forestry industry while creating local jobs.

*Developed by four organizations: KAJIMA CORPORATION, Tokyo University of Agriculture and Technology, Forestry and Forest Products Research Institute, and T.E. Consulting Inc.





(KAJIMA CORPORATION obtained the approval of the Minister of Land, Infrastructure and Transportation)

< oto no ha Café > Client & Basic Design: Otowa Building Ltd. / Design & Supervision: KAJIMA CORPORATION / Design Cooperation: Ikehata Atelier / Interior Design & FFE: ILYA CORPORATION / Construction: Sumitomo Forestry (Building), Sakamoto Corporation (Exterior)