HIGHLIGHT 1

Related SDGs

Enhancing Our Timber and Materials Procurement to More Effectively Embrace Human Rights and the Environment

Material Issue 1

Ongoing timber and materials procurement that considers sustainability and biodiversity

Related goals	Fiscal 2021 Plan	Fiscal 2019 actual results
Building sustainable supply chains	80% implementation rate of our sustainability procurement survey in the supply chain of the domestic housing department	86.0%
	100% implementation rate of our sustainability procurement survey for suppliers of imported timber	100%

With increasing awareness of human rights and environmental issues in the supply chain, measures to ensure a sustainable society over the entire supply chain are being sought. In accordance with the Sumitomo Forestry Group Procurement Policy, we are promoting the procurement of timber and wood products from properly managed forests and reinforcing responsible procurement measures for non-wood materials as well.

Responsible Procurement in Our Housing and Construction Business

In 2002, Sumitomo Forestry Group formulated its Green Procurement Guidelines to build a sustainable supply chain. In 2015, our Timber Procurement Philosophy and Policy was revised and renamed to the Sumitomo Forestry Group Procurement Policy. In 2017, we drew up the Sumitomo Forestry Group Code of Conduct, which was expanded to include the supply chain. Through this and other measures, we have reinforced our efforts to build a sustainable supply chain.

In the Housing and Construction Business, one of the main pillars of our Group's operations, sustainable materials procurement is positioned as one of our material issues for management. The structural materials and small cross-sectional wood slabs called hagarazai* are procured through our trading arm, the Timber and Building Materials Division, which confirms legality and sustainability of timber and wood products. In addition, we have been responding to the Clean Wood Act, which seeks to promote the distribution and utilization of legally harvested wood and related products from May

Engaged in procurement activities based on the Sumitomo Group Procurement Policy

Sumitomo Forestry Group Procurement Policy

Wood

- Confirming legality (Clean Wood Act)
- Confirming sustainability (Sustainability Procurement Survey)

Building Materials

- Procurement in line with Sumitomo Forestry Group's Green Procurement Guidelines
- Implementation of the Sustainability Procurement Survey

2017. The Housing and Building Materials Division registered as a Type 2 Registered Timber-Related Operator under the Clean Wood Act in March 2018. For housing equipment, insulation, resin parts and other building materials, procurement is conducted in accordance with the Sumitomo Forestry Group Green Procurement Guidelines. Before we begin transactions with a new supplier, we first conduct checks of their various practices at our supplier evaluation meetings. Areas for examination include quality, cost and delivery times as well as environmental conservation, human rights, labor safety, information security and a wide range of other categories.

In an aim to further enhance our practices at Sumitomo Forestry, in May 2019 in our Mid-Term Sustainability Targets, we set out a goal to build a sustainable supply chain and are regularly conducting sustainability surveys and other efforts to reinforce our management system.

* Structural materials are a wooden house's foundation, posts, beams and other wood materials used for the structure. Hagarazai are materials and base materials used to supplement the structural materials of a wooden house.

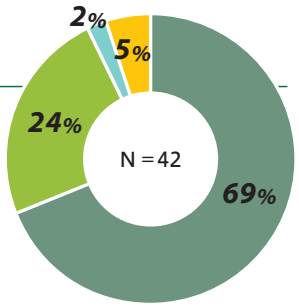
Conducting Sustainability Procurement Survey

Starting in fiscal 2019, the Housing and Construction Division began subjecting new suppliers to an annual Sustainability Procurement Survey in addition to the Green Procurement Survey that was required in the past. This Sustainability Procurement Survey was originally aimed for existing building materials and housing equipment manufacturers and suppliers. In addition, we conduct surveys of 30 companies we transact with directly (making up for about 86% of our total fiscal 2018 purchase amount) and the top 12 companies (in terms of fiscal 2018 purchase amount) that we transact indirectly with. These surveys cover a total of 53 categories and help us grasp each company's status regarding governance, human rights, labor safety, environmental initiatives as well as sustainable wood procurement and other relevant issues.

In October 2019, we held a sustainability survey briefing to all suppliers who were asked to respond to our survey. Approximately 50 people attended, and we shared with them the Sumitomo Forestry Group Code of Conduct, the Sumitomo Forestry Group Procurement Policy and our thinking regarding responsible procurement to promote mutual understanding.

Fiscal 2019 Sustainability Survey Results

(100% indicates a perfect score)



The survey conducted had a 100% response rate, and based on their responses, suppliers were evaluated on a four-scale ranking of S, A, B or C.

Through the surveys, we were able to confirm that many suppliers share our own understanding of what responsible procurement means. On the other hand, some suppliers fell short of our expectations and after discussions at our supplier evaluation meetings, we provided feedback, which we will continue to follow up on to ensure ongoing improvement.

A sustainability procurement survey explanatory meeting

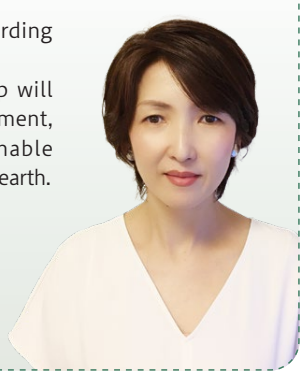
Towards Building an Even Better Partnership

The surveys provided us with feedback, as well. Our suppliers commented that the surveys prompted them to advance their own measures and gave them impetus to improve on areas that fell short of expectations. In addition, we realized that we were not able to get valid responses on some of the survey questions because they were difficult to understand. To enhance mutual understanding, we will continue to devise new methods and work in cooperation with the relevant divisions to make improvements. With the expansion of our survey subjects and the improvement of its content, we will work to foster positive partnerships with our suppliers to build a strong supply chain.

A Comment from One of Our Suppliers

The TOTO Group is striving to be an ongoing presence that contributes to societies and the global environment. For this purpose, TOTO has integrated management and CSR and is working to create value that harnesses its strengths for the benefit of all stakeholders. At Sumitomo Forestry Group's procurement seminar, we were able to get information about the company's ESG initiatives and stance, how ESG surveys are handled to confirm responsible procurement and specific checklist items. This enabled us to better understand Sumitomo Forestry's thinking regarding a sustainable supply chain.

In its business activities, the TOTO Group will fulfill its responsibilities by balancing management, the environment and society for the sustainable development of the company, of societies and the earth.



Masami Sasaki,
sales chief, Housing Marketing Department 1,
Housing Company Marketing Division,
Special Sales Division, TOTO Ltd.

HIGHLIGHT 2

Related SDGs

Building Homes that Protect Lives and Lifestyles

Material Issue 2

The development and sale of products and services that consider the environment and society

Related goals

Increasing environmentally conscious products and services

*Including reducing greenhouse gas emissions towards creating a decarbonized society (SBT: Scope 3)

Fiscal 2021 Plan

80% of new custom-built detached housing orders are for ZEH type houses

*ZEH (Net Zero Energy House) are houses with an annual primary energy consumption of net zero or below thanks to a combination of high insulation specifications that suppress energy consumption, high-efficiency equipment that conserve energy, and solar power generation systems and other equipment that produce energy.

Fiscal 2019 actual results

48.2%

*Values based on orders include ZEH and Nearly ZEH. ZEH Standardization Performance (FY2019) submitted to Sustainable Open Innovation Initiative is 51%

In recent years, there has been an increase in large-scale natural disasters, such as earthquakes, tsunamis and typhoons, causing significant economic damage and threatening our society and lifestyles. By providing safe and reliable housing, Sumitomo Forestry wants to contribute to protecting people's lives and lifestyles.

A house that protects life

Guard Life

Providing the daily comforts of life while protecting its occupants from unexpected natural disasters

1. Resistant to earthquakes
2. Resistant to fires
3. Resistant to strong winds and rain

BIG FRAME RESILIENCE

A house to live in a long time

Keep Life

Providing energy-saving and insulation specifications and installing the latest equipment to make life comfortable at home even after a disaster

1. Produces electricity
2. Secures water supply
3. Protects from heat or cold
4. Stores food supplies

Guard Life

Sumitomo Forestry Homes – Resistant to Earthquakes, Fires and Typhoons

Sumitomo Forestry's wooden homes utilize a unique Big Frame (BF) construction method as one of its distinct characteristics. This method uses posts that are approximately five times thicker than standard posts as the primary structural material. These posts are then secured with strong metal for high resistance to external forces such as earthquakes. Using a three-story actual-sized model home, we conducted tests to confirm that our houses can withstand the shaking and repeated aftershocks of an earthquake on the scale of the Great East Japan Earthquake in 2011. In addition, our houses have adopted the Ministerial Ordinance on Semi-Fireproof Houses as a standard specification, which in terms of fire insurance, make them equivalent to reinforced concrete construction (RC construction) and steel frame construction buildings. In addition, our houses can withstand winds of 88m/second, much higher than Typhoon Faxai (highest wind speed: 57.5m/second) that hit the Tokyo metropolitan area in 2019. Sumitomo Forestry houses are resistant to earthquakes, fires, typhoons and other natural disasters.

Zero Damage in a Scale-7 Intensity Seismic Tremor

Mr. I, a resident of Mashiki in Kumamoto Prefecture, was away from home when the Kumamoto Earthquake of 2016 hit. He decided to take refuge in his parents' home. Several days later, he checked in on his own home and was surprised to discover that despite two scale-7 earthquakes, there was little change either inside or outside to indicate that an earthquake had occurred. Even with strong aftershocks, the house did not creak, giving him a sense of security that the house was safe.

Houses That Protect Lives – Offering Safety to Customers and the Community

With the Nankai Trough Earthquake, major typhoons and other natural disasters forecasted in the near future, customer awareness of disaster prevention is growing yearly. To respond to these needs, we want to build more homes that are resistant to disasters and give both customers and communities a sense of security and safety that their lives are protected even in the event of a disaster.

Keep Life

The Thinking Behind "Taking Refuge at Home"

Many people after a large-scale disaster find themselves falling ill. And sometimes it takes days before utilities such as electricity and running water are restored.

What is important during times like these is the thinking behind "taking refuge at home." However, with the fear of aftershocks, with the lack of electricity or water, this was not possible.

Sumitomo Forestry's ZEH houses are not only earthquake and fire resistant, but they have high insulation properties, as well. In addition, electricity produced with solar power generation systems can be stored in energy storage systems, which combined with Enefarm household fuel cells, can supply power for up to eight consecutive days, enabling the use of hot water and floor heating. Because hot water stored with Enefarm can be used for daily needs, occupants can safely and securely take refuge at home even when various essential utilities are disrupted.

A Low-energy Lifestyle That Reduces Environmental Burden in a Healthy, Comfortable Way

Of course, the benefits of Sumitomo Forestry's ZEH houses are evident not only during times of disaster. With high insulation properties and energy-saving housing equipment, occupants can enjoy a comfortable lifestyle while reducing their energy consumption. In addition, Sumitomo Forestry ZEH houses, which use high-insulation wood, can protect the health of the people who live in them, such as preventing violent fluctuations in blood pressure due to sudden changes in room temperatures when bathing or getting out of bed in the winter.

Taking Refuge at Home Made Possible with Double Power Generation

Mr. S's house is located in the central area of Boso Peninsula, Chiba Prefecture in Japan, and was directly hit by Typhoon Faxai in September 2019. Several hours of this record-setting storm resulted in a power outage that lasted three-and-a-half days, forcing many to evacuate to shelters. However, Mr. S's family used their solar power generation system and Enefarm to get electricity both day and night. They were able to use air conditioning and other electric products and take refuge at home in a manner that was almost like life as usual.

Comment from the Branch Manager

I am in charge of the Boso Peninsula, Chiba Prefecture, an area that was heavily damaged by a typhoon in 2019. I am proud of the fact that right after the typhoon, many customers called to express their gratitude, saying that their homes were almost totally unscathed and that they were able to stay safe at home even with the disaster thanks to the installation of Enefarm. In recent years, I am sensing a change in customer needs with an increase in natural disasters. In particular, people are expressing more interest in ZEH houses, home energy storage systems and Enefarm for its safety features, and the ratio of orders for these products has increased significantly. As one of the people in charge of creating the Ichihara Exhibition Space, which enables customers to have a hands-on experience of these types of equipment, I am strongly promoting these features as a means for current and future generations to live safely.

Hirotsugu Mori,
assistant manager, Chiba Branch,
Housing and Construction Division

HIGHLIGHT 3

Related SDGs

New Dimensions in the Benefits of Wood Born from Collaboration

Material Issue 2

The development and sale of reliable and safe products and services that consider the environment and society

Related goals

Increasing environmentally conscious products and services

Fiscal 2021 Plan

Carbon stock in wooden architecture in Japan of 199,509t-CO_2

Fiscal 2019 actual results

193,072t-CO_2

Kurkku Fields, a sustainable farm and park, was created in Kisarazu, Chiba, Japan in the autumn of 2019. Here we introduce how Sumitomo Forestry was involved in this facility's efforts to enrich lives and society.

Creating a Place where People can Experience How to Coexist with Nature

Kurkku Fields is a sustainable farm and park comprising approximately 30 hectares of farmland, pastures and poultry farms interspersed with artwork. Through workshops and harvesting activities where participants can eat freshly gathered produce and eggs, Kurkku Fields offers experiences in farming, food and art all in one spot. Sumitomo Forestry was in charge of creating spaces for these experiences that integrated nature. Specifically, we built four facilities – a dining/bakery building, a charcuterie where meat is processed and sold, a chiffon area where chiffon cake is produced and sold, and the Center House, a building with showers and a living room space for guests of Tiny House Village, a collection of trailer houses that serve as accommodation facilities. We participated from the earliest concept-development stages and worked diligently on this new challenge, developing ways to harness the huge open space and discussing what types of experiences should be conveyed.

First floor dining area

Wood Conveys the Touch of Life

The touch of life – this is one of the important concepts behind Kurkku Fields. In a city, it is often difficult to feel the existence of "life," so Kurkku Fields aims to give this sensation through farming, eating and art. To play up on this concept, we utilized plenty of wood and paid close attention to structural details. We tried to create a tactile-oriented space that allows people to directly touch and feel wood, which is a form of nature and life itself. In particular, the dining/bakery building uses wood not only for the interiors but the exterior walls, the roof, the flooring and many other parts. Knowing that wood changes and gains more character over time, our design took into consideration ways to enjoy this change. By using scrap wood from the barn for flooring, we also tried to show our consideration for the environment and our desire to not waste limited resources. In addition, a portion of the roof uses natural slate called ogatsuishi from Ishinomaki, Miyagi Prefecture, one of the disaster sites of the Great East Japan Earthquake in 2011. The building reflects the thoughts and wishes of a wide variety of people who were involved in the project.

Dining/bakery building exterior view

A New Appeal of Wood, Discovered through Collaborative Work with People from Different Fields

This project was created by a group of artists, architects, government officials, farmers, landscapers, permaculture designers and a variety of other specialists led by musician Takeshi Kobayashi, who served as chief producer.

For Sumitomo Forestry, working with professionals from different fields on the project's overall design and the building of each structure exposed us to novel methods and thinking that differed from our standard construction practices and provided us with new learning experiences, stimulation and ideas.

These diverse encounters and collaborations offered us a fresh angle and perspective about the appeal and value of our ongoing commitment to wood. While different from our usual timber solutions for buildings, we hope that this added dimension of the benefits of wood will help to elevate interest in wooden buildings.

Living room space of the Center House

Comment from the Owner and Chief Producer

Broadly speaking, the concept behind Kurkku Fields is sustainability. Creating a space that reflects this concept, which constantly evolved in different ways, was frankly very difficult. However, it was fun to continuously ask ourselves such questions as, "Where are we coming from?", "Where do we want to go to?" and "Where are we now?"

I worked with Sumitomo Forestry on this project until the very end, closely enough to get to know them all as individuals, and I know they gave it their all. Sustainability requires individual freedom, thought and strength. Even if it is an accumulation of small achievements over time, we must move toward sustainability to protect the interests we have now. While our work with Sumitomo Forestry has concluded for this stage, we will consult them for our next stage. For certain, trees, wood and forests are an indispensable factor in our efforts to coexist with the earth.

Takeshi Kobayashi, musician

HIGHLIGHT 4

Related SDGs

The Power of Greenery in Elevating the Value of Communities and Living

Material Issue 2

The development and sale of reliable and safe products and services that consider the environment and society

Related goals

Increasing environmentally conscious products and services

Creating an environment that considers biodiversity

Fiscal 2021 Plan

Order ratio of 63.0% for environmentally-friendly products* in our Environment Business

500,000 in sales of native species logs

Fiscal 2019 actual results

56.8%

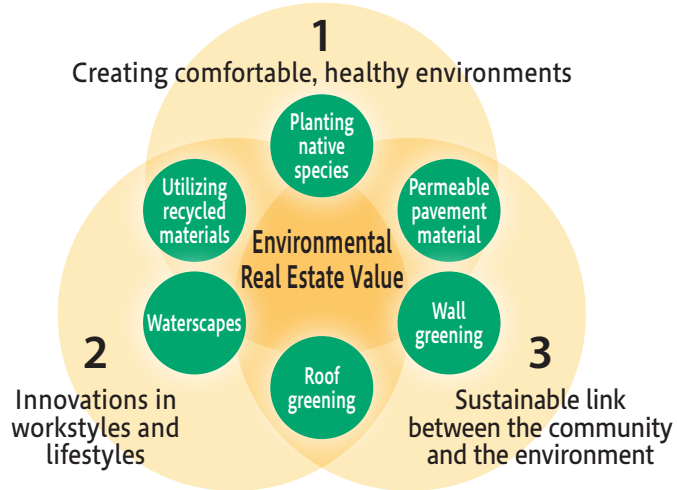
424,000logs

* (1) local seedlings, (2) permeable paving material, (3) green wall construction, (4) rooftop greening, (5) biotope and (6) use of recycled materials

In recent years, there has been an increasing focus on the various effects and benefits of greenery. Incorporating greenery in real estate enhances value. We want to build lifestyles and communities that are enriched through coexistence with nature and link this with people's health. Sumitomo Forestry Group is challenging itself to create new greenery value in houses, office buildings and entire neighborhoods with a view to sustainability.

Creating Communities – What are We Seeking?

With growing concerns about climate change and other environmental issues, and with low birthrates, an aging society and changes in work style, our societal environment and lifestyles are undergoing tremendous change. This is resulting in renewed interest in the value of creating greenery in our communities. By harmonizing greenery with buildings and spaces, we enhance the value of not only the buildings themselves, but the surrounding areas as well. With worries about changes in climate and societal structures forecasted to grow in the years ahead, we must envision how we wish our lives to be over the next several decades. We believe community planning needs this type of long-term perspective.



Comprehensive Environmental Real Estate Born from Collaboration

Sumitomo Forestry Landscaping, which plays a central role in Sumitomo Forestry Group's greening business, has a business and capital alliance with Kumagai Group, major construction company. The two companies are working together from the planning and design stages to create environmental real estate that utilizes greenery needed for a sustainable society. To measure the companies' contributions to the region and environment, six quantitative targets have been set. However, to avoid overreliance on indices and numbers, we are also planning and designing with an emphasis on the added value to the people who use the space, the community and society as a whole.

Six Indices for the Greening of Environmental Real Estate

- A planting plan that uses primarily native species
- Avoiding the use of plants/vegetation that may lower the region's biodiversity
- The greening of buildings with roof, wall and other greening
- The use of permeable pavement material
- The use of recycled materials
- The creation of waterscapes, biotopes

A High-Rise Japanese Garden That Conveys the Beauty of Nature and Harmony

One example of an environmental real estate project that Sumitomo Forestry Landscaping designed is Hotel Yaenomidori Tokyo that opened in the Yaesu Hatchobori area of Tokyo in July 2020. The hotel's concept is to present the multiple aspects of Japan's beauty. On the very top floor is a Japanese garden for guests to experience a spiritual, Japanese-style, sophisticated calm despite being in the middle of the Tokyo business district. By using shishiodoshi (water-filled bamboo tubes that clack against stones when emptied to frighten wild), water basins and other waterscape devices, by planting trees that respond to the change in seasons, Sumitomo Forestry Landscaping carefully designed and constructed a space that conveyed the beauty of nature and Japanese culture through the five senses. It harnessed its experience and technology to secure trees both below and above ground, to consider load limits and rain and wind conditions of high-rise buildings, and to commit to planting native species.

With an Aim to Create Greater Value for Society

People who use offices, residential areas, hospitals, hotels or other types of spaces seek greenery for different reasons. At Sumitomo Forestry Group, we create greenery with a purpose, such as a place to re-energize during work, to enrich biodiversity, or a variety of other needs. We will continue to keep abreast of societal changes and try to contribute to SDGs and the resolution of a wide variety of other societal issues. To do so, we will try to quantify the effects of greenery in terms of reducing temperature increase, promote proposals for acquiring environmental certifications and disseminate more widely the value that greening provides to society.

Message from the Hotel Management

Just as our name indicates, Hotel Yaenomidori Tokyo seeks to represent the multi-layered beauty of Japan with its emerald-like sophisticated space and services. That is why I love that the first thing guests see when they enter our hotel is a Japanese garden located across the front lobby on the uppermost floor. This Japanese garden, with a view of Tokyo as a backdrop, is as beautiful as a painting. Here we hope our customers are stirred emotionally and feel something out of the ordinary. To have our guests enjoy the garden, we proactively invite them to the veranda. We hope the murmur of the stream, the scent of the flowers and other aspects of the garden that can be enjoyed with the five senses will give our guests a sense of calm. Sumitomo Forestry Landscaping helped realize this by providing advice from many different perspectives. While there were construction challenges along the way, I am grateful that they successfully realized our vision.

Tomomi Takahashi,
general manager, Hotel Yaenomidori Tokyo

HIGHLIGHT 5

Related SDGs

Aiming for 100% Renewable Energies by 2040

Material Issue 3

The reduction of the environmental impact of our business activities

Related goals

Reducing greenhouse gas emissions toward creating a decarbonized society (SBT: Scope 1 & 2)

Concrete Measure Greenhouse gas emissions ($t\text{-}CO_2e$)

Scope 1, 2: By 2030, reduce greenhouse gas emissions 21% compared to 2017 (base year)

*SBT Scope 3 targets are incorporated into our Material Issue 2, the development and sale of reliable and safe products and services that consider the environment and society. Scope 3: A 16% reduction compared to 2017 (base year) of total Category 1 and 11 greenhouse gas emissions by 2030.

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Sumitomo Forestry Group has set forth the reduction of the environmental impact of our business activities as one of its material issues. In July 2018, we formulated a Group target for reducing greenhouse gas emissions, which was certified by the SBT Initiative*1. In addition to energy conservation efforts, we are accelerating our use of increasingly important renewable energies to achieve our goal and have become a member of RE100*2 in March 2020.

Joined RE100 with the Aim for 100% Renewable Energies

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) issued its Special Report on Global Warming of 1.5°C, which published the latest scientific findings regarding global warming. According to this report, limiting global warming to 1.5°C compared with 2°C above pre-industrial levels by the end of this century will have a significant difference in impact on the global environment. Given these scientific findings, COP24 and other international discussion forums are rapidly aligning with the Paris Agreement and shifting their targets from 2°C to 1.5°C.

Sumitomo Forestry Group's long-term greenhouse gas emissions reduction target was certified by the SBT Initiative in July 2018. However, prompted by these new findings and in preparation for revisions in SBTs, we have decided to further reduce the greenhouse gas emissions from our business activities. As part of this effort, in March 2020, we became a member of RE100 and are aiming to use 100% renewable energies.

By 2040, we aim to utilize 100% renewable energy for the electricity used for our Group business activities and for the fuel for our power generation operations.

Sumitomo Forestry Group's implementation of renewable energy includes solar power generation panels installed at our housing exhibition sites and generated power for our own use (including an adjacent wood fuel chip factory) from our biomass power generation sites. In fiscal 2019, renewable energy accounted for about 16% of our total group electricity usage. To accelerate the implementation of renewable energy, we plan to have each business division set its own targets and tackle the issue as a company-wide initiative.

For Sumitomo Forestry Group to achieve 100% renewable energy for the electricity for our operations, we are utilizing Sumirin Denki, a service where we purchase surplus power as well as supply electricity generated from solar power systems of Sumitomo Forestry home houses. We are also considering installing solar power generation systems in our factories both in Japan and overseas. Furthermore, we will consider a diverse range of procurement methods that take advantage of programs in each country we operate.

Sumitomo Forestry Group will continue to proactively utilize renewable energies to reduce greenhouse gas emissions and contribute to the realization of a sustainable society.

2040 RE 100
THE CLIMATE GROUP CDP

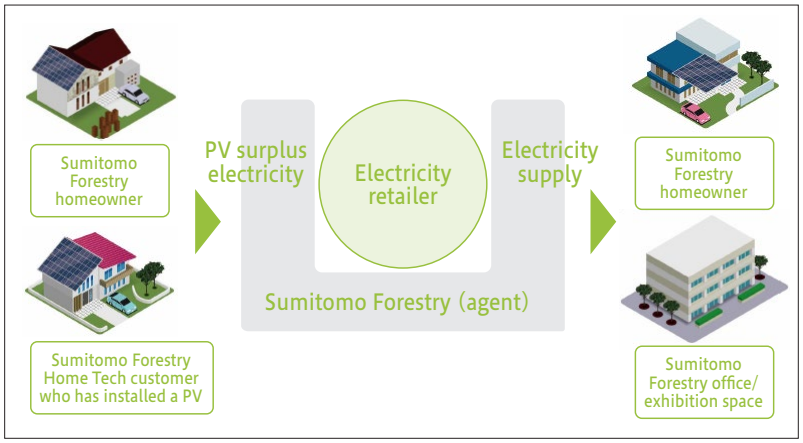
*1 SBT (Science Based Targets) Initiative:
An international initiative established in 2015 by four organizations, including the United Nations Global Compact and CDP. On October 15, 2019, the SBT Initiative updated its target validation criteria to 1.5°C. Our decision to become a member of RE100 is part of our effort to aim for greenhouse gas emissions that are in line with this new validation criteria level.

*2 RE100: An international initiative operated through an alliance with the Climate Group, an NGO, and CDP. As of March 25, 2020, 229 companies worldwide are members, of which 32 companies are Japanese.

Utilizing Sumirin Denki Solar Power Generation for Domestic Electricity Usage

In November 2019, Sumitomo Forestry Group launched Sumirin Denki, a service for owners of Sumitomo Forestry Group homes where we purchase surplus energy generated by their household solar power systems and supply it to others. We began this service with the completion of the government's FIT (feed-in tariff) fixed-price renewable energy purchase system.

We are working on ways to utilize this energy from Sumirin Denki for our business offices and appropriate it to our domestic electricity consumption. Because Sumirin Denki is based on solar power, we need to think of ways to supply electricity at night and are working on the installation of batteries as well as the procurement of other electricity sources, such as biomass power generation from our own Group operations.



Expanding Solar Power in Our Factories

As Sumitomo Forestry Group, our manufacturing facilities account for about 30% of our total greenhouse gas emissions. To achieve RE100, it is vital that we conserve energy and expand the use of renewable energy in our factories.

In May 2020, a new plant was opened in the Kagoshima Plant site of Sumitomo Forestry Crest, which manufactures interior materials. Under a PPA (Power Purchase Agreement) model to hold down initial costs, we plan to install 1,540 solar power panels in this new factory building, which is forecasted to generate approximately 549 MWh of power annually, reducing greenhouse gas emissions by 260t per year. In addition, PT AST Indonesia, which manufactures and sells musical instruments, parts for musical instruments, wooden building materials and interior housing materials, is constructing a new plant to expand production. About 90% of AST's greenhouse gas emissions comes from electricity consumption and with the operation of the new plant, electricity consumption is expected to increase. However, we are planning to install 3,384 solar power panels on the roof of the new plant, which will produce approximately 2,181 MWh of power annually, reducing greenhouse gas emissions by about 1,600t.

Both in Japan and overseas, Sumitomo Forestry Group is considering the installation and expansion of solar power panels in our manufacturing sites in an ongoing effort to increase the ratio of renewable energy.

* PPA Model: A system whereby a host loans out factory rooftop space to a power generation company to install solar energy panels and then purchases the electricity generated from these panels for its own use.

Exterior view of the Kagoshima Factory
Installation of solar panels is scheduled for completion in September 2020

Overseas Approaches to Realizing RE100

Our New Zealand subsidiary Nelson Pine Industries Ltd., which manufactures and sells MDF (medium-density fiberboard), veneer and LVL (laminated veneer lumber), consumes the most electricity within our Group. In New Zealand, a high ratio of power composition is from hydropower, geothermal power and other forms of renewable energy, and was approximately 80% as of 2016. The New Zealand government has set out a goal for 100% renewable energy by 2035, which is when we forecast to achieve RE100.

With the momentum for implementing renewable energy growing in Southeast Asia, we are considering the installation of solar power generation systems at our other manufacturing sites in Indonesia and Vietnam. In the United States and Australia where we are primarily involved in the housing business, we plan to steadily transition to renewable energy thanks to the ability to procure renewable energy at low cost and the issuance of sufficient renewable energy certificates.

HIGHLIGHT 6

Related SDGs

A Diverse and Vibrant Workplace

Material Issue 4

A vibrant work environment where a diverse workforce can unharness their skills and individuality

Related goals

Creating a work environment that generates diverse ideas, job satisfaction and vibrancy

Securing human resources by nurturing younger generations and utilizing older ones

Fiscal 2021 Plan

5.5% female employees in management positions at Sumitomo Forestry, 7.3% at domestic affiliated companies

Employment rate of people over 60 years old (including re-employment) of 87.0% at Sumitomo Forestry, 78% at domestic affiliated companies

Fiscal 2019 actual results

	Sumitomo Forestry	Domestic affiliated companies
	4.2%	6.1%
	79.6%	69.4%

With falling birthrates and an aging population, Japan's working population continues to decline. To secure a good workforce, it is ever more important to promote diversity and create a work environment where women and senior citizens can succeed. In its Action Guideline and Code of Conduct, Sumitomo Forestry Group has formulated ways to secure and respect diversity and is focusing on initiatives that will enable a diverse workforce, regardless of nationality, gender, age and other factors, to play an active role.

Promoting Women's Empowerment by Breaking Away from Stereotypes

In 2013, Sumitomo Forestry Group announced as part of its diversity management its Declaration on Empowering Women, which has three major pillars: to create a positive work environment for women, to leverage women's unique creative powers and to spur innovation through the participation of women. By drawing out women's potential, the Declaration seeks to integrate a wide range of viewpoints to vitalize the work environment. In 2016, the Company formulated is Voluntary Action Plan on the Appointment of Women Directors and Managers. Currently, we aim to have at least a 5.5% ratio of women in management positions by 2021.

To make this goal a reality, in 2020, we established a new job description called administrative planning to provide more opportunities for active participation and open a path for employees in many different departments and roles to become managers. In addition, we are continuing our Mentor System that we adopted in fiscal 2016 where division managers and group manager-class supervisors serve as mentors and support junior female managers, manager candidates and other mentees. In fiscal 2019, six mentees participated in this program.

In fiscal 2019, we held an event called the Women's Conference 2020, aimed primarily at young women employees in their 20s and 30s. Participants were given the opportunity to hear from people who could serve as role models, namely female managers and female directors. The response was very positive, with participants saying that they gained a better idea of what they should strive for and that it served as an opportunity to reevaluate their position and job description. Feedback was shared widely among the directors and president, who also attended, and discussed at management training seminars. It was an opportunity for all employees to dispel their unconscious biases, including their perceptions of gender roles, and raise awareness that a diverse workforce benefits the company's development.

Comment from a Participant of the Women's Conference 2020

We had the opportunity to attend the Women's Conference 2020. I was impressed at how motivated all the participants were in their work and how they each carved out their own workstyle. This conference was both simulating and fulfilling in helping me realize that there are many such women. I now know that the company needs me and has high expectations of me, and this has given me both confidence and courage. I realized that I sometimes take things too seriously and hesitate, so in order to advance in my career, I will try to take on new challenges and be more proactive. The conference encouraged me to have a positive attitude to try new things, including moving up the career ladder.

Seiko Kitajima,
Housing and Construction Division, Fukui Branch

Participants of Women's Conference 2020 displaying their individual goals

Creating a Company where Employees can Continue to Work with a Sense of Security

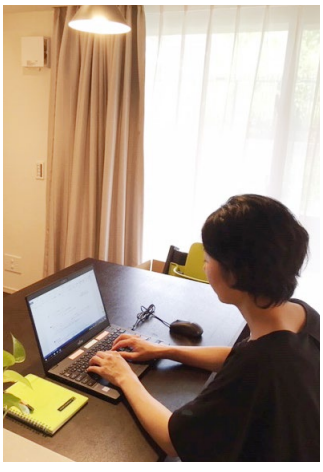
To expand work opportunities for older generations, in fiscal 2020, Sumitomo Forestry raised the retirement age from 60 to 65 and implemented a flexible age retirement system where employees can choose when to retire. In addition, we abolished the upper age limit of our Senior Human Resources Bank, a system for employees over the age of 65 to continue working. Providing opportunities for employees to continue working for a long time with a sense of security and enabling everyone to develop career paths at an early stage leads to securing better people. Having employees with a wealth of experience pass on their valuable knowledge and skills to younger generations is also an aim. Since fiscal 2018, we have also begun promoting the Universal Manner Test, which teaches people how to interact with individuals with physical, mental or other challenges. We are aiming to have all employees pass Level 3 of this test. Because we believe a clearer understanding of the difficulties associated with disabilities and of the importance of diversity will lead to better product development that responds to diverse customer needs, employees in our research and design departments are also required to take the higher Level 2 of this test in-house.

Veteran employees supporting younger staff
(Senior Human Resources Bank Center)

Being awarded a certificate after the company's first Universal Manner Test by then-President Ichikawa

Supporting Employee Health, the Foundation of Everything We Do

The most important element in the company's management is employee health. Sumitomo Forestry conducts regular stress checks of its employees and promotes the use of a workplace mental health service called EAP (Employee Assistance Program). We also hold health-related seminars and events and promote other initiatives to protect employee health. In addition to a 100% compliance rate for primary-level medical checkups for all employees, we are working to create a structure that will raise the percentage of employees undergoing secondary-level checkups as well. We will continue to implement more effective wellness promotion measures by communicating closely with our employees and incorporating improvements. With the spread of the novel coronavirus, we have significantly accelerated the timetable for expanding the scope of eligibility for teleworking, one element of our workstyle reform. In addition, in an environment where working from home will continue indefinitely, we are looking into ways to support teleworking, such as providing information on ways to prevent the lack of exercise. Not only will we try to respond to the current situation, we will also consider different workstyles that reflect each employee's home environment, aptitude and other factors to promote workstyle reform and health management.



Working from home

HIGHLIGHT 7

Related SDGs

A Strategic Response to Climate Change

Material Issue 5

Reinforcing corporate ethics and governance structures

Related goals	Fiscal 2021 Plan	Fiscal 2019 actual results
Enhancing risk management and compliance structures	Have all business divisions revalidate the TCFD scenario analysis results and incorporate their findings into the next Mid-Term Management Plan	Analysis results have been revalidated, the scope has been expanded and the results disclosed for two divisions, the domestic Housing Division and the Timber and Building Materials Division

In 2018, Sumitomo Forestry expressed its support of the recommendations made by the Financial Stability Board's TCFD*1 (Task Force on Climate-Related Financial Disclosures) in recognition of the risks and opportunities that come with climate change. In the same year, we initiated a scenario analysis*2 in accordance with TCFD's recommendations.

*1 An abbreviation of Task Force on Climate-Related Financial Disclosures. Established in April 2015 by a directive from the FSB (Financial Stability Board), this task force on climate-related financial information disclosure provides a framework for companies who voluntarily wish to disclose information on climate-related risks, opportunities and financial impact.

*2 A method that forecasts of the impact of climate change itself, as well as what changes long-term policy trends related to climate change may create in the business environment, to consider the possible impact on a company's business and management.

Identifying and Evaluating Risks and Opportunities Based on a Scenario Analysis of 2030

A recommendation released by TCFD in June 2017 set out four thematic disclosure areas – governance, strategy, risk management and metrics/targets – for a company's climate-related financial information. For Sumitomo Forestry, which handles wood as its primary resource and product, a major transition risk is the increase in timber procurement costs with stricter forest conservation policies, logging restrictions and other regulations in each of the countries we operate in. Physical risks include the intensification of natural disasters and the increase in housing construction costs due to delays related to temperature rises, among others. For our scenario analysis, the relevant headquarters departments worked with each business division. Two divisions, the Timber and Building Materials Division and the Housing and Construction Division, constructed scenarios forecasting both a +2°C and +4°C increase in average global temperature compared to pre-industrial levels and considered how each scenario would impact our situation in 2030.

In a +2°C scenario, we forecasted that with aggressive government promotion, the market for net zero energy houses (ZEH) would mature. We also predicted the entry of competitors from other industries with the development of advanced ZEH and the move toward lower costs. In addition, forest regulations and an increase in forest fires may actualize procurement risks. In a +4°C scenario, we forecasted that with government promotion of energy conservation measures in homes, the popularization and demand for ZEH and high-durable houses would continue to grow, but that the Timber and Building Materials Division would see changes in the supply chain as a result of increased fires and spread of pests that would make procurement difficult.

With these scenarios in mind and using science-based forecasts, we evaluated the financial impact on our operations if we continued our business as usual. Results of these scenario analyses were reported to the Sustainability Committee and the Board of Directors and were shared among top management. In the future, in addition to enhancing the accuracy of these analyses, we will discuss ways to incorporate our findings in our business plans and build resilience into our corporate strategy so that we can respond to an uncertain future.

The four TCFD disclosure categories

Governance	The organization's governance and climate-related risks and opportunities.
Strategy	The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.
Risk management	The processes used by the organization to identify, assess and manage climate-related risks.
Metrics/ Targets	The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

Risk assessment

Timber and Building Materials Division			
Risk category		Impact on operations	Risk level
Transition Risks	Carbon emission targets, policies in each country	Increased timber procurement costs due to policies related to forest carbon sinks.	High
	Forest conservation policies	Increased timber procurement costs due to logging taxes, logging fees and other. A continuation of the subsidy program will create a monetary incentive. Depending on the policy, this may impact market competitiveness and revenues.	High
	Energy conservation and other subsidy policies	Increased revenues from the promotion of wood biomass operations. On the other hand, if subsidy policies are abolished, decreased revenues.	High
	Changes in energy mix	Increased revenues if biomass is incorporated into each country's sustainability criteria. On the other hand, higher costs of biomass fuel (wood chips) with an increase in demand.	High
	Economic stagnation with global warming regulations	A fall in demand for wood building materials and a decrease in revenues if construction demand is suppressed.	High
	Advances in next-generation technologies		Low to moderate
	Popularization of renewable energy/energy conservation technologies		Low to moderate
	Changes in investor evaluation		Low to moderate
Physical Risks	Rise in average temperatures	Increased timber procurement costs with forest fires and tree diseases, insects and other. On the other hand, rising temperatures and increased precipitation will lengthen the growth period. This will increase productivity, which may reduce timber procurement costs.	High
	Changes in precipitation and climate patterns	Increased timber procurement costs with changes in the regions of vegetation and our procurement.	High
	Intensification of extreme weather	A fall in revenues due to factory shutdowns. Increased timber procurement costs with a decline in forest resources.	High

Housing and Construction Division			
Risk category		Impact on operations	Risk level
Transition Risks	Carbon emission targets, policies in each country	Increased timber procurement costs due to policies related to forest carbon sinks.	High
	Forest conservation policies	Increased timber procurement costs due to logging taxes, logging fees and other.	High
	Policies related to buildings	Additional investments and renovation costs to comply with policies. A continuation of the subsidy program will create a monetary incentive. Depending on the policy, this may impact market competitiveness and revenues.	High
	Changes in customer evaluation	If customer awareness of climate change increases, customer preference will move toward the use of certified timber, increasing procurement costs.	High
	Fossil fuel subsidy program		Low to moderate
	Changes in energy mix		Low to moderate
	Changes in investor evaluation		Low to moderate
Physical Risks	Intensification of extreme weather	In the event of a major natural disaster, increased construction costs due to schedule delays, equipment repairs or replacement, and other factors. Increased days of excessive heat will lower outdoor work productivity. Increased costs due to construction delays and maintaining and enhancing worker health.	High

Science-based world view for 2030 (excerpt)

		Current	2030	
			4°C	2°C
Carbon emission targets, policies in each country	Each country's targets	Indonesia deforestation 325ha (2030 goal)	450ha (assumed)	300ha (assumed)
		Logging regulations for natural forests	none	Set by each country (20~100%)
Construction policies	ZEH target	Number of new constructions	XX units (maintaining status quo)	XX units (XX% lost opportunity)
		ZEH ratio	ZEH XX%	XX%, advanced ZEH XX%
Energy conservation and other subsidy policies	Subsidy amount Biomass energy ratio	Power supply composition in Japan, 1.7%	3.7%	4.6%
Changes in energy mix				
Rise in average temperature	Changes in vegetation Increase in fires	Forest fire area 0.951%/year (Canada)	1.594%/year	1.690%/year

Opportunity examples related to climate change

1.The expansion of housing sales in response to government promotion of ZEH

+2°C scenario
ZEH with a much higher energy efficiency than currently becomes the standard

+4°C scenario
The government requires an even higher ZEH ratio

With the setting of a ZEH sales target, the Company's technology development capabilities and market competitiveness increase, leading to greater market share and revenues.

2. A growth in the need renewable energy

+2°C scenario
The ratio of biomass power in Japan's power supply composition grows to 4.6%

+4°C scenario
The ratio of biomass energy in Japan's power supply composition grows to 3.7%

Revenues increase for biomass energy fuel chip suppliers.

WEB For details on our initiatives related to climate change, please check our web page.