Environmental and Social Report 2006

# The Power of Forests Empowers the Future

Sustainable



#### **Corporate Profile**

Company name	Sumitomo Forestry Co., Ltd.		
President/ Director	Ryu Yano		
Head Office	Marunouchi Trust Tower N, 1-8-1, Marunouchi, Chiyoda-ku, Tokyo, JAPAN 100-8270		
Telephone	+81-3-6730-3500		
Paid-in capital	27,672 million yen		
Incorporated	February 20, 1948		
Founded	1691		
Employees	4,330 (Consolidated: 11,997)		
Net sales	¥595,993 million (Consolidated: ¥791,128 million)		
Business scope	Forest management; purchase and sales of products, including logs, timber, wood chips, plywood for general use, post-processed plywood, fiberboard, metal building materials, housing systems and fixtures, and concrete and ceramic building materials; construction and sales of custom-built housing; purchase and sales of developed housing and housing lots, purchase and sales of interior products; construction, purchase, sales, and rental of multi-unit residential and office buildings		

47 companies

Consolidated subsidiaries and affiliates



## Kikorin

Kikorin, a forest spirit born from trees, is Sumitomo Forestry's unique mascot, whose important message to us transcends all generations.

Through trees, Earth's only renewable natural resource, Kikorin embodies the spirit of Sumitomo Forestry, which strives to make a positive contribution to people, society, and the environment. Plant trees, harvest them, use the timber to build houses, and put those profits back into forests, repeating the entire cycle once again—this is the principle of "sustainable forestry" that has been passed down and has guided our company for over 100 years. We learn from the past and build the future. It is with this in mind that Kikorin, Sumitomo Forestry's mascot, was born.

Sumitomo Forestry, which supports forest- and people-related activities, from forestry through to housing businesses, works to further sustainability. Kikorin tells us in a friendly and easy-to-understand way what sustainability is and how trees are important in creating the future.

#### About the paper used in this report:

Name: Kanbatsu\* white

Uses a minimum of 70% domestic timber (10% of which is thinnings).

A portion of the domestic timber includes wood chips sold by our Wood Products Trading Division, Business Headquarters.

\* Kanbatsu: thinned wood







#### **Editorial Policy**

- This report focuses on activities in which Sumitomo Forestry contributed to creating a sustainable society during fiscal 2005. Sumitomo Forestry has published an *Environmental Report* since 2000 and the *Environmental* and Social Report since 2004.
- This report contains a "Special Feature" report that gives an overview of Sumitomo Forestry's activities to allow readers to understand our initiatives towards sustainability in an easy-to-understand manner. Concise performance data is also provided.
- The first "Dialogue with Stakeholders" was held and views were obtained from outside experts regarding expectations of Sumitomo Forestry. This year we have also included a third party evaluation of our initiatives and of this report itself.
- This report was prepared with reference to the following guidelines:
  - Environmental Reporting Guidelines (2003 edition), Ministry of the Environment
  - Sustainability Reporting Guidelines 2002, Global Reporting Initiative

#### Reporting Period and Scope

- Reporting period: April 2005 to March 2006 (Includes some activities in or after April 2006 and future expectations.)
- Organizations covered: Social Report—Sumitomo Forestry Co., Ltd. Environmental Report—Sumitomo Forestry Group (excluding some data)
- Parts of this report also cover the activities of the following Group companies:

Sumitomo Forestry Two-By-Four Homes Co., Ltd., Sumitomo Forestry Crest Co., Ltd., Sumitomo Forestry Home Service Co., Ltd., Sumitomo Forestry Landscaping Co., Ltd., Sumitomo Forestry Timberland Management Co., Ltd., Sumitomo Forestry Home Tech Co., Ltd., Sumirin Agro-Products Co., Ltd., Sumirin Maintenance Co., Ltd., P.T. Kutai Timber Indonesia (KTI), Alpine MDF Industries Pty Ltd., Nelson Pine Industries Ltd. (NPIL), P.T. Rimba Partikel Indonesia (RPI), P.T. AST Indonesia (ASTI)

#### Publication Date

August 2006 The next report is scheduled for publication in August 2007

#### Website

#### http://www.sfc.co.jp/e/

To disclose our activities to a still wider audience, we also publish information on our website above.

#### CONTENTS

Corporate Profile	1
Editorial Policy	2

#### The Power of Forests Empowers the Future

Dialogue with the President	3
Comments from Executive Managers	7
Sumitomo Forestry's View on Sustainability	9
Special Feature The Power of Forests Empowers the Future	11
Dialogue with Stakeholders	17
Highlights of Fiscal 2005 Activities	19

#### **Performance Data**

#### Corporate Governance 21

#### Social Report

Together with Our Customers	22
Together with Our Business Partners	25
Together with Our Shareholders	26
Together with Our Employees	27
Together with Society	29

#### Environmental Report

Ec

Environmental Vision	31
Balance of Input & Output	32
Environmental Management	33
Environmental Activity Plans and Results	35
Conservation and Effective	
Forest Resource Utilization	37
Global Warming Prevention	39
Effective Resource Utilization and	
Waste Reduction	41
Promotion of Environmental Business	42
Environmental Conservation in the Office	42
Development of Environmental Technologies	43
onomic Report	44

Third Party Evaluation	45
GRI Content Index	46

Dialogue with the President Midori Miyazaki & Ryu Yano (Sumitomo Forestry President)

# Sumitomo Forestry The Direction in Which We Should Be Going

On April 4, 2006, Midori Miyazaki, a professor at the Faculty of Policy Informatics, Chiba University of Commerce, was invited to a Sumitomo Forestry model home located within Shakujii Jutaku Koen (a housing park in Nerima-ku, Tokyo) to talk with Sumitomo Forestry President, Ryu Yano.

#### Protecting Forests for More Than 300 Years

Yano: Sumitomo Forestry has its origins in the 17th century when the Sumitomo family began using timber from forestland around its Besshi Copper Mine. In the Meiji era (1868 -1912), however, as mining operations modernized, trees were felled at a rapid rate in order to meet an increasingly large fuel requirement. That and the effect of sulfur dioxide generated during the copper smelting process led to degradation of the entire surrounding area, to the point where bare rock could be seen on the surface. Teigo Iba, who was manager of the mine at the time, became concerned and set about implementing large-scale reforestation to return the hills to their original lush green state. This marked the beginning of our harmonious coexistence with the environment.

Miyazaki: Sumitomo Forestry's thought towards upstream resources, the forests, in your building of houses, which are the downstream products, is very unique and the sort of stance we must adopt if we are going to build a sustainable society. I believe the world has reached a major turning point; we can no longer act in the same way as we have in the past. I also feel that we need to shift the bar against which we measure society away from purely economic performance and focus more on how happy we are.

Yano: I agree with you. Mankind did a lot of damage to the Earth during the 20th century, and now that we're in the 21st century, global warming and environmental pollution are worsening. If we keep going as we are, humans may eventually be unable to live on the planet. Sumitomo Forestry has responded with a new emphasis on sustainability, actively increasing our use of timber, which you could say is the definitive renewable resource. Wood lasts some several hundred years, and through sustainable forest management, which involves planting and appropriately caring for forests, as well as replanting where mature trees have been harvested, carbon dioxide (CO2) can be absorbed and sequestered. On top of that, trees retain CO2 even after being felled for use in wooden houses. One could say that this is like building forests in the city. Coexistence between society and the forests is going to be essential. Timber is a gift from the forest, and using it to build homes is a way of achieving coexistence with our forests and nature. In that sense, Sumitomo Forestry has a major role to play in advancing this crucial 21st century theme of living in harmony with the environment. We have even won high praise for our approach to sustainability from outside the company, as demonstrated by our inclusion in the Dow Jones Sustainability World Index last year.



### Utilizing Japanese Timber to Revitalize Domestic Forests

Miyazaki: In particular, you have been pouring effort into utilization of domestic timber, haven't you? I have heard that currently 50% of the timber used for your houses' principal structural members is Japanese-grown.

Yano: That's right. We are aggressively promoting the use of Japanese timber because it helps revitalize domestic forests. A long time ago, it was common for a family to plant a paulownia tree behind their house when a daughter was born and then to cut it down when she married to make a chest of drawers for her to take to her new home. So you see, trees and forests used to be closely intertwined with the daily lives of Japanese people. But Japanese timber has lost its international competitiveness, and so forest resources, despite their abundance, are not being utilized. We are also facing a shortage of labor due to an aging forestry worker population.

Circumstances have continued to change, however, over the last few years. High crude oil prices and an expanding timber market are making Japanese timber more competitive, since prices are now closer to the prices of imports. We would like to make the most of this turn of events, actively employing Japanese timber as our contribution to the conservation of national land and ecosystems.

Miyazaki: Global environmental issues have become so serious that I feel they now ought to be tackled by localities, based on regional characteristics, as we aim to achieve a sustainable society. A crucial element of this will be local production for local consumption. Using the same logic, it will be important to make use of domestically-produced materials.

#### Initiating an Appreciation for Long-lasting Homes

Miyazaki: You would be amazed at the completely different notions held by Europeans or Americans about the expected life span of a house. Whereas most people in Japan think about rebuilding every 20 years, and manufacturers tend to supply housing accordingly, it is common in the United Kingdom and elsewhere for people to occupy houses built centuries ago. Those houses might be less functional than modern houses in terms of insulation and airtightness, but they have character and would be wonderful to live in. A key topic, perhaps, will be determining what to value in a house.



Yano: Yes. And those houses are well looked after too. Through my involvement in the formulation of basic law on housing, I proposed that we cease the current arrangement whereby the value of a housing asset falls to zero after 20-25 years and instead allow houses to become social assets. Demand for renovation too, such as seismic retrofitting, will be closely watched. Sumitomo Forestry has so far built some 180,000 houses nationwide and I am suggesting that a file be created as a record for each one. The file will contain floor plans and other information that will enable quick decisions on what additions or improvements should be made.

Miyazaki: I heard that Sumitomo Forestry offers maintenance for 60 years after completion of a house, which means responsibility for a house is handed down to the next generation. Social assets are built up as part of a long-term approach, which is exactly the kind of corporate stance that should be aimed for.

Yano: In addition to providing 10 years of free support as stipulated by the Housing Quality Guarantee Promotion Law, Sumitomo Forestry also provides a further 10 year guarantee on the structural framework and watertight nature of the building for owners who undertake our special maintenance for a fee option. Furthermore, we also have in place a 60 year Longterm Support System which offers regular free inspections for the first 20 years, and for a fee at 10 year intervals thereafter. The actual frame of a house will remain sturdy for 50-60 years, but the interior and equipment age. By replacing just the interior and equipment, a house can retain its value as a social asset, and the impact on the environment from rebuilding is lessened. The idea of valuing and living in a house for a long time is still uncommon in Japan, so we would like to initiate such thinking.

### Creating Warm and Pleasant Homes for a Close Family Atmosphere

Yano: Here in Japan we hear a lot these days about problems relating to NEETs (people Not in Employment, Education or Training) and so-called freelance part-timers, and I believe inadequate living environments might be partly to blame. Even in Japan, some houses used to be lived in continuously by the same family for 200-300 years, but such cases are dwindling. And although some say the problem lies in education, I don't expect the situation to improve unless we start designing our houses

#### and towns properly.

Miyazaki: The way you design your house, whether or not you set aside a room where the whole family can gather, for example, certainly makes a difference. We can now do things beyond the normal capacity of humans, such as communicate with people on the other side of the world in real time, thanks to advancements in information technology. And so I think houses bear an even greater function of giving us that which we require as living beings: a warm and pleasant environment. The lack of such a place is likely a factor in family breakups and the committing of heinous crimes. If you consider psychological issues, you realize that more energy needs to go into creating "homes," not just "houses," and there is a warmth in wood that can produce that kind of atmosphere.

Yano: I agree. And we are going to have to pay more attention to improvement of the local environment, too, when determining the exterior of housing.

Miyazaki: When looking to improve the local environment, I think it is important to reacknowledge wisdom from Japan's past. In the Amami Islands in southern Japan, there is a notion of a passage for the gods, which must not be obstructed. That means that no buildings lie along that passage. In actual fact, the passage works to avoid damage from natural disasters, such as typhoons, acting both as a channel for the wind and for flash floods. Any damage caused is minimal. It's very scientific.

Yano: We have many things to learn from ancient wisdom and traditional techniques. Sumitomo Forestry houses have had the natural heating and cooling *Ryouonbou* concept incorporated into their design. It is a unique system of ours, making clever use of Japan's climate to heat the houses in winter and cool them in summer. The method also contributes significantly to energy conservation and therefore an essential element of future housing.

### Creating a Workplace that Facilitates Employee Self-actualization

**Miyazaki:** I believe that a company cannot achieve its full potential if its employees are not happy. How do you perform in that area?

Yano: Our employees are characteristically laid-back and this may have something to do with the fact that our business is centered around trees and timber. Trees grow up straight and tall as long as rain falls and the sun comes out, but it takes





hundreds of years for one to develop into a really fine tree.

Employees currently in their twenties or thirties will be running the company in 10 or 20 year's time, and so it is vital in the workplace that they are able to speak their mind and make open and frank proposals. We have to create a workplace in which employees are able, via their jobs, to feel a sense of purpose in life and achieve self-actualization, rather than work as in the past, solely for the benefit of the company. Sumitomo Forestry has recently introduced in-house recruitment and free agent (FA) programs. These kinds of systems should be put in place quickly.

#### Helping to Create Housing and Town Environments Revered Worldwide

Miyazaki: What should Sumitomo Forestry be aiming for in the long term?

Yano: There are two answers to that. The first is that we must contribute, through the utilization of forests and trees, to the tackling of the global environmental issues we are facing in the 21st century. The other is that we must conduct business in a way that benefits society at large. This is the philosophy upon which our business has been based so far, and we shall continue in the same frame of mind. It is also the source of our brand power.

In terms of society, we have come to realize that putting in place comfortable housing environments is necessary irrespective of economic vitalization. Betterment of the environment itself, not the actual provision of housing, is what people currently value most, and we need to start working on that now for the benefit of future generations, too. Sumitomo Forestry would like to make a contribution, through strong leadership, so that in 10 to 20 years we will have created housing and living environments, and towns, that the whole world admires.

Miyazaki: I've heard that you recently set up a body called "Team 2020."

Yano: Yes, we have. The team was formed in March 2006 to consider what Sumitomo Forestry ought to look like in the year 2020. When recruiting members for the team from inside the Group companies, applications were received from twice the quota of members. It will be the responsibility of top management to determine how to turn proposals resulting from those deliberations into reality.

Miyazaki: By 2020 the declining birthrate in Japan will have become an urgent concern and the population will be starting to decrease. Demand for houses will fall as a result, and housing policy, too, will undergo fundamental changes. You will really need to hammer out your philosophy well.

Yano: We have already begun, and any philosophy or business strategy we come up with will have to take those predictions into account.

Miyazaki: As a company that contributes to lifestyles and culture, you are going to have to decide what form the company is going to take and then embark on steps towards it. Today, you have mentioned various initiatives and ideas that are aimed at achieving a sustainable society. I look forward to seeing how your business develops.

Yano: We'll certainly do our best to live up to your expectations. Thank you very much for coming here to talk with me today.



Midori Miyazaki

Professor Faculty of Policy Informatics Chiba University of Commerce

Completed graduate school at Keio University. Through journalistic experience as the first female newsreader for NHK's "NEWS CENTER 9", acquired practical knowledge of her specialties, international politics and policy informatics. Previous positions include lecturer at Tokyo Institute of Technology and assistant professor in the Faculty of Policy Informatics at Chiba University of Commerce. Involved in protecting *Yakusugi* (Japanese cedar) and *Oshima tsumugi* (pongee fabric) and holds positions as custodian of Amami Park and curator of the Tanaka Isson Memorial Museum of Art. Also Auditor of Showa Shell Sekiyu; board member of The Japan Association for Social Informatics, the Japan Association for Planning Administration, and the Japan FAO Association; and member of the Kanagawa Prefectural Board of Education.

## **Comments from Executive Managers**

With their sights on sustainable operations, the executive managers of each of the headquarters lay down their challenges and goals.

### Business Headquarters



Shoichi Takahashi Representative Director and Senior Managing Executive Officer

#### Key initiatives

- 1. Promote environmentally-friendly procurement of timber
- 2. Aim to expand sales of health- and environmentallyconsiderate products
- 3. Promote expansion of support provided to building contractors through INOS Group business

The coming into effect of the Kyoto Protocol has heightened public interest in the reduction of greenhouse gases, both increasing demand for domestic timber (Japanese cedar) and boosting sales of products made with local materials and suited to local climates. Meanwhile, there are greater risks as any association with illegal logging or handling of timber could prove fatal for a company.

In light of these circumstances, Business Headquarters is undertaking the following key initiatives.

### Promotion of environmentally-friendly procurement of timber

In order to meet demand for timber as a sustainable resource, we aim to increase volumes of plantation and domestic timber (Japanese cedar). Our target for Japanese cedar products is 150,000m<sup>3</sup>. Promoting the utilization of domestic timber also helps Japan in its challenge to reduce greenhouse gases by 3.9% using forest absorption, as part of its 6% reduction target under the Kyoto Protocol. Additionally, we aim for 100% confirmation that our suppliers are abiding by laws to ensure we do not procure illegally logged timber.

### Expansion of sales of health- and environmentally-considerate products

Business Headquarters aims to expand sales of energyefficient hot water systems, solar panels and other environmentally-friendly products that help reduce the rising amount of  $CO_2$  being emitted by regular homes. We will also maintain a 100% usage rate of low formaldehyde (F $\downarrow$ 

#### Expansion of support to building contractors

Through the INOS Group business, we enable local contractors to deliver quality wooden housing by providing them with operational support as well as high-quality housing materials that are friendly both to the environment and to human health. Working with building contractors in this way leads to a brisk supply of wooden houses, thereby promoting the utilization of local, domestic timber.

### Business Development Headquarters



Mamoru Inoue Director and Managing Executive Officer

#### Key initiatives

- 1. Promote the use of plantation timber in overseas manufacturing
- 2. Boost sales of products which give due consideration to lifestyle environments
- 3. Enhance activities in immediate operations (resource conservation and reuse)

The importance of environmental conservation is recognized around the globe, and it is vital that we consider the environment in our line of work. The Business Development Headquarters, too, in charge of domestic and overseas manufacturing, overseas wooden housing business and trading activities, takes the environment into account at all times.

In manufacturing operations using wood as a raw material, it is important to maintain the sustainability of timber resources. Our goal is to protect the earth by maintaining the sustainability of nature through afforestation, and to create products in a way that will please everybody concerned the people who nurture the trees, the people who process them, and those who purchase the final product. We are additionally seeking to boost sales of environmentallyfriendly products, which are less likely to release harmful substances, thereby protecting the health of users.

We believe we can contribute to protecting the global environment, not just in relation to raw materials and products, but also through wooden houses themselves, by sequestering  $CO_2$  and reducing the amount of fuel consumed by homes. In China and South Korea, wooden housing has yet to make much ground, although the importance of environmental protection has been singled out at the governmental level. Therefore, we carry out our overseas housing business in the strong belief that demand for wooden housing, which offers superior insulation to concrete, is going to climb out of the need, among other factors, to conserve fuel resources.

We will incorporate the environmental consideration into our business activities at all levels, from large initiatives such as planting forests and utilizing biomass energy, to more immediate efforts such as the thorough sorting of waste, green purchasing and reutilization of resources at offices. Combined with our contribution to corporate results, we hope that these activities will meet with the approval of all concerned.

### Housing Headquarters



Hideyuki Kamiyama Director and Managing Executive Officer

#### Key initiatives

- 1. Encourage CO<sub>2</sub> reductions and energy-saving (promotion of *Ryouonbou* natural heating and cooling concept)
- 2. Make active use of sustainable and domestic timber
- 3. Promote Zero Emissions initiatives

Air-conditioning systems have added a great deal of comfort to indoor environments, although the downside is a jump in energy consumption. As we seek to curb greenhouse gas emissions, energy-saving technology in housing construction has grown in significance. Sumitomo Forestry's Ryouonbou natural heating and cooling concept makes the most of nature's blessings to generate coolness in summer and warmth in winter, thereby removing overreliance on air-conditioning systems. We incorporated this effective feature of traditional Japanese wooden houses into a new housing product introduced in October 2005-MyForest. Using our technology to study and elicit the best wood could offer, we created an environmentally-symbiotic home that brought together the integrated strengths of the Sumitomo Forestry Group and technological capabilities we had developed through 30 years in the housing business. As well as expanding the application of Ryouonbou, our goal was and continues to be to achieve total conformity with next-generation energy conservation standards.

Effective utilization of timber resources and the use of domestic timber are also significant issues. Domestic timber is currently used for around 50% of the principal structural members in our products, but we are going to raise that to above 70% in the near future.

Measures to deal with waste have also been aggressively pursued. For example, we have already attained a 97% recycling ratio for wood waste from demolition sites ahead of the targets stipulated by the Construction Materials Recycling Act. We will continue to make efforts to limit waste through 3R (reduce, reuse, recycle) activities, precutting and ingenuity in distribution of materials to construction sites. Our goal is zero emissions.

Not only will the Housing Headquarters provide comfortable, safe and secure housing, but we will endeavor, through the utilization of domestic timber, to nurture healthy, sustainable forests in Japan and to absorb and retain  $CO_2$  as part of our contribution to the creation of a sustainable society.

### Collective Housing Headquarters



Hideki Nose Director and Managing Executive Officer

#### Key initiatives

- 1. Lessen environmental impact: reduce  $\mathrm{CO}_2$  emissions and construction waste
- 2. Promote green procurement and green purchasing
- 3. Minimize environmental impact over the medium to long term, with longer lasting housing, etc.

The Collective Housing Headquarters treats global environmental concerns as the foremost pressing issue for management and focuses on lessening environment impact, reducing costs and building a basis for differentiation of environmental strategy. We have established clear goals for each of our key environmental initiatives, specified as the reduction of  $CO_2$  emissions, the reduction of construction waste and the promotion of green procurement and purchasing. And besides maintaining ISO 14001 certification as the cornerstone of our environmental management system, we also conduct environmental education programs as we believe it is important for the promotion of environmental activity that employees themselves possess an awareness of the issues and take action of their own accord.

It is the Collective Housing Headquarters' business to "build up quality social capital making effective use of limited land," which we believe helps to reduce environmental impact. The buildings we construct have long lifecycles, several decades in the case of wooden buildings, meaning we need to be able to envisage how a region or city should look in the medium to long term. In addition to utilizing land in the most efficient way, we aim to reduce the impact on neighboring environments still more by trying to further extend the lives of buildings.

As well as continuing to dispose of construction waste properly, we are aggressively trying to lessen the medium- to long-term impact on the environment through such efforts as implementing life cycle assessments (LCAs).

We will continue to build up the social infrastructure required for the long term, for example through the construction of multi-occupant clinical centers (Clinic Squares), the construction of condominiums with attached nursing care facilities, and the setting up of Customer Support Centers to provide 24-hour support.

## Sumitomo Forestry's View on Sustainability

"While benefiting Sumitomo itself, our business activities must at the same time promote the welfare of the country and of mankind in general." This philosophy handed down by Sumitomo's second Director General, Teigo Iba, remains a part of us to this day. Now Sumitomo Forestry is reconsidering how it should contribute to society in an era of enormous, ongoing change.



9

#### Rules Governing the "House of Sumitomo"

#### **Our Business Principles**

Article 1. Sumitomo shall achieve strength and prosperity by placing prime importance on integrity and sound management in the conduct of its business Article 2. Sumitomo shall manage its activities with foresight and flexibility in order to cope effectively with the changing times. Under no circumstances, however, shall it pursue easy gains or act imprudently.

"While benefiting Sumitomo itself, our business activities must at the same time promote the welfare of the country and of mankind in general."

Teigo Iba, Second Director General of Sumitomo, January 1900

Source: Yūō

#### Origins of the Sumitomo Forestry Group

The history of the Sumitomo Group dates back to the 17th century. In 1690, members of the Sumitomo family founded the Besshi Copper Mine, after which the mining, smelting and export of copper formed the backbone of the family business.

However, some 200 years later the forestlands surrounding the mine had become devastated by sulfur dioxide released during the copper smelting process, which was causing trees in the Besshi hills to die, and also due to large quantities of timber being felled for use as fuel, building materials, and mine timber. With the resolve to return the mountains of Besshi to their natural state, making them once again wild and vigorous, and in the spirit of repaying for what had been reaped from the land, Teigo Iba, the manager of the mine at the time decided on a large-scale reforestation plan. To resolve the problem of smoke pollution from sulfur dioxide being emitted from the copper smelter, he relocated it to the uninhabited Shisaka Island. He also employed forestry experts and set out to plant more than one million Japanese cedar<sup>1</sup> and cypress<sup>2</sup> trees each year, a responsibility that Sumitomo Forestry has now assumed. The notion of "sustainable forestry," where the cycle of planting and reproduction would carry on in perpetuity, had been firmly established.

Sumitomo Forestry grew out of this forestry business and operations were expanded to include overseas afforestation and timber imports, as well as custom-built detached houses and collective housing businesses. The philosophy of "sustainable forestry," however, was never forgotten with the ensuing idea of "sustainability" having been assimilated into every aspect of our business.

Japanese cedar (Cryptomeria japonica); sugi
 Japanese cypress (Chamaecyparis obtusa); hinoki

#### An Ongoing Contribution to Society

A whole host of societal problems have surfaced in recent years, including a deteriorating global environment, poverty, and the depletion of energy resources, which means society is going to have to drastically alter its course. Corporations will therefore be expected to fulfill a more substantial role in resolving these issues to help realize a sustainable society.

Sumitomo Forestry manages extensive company-owned forests and consequently bears enormous responsibility for the preservation of forests in Japan and around the world. There is also a large expectation that the company utilizes timber as a renewable resource. Moreover, as a manufacturer and supplier of housing, an inseparable aspect of people's daily lives, it is important not only to deliver high-quality, safe homes, but also to put forward living styles that encourage sustainable family, community and natural environments.

What path should Sumitomo Forestry take in order to meet society's needs, while continuing to grow well into the future? "Team 2020" was formed in March 2006 as a forum for employee-centered debate that would clarify the form that the Sumitomo Forestry Group should aim to become. This move aims to establish a vision of the future that the Group's employees would like to realize. Sumitomo Forestry Group is embarking on a new journey to transform itself into a truly sustainable corporation.





- Creation of beautiful landscapes
- Improvement of collaboration and trust with stakeholders (pp. 17-18)
- Fostering and utilization of personnel that contribute to society (pp. 27-28)
- Employee health and motivation (pp. 27-28)
- Total compliance (p. 21)
- Fostering of future generations

Future

Creation of future human resources



# Special Feature The Power of Forests Empowers the Future

Effective utilization of renewable wood resources restores vitality to forests. All Sumitomo Forestry workplaces are pursuing initiatives based on the same desire to use the power of forests to build a sustainable future.

#### Valuing Balanced Ecosystems—Forest Management to Suit the Times

"This is a new challenge for us," says Noriaki Toi of the Forest Management Division. Management of company-owned forests over the last 15 years has been centered on selective harvesting, the aim being the repletion of forest resources. The 8th Forest Management Plan established in October 2005, however, aimed additionally for economic sustainability and spelled out a strategy of small-area clearcutting, which involves felling all trees within a specified area. With resources replete, as many forests were approaching harvest 50-60 years after planting, it was determined that sustainable forest management could now be implemented. Forests are harvested according to region and terrain, with harvesting locations being chosen for their high productivity, the ability of forests to regenerate after clearcutting and the ability to earn enough revenue to cover cultivation costs.

During fiscal 2006, we plan to obtain Sustainable Green Ecosystem Council  $(SGEC)^1$  certification to attest to our implementation of ongoing sustainable forest management.



"It is our task to build a model for forest management," says Noriaki Toi, Niihama Forestry Office, Forest Management Division



We will attempt to develop forestry as a business while placing the highest priority on environmental consideration and acknowledging the importance of balanced ecosystems.

 Sustainable Green Ecosystem Council (SGEC): Japan's own forestry certification system set up in 2003 through which forests are verified by third parties as being properly managed.

#### Helping Prevent Global Warming while Reinforcing a Forestry Base

The amount of  $CO_2$  absorbed by forests is proportional to the volume of tree growth. For coniferous trees like Japanese cedar and cypress, growth is highest when aged 30-40 years. The growth rate slows past this stage and  $CO_2$  absorption falls. "By planting more trees to help forests rejuvenate, we want to increase the amount of  $CO_2$  absorbed," says Toi.

In a way, clearcutting also helps to reinforce a base for the forestry industry. The forestry business had fallen into decline in the shadows of Japan's high economic growth, and the population working in the forests is aging. "The 'year 2007 problem'<sup>2</sup> exists in the forestry industry, too," explains Hiroyuki Okada of the Forest Management Division's Niihama Forestry Office. "We must expand the scope of afforestation and pass on planting and cultivation skills to the next generation."

Clearcutting should generate about a 2.5 times greater workload than previously, helping to stimulate local employment. "Environmental impact and fostering human resources to work in forestry—ongoing responsible forest management will be vital in resolving a wide range of issues. It is our task to build a model for such management," says Toi. Okada agrees, "In managing company-owned forests, we have to be sustainable in more ways than one; environmentally, resource-wise, economically, and also in relation to people. We cannot allow what our forerunners built up over 300 years to vanish on our watch."

2. A term referring to the year in which Japan's post-war baby boomers (born between 1947 and 1949) will start retiring en masse, resulting in a shortage of human resources with specific skills in legacy systems still driving the nation's banks, railways and manufacturing operations.



Hiroyuki Okada of the Forest Management Division's Niihama Forestry Office, which manages the 14,000 hectares of companyowned forest around the city of Niihama, Ehime Prefecture

#### Restoring Vitality to Japan's Forests—Using Domestic Timber and Improving Distribution

One factor invariably offered up by parties involved as a reason for the deterioration of Japanese forestry is competition with low-priced imported timber. "Prices for Japanese raw lumber are half what they were 20 years ago. Even if you harvest a block of Japanese cedar, the expense involved leaves no money to invest back into the forests," points out Yuki Sato of Sumitomo Forestry Timberland Management, which is in charge of raw lumber distribution.

Sumitomo Forestry efforts aimed at increasing the use of domestic timber include employing *Super Cypress*, a laminated



engineered wood made from Japanese cypress, as housing material, and marketing the MIZDAS timber drying system, which was developed to raise the quality and promote the greater adoption of domestic timber.

Kohno Kohsan manufactures Super Cypress in the city of Saijo, Ehime Prefecture. Super Cypress is a laminate of domestic cypress timber materials, such as short logs, that were not previously utilized, and can be used in posts and foundations for houses. A number of issues had to be overcome in the development of Super Cypress; for example, getting around the variations in quality of the raw material, and finding a way to securely bond together Japanese cypress, which has a high resin content. Sumitomo Forestry worked together with laminated timber producers to advance development, resulting in a high-quality laminated timber product. "It took two years of repeated trial and error before we came up with a product we were satisfied with," explains Tokuhiro Kohnoike of Kohno Kohsan. Cost still doesn't match the price of imported timber; nevertheless, the company's devotion to Super Cypress comes from "seeing the devastation of the surrounding hills and wanting to regain some of the vitality of Japanese forests by

making use of local trees."

In order to maintain a uniform level of quality among the multitude of posts used in the approximately 10,000 houses built each year, members of the Building Materials Procurement & Logistics Division work constantly to ensure stable procurement of the Japanese cypress raw material. Variations in the quality of domestic timber occur due to a number of factors, including the elevation of the land and the direction of the slope face. Yasuhiko Tsurusawa of the same division explains that "a broad network covering all areas in which Japanese cypress is planted, from Kyushu to Fukushima" is the solution to the problem. Sumitomo Forestry possesses just such a network, developed because of the high value it has placed on relations with local communities through its long involvement in forestry.

Another important aspect of the utilization of domestic timber is stabilizing quality over time. Japanese cedar and cypress are difficult to dry and often exhibit crook and bowing, making them less stable in quality compared to imported timber. This situation hindered their wider adoption as raw



Iwao Ogawa, Wood Products Trading Division, Business Headquarters, is involved in promoting greater use of domestic timber



Yasuhiko Tsurusawa, Building Materials Procurement & Logistics Division, Housing Headquarters: "Making *Super Cypress* a standard material was a significant decision"



materials. However, the MIZDAS timber drying system developed and propagated by Sumitomo Forestry now enables the supply of high-precision timber. Usage volumes of Japanese cedar, which comprises roughly 50% of Japan's planted forest, have jumped. According to Iwao Ogawa of the Wood Products Trading Division, which handles distribution of domestic Japanese cedar, "The product's reputation in the timber industry is by no means a good one. But if we keep using it, then perhaps opinions in the industry will change five or ten years from now."

#### If in Doubt, Don't Use It—Rigid Standards for Imported Timber

Sumitomo Forestry is strengthening initiatives aimed at proactive utilization of domestic timber. Yet demand for whitewood, Douglas fir and other imported timber is still strong. We are particularly conscious, when importing such timber, of making sure we do not bring in any illegally felled timber, and for that reason we are aiming to finish and publicize a set of timber procurement standards during fiscal 2006. "Local representatives carry out legality inspections of suppliers and timber. If there is any doubt about a company or product, we don't use it," explains Masaaki Iuchi of Business Headquarters' Wood Products Trading Division. This demonstrates the strength of the company's desire to realize sustainable timber supply, even from overseas forests.

#### Passing on Timber Processing Skills that Deliver High-quality Interior Materials

In addition to posts and other structural members, wood is employed generously as an interior material in Sumitomo Forestry houses, for example in stairs and flooring. The task of processing these materials is shouldered by Sumitomo Forestry Crest. Stairs and doors are processed by hand to specifications that differ from house to house. "The most complicated finishes require years of experience," explains Shigemi Yokota. Tried and tested skills that ensure a high level of quality are continually being passed on to younger generations.

### Suggestions for Employing Wood in Homes from Observations of Japanese Living Styles

"Putting forward ways to incorporate nature into living—that is Sumitomo Forestry's concept for the creation of good homes," says Michinori Ochiai of the Product Development Division. Sumitomo Forestry has always insisted on using wood in houses, but the development of *MyForest*, introduced to mark 30 years in the housing business, was an opportunity to fashion a truly Sumitomo Forestry style of house. The resulting two main concepts were the utilization of domestic timber and the creation of comfortable indoor environments making use of natural energy such as sunlight and wind.

Besides using *Super Cypress* for posts and foundations, domestic timber is also used as lining for external walls. Domestic timber accounts for around 50% of the materials used in a single house. In Hokkaido, all structural materials are already made from domestic wood, 90% of which is



Hokkaido-grown timber such as Japanese larch and Sakhalin fir.

The question is how to increase usage of domestic timber without increasing costs. Taisuke Nagashima of the Housing Headquarters' Technology Division says firmly, "*MyForest* is the culmination of what we have achieved so far in the housing business. As leaders of the industry, we must double our efforts to use domestic timber."

The second of the two concepts is achieved through the natural heating and cooling concept, *Ryouonbou*. Using ingenuity in design, channels are created for the wind to pass through the house, and large south-facing windows let in sunlight. Deciduous trees planted in the garden block out the sun in summer, while letting light in during winter. It is estimated that energy consumed by air-conditioning can be reduced by 40% using these kinds of innovations. Households are consuming more and more energy and therefore Sumitomo Forestry is charged with another important task of creating energy-efficient houses that offer comfortable living.

### Long-term Living Is the Foundation for Sustainable Housing

Saeko Ebata wanted a home in which she could sense the warmth of the wood and that would suit her particular lifestyle, and so she tore down an old Japanese-style house and rebuilt it in 1998. Apparently her mind was made up by the advice of a carpenter friend who had said, as she was visiting the various showhomes, "You can't go wrong with Sumitomo Forestry."

"With this house, I feel a sense of achievement having built it together with the people who worked on-site, and it is still evolving eight years down the line," she says. Even after completion, she has made small improvements to the garden and the interior, and her attachment to the house is growing as the years go by. During construction, she enthusiastically conveyed her own preferences, while both understanding the diligence the staff maintained in building the house as well as establishing a strong communication link with them.

For example, at Ms. Ebata's urging that "waste, if properly sorted, can be used as a resource, leading in turn to cost reductions; in other words, benefits for both corporations and consumers," Sumitomo Forestry undertook its first sorting of waste at a construction site, in 1998. Although the initiative began on a trial-and-error basis, it would serve as the foundation for future recycling activities, with the site itself becoming a training ground for employees. Now, Sumitomo Forestry thoroughly separates its waste at all construction sites.

Once a house has been handed over, maintenance becomes indispensable for peace of mind and continued comfortable living. "Requests for repairs and consultations can be lodged 24 hours a day, 365 days a year, so I can rest easy knowing I can ask freely for advice about the slightest problem."

Ms. Ebata has other expectations: "As well as coming up with new housing ideas, I would like to see Sumitomo Forestry live up to its duty to protect precious housing customs, especially those unique to Japan like traditional carpentry techniques and incorporating Japanese traditions into housing design."



#### Houses as a New Resource

"You can't really call it 'demolition'," says Koji Kuraishi of Musashino Sogyo, a company contracted by Sumitomo Forestry to demolish houses that are to be rebuilt. "Dismantling and sorting of house components' would be a more fitting description."

When a house needs to be dismantled, Sumitomo Forestry entrusts the job to a reliable contractor that has been selected based on strict prerequisites. The contractor is asked to sort materials thoroughly. At the demolition site, materials are separated into seven groups that include metals, concrete and plastics. Each of these groups is then transported to an intermediate treatment plant affiliated with Sumitomo Forestry where they are recycled or disposed of in an appropriate manner. Typical demolition in the past saw whole houses being torn down with heavy machinery, then crushed and landfilled, but Sumitomo Forestry has initiated sorting and recycling efforts in response to the Construction Materials Recycling Act enacted in 2000.

"Manual work, and therefore the workload, has increased

since we started sorting materials," reveals Masami Yokoyama of Marutone Apex, another company entrusted with demolition work. But now the workers, who found the task an inconvenience at first, separate the materials as a natural part of their routine. In demolition, heavy machinery is brought in to pull down a house when only the wooden frame is left after gypsum board and other materials have been individually removed. The time it now takes to demolish a house has lengthened from one week to nearly two weeks.

Wood waste, which accounts for around 20% of the waste from dismantling, is carried to a designated recycling company where posts and other large items are turned into chips to be used, for example, in paper-making, while smaller wood items are transformed into materials such as particle board.

The forests bestow on us abundant gifts. It is Sumitomo Forestry's mission to contribute to the realization of a sustainable society by making the most of those gifts in housing and disseminating the culture of forests and trees. Each of our employees brings with them to the workplace a consideration for the forests and a spirit of sustainability that will help pave the way toward a sound future.

The power of forests empowers the future.

Masami Yokoyama, Marutone Apex: "Designing homes that can be easily dismantled is another important aspect in the promotion of recycling"

## Dialogue with Stakeholders Sumitomo Forestry's Role in the Creation of a Sustainable Society

What should Sumitomo Forestry do to help direct society down the path toward sustainability? A dialogue was held with a panel of experts from outside the company in order to learn about society's expectations of Sumitomo Forestry and to integrate those needs into our activities in the future.



#### Lead the Way in Domestic Timber Use to Help Protect Forests in Japan and Overseas

Adachi: It is wonderful that you are trying to increase usage of domestic timber. Japan buys most of its timber from overseas, but while some people say it's a matter of price and quality when it comes to Japanese timber, unless effort is made to do something about the situation, the Japanese forestry industry will never be sustainable. Who has the capability to carry this out except companies like Sumitomo Forestry that are involved from the forests through to the finished product? Society has pinned its hopes on you to make Japanese forestry sustainable.

Zenyouji: The forestry industry in Japan is characterized by small-scale forestry operations and an aging population, which means lateral ties will have to be established and a network of financial institutions, housing manufacturers, architects and others will need to be formed to promote the use of domestic timber.

Adachi: If it can be demonstrated that the manufacturing process of domestic timber is not cause for environmental concern, then it might be able to attract premium prices. Organic vegetables grown in Japan sell well even though they are more expensive and I think the same would apply to Japanese timber, too. But in saying that, small forestry businesses cannot accomplish that individually. Sumitomo Forestry's integrated strengths and networks would be extremely beneficial.

Kuramitsu: We need to think globally about how to build up sustainable forests. Not only must we protect Japanese forestry, but we have to be able to co-exist with the world outside Japan and inform Japanese people about the advantages of domestic timber.

#### Sustainable Building of Houses Can Lead to Closer Ties within Communities

Fukuta: I built a "Sumitomo Forestry's Home" house 14 years ago back in Gifu, where I come from. The structure was made

of wood of course but the walls were wallpapered over, leaving the only visible wood in the flooring. I think this is a bit of a shame.

Zenyouji: I feel the same way. Most walls are covered with vinyl wallpaper, so the true qualities of the timber stay hidden beneath the surface. I would like to see Sumitomo Forestry publicize the beauty and merits of wood more assertively. My specialty is housing design, which means we are in the same business of exploiting the qualities of wood to increase demand for wooden housing, and I hope that you will assume a leading role in the industry in this respect.

Fukuta: You will agree that Japan is full of city-style housing offering only confined spaces, and you hardly have anything to do with your next-door neighbor. I believe that when building a house consideration must first be paid to designing a home that will blend into the external environment, as well as to providing a place where fellow members of the community can interact.

Zenyouji: Yes. For example, laying down a strip of lawn in front of each dwelling where neighbors can chat. I feel that town development should take advantage of the knowledge Japanese have accumulated over the years.

Hayano: Our company specializes in custom-built housing, which means we build houses to meet customers' tastes. But we also believe that in order to create beautiful streetscapes as a kind of social capital, we have to build houses that achieve harmony with the surrounding environment.

Kobayashi: I'm interested in the average ecological footprint, such as the approximate annual energy consumption, of people living in Sumitomo Forestry housing. What environmental proposals do you have?

Yamamoto: We have been promoting our *Ryouonbou* natural heating and cooling concept as a way to reduce energy consumption. It involves engineering buildings to make the most of the forces of nature, creating coolness and warmth without having to consume excessive energy for air-conditioning.

Adachi: I believe the durability of a house is an important element of sustainability. Research has been conducted to examine how long houses need to last before we are able to get

#### **Participants**



Dr. Naoki Adachi Executive Director The CSR Institute. Inc



Koichi Kaneda Kazunori Kobayashi Deputy General Manager Manager Japan for Sustainability CSR Promotion Department Daiwa Securities Group Inc. (JES)



Sachiko Zenyouji Architect, President Organic Table Co., Ltd.



Seiji Fukuta Professor The Department of Comparative Study of Cultures Tsuru University

by with just Japanese forest resources; the findings suggested that houses need to be able to last 100 years. Bearing this in mind, I would like Sumitomo Forestry to put forward your ideas as to what a sustainable society and sustainable houses are. Kaneda: When thinking about a house, I believe health, design and price are the most important factors, though we don't hear too much about the health element. I would like Sumitomo Forestry to make health-related information much easier to understand, about the "sick house" syndrome for instance.

Zenyouji: I, too, would like you to pursue research into the relationship between health and wood.

Yamamoto: The interior is a problematic issue for us. I, too, want to use solid wood more in both the interior and exterior. People generally like wood, but with regard to the connection between wooden houses and health, that hasn't been scientifically proven yet. I can't give you any numbers. But I would like to embark on this area of research.

#### Apply Forest Management Know-how in Collaboration with Communities, Corporations and NGOs

Kaneda: Sumitomo Forestry owns one thousandth of all land in Japan; how do you intend to use those forestlands as resources? How you use those resources in responding to society's needs, not just as a source for timber, is extremely important.

Kobayashi: A popular expression right now is "food mileage." How far does each food item travel to reach us? If food comes a long way from overseas, then naturally transporting the food will have an impact on the environment. Perhaps if you disclosed the "wood mileage" of timber, it would serve as an effective tool in raising society's awareness of the relative lack of environmental impact of domestic timber.

Kuramitsu: I think it will be necessary to implement a form of traceability by attaching certificates of origin to both foreign and domestic timber.

Kaneda: Sumitomo Forestry possesses a wealth of knowhow relating to forests, including knowledge pertaining to biodiversity and environmental matters. I think it will become very important that you use that know-how to urge

companies with no direct connection to forests to get involved in afforestation activities. And the reason why sustainability is such a buzzword now is because cracks are beginning to show in the current societal system. The issues will need to be tackled together with NGOs as corporations and governments are not the only ones concerned.

Kobayashi: I hope Sumitomo Forestry will play a role in biodiversity, too. Forests are home to many animals and so managing those forests properly will help preserve biodiversity. To succeed, collaboration with NGOs will be vital. Besides, collaboration is a way to support the activities of NGOs and research institutions. I think your company-owned forests and business would be a very unique setting, as well as a valuable asset, for this kind of joint effort.

Hayano: Yes. We do possess extensive company-owned forests, but responsibility doesn't stop at ownership. We need to think about how those forests should interrelate with society.

Kuramitsu: Everyone, thank you all for your valuable ideas and opinions. I have realized through this dialogue that there are still many, many things we can and must do.

**Participants from Sumitomo Forestry** 



Managing Executive Officer

Corporate Planning Division

General Manager of

Director

Hitoshi Hayano Jiro Kuramitsu



General Manager of Wood Products Trading Division Business Headquarters



Yasuyuki Yamamoto Executive Officer General Manager of Technology Division and Product Development Division Housing Headquarters

# Highlights of Fiscal 2005 Activities

This section introduces the major initiatives undertaken by Sumitomo Forestry during fiscal 2005 for the realization of a sustainable society.



#### Launch of MyForest Environmentally-symbiotic Homes

In October 2005, Sumitomo Forestry launched MyForest to commemorate the 30th anniversary of our housing business, representing a compendium of our accumulated expertise. Utilizing wood, the fundamental building material of Japanese dwellings, this "environmentally-symbiotic home" draws upon the wisdom of our forefathers in comfortably passing the four seasons of the year in Japan.

Super Cypress and MIZDAS Cypress are used as structural materials, while wall surfaces are composed of Cross Panels with reinforced earthquake-resistance. Domestic timber is actively utilized to help maintain Japan's forests. Specific focus has been placed on the traditional functionality of natural light and good air-flow, adopting the natural heating and cooling Ryouonbou approach that fosters year-round comfort without over-reliance on air-conditioning and heating.

#### Certificate of Appreciation from The Minister of Agriculture, Forestry and Fisheries of Japan for "Promoting the Use of Regional Wood"

The Ministry of Agriculture, Forestry and Fisheries of Japan, together with the Forestry Agency initiated a special "Promoting the Use of Regional Wood"1 project in fiscal 2005, seeking greater awareness and utilization of domestic timber resources as a measure to reduce greenhouse gases. On January 26, 2006, Sumitomo Forestry received a Certificate of Appreciation from The Minister of Agriculture, Forestry and Fisheries of Japan for our strong track record of using large quantities of domestic wood and our public relations activities. The award reflected high evaluation of our development of Cross Panel and other technologies for expanded application of domestic timber, as well as our wide-ranging PR activities in support of the active use of domestic lumber resources, including corporate advertising and sponsorship of Masters League Professional Baseball, which also plays an active role in the Promoting the Use of Regional Wood project.



Minister of Agriculture, Forestry and Fisheries of Japan Shoichi Nakagawa presents a Certificate of Appreciation to Sumitomo Forestry President Ryu Yano

1. "Regional" refers to "local."

#### Acquisition of FSC's<sup>2</sup> CoC Certification<sup>3</sup>

With increasing social requirements for the prevention of illegal logging and the conservation of natural forests, the Business Headquarters' Wood Products Trading Division has devised systems for the handling of timber certified as being legally compliant and sustainable. Sumitomo Forestry is also in compliance with the Japanese government's revised Green Purchasing Law, and is responsive to customers wanting to procure materials that take environmental concerns into consideration.



2. FSC: Forest Stewardship Council 3. Chain of Custody (CoC) Certification: System of certification of appropriate management by producers and resellers during processing and distribution of timber from forests accredited by the FSC, meeting strict environmental, social and economic criteria established for forest management.

Certificate SGS-COC-2556



dshin Council A C

#### CO<sub>2</sub> Balance for Business Activities

Sumitomo Forestry is working on CO2 reduction, in line with our goal of a 6% reduction in group-wide CO2 emissions per sales unit by 2010 as compared with fiscal 2004. We are participating in the "Team -6%" national campaign for global warming prevention, and related efforts include support for "Cool Biz"4 and "Warm Biz"5 programs, switchover to more fuel-efficient vehicles, encouragement of fuel-efficient driving habits, and energy savings at plants.

CO2 absorption by company-owned forests during fiscal 2005 has been provisionally calculated at 247,931t-CO2.

4. Cool Biz: "No jacket, no tie" campaign advocated by Japan's Ministry of the Environment for the summer months in order to lessen the necessity of air-conditioning in offices and hence save energy.

5. Warm Biz: Warm clothing campaign advocated by Japan's Ministry of the Environment for autumn and winter in order to lessen the necessity of heating in offices

CO<sub>2</sub> balance in domestic businesses at Sumitomo Forestry (FY2005)



#### Achievement of 97% Recycling Rate for Wood Waste from Dismantled Structures

The Law for the Recycling of Construction Materials mandates a 2010 target of at least 95% as the recycling rate for construction-related timber. Sumitomo Forestry's Housing Headquarters has developed a system for recycling wood waste generated from demolition work. The system already meets a 97% recycling rate, well in advance of the target year.



Wood waste collected from sites of new construction and dismantling is recycled into wood chips for papermaking and raw material for particle board

#### Participation in CSR Projects

We consider it important to publicize Sumitomo Forestry's CSR efforts and to engage in dialogue with all of our stakeholders in a variety of different ways. To this end, we were involved in the Nikkei CSR Project, sponsored by Nihon Keizai Shimbun, Inc., and Sustainable Japan 2005, sponsored by The Asahi Shimbun Company.



Sumitomo Forestry efforts such as environmental technologies and utilization of domestic timber were presented at the Sustainable Japan 2005 public symposium

#### Formation of "Team 2020" to Consider Sumitomo Forestry's Future

In March 2006, "Team 2020" was formed in order to consider the future that we want to achieve, what the Sumitomo Forestry Group should look like, and concrete steps towards actual realization. The team comprises some 56 highly capable members coming from a variety of positions nationwide, including from subsidiaries and affiliates. Regular meetings are to be held so as to propel debate on the future of the Sumitomo Forestry Group.



Active discussion takes place at a workshop to consider the specific future of the Sumitomo Forestry Group

#### Asbestos usage status and response

During 2005, the impact of asbestos on health became a major social issue in Japan. Accordingly, Sumitomo Forestry and Sumitomo Forestry Two-By-Four Homes undertook investigations of asbestos usage in their respective products. It was determined as a result that no construction materials containing asbestos were being used as of 2005. While materials containing asbestos were found to have been used prior to November 2002 (prior to May 2004 for Collective Housing Headquarters), this asbestos content was embedded in concrete, etc., and not subject to dispersion, such that there is no concern over asbestos exposure in ordinary housing. Sumitomo Forestry has announced this on our website and in our customer magazine Suteki-na Kazoku, as well as addressing queries directed to our Customer Support Centers. In addition, Sumitomo Forestry Two-By-Four Homes has established a response desk to answer questions at each branch office.

With respect to the demolition work of houses that use building materials containing asbestos, our operations conform to the Asbestos-related Disorders Prevention Standards set forth by the Ministry of Health, Labour and Welfare in July 2005. We will continue to strictly observe the law and work with related government agencies, industry associations, and construction materials manufacturers, while responding appropriately and disclosing information.

#### Response to problem involving falsified approval of screws for two-by-four and other construction methods

In March 2005, it was discovered that approval documentation from the Ministry of Economy, Trade and Industry pertaining to the structural calculation method for connecting screws and nails produced by Kanematsu-NNK had been falsified, leading to overstatement of strength. With respect to investigations conducted on Sumitomo Forestry products, some 21 affected buildings were identified by the Collective Housing Division, but all of these were in fact found to conform to The Building Standard Law of Japan. Sumitomo Forestry Two-By-Four Homes examined delivery documentation from building contractors and screw suppliers, identifying 73 buildings using the problem screws. Of these, detailed investigation, including structural calculation and on-site inspection, resulted in 58 buildings passing and 15 failing. Reinforcement work was completed on all of the failed buildings by March 2006.

Sumitomo Forestry Two-By-Four Homes is implementing stricter control of delivered construction materials and suppliers so as to prevent the recurrence of similar problems in the future. In the unlikely event that such an issue arises again, we are committed to rapid disclosure of information and enhanced response that places maximum priority on safety for customers.

# **Corporate Governance**

### **Corporate Governance**

Considering corporate management in terms of social commitment, and in order to improve corporate transparency and build systems by which operations are undertaken in a manner that is both appropriate and legally compliant, we position the enhancement and strengthening of corporate governance as an issue of the highest priority.

#### Status of Corporate Governance

Sumitomo Forestry has adopted an auditing system to ensure sound and sustainable management, and has appointed four statutory auditors, including two from outside the company. Statutory auditors attend Board of Directors and Executive Committee meetings, providing an oversight function for directors and undertaking detailed consideration of the content of the Executive Committee meeting at the Board of Statutory Auditors meeting. The auditors are also charged with enhancing the auditing system through the quarterly meetings with the representative directors and through meetings with auditors of other Group companies, also on a quarterly basis.

Sumitomo Forestry introduced an executive officer system in June 2002 in order to achieve management that emphasizes speed as well as separating decisionmaking and supervisory functions from operational functions, together with the reinforcement of operational oversight and the clarification of responsibility.

As a rule, the Board of Directors meets once a month. The Board makes decisions on important issues pertaining to the Sumitomo Forestry Group companies and checks business results and other matters, while also playing a supervisory role for the operation of business. The Executive Committee meets twice a month in principle to discuss the direction of managerial strategy, while the executive officers meet once a month for reports on the status of operational progress. As an additional measure, the Audit Division has been established, fulfilling an internal audit function for the Board of Directors.

#### **Risk Management and Compliance**

#### Basic guidelines and structures

In order to promote businesses on the basis of strict legal compliance and a strong sense of ethics, as well as to elucidate, evaluate, and respond to the diverse risks involved in each of our businesses, the Legal Affairs and Risk Management Section has been created within the General Administrative Division along with the establishment of the Risk Management and Compliance Committee.

#### Compliance Desk

In order to encourage corporate self-regulation, the Compliance Desk was established to receive information from Group employees regarding illegal behavior or activity in violation of corporate ethics. The general manager of the General Administrative Division and an attorney advisor serve as the initial points of contact. Protection for those who report such information is spelled out in accordance with the Whistleblower Protection Law, which came into effect in April 2006.

#### Emergency response

A dedicated Emergency Hotline has been set up within the Risk Management Section of the Head Office as a point of contact for reporting and consultation when emergency situations arise. A "two-hour rule" has also been instituted, ensuring that such reports are delivered to top management as quickly as possible, and structures have



As of March 31, 2006

Corporate governance structure

been established to facilitate top-level direction when required by the situation at hand.

Formulation is also proceeding with respect to the Business Continuity Plan (BCP) based on the assumption of a major earthquake in the Tokyo Metropolitan Area, with implementation targeted for fiscal 2006 so as to enable smooth resumption of business in the event that a large-scale disaster were to strike.

In addition, a safe driving management system has been initiated to help prevent traffic accidents. The system promotes the integrated management of information on drivers through such initiatives as mandatory submission of driving record certification for those employees who drive vehicles in the course of their work.

#### Information security initiatives

Due to the nature of our business, Sumitomo Forestry maintains detailed customer information for extended periods of time, meaning that excellent information security is an important issue. We are striving for thorough awareness of this issue and towards that end have produced a proprietary manual and implemented an e-learning course. Nevertheless, personal information leakage, such as theft of items from vehicles, occurred on 20 occasions during fiscal 2005 (including from Group companies and contractors). Sumitomo Forestry takes such incidents very seriously, and we are working to fully enforce internal rules on information control so as to prevent recurrence.

# Social Report



## **Together with Our Customers**

The foundation of our business is to provide high quality housing and services that meet and even surpass the expectations of our customers. Sumitomo Forestry takes a long-term view of customer satisfaction improvement in an effort to further contribute to the development of a sustainable society.

#### Seeking Increased Customer Satisfaction

Personnel education, training and study sessions are implemented in order to expand awareness of putting the "customer first," and to provide services that deliver greater customer satisfaction.

Customer service management has also been introduced to thoroughly integrate the "customer first" principle into our daily operations. In order for employees to improve customer satisfaction from every possible perspective, specific initiatives are determined for each division, and continual service improvement is sought by putting these into practice.

In fiscal 2005, the Customer Satisfaction Information Center was established on the company intranet as a form of internal education. Customer incidents occurring in the course of everyday business are shared, helping to foster improved service.

#### ■24-hour, 365-day consultation system after handover

The housing business of Sumitomo Forestry places strong emphasis not only on the quality of our houses but also on the service that we provide after the homes have been handed over. Our specialized Customer Support Centers, staffed by full-time technicians who are always ready to respond promptly and reliably, offer after-sales support at all offices nationwide. In combination with our Call Center for evenings and public holidays, we now offer 24-houra-a-day, 365-days-a-year availability to provide advice and respond to telephone requests for maintenance and repair work.

#### Questionnaire

In realizing the "customer first" principle, it is essential to listen to what customers say. Sumitomo Forestry collects opinions and comments via questionnaires when customers move in, and at the time of two-year and 10-year inspections.

In September 2005, we also implemented a postcard questionnaire, presented whenever regular or unscheduled maintenance checks are completed, seeking customer comments on the response speed, quality of repair or maintenance, and attitude and behavior of the personnel conducting the work.

#### Club Forest website for homeowners

"Club Forest" is an exclusive website available to all owners of "Sumitomo Forestry's Home" houses allowing them to contact Sumitomo Forestry 24 hours a day regarding the repair and maintenance of their homes. Customer Support Center staff follow up on customer e-mail with a telephone call during regular working hours. The site also supports a diversity of customer lifestyles by providing useful information on topics such as gardening and interior decorating.

#### Distribution of home and lifestyle magazine

The home and lifestyle magazine *Suteki-na Kazoku* is sent out semi-annually to help raise customer satisfaction. Maintenance tips are provided along with lifestyle ideas, enabling ongoing communication with customers.



Customer Satisfaction Information Center (intranet)

#### Breakdown of Call Center consultations





Website for "Sumitomo Forestry's Home" house owners



Home and lifestyle magazine Suteki-na Kazoku

#### For Customers' Peace of Mind and Safety

#### Promotion of Housing Performance Indication System

The Housing Performance Indication System provides highly reliable information on new housing performance in terms of comparable items for third-party evaluation, allowing potential homebuyers to purchase with confidence. Because Sumitomo Forestry believes that this relates to improved asset value as well as confidence in home-buying decisions, we promote utilization of the housing performance indication system. In fiscal 2005, the Housing Performance Evaluation at Design Stage system was implemented for 93% of our houses. We also recommend utilization of the Housing Performance Evaluation at Completion Stage system to our customers.

#### Long-term Support System

Lengthening the lifecycle of housing has become an urgent social priority in the context of promoting a recycling-oriented society. Accordingly, in April 2003 Sumitomo Forestry launched a Long-term Support System providing support for 60 years after the sale of each housing unit. The main points of the system are:

- Ensure the principal structural members of the house have an expected functional lifespan of at least 75 years
- Determine a service life for each material and design the home to facilitate inspections, repairs, and materials replacement
- Implement regular inspections over a 60-year period
- Implement proposals from the design stage that will allow for future changes in the life stages of the occupants
- Propose maintenance programs that include maintenance management and renovation proposals over a 60-year period

Taking advantage of this system, we are working to rapidly ascertain customer requirements, engaging in an uninterrupted flow of communication with our customers.

#### Housing capable of withstanding natural disasters, and disaster response systems

In order to live with peace of mind in Japan where the threat of a major earthquake is always imminent, earthquake resistance for housing is a highly important factor. Sumitomo Forestry has combined the advantages of wooden post-and-beam and panel construction methods, developing the multi-balance construction Powered Wall Method, which integrates posts, beams, and surfaces. Also, the Sumirin ARC Construction Method, a foundation reinforcement technology for seismic retrofitting of wooden houses, developed by Sumitomo Forestry together with Sumitomo Forestry Home Tech, has successfully undergone technical assessment in March 2006 by The Japan Building Disaster Prevention Association. The Sumirin REP Construction Method for seismic retrofitting, which integrates the ARC Construction Method, has been defined by the Tokyo Metropolitan Government Bureau of Urban Development as "a seismic retrofitting method that is both affordable and reliable."

Furthermore, we have established support and management systems for response in the event of natural disasters such as earthquakes or floods. A disaster response team is set up at the local branch when a disaster occurs, enabling recovery work to be rapidly performed on affected houses, as well as helping to alleviate customers' anxiety.

#### Prevention of sick house syndrome

Sick house syndrome, which has surfaced as a problem in recent years, is caused by volatile organic compounds, such as formaldehyde released from building materials, wallpaper adhesives, etc. In order to prevent sick house syndrome, Sumitomo Forestry adopts primarily "F $\stackrel{\leftrightarrow}{\sim} \stackrel{\leftarrow}{\sim} \stackrel{\leftarrow}{\sim} \stackrel{\leftarrow}{\sim}$ " products for building materials and

#### Housing quality improvement

In conjunction with establishment of the Housing Headquarters Quality Improvement Committee in 2005, Sumitomo Forestry has created systems aimed at quality control reflecting the "customer first" principle. Quality improvement working group meetings are held monthly at each branch office. Issues occurring in previously constructed housing are ascertained for response to any and all qualityrelated problems, leading to the development of improved materials and housing specifications.

#### Long-term Support System





Testing product strength by applying pressure on a full-scale model

wallpaper adhesives, which are those having the smallest amount of formaldehyde release among products meeting Japanese Industrial Standards (JIS) and Japanese Agricultural Standard (JAS) requirements.

#### Universal Design

At Sumitomo Forestry, our concept of universal design (UD) means that homes are comfortable to live in for all the family and will remain easy to live in well into the future.

We believe that the foundation of good housing design lies in the safety, comfort, and ease of living for the entire household, achieved through design factors like space and flow planning that match the family, dimensional planning such as hallway width for smooth and easy movement and posture, and the use of materials and fixtures like handrails that help prevent accidents from happening. Other elements of UD include planning for layout shifts that don't necessitate major remodeling as lifestyles change, and the ability to provide long-term maintenance support as the structure ages.

With the formation of an internal UD working group in 2003, data based on human lifestyle engineering collected at our Tsukuba Research Institute continues to be applied to the creation of homes so that all our customers can lead comfortable and enjoyable lives in Sumitomo Forestry housing.



Employing analysis of human kinetics in UD

#### Land Use Proposals that are Responsive to Social Change

At Sumitomo Forestry Collective Housing Headquarters, we plan and propose projects to landowners that help contribute to the local community, including day care centers for the elderly and rest homes. We offer wide-ranging support for such projects, starting with design and construction powered by Sumitomo Forestry technology, and extending to solid project planning through project forecast analysis, as well as managerial and operational consulting.

Fiscal 2005 saw the construction of projects such as a day care center for the elderly in Aichi Prefecture and a rest home in Kanagawa Prefecture. These projects were characterized by good utilization of land, high social value, as well as profitability, thus meeting the needs of both local residents and property owners.



A day care center for the elderly

#### Local Vitalization

#### Establishment of Property Development Business Division

In December 2005, in order to help realize local development that gives due consideration to the environment and is in harmony with the surrounding area, as well as delivering asset value and social significance, Sumitomo Forestry established a new Property Development Business Division as an independent organization for the promotion of projects centered on construction and sale of detached houses. Using our experience in custom design, this new division will be providing housing products marked by functional beauty that is both simple and natural, as well as high value. Sales are set to commence in fiscal 2006.

#### Community development

The INOS Group Project Division offers townscape planning support, seeking to improve communications and provide proposals to member corporate clients. Based on the slogan, "From home development to town development, and from town development to communities," we incorporate tree-planting in home development in conjunction with Sumitomo Forestry Landscaping. During fiscal 2005, we assisted in the planning of 42 homes in five regions.

#### Perspectives

#### Expanding the Universal Design approach

Universal Design (UD) is about approaches and processes in making things. There is no set of clear numerical values that can be rigorously adhered to, meaning that it can be difficult to obtain obvious results. While we recognize the importance of spreading the UD concept within the company, it can also be quite challenging.

In an episode worth noting, however, one working group member achieved new insight through personal experience. After sustaining a lower back injury, he found himself using handrails that he had not previously thought necessary. He suddenly understood that each of us will become elderly at some point in the future, and that any of us can be temporarily incapacitated through injury, illness, or pregnancy.

In the future we will be using the Universal Design House, completed in 2005 at the Tsukuba Research Institute, as a location for internal training and awareness, promoting hands-on experience for our employees. The Universal Design House is a testing facility incorporating the latest UD know-how.



Yoshiko Morita, Supervisor, Technology Division, Housing Headquarters (second from the right with other working group members at the Universal Design House)

## **Together with Our Business Partners**

Relations with building contractors, precut factories, and other business partners form an indispensable element of sound business development by Sumitomo Forestry. We are strengthening our collaborative relationships with business partners in such areas as green procurement and safety.

#### Green Procurement

Sumitomo Forestry has established proprietary Green Procurement Guidelines so as to prioritize the purchase of products and services with low environmental impact from suppliers who are working to reduce the environmental impact of their business activities. These guidelines are formulated to help "prevent environmental pollution," "reduce environmental impact," and to "build a recycling-oriented society and economy." Evaluation focuses on the environmental conservation efforts of business partners, together with separate product assessment based on seven specific criteria. Products that satisfy both aspects of this evaluation are designated as "green products."

#### • Green Procurement Guidelines (Outline of product evaluation)

- Reduction of the use of substances or emissions that affect the environment or human health
- 2. Reduced consumption of energy resources
- 3. Use of materials only from forests managed in a legal and sustainable manner
- 4. Usability over the long term
- 5. Suitability for recycling
- 6. Use of recyclable materials and reusable components
- 7. Ease of proper treatment or disposal at end of lifecycle

#### **Communication with Business Partners**

#### Sumirin-kai

Sumitomo Forestry has established the "Sumirin-kai" as a forum for communication with suppliers and retailers of building materials in each locale where we do business. This fosters product R&D, the sound development of production and distribution, as well as targeting improvements in terms of both member business development and the entire building materials industry. Some 861 member companies were registered as of March 2006. In addition to issuing a monthly e-mail magazine, activities include regionally organized training sessions and meetings, so as to deepen mutual friendship among members.



Explanatory meeting held by the Sumirin-kai before factory tour

#### Precut Forum 21

Lumber used for housing can be precut at a factory, which helps streamline the building process and shorten construction time. Sumitomo Forestry is actively involved in the operation of Precut Forum 21, a nationwide network established in 1997 that aims to improve quality and productivity at precut factories. The Forum conducts ISO seminars for companies seeking to achieve ISO 9001 series certification, and results can be seen in the fact that about 60% of member companies have become certified. During fiscal 2005, the Forum continued to hold events, including training courses in construction methods at Sumitomo Forestry School of Professional Building Techniques, study tours of manufacturers in other industries, and various specialized seminars.

#### Reduction of work related accidents by building contractors

Sumitomo Forestry has established Health and Safety Management Guidelines to reduce construction site accidents, especially those involving falls and slipping, heavy machinery and power tools. The goal is to eliminate work related accidents in cooperation with building contractors. Awareness levels were further raised during fiscal 2005, focusing on a basic policy of "strict adherence to safe work and procedures through self-management." In addition, guidance and training were also provided with respect to the achievement of workplace health and safety.



Presentation on "Background to the Introduction of Two-By-Four Housing to Japan and Related Issues"

#### Number of work related accidents at construction sites



#### Perspectives

#### Communication with building contractors

The Sumitomo Forestry Building Contractor Association (known as the Keyaki-kai) has been established to promote friendly relations with building contractors, to raise the quality of "Sumitomo Forestry's Home" houses, and to improve the technical skill levels and construction management capabilities of the contractors. Contractor representatives discuss work-related issues that they face, and motivational awards are presented to individuals for excellence in

Another organization, the Seju-kai, operates independently with the objective of information

site management and carpentry.

exchange to improve management processes. Sumitomo Forestry supports the organization's activities in the role of an advisor. Active dialogue is pursued with the representatives of the Seju-kai and Keyaki-kai in considering evaluation standards for contractors.

Makoto Takagi Manager Production Management Division Housing Headquarters

## **Together with Our Shareholders**

Appropriate information disclosure helps enable greater transparency and higher quality of management, and is also important in building relationships of greater trust with shareholders and investors. Accordingly, Sumitomo Forestry is active in public relations and IR activities.

#### Communication with Shareholders and Investors

#### Appropriate information disclosure for relationships of greater trust

In the interest of greater management transparency, Sumitomo Forestry takes an active approach to information disclosure. Notifications of the meeting are sent out early to the shareholders, and efforts continue to be made to build relationships of greater trust with shareholders and investors. From fiscal 2006, the meeting is being held on a date outside the timeframe of the bulk of other companies' general meetings so as to allow more shareholders to attend.

Following the announcement of the interim and end-of-term results, a presentation on performance attended by the president is held for the benefit of institutional investors and securities analysts. In addition, around 150 individual meetings are held each year, with Sumitomo Forestry either hosting or dispatching representatives. Other efforts include business presentations on specific themes, expanded information disclosure, and enhanced IR information on our website.

In the business reports sent to shareholders after the announcement of interim and endof-term results, rather than simply stating figures, we have also devised ways to make the reports easier and more interesting to read. From fiscal 2005, for the convenience of our domestic investors and for expanded distribution to our domestic business partners, we have added a Japanese version of our annual report to the longstanding English version.

#### Shareholder questionnaire

A questionnaire was issued to all of our shareholders in 2005, including both individuals and corporations. Some 1,038 of these were returned (40 less than in 2004), representing a return rate of 9.4%.

The percentage of our shareholders who list "environmental initiatives," "being a fan of "Sumitomo Forestry's Home" houses," and "corporate philosophy" as reasons for their investment is rising, and it would appear that increasing numbers of shareholders have a greater awareness of socially responsible investment, as opposed to simply the pursuit of capital gain. Many of the comments received on questionnaires include expectations for environmental preservation and forest conservation, as well as ideas for the development of new uses for timber and research on biomass power generation.

Sumitomo Forestry will continue to implement questionnaires to ascertain the expectations that people have of us, as well as for strong communication with our shareholders.

#### Inclusion in Socially Responsible Investment Indexes

Socially responsible investment (SRI), which assesses not only corporate economic performance but also factors such as environmental activities and social dependability, is attracting considerable attention. Sumitomo Forestry has received global recognition for inclusion in the FTSE4Good Global Index, and was added to the Morningstar Socially Responsible Investment Index (MS-SRI) in June 2005 and Dow Jones Sustainability World Index (DJSI World) in September 2005. The DJSI is a stock price index representative of SRI, and includes only companies that score near the top 10% of 2,500 global corporations in terms of economic, environmental, and social performance. There were 318 firms in the DJSI World in 2005, 36 of which were Japanese. Sumitomo Forestry was the only Japanese housing manufacturer to be included.





IR reports

#### • Share distribution (by shareholder type)



## **Together with Our Employees**

Employees are the "human assets" of Sumitomo Forestry. In addition to education and training programs to further develop employee skills, we strive to maintain a comfortable and productive workplace environment for all our employees.

#### Fostering a Workplace Environment where a Diverse Range of Employees Can Be Active

#### Basic personnel policy

At Sumitomo Forestry, we believe that our employees are valuable "human assets," and one of our Action Guidelines is "To create an open corporate culture that instills a strong sense of pride and motivation in employees." In order to continue to be an "excellent company" in total housing and living-related businesses, we have established the following basic policies for the management of our personnel system.

- Encourage reform of our corporate culture and promote corporate vitality
- Strengthen human resources development and training, and provide opportunities to motivated and capable employees, in order to achieve a more proactive and independent corporate group
- Reward results fairly
- Firmly establish transparency and in-house consensus, and achieve a workplace brimming with vitality and possessing a high awareness of its goals

#### Recruitment policy

In order to recruit motivated human resources for the ongoing vitalization of our corporate culture, Sumitomo Forestry adopted the following recruitment policies in 2005. The guiding image for our personnel is to be "mentally tough and fair." Our basic stance in recruitment is that "Sumitomo Forestry earnestly supports the efforts of job-hunters."

#### In-house recruitment and free agent programs

Sumitomo Forestry provides opportunities to motivated personnel to demonstrate their capabilities, and has introduced in-house recruitment and free agent (FA) programs to encourage career-building and provide greater job satisfaction. These programs are not only helping to realize the ambitions of employees themselves, but are also helping the company to identify a diverse range of human resources and capabilities, contributing to the further vitalization of Sumitomo Forestry.

#### Taking positive action

In order to promote a workplace environment in which female employees can play a more active role, the Positive Action Team has been established within the Personnel Division. Various activities are undertaken, including the regular publication of awareness-building in-house newsletters, the creation of special pages on our intranet, the Career Advancement Training program, and discussion sessions for female employees to share information and ideas among themselves.

#### Support for childcare and nursing

Sumitomo Forestry supports various modes of work, and has

#### Perspectives

#### Taking parental leave

When our second child was born in October 2005, I took eight days of parental leave. There was no precedent at Sumitomo Forestry for a man to actually take parental leave, so I was somewhat hesitant. But with the understanding of my boss and the cooperation of my coworkers, I was able to go through with it. In Holland, where I had been posted previously, it was completely normal for men to take active roles in childcare, so that was an inspiration for me. It was a short time, but I was able to focus on my children, and to better understand the work involved in homemaking and the various relationships in our community. Parental leave will no doubt become more established in the future it can be a paid leave program and if it can be taken in multiple installments. The government and public opinion are both supportive of greater roles for men in childcare, and I look forward to seeing companies taking bolder approaches.



#### ■ Vacation programs

In order to allow employees to obtain sufficient time for both physical and mental refreshment, Sumitomo Forestry encourages taking summer vacations and has also introduced the "Refresh Vacation Program" allowing five consecutive days off by taking advantage of regular days off and paid vacation time.

In the Housing Headquarters and sales offices with regular days off scheduled on Tuesday and Wednesday, "Family Friendly Day" has been established to enable at least one Saturday or Sunday off each month through the use of paid vacation or time in lieu. This allows participation in school or community events.

#### Relations with the labor union

Sumitomo Forestry must continuously exert maximum effort to ensure job stability for employees and to maintain and improve working conditions. The labor union represents the voice of the employees, and is based upon maintaining harmonious industrial relations and mutual trust. Mechanisms for communication include regular meetings with management to strengthen mutual understanding, thus fostering smooth and sound industrial relations.

#### • FY2005 results

Number of newly hired graduates     179	
Ratio of female employees · · · · · · · · · · · 15.8%	
Ratio of disabled employees · · · · · · · · · · · · · · · · · ·	
• Rate of female employees taking parental leave	
Average cost of training per person102,300 yen	

Number of overseas trainees

#### • Applications for in-house recruitment and FA programs

	In-house r	ecruitment	FA	
Fiscal year	Number of applicants	Number accepted	Number of applicants	Number accepted
2004	19	3	16	6
2005	75	7	5	1



#### Helping People Grow at Sumitomo Forestry

#### Human resources development policies

The basic stance of human resources development at Sumitomo Forestry is to support individual initiative. In line with our corporate philosophy of creating an open and inclusive corporate culture, we take an active approach to human resources development.

#### Multifaceted training program

Sumitomo Forestry offers a broad range of educational and training programs, including career design training to promote the formation of a corps of objective-oriented employees who are capable of taking the initiative; "cafeteria-style" training to support the acquisition of business skills; overseas study and training programs to foster the development of personnel capable of global business expansion; and management strategy training and graduate studies programs for the development of future leadership. Another important program is the Sumirin Business College operated by the Housing Headquarters, offering self-development training courses on a voluntary participation basis for the improvement of housing-related knowledge and skills.

#### Creation of intellectual property

"Patent leader" and awards programs have been implemented to encourage the creation of intellectual property and to foster a culture of associated activity. In order to increase employees' awareness of intellectual property, incentives are paid to those who submit ideas for outstanding inventions.

#### Continuation of traditional technologies

"Sumitomo Forestry's Home" houses are the modern repositories of traditional indigenous building techniques, and the continuation of these techniques is an important issue for the future. Accordingly, the Sumitomo Forestry School of Professional Building Techniques

#### Human resources development system



Mandatory training for specific job categories and levels (includes performance appraisal staff training)

was founded in 1988, allowing newly hired employees of affiliate Sumirin Construction to obtain national vocational qualifications within one year. In addition, the school serves as a center for the training of Sumitomo Forestry Group employees. There was a total of 702 graduates in fiscal 2005.

#### Creating a Safe and Healthy Workplace Environment

#### Employee Health Management Program

The Sumitomo Forestry Group Employee Health Management Program was introduced in April 2006. This program offers thorough voluntary health checkups for older employees (in place of periodic check-ups for younger employees), and provides nationwide integrated management of employee diagnostic data, including follow-ups on checkup results.

#### Eliminating excessively long working hours

Elimination of excessively long working hours is a critical issue for management, and ongoing efforts to bring attention to this include visits to worksites by headquarters staff and the implementation of employee questionnaires on a regular basis. Additional measures are

#### Commitment to Human Rights

#### Implementation of human rights education

In order to raise human rights awareness levels, training sessions delivered by outside presenters are given to newly hired employees. Themes for fiscal 2005 sessions included tackling sexual harassment also being considered in order to achieve rapid improvements in the working environment.

#### Mental health initiatives

A mental health consultation office has been in place for many years, but new contracts with medical institutions specializing in mental health have been established due to the fact that conventional services have not sufficiently emphasized preventive aspects. As a result, a network of counselors and specialist physicians is now available nationwide. Given that early self-awareness is key to maintaining mental health, introduction is planned for a Web Mental Check System, allowing self-analysis via the Internet.

and discrimination, and were attended by 533 employees of the Sumitomo Forestry Group.

### **Together with Society**

We use the experience and knowledge accumulated through our forestry business to contribute positively to society. We provide information as a company open to society, and are committed to good corporate citizenship.

#### Explaining Our Corporate Stance to Society

#### Presentations on domestic timber usage

Sumitomo Forestry believes that opportunities for direct two-way communication with citizens are essential to being a company that is trusted by society. With increased social interest in domestic timber usage, we are actively creating opportunities to explain efforts at Sumitomo Forestry, such as through environmentally themed seminars.

During fiscal 2005 these efforts included participation in a public seminar on the environment sponsored by the Tokyo University of Agriculture and Technology, and the Fair Wood Architecture Seminar 2006 in Tokyo, sponsored by a group of environmental NGOs. We introduced our efforts to promote domestic timber usage, as well as explaining to a variety of stakeholders the necessity for reconsideration of the value of domestic timber and the need for its utilization.

#### Hosting student field trips

As a part of the education of the young people who will inherit the future, we accept student field trips with a focus on the importance of using domestic timber and on environmental initiatives being undertaken by Sumitomo Forestry. In 2005, students from Higashi Shirakawa Junior High School (Higashi Shirakawa Village, Gifu Prefecture) visited the Housing Headquarters as a stop on their annual school excursion itinerary. They toured inside the company and attended a presentation on house building. In another instance, five students from Nakatsugawa Municipal Sakamoto Junior High School (Gifu Prefecture) studied universal design at the Senkawa model home at the Sumitomo Forestry Tokyo Nishi Branch as part of their studies on social welfare. And at the Gunma Branch, students from the Maebashi Municipal Minami Tachibana Junior High School were introduced to environmental initiatives by Sumitomo Forestry during a "1-day hands-on study session."

#### Participation in CSR projects sponsored by newspapers

Sumitomo Forestry places great importance on communication between our company and society, and to that extent in 2005 we participated in the Nikkei CSR Project, sponsored by Nihon Keizai Shimbun, Inc., and in Sustainable Japan 2005, sponsored by The Asahi Shimbun Company. These events help disseminate CSR-related information for the creation of a sustainable society. We also introduce the thinking behind our products and services through public symposiums and newspaper features.

As part of the Nikkei CSR Project, a publication entitled *CSR—Hatarakigai wo Tabaneru Keiei* was released summarizing relevant activities during fiscal 2005. The book features reflections by people working for the benefit of society through their business activities, and includes Sumitomo Forestry employees involved in the businesses of universal design for homes, and the planning and construction of community-based facilities such as day care centers for the elderly.

#### Support for Masters League baseball

Sumitomo Forestry helps sponsor Masters League Professional Baseball, an organization made up of retired professional baseball players. The Masters League has a three-year agreement with the Forestry Agency to engage in PR activities linked with the Promoting the Use of Regional Wood\* project. Our support stems from our business development in the direction of active utilization of domestic timber, centered on the *MyForest* housing product.

\* "Regional" refers to "local."

#### The mascot "Kikorin" helps communicate the importance of sustainability

Wood is a sustainable resource for the future, and the Japanese people have passed on their own unique culture of wood down through the generations. Sumitomo Forestry Group aims to let as many people as possible know about the role of timber and forests, about our business spirit, and about the importance of sustainability in building an attractive future where people and nature are in harmony. To this end, we have adopted a mascot known as "Kikorin" in July 2005. Kikorin now features in our corporate advertising and television commercials.

We will be using Kikorin, taking advantage of the Internet and various communication tools, to engage in dialogue with the public about timber and forests, and about a sustainable society. Kikorin will also be present at various events that our customers attend, helping them to feel the attraction of wood and forests.



Fair Wood Architecture Seminar 2006



Higashi Shirakawa Junior High School students listen attentively to a Housing Headquarters employee



Sumitomo Forestry initiatives are introduced in CSR—Hatarakigai wo Tabaneru Keiei



sumitomo Forestry's stance on active use of domestic timber was presented through our sponsorship of the Masters League



Kikorin is featured in advertising to help present our corporate stance

#### Social Contribution Activities Based on Our Core Businesses

#### Information dissemination at Forester House

At the company-owned forest on Mt. Besshi in Niihama, Ehime Prefecture, forest management is being implemented under the theme of "Sumitomo Forest Ecosystems" to develop new forms of management that reflect the entire ecosystem, including flora and fauna, air, water, soil and scenery. Forester House, built in 1993, and Sumitomo Forest Ecosystems' Memorial Square are open to the general public. Georama type exhibits recreate the various aspects of forest work from planting to felling, while a gallery introduces the company-owned forest through panel displays. Other exhibits present social and environmental efforts by Sumitomo Forestry. As a point of dissemination for information on both new forest culture and local culture, the facility welcomes study visits from elementary and junior high school students, and is a popular resting spot among hikers.



Forester House

#### Mt. Fuji Manabi no Mori activities

In the wake of a typhoon in September 1996, which caused extensive damage to a national forest on the southern slopes of Mt. Fuji, Sumitomo Forestry initiated the Mt. Fuji Manabi no Mori natural forest restoration project in 1997. To help govern the restoration activities, we set up a steering committee composed of representatives from local governments, environmental volunteer groups, universities, media representatives and others, and sought their input during the course of the project. External specialists were also engaged in a vegetation monitoring program and wildlife habitat survey to ascertain the effectiveness of the restoration activities. Efforts currently center on forest cultivation, now that planting has been completed, and the area will be used as a location for environmental education in the future.

#### Preservation of Tokyo headwater forests

From April 2005, we have been supporting employee volunteers participating in the Tamagawa Suigen Shinrintai project sponsored by the Tokyo Metropolitan Bureau of Waterworks. A total of 32 employees participated during fiscal 2005, helping with pruning and tree thinning work in the manmade forests of the Okutama area. These activities are ongoing, guided by a spirit of "even a little bit more pure water."

#### Support for the greening of Solo

Since 2005, Indonesian group company Rimba Particle Indonesia (RPI) has been donating seedlings of the fast-growing *Acacia mangium* tree to the Sanitation and Parks departments of the ancient capital of Solo in central Java, Indonesia. Some 5,000 seedlings were donated in February 2006, with the objective of greening roadsides and other areas.

#### **Other Social Contribution Activities**

#### KTI Educational Foundation

Kutai Timber Indonesia (KTI), Sumitomo Forestry Group company, established the KTI Educational Foundation in 2000 to provide scholarships to elementary and middle school students. In 2005, the foundation provided 34 million Rupiah to 55 elementary and 17 middle school students. The foundation is also involved in efforts to assist local residents in the area surrounding the KTI factory and donates funds to help people affected by flood.

#### Donating of female employees' uniforms to charity for Mongolia

In June 2005, with a change to new work uniforms for female employees, cardigan sweaters and blouses used with the previous uniforms were collected and sent to the Japan Relief Clothing Center, an officially recognized NPO. These articles were then distributed to the Children's Art Center of Mongolia, as well as to destinations in Myanmar, Laos, and Afghanistan.



#### Perspectives

#### Our pleasure to help to cultivate knowledge of forests and forestry

Forester House helps people learn about forests and forestry, while also serving as a rest stop and location for information dissemination to hikers and climbers visiting the Mt. Besshi area. The region features rich natural assets such as iris colonies and *Tsugazakura (Phyllodoce nipponica)*, and many people stop in at Forester House between mid-April and early June when the *Tsugazakura* and irises are in bloom. It is our pleasure to take this opportunity to help better acquaint these visitors with forests, forestry, and the local area.

Another important role is the preservation of these valuable natural assets, through efforts such as cooperation with local authorities in preserving *Tsugazakura*. From the standpoint of ongoing innovation in preserving our forests, we will continue to promote knowledge of forests and forestry among the general public. Fukumatsu Yamaguchi Manager Forester House



# **Environmental Report**

### **Environmental Vision**

The Sumitomo Forestry Group will contribute to creating a sustainable society under a Medium-Term Environmental Management Policy for tackling priority issues.

#### Pursuing "Environmental Symbiosis" as a Focal Point of Management

The Sumitomo Forestry Group's corporate philosophy is to utilize timber as a renewable resource, and to contribute to a prosperous society through all types of housing-related services, including forest management, the manufacture and distribution of timber and building materials, the construction and sale of custom wooden housing, and our greening business.

The environment is now a pressing global issue and corporations find themselves bearing increasing social responsibility. The Sumitomo Forestry Group has responded by positioning "environmental symbiosis" as a focal point of corporate management and formulated the Medium-Term Environmental Management Policy in December 2005. The goal is genuine environmental management, whereby a balance between economic and environmental interests can be achieved; for example by targeting reductions in both environmental impact and costs, and contributing to both society and business performance through a strategy of "environmental differentiation." Under the policy, we will: (1) pursue thorough environmental management; (2) strengthen and promote environmental education; (3) enhance environmental communication; and (4) promote social contribution activities. Initiatives central to the pursuit of thorough environmental management are outlined in the table to the right. Sumitomo Forestry has always been an environmentally-symbiotic company, having actually originated from a spirit of repaying for what had been reaped from the land when hills around the Besshi Copper Mine were returned to their original lush green state through afforestation activities after being devastated by modern mining methods. The Sumitomo Forestry Group will always remember its origins, continuing to work for the benefit of customers, business partners and all other stakeholders, as well as to contribute to the creation of a sustainable society.

#### Principal environmental management initiatives

- In addition to reducing CO<sub>2</sub> emissions from business operations, we will work with customers and business partners to lessen the environmental impact of products and services throughout their entire lifecycles.
- We will achieve sustainability of timber resources through the promotion of green procurement and the use of timber cut from forests that have received Forest Stewardship Council (FSC) certification.
- We will aim to achieve zero emissions at an early stage.
- We will carry out thorough management of harmful substances.

#### **Environmental Philosophy**

With many years of practical experience in silviculture, Sumitomo Forestry has an appreciation of the wonderful renewable resource that forests represent and the benefits that nature provides. Environmental protection is imperative in the 21st century. As a company with a close affinity with nature, we are aware of the potential impact of our activities on the environment, and we contribute to society through the vigorous pursuit of business operations in harmony with conservation principles.

#### **Environmental Policies**

Founded on our corporate philosophy and environmental philosophy, Sumitomo Forestry Co., Ltd. seeks to make a positive contribution through all its business operations to maintain and improve the natural environment and the communities in which we live and work. To help create a sustainable society, we will conduct our operations with the following principles in mind:

- 1. Engage constructively in business activities that are beneficial to creating a sustainable society.
- Promote forest cultivation at home and abroad, maintain and enhance the multifunctional roles that forests play in conserving forest resources and in preventing global warming, and pursue business activities consistent with environmental conservation.
- 2) Aim for product handling and procurement that takes account of the entire lifecycle of products, from resource utilization through to manufacture, consumption, and disposal.
- 3) Focus on recycling and reuse in the development, design, and production of housing and products. Endeavor to use resources and materials that provide excellent conservation value, resource protection, and renewability, while also employing resource utilization technology with excellent energy efficiency and conservation value.
- Accurately assess the direct and indirect effects of our housing, products, and business activities on the environment, and strive to prevent pollution and to minimize environmental impact by implementing the necessary control measures.
- Strive to minimize the environmental impact of our housing, products, and business activities at all stages.
- Strive to reduce waste, carry out appropriate waste treatment, and increase the ratio of product recycling and reuse.
- Recognize that reducing environmental impact and promoting environmental responsibility also translates into greater productivity and reduced production costs, which in turn enhance competitiveness.
- Be thoroughly familiar with the laws and regulations applicable to our products and business activities, and strictly comply with requirements. Where necessary, draft voluntary standards and ensure compliance.
- Establish objectives and targets to achieve continual improvement of environmental management systems, and review such targets at least once a year.

This policy is publicly disclosed and communicated to all employees.

## Balance of Input & Output

In order to understand the environmental impact of business activities and to promote effective activities to reduce that impact, we calculate the input of resources and energy and the volume of emissions of CO<sub>2</sub> and waste according to the lifecycle of products in each business.

#### Environmental impact of business activities of the Sumitomo Forestry Group (including overseas affiliates)



#### CO2 absorption by forests

The Sumitomo Forestry Group contributes to the absorption of  $\rm CO_2$  by forests, and therefore the prevention of global warming, through the promotion of sustainable forest management both in Japan and overseas.



#### Contribution to the expansion of carbon stocks

Carbon stocks are stocks of CO<sub>2</sub> stored within the atmosphere, forests and the ocean that play a major role in global warming prevention. As trees grow, they take in and retain CO<sub>2</sub>. When they stop growing, as much CO<sub>2</sub> is released as is absorbed, and when they decay or are burned the CO<sub>2</sub> that has been stored is released. The harvesting and replanting of forests, therefore, rejuvenates them, increasing the amount of CO<sub>2</sub> sequestered. Using harvested timber as building material means the carbon contained in the trees is not released as CO<sub>2</sub> but is stored over the long term. This is why wooden housing is likened to building forests in the city. By encouraging the provision of quality wooden houses and the use of wood building materials, the Sumitomo Forestry Group will look to expand society's carbon stocks in the form of timber, thereby contributing to the prevention of global warming.

#### Data calculation

#### Input

- Energy consumption values for office activities, production and other direct activities were tabulated for each energy category; values for on-site construction and other indirect activities were reached by multiplying the amount of energy consumed in a standard process by the number of construction projects.
- Raw material values for the housing business were calculated by tabulating the volume of each type of principal structural material used for one standard house and multiplying by the number of houses completed.
- The volume of raw materials input at domestic and overseas plants was tabulated. Water consumption by offices was estimated from utilities expenses.

#### Output

- In the housing business, waste from demolition work and new housing construction was included. Manifest form values were used for demolition work waste, while the waste value from new housing construction was reached by multiplying the average of a sample (20 houses in fiscal 2005) by the number of new houses built.
- For timber and building material production activities, the volume of waste disposed of by domestic and overseas plants was tabulated according to waste type.

We will continue to review calculation procedures as we include other areas indirectly influenced besides those listed above, and other businesses. We are also aware that further improvements to accuracy need to be addressed.

## **Environmental Management**

Among the first in the housing industry to acquire ISO 14001 certification, Sumitomo Forestry is trying to reduce environmental impact through a management system that covers the entire company. Risks relating to waste, asbestos, illegal logging, soil contamination and other issues are identified and addressed.

#### **Environmental Management System**

#### A companywide management system

Sumitomo Forestry introduced an environmental management system (EMS) in fiscal 1995, and the Housing Headquarters acquired ISO 14001 certification in fiscal 1997, before anyone else in the housing industry. The certification was upgraded in fiscal 2002 to encompass the whole company. Certification at group companies was also pursued with four companies—Sumitomo Forestry Landscaping, Sumitomo Forestry Home Service, Sumitomo Forestry Crest and Sumitomo Forestry Two-By-Four Homes—being included in integrated ISO

14001 certification as of fiscal 2005. We also revised our *Practical Manual for ISO 14001* in response to revisions to ISO 14001 standards, adding rules for reporting on environmental accidents and establishing targets.

As part of a review of our management system, we have introduced "environmental budgets" in an attempt to integrate environmental management into day-to-day operations. Environmental budgets were introduced to all departments, including those overseas, from fiscal 2006.



#### Internal environmental audits

To ensure our environmental conservation activities are implemented efficiently and reliably, departments conduct audits of one another. In fiscal 2005, 50 departments took part in the audits in which internal environmental auditors checked up on performance evaluations and plans for improvement, compliance systems and measures, and readiness for environmental accidents. Findings from the internal audits are reported to management who then prescribe improvements as required. Employees can become designated internal environmental auditors by passing an examination upon completion of a training course that is held twice a year. As of the end of March 2006, 725 employees (including 221 from affiliated companies) have been designated as such auditors.

#### Audits by external certification bodies

ISO 14001 annual surveillance assessments and reassessment audits (once every three years) are carried out by external certification bodies. In fiscal 2005, we underwent our third reassessment audit together with an assessment for a transition from ISO 14001:1996 to ISO 14001:2004. We received indications of two minor non-conformances and 40 areas for improvement. The minor non-conformances were inadequate identification of related laws and regulations in the "List of Requirements of Environment-related Regulations," and inadequate management of permit expiry dates for industrial waste treatment contractors. Corrective measures were immediately taken and reported to the auditing body.

#### Education and training

Environmental education programs for people involved with the Sumitomo Forestry Group are conducted to promote awareness and implementation of environmental conservation activities in day-to-day operations. During induction training at Forester House, new employees are taught the history of forestation and about forestry technologies and skills, as well as the concept of environmental symbiosis. And in fiscal 2005, environmental lectures for building contractors and business

partners, as well as lectures at universities and junior high schools, were held on 65 occasions. A total of 1,362 Sumitomo Forestry Group employees and 1,762 people from outside the company attended the lectures.



Training course for internal environmental auditors

#### **Environmental Risk Management**

#### Identification of environmental risks

Major risks to Sumitomo Forestry business activities are identified and clarified. Countermeasures for each risk are then devised and developed by related departments. Specifically, we are responding to risks clarified under the categories of waste treatment, asbestos, illegal logging, soil contamination, storage and treatment of polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and impact on ecosystems.

No environmental accidents or major violations of environmental laws or regulations occurred during fiscal 2005.

#### Prevention of illegal dumping

The Environmental Safety Division of the Housing Headquarters has so far played a central role in forming and implementing guidelines for the appropriate treatment of industrial waste. In addition to education on legislation related to industrial waste conducted at Housing Headquarters branch offices, on-site surveys of industrial waste treatment facilities have been implemented twice a year by local office waste management staff, and independently by the Environmental Safety Division.

Other relevant divisions and group companies have also made efforts with regard to the appropriate treatment of industrial waste; unfortunately, however, the fiscal 2005 internal environmental audit uncovered disparities in issue awareness and measures. Therefore, the Environmental Management Division has now been charged with offering across-theboard instruction and guidance on proper treatment of industrial waste, beginning in fiscal 2006. Sumitomo Forestry will seek to fulfill its duties in the context of being a waste-emitting enterprise through the formulation of basic policy and regulations on industrial waste treatment at all Group companies and thorough implementation of appropriate waste treatment by relevant departments.

#### Asbestos

The Housing Headquarters has formulated "Procedures for the Demolition of Buildings Containing Asbestos" to prevent the dispersal of asbestos during demolition work. The Housing Headquarters, Collective Housing Headquarters and Sumitomo Forestry Two-By-Four Homes provide ongoing disclosure of information on asbestos usage and countermeasures via their respective websites. (See page 20)

#### Prevention of illegal logging

Sumitomo Forestry is in the process of formulating timber procurement standards for proving the legality of timber and timber products we handle. The standards should be completed during 2006. Reconfirmation of the legal compliance of products for which standards have already been established is underway. Where it is difficult to prove the legal compliance of a product due to circumstances in the producing country, local representatives have to investigate the compliance of both the product and the supplier and are urgently developing standards to deal with such cases.

#### Soil contamination

A Soil Contamination Countermeasures Panel has been set up within the Risk Management and Compliance Committee and is already in operation formulating soil contamination countermeasure standards. We are continuing to gather information on soil conditions throughout the Sumitomo Forestry Group; in September 2005, we produced the *Guidebook* on Soil Contamination Countermeasures to be applied when examining the history of land to be purchased and housing sites to be sold on behalf of others; and soil contamination countermeasure standards were formulated in May 2006 for application to land managed or owned by the Group. A soil contamination inspection was actually carried out at Sumitomo Forestry Crest's old Shizuoka Factory, which was relocated in April 2006.

#### Impact of operations on ecosystems

Sumitomo Forestry has been implementing sustainable, environmentallyfriendly management of company-owned forests in Japan through ISO 14001 evaluation of environmental conservation systems. In addition, we are aiming for forest certification by the Sustainable Green Ecosystem Council (SGEC), which verifies the sustainability of forests.

Overseas, we plan to contribute to the preservation of ecosystems through the use of plantation timber and the promotion of afforestation, which should ultimately alleviate the decline of natural forests.

#### Reduction of harmful chemical substances

• Volatile organic compounds (VOCs)

VOCs have been singled out as a cause of "sick house" syndrome. At Sumitomo Forestry, in principle only F 方方方 building materials are employed, ensuring the lowest emissions of formaldehyde.

Sumitomo Forestry Crest is also putting effort into reducing VOCs, having incorporated the theme into its environmental budget.

- Reduction of chemical substances in housing materials
- With the European directives on Waste Electrical and Electronic Equipment (WEEE) and on Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) coming into effect, it is essential to be alert to harmful substances such as hexavalent chromium, lead and cadmium, contained in products. Sumitomo Forestry is seeking to eliminate chromium from the surface treatment of structural metals used to stabilize timber. We will be collaborating with manufacturers on a gradual switch to chromium-free metal that is both friendly to the environment and supports long-lasting houses. This will involve exposure testing at the Tsukuba Research Institute to check performance attributes such as resistance to corrosion.
- Emergency response manuals for factories and research institutes
- A *Chemical Substance Management Manual* has been formulated at the Tsukuba Research Institute based on a pollution control agreement entered into with the city of Tsukuba. The institute established an organizational structure for chemical substance management in accordance with the manual, and has prescribed methods for receiving, storing, using and disposing of chemical substances. At Sumitomo Forestry Crest's Komatsujima Factory, an environmental work manual has been created that lays down procedures for environment-related tasks and includes methods for waste and water treatment and handling of organic solvents. The manual stipulates that air and water pollutants, and organic solvent density must be measured during work processes.
- Storage and treatment of polychlorinated biphenyls (PCBs)

The Environmental Management Division has completed a survey clarifying the amount of PCBs stored within the Sumitomo Forestry Group, and how they are stored. Sales offices actually storing PCBs have begun formulating implementation plans for appropriate treatment of the substances after a request to do so was made by the Environmental Management Division. In fiscal 2005, PCB disposal was completed at two Sumitomo Forestry Crest factories and will be pursued successively at all other locations.

## **Environmental Activity Plans and Results**

At Sumitomo Forestry, every division carries out environmental activities based on key initiatives and annual goals that each one has established. We also calculate and disclose information on environmental protection costs and benefits.

#### •Key environmental goals and results

Priority	Division	Key initiatives	FY2005 plan	FY2005 results	FY2006 plan
Management cor		Continuation of sustainable company-owned forest management	Implement annual harvesting plan based on 7th Forest Management Plan	Fell slightly short of Forest Management Plan targets	Implement 8th Forest Management Plan (acquire certification for company-owned forests; introduce small-area clearcutting to some plantations)
Prevention of global warming	Business Headquarters	Promotion of waste wood as biomass energy resource	Increase volume of fuel chips handled (212,000m <sup>3</sup> )	Almost attained volume target (203,065m <sup>3</sup> )	Increase volume by tapping new sources (including bark and green wood); develop new sources
	Housing Headquarters	Reduction of CO <sub>2</sub> emissions in houses at the residential stage	Aim to receive at least 50% of housing product orders for houses conforming to next- generation energy conservation standards	Next-generation energy conservation standard conformance made standard for new products; attained a 69% order ratio for next-generation energy-efficient houses	Increase provision of houses conforming to next-generation energy conservation standards (80% of orders)
	Business Headquarters	Recycling of wood waste	Increase volume of demolition wood chips handled for paper-making and fiberboard (target: 173,000m <sup>3</sup> )	Increased volume to 174,862m <sup>3</sup> , attaining target	Increase volume of wood chips used in paper- making and fiberboard
Waste reduction	Housing Headquarters	Improvement of recycling rate for specific construction materials	Aim to deliver 95% of waste materials to designated recycling facilities by FY2005	Attained target with 97% of waste materials delivered to designated recycling facilities	Launch initiatives aimed at achieving zero emissions
Collective Housing Headquarters			Reduce volume of waste per floor area for reinforced concrete (RC) structures to 0.10m <sup>3</sup> /m <sup>2</sup> or less	Achieved 0.05m <sup>3</sup> /m <sup>2</sup> , thereby attaining target	Make efforts to reduce volume of waste per floor area (continued)
		Reduce volume of waste per floor area for wooden structures to 0.13m <sup>3</sup> /m <sup>2</sup> or less	Achieved 0.16m <sup>3</sup> /m <sup>2</sup> , falling short of target	Make efforts to reduce volume of waste per floor area (continued)	
	Business Increasing handling of products and raw lumber Headouarters		Increase handling of NPIL products, which feature the Eco Mark	Targets established at beginning of year not attained	Increase handling of NPIL products, which bear the "wood-based board environmental declaration and recycling mark" of the Japan Fiberboard and Particleboard Manufacturers Association (continued)
Green	resources	Increase handling of conifer and broadleaf plantation timber and plantation timber plywood	Volume targets not attained due to market and other factors	Increase handling of conifer and broadleaf plantation timber and plantation timber plywood (continued)	
	Housing Headquarters Procurement with procurement standards		Ensure new manufacturers comply 100% with green procurement corporate evaluation requirements	Target attained	Ensure current manufacturers comply 90% with green procurement corporate evaluation requirements
Reduction of environmental impact of office activities	Entire Group	Reduction of CO <sub>2</sub> emissions from offices	Reduce CO <sub>2</sub> emissions per sales unit by 1% compared to FY2004	Achieved reduction of 1.4% compared to FY2004 in real terms across scope of calculation	Reduce CO <sub>2</sub> emissions per unit of net sales by 2% compared to FY2004; Continue activities to spur CO <sub>2</sub> emission reductions such as promoting "Cool Biz" initiatives and encouraging a switch to eco-cars*
Enhancement of communication	Business Headquarters	Promotion of internal and external environmental information activities	Disseminate environmental information through the Sumirin-kai network of business partners	Disseminated environmental information once a month	Promote environmental communication in administrative divisions

\* Eco-car: A low emissions vehicle that produces little or no CO2 or NOx, substances that cause global warming and atmospheric pollution. Current eco-cars include electric vehicles, CNG vehicles, hybrid vehicles and fuel-cell vehicles.

#### Affiliates (Japan)

Priority	Affiliates	Key initiatives	FY2005 plan	FY2005 results	FY2006 plan
Prevention of	Sumitomo Forestry Two- By-Four Homes	Reduction of CO <sub>2</sub> emissions in houses at the residential stage	Expand sales of houses conforming to next- generation energy conservation standards	Fell slightly short of target order ratio for houses conforming to next-generation energy conservation standards	Modify order target to focus on houses using external thermal insulation and continue to promote energy-efficient houses
global warming	Sumitomo Forestry Landscaping	Promotion of tree planting	Promote tree planting, using ratios of the quantity and value of tree planting as indicators	Largely attained planting quantity targets, but did not attain targets for value	Promote tree planting, using ratios of the quantity and value of tree planting as indicators (continued)
Waste reduction	Sumitomo Forestry Crest	Reduction of plastic waste	Poduco disposal costs for wasta plastice		_
Reduction of harmful substances	Sumitomo Forestry Crest	Reduction of use of paint containing toluene, xylene or styrene	Reduce usage by 50% compared to FY2004	Target attained	Reduce usage by 50% compared to the previous year as an ongoing measure
Reduction of environmental impact of office activities	Sumitomo Forestry Home Service	Beautification activities Evaluation of beautification success inside offices in 5 categories, such as desk tidiness, awarding points on a scale of 1-5	Aim for a total of at least 18 points (out of 25)	Attained an average 18.89 points across all offices for the full year	Target: an average 19 points across all offices
Sustainable use through renovations	Sumitomo Forestry Home Service	Increasing the number of brokerage cases towards greater utilization of existing buildings	Aim for a total of 2,500 brokerage cases for condominiums and detached houses	Attained a total of 2,895 cases, including 1,551 condominiums and 1,344 detached houses	Continue with the same targets
Social Contribution	Sumitomo Forestry Crest	Participation in "Millennium Forest" afforestation program in Tokushima Prefecture as part of regional social contribution activities	Aim for participation by 40 volunteers over 3 events	A total 37 volunteers participated in 4 events	Continue efforts; aim for participation by 40 volunteers over 3 events

#### Affiliates (Overseas)

Initiatives based on environmental goals and implementation plans were also commenced at overseas offices from fiscal 2006.

Priority	Affiliates	Key initiatives	FY2006 goal
Prevention of	RPI	Promotion of afforestation	Aim to plant 700,000 trees
global warming KTI		Promotion of afforestation	Aim to plant 1,400,000 trees
Waste reduction ASTI		Reduction of water usage for wood chip washing	Explore reduction measures
		Reduction of waste (focus on use of recycled materials)	Aim for 20% inclusion of crushed plastic
Reduction of harmful substances	ALPINE	Sales promotion of environmentally-friendly (FSC-certified; F☆☆☆; F☆☆☆☆) products	Aim for 10,000m <sup>3</sup> sales volume for environmentally-friendly products
# Outcome of Fiscal 2005 Activities



Hidekazu Tanaka General Manager of Environmental Management Division (Environmental Controller)

Departments in the Sumitomo Forestry Group undertake activities for each fiscal year based on environmental budgets they have formulated to match their particular responsibilities. Environmental budgets were pursued in a total of 204 categories in fiscal 2005, including 95 categories for Sumitomo Forestry on its own and 109 categories for affiliates within Japan. An addition in fiscal 2005 has been the departments' implementation of self-assessments for each category based on target attainment levels during the year or at year-end, with the goal being to raise the success rate of initiatives. And with the introduction of environmental budgets at overseas affiliates from 2006, a structure for budget-based activities has now been fully established across the entire Group.

The success rate of activities carried out by all Group companies within Japan over the 2005 fiscal year rose nine points from the previous year, and as targets were more closely related to daily operations, an even greater departmental awareness toward environmental initiatives was nurtured.

(Unit: Million yen)

# **Environmental Accounting**

In the interests of promoting environmentally sound management, Sumitomo Forestry calculates the costs and benefits of environmental conservation activities. The scope of calculation covers the Sumitomo Forestry parent company and certain affiliated companies.

# • Environmental conservation costs

-			Willion you
Category		Main activities	Costs
	Pollution prevention costs1	Soil contamination countermeasures (publication of booklets; surveys)	21
(1) Operations	Global environmental protection costs <sup>2</sup>	Sustainable forestry	490
		Overseas afforestation consultancy	22
(1) Operations costs		Promotion of construction waste reduction and recycling	3,000
	Resource recycling	Waste wood chip recycling distribution operations	136
	costs <sup>3</sup>	Environment-related business (potting mix using sediment from water purification plants, etc.)	134
		ISO 14001 compliance and operation	41
(2) Managemer	nt activity costs4	Disclosure and administration of environmental information (environmental advertising, exhibits, etc.)	401
		Green purchasing	328
(3) Research and development costs <sup>5</sup>		R&D related to environmental conservation	250
		Management of Mt. Fuji Manabi no Mori natural forest restoration project	32
(4) On sint as sto	(4) Social contribution costs <sup>6</sup>	Forester House administration	39
(4) Social contr		Other social contribution activities	2
		Grants to the Keidanren Nature Conservation Fund, etc.	4
	Total		4,876

1. Pollution prevention costs: Expenditure on soil contamination inspections and on creation of booklets about soil contamination countermeasures.

 Global environmental protection costs: Expenditure on preservation and management of company-owned forests to foster sustainable forestry, and expenditure in Japan and overseas relating to Indonesian reforestation projects.

 Costs of resource recycling: Expenditure on waste wood recycling distribution operations, and sorting, recycling, appropriate treatment, transportation and management of construction waste.

 Management activity costs: Office expenses and auditing costs relating to acquisition and maintenance of ISO 14001 certification, and expenditures relating to disclosure of environmental information, for example through advertising and social and environmental reports.
 Research and development costs: Expenditures for environment-related research conducted at Tsukuba Research Institute.

6. Social contribution costs: Expenditures related to operating the Mt. Fuji Manabi no Mori natural forest restoration project; expenditures related to maintaining and operating Forester House, and grants to the Keidanren Nature Conservation Fund and other contributions.

#### • Environmental benefits

Category	Description	Benefit
(1) Operations benefits	CO2 sequestered by company-owned forests	247,931 tons
	Volume of waste wood recycled from demolition work by Housing Headquarters	23,236 tons
	Volume of waste wood recycled by distribution business (chip conversion)	748,273m <sup>3</sup>
	Production volume of potting mix using sediment from water purification plant	21,215 tons
	Reduction of harmful chemical substances (substances designated under the Pollutant Release and Transfer Register (PRTR) Law)	78.7 tons
(2) Management activity benefits	Employees designated internal environmental auditors	114
	FSC and CoC certifications of Business Headquarters' Wood Products Trading Division	_
(3) Research and development benefits	New environmentally symbiotic homes built with domestic timber and featuring Ryouonbou natural heating and cooling	_
	New function developed for the MIZDAS timber drying control system	_
	Volunteers who participated in Mt. Fuji Manabi no Mori project	198
(4) Social contribution benefits	Visitors to Forester House	5,533
	Volunteers who participated in Tamagawa Suigen Shinrintai (P. 30)	32

# Highlights of Our Environmental and Social Activities

Year	Environmental and social activities
1991	Green Environmental R&D Division established (Jan.); Tropical forest regeneration project began in East Kalimantan, Indonesia (Dec. – Mar. 2004)
1993	Sumitomo Forest Ecosystems' Memorial Square and Forester House opened to commemorate centennial anniversary of large-scale reforestation plan in Shikoku (Oct.)
1994	Sumitomo Forestry's Environmental Philosophy formulated (Dec.)
1995	Environmental Management Committee established (Jan.)
1996	Sumitomo Forestry environmental management system implemented independently companywide (Apr.)
1997	ISO 14001 certification acquired by five Housing Headquarters divisions and Northern Kanto Regional Division (Aug.); Mt. Fuji Manabi no Mori natural forest restoration project begun to restore state-owned forest destroyed by a typhoon (Sep.)
1998	Environmental Business Division established (Jun.); ISO 14001 certification acquired by all Housing Headquarters' Eastern Japan Housing Division (Oct.)
1999	ISO 14001 certification acquired by Forest Management Division (Jul.); Environmentally symbiotic home certification acquired (Aug.); Forest Ark volunteer activity center opened within Mt. Fuji Manabi no Mori (Oct.); Commenced Clean Development Mechanism (CDM) feasibility surveys on behalf of the Ministry of the Environment (Aug.)
2000	Companywide Environmental Policy formulated (Oct.); Environmental management system implemented at all Sumitomo Forestry divisions (Oct.); Reforestation project began in Way Kambas National Park, Indonesia (Nov. – Mar. 2004); Commenced publication of environmental reports (Nov.)
2001	ISO 14001 certification completed for all Sumitomo Forestry divisions (excluding overseas affiliates) (Aug.); ISO 14001 certification acquired by Kutai Timber Indonesia (KTI) (Jul.)
2002	ISO 14001 companywide integrated certification acquired (excluding overseas affiliates) (Aug.); ISO 14001 certification acquired by Sumitomo Forestry Landscaping and Sumitomo Forestry Home Service (Nov.)
2003	ISO 14001 certification acquired by Sumitomo Forestry Crest and Sumitomo Forestry Two-By-Four Homes (Sep.); ISO 14001 certification acquired by Nelson Pine Industries (NPIL) in New Zealand (Jul.)
2004	Environmental Management Division established (Apr.); FSC and CoC certifications acquired by Alpine MDF Industries (Sep.)
2005	CSR Promotion Office established (Apr.); FSC and CoC certifications acquired by KTI (Jan.); ISO 14001 certification acquired by Rimba Partikel Indonesia (RPI) (Oct.)
2006	FSC and CoC certifications acquired by Business Headquarters' Wood Products Trading Division (Mar.)

# **Conservation and Effective Forest Resource Utilization**

Over the years, Sumitomo Forestry has nurtured a culture of sustainable forestry. This philosophy manifests itself through sustainable forest management and the proactive use of domestic timber, which we will pursue to help conserve forests in Japan and around the world.

# Sumitomo Forestry-owned Forests

## Company-owned forest management policy

Forests owned by Sumitomo Forestry are located in four regions—Hokkaido, Shikoku, Kyushu and Wakayama—and cover a total of 40,494 hectares. This represents about one thousandth of Japan's land area. The forests comprise 49% plantations, 42% natural forest, and 9% unforested area.

Over the last 15 years, Sumitomo Forestry has used non-clearcut harvesting practices in its company-owned forests, the aim being the repletion of resources. But now, in order to promote the effective utilization of those resources and the revitalization of the forestry business, we are going to expand and improve thinning operations and adopt small-area clearcutting methods, giving due consideration to the environment. This will be carried out in company-owned forests in Shikoku and Kyushu, two of the four company-owned forest zones. The particular forest areas subject to clearcutting have been selected based on their high productivity, ability to regenerate, and ability to yield a profit.

This change in harvesting policy is also considered good management from other perspectives: trees planted after the World War II have reached an age ideal for harvesting; the volume of CO<sub>2</sub> absorbed will decrease in forests whose growth rate has already peaked; and the dissemination of skills and securing a workforce are pressing issues as the aging forestry worker population is gradually replaced. Sumitomo Forestry will continue to implement sustainable forest management as we endeavor to enhance the public benefit of our company-owned forests through national land conservation and CO<sub>2</sub> absorption, and to revitalize both forests and the forestry industry.

# Sustainable Green Ecosystem Council (SGEC) forestry certification

Sumitomo Forestry has commenced efforts aimed at obtaining, for all our company-owned forests, Sustainable Green Ecosystem Council (SGEC) certification, which is a forestry certification scheme unique to Japan. In addition to current ISO 14001 recognition of environmental conservation systems for our forests, this forestry certification will provide verification by an independent body that our forests are properly managed. Our goal is to obtain certification by September 2006.

#### • Distribution of Sumitomo Forestry-owned forests



#### •The public benefits of our forests

- Sequestration of CO<sub>2</sub>
- Prevention of soil erosion
- Cultivation of water resources (mitigating floods, purifying water)
- · Maintenance of biodiversity
- · Provision of recreational spaces

# Preserving Ecosystems

The timber used by the Sumitomo Forestry Group as raw materials or products is a renewable resource provided by nature and requires sound conservation of forest ecosystems. In forest management, we place particular emphasis on the yield potential of forests and on consideration to soil and water conservation. We will endeavor to use timber resources in a sustainable manner and preserve ecosystems by diversifying tree species and forest ages according to the characteristics of the forestland, and through forestry practices that respect the flora and fauna living there.

In timber procurement, we aim for thorough traceability management and we also recognize the need to work together with suppliers, other corporations and local residents in preserving forest ecosystems. In particular, we promote the use of plantation timber when importing from overseas to help take some of the burden off natural forests.

The Sumitomo Forestry Group is a nature-loving corporation aware of the impact its business activity has on ecosystems and therefore strives to preserve those ecosystems through corporate activities. As well as helping to improve the quality of ecosystems in the vicinity of living environments through its greening business, and by urging housing customers to plant trees, we are furthering initiatives to communicate the importance of biodiversity to society through activities such as the Mt. Fuji Manabi no Mori natural forest restoration project.

# Perspectives

# Caring for a forest tree you planted as though it were in your own garden

Sumitomo Forestry has spent more than 100 years nurturing Japanese cypress plantations and 60-100 years nurturing Japanese cedar plantations. In other words, we have the marvelous privilege of harvesting the trees planted by our predecessors. When we first joined the company, we practiced clearcutting. We always wonder how the forests we planted to replace the areas we clearcut are now faring.

With the  $\it MyForest$  product, 51% of principal structural members are made from domestic timber, and wood used

in the foundations are 100% Japanese cypress. But you can't see the structural members from the outside when the house is finished. As people involved in managing company-owned forests, we think this is a real shame. Japanese cypress has been considered an especially valuable building material since ancient times and we believe we could win more customer satisfaction depending on how we employ it. We want to work at this while trying to increase the amount of domestic timber we use.



Noriaki Toi Manager Niihama Forestry Office Forest Management Division

Kenji Terazawa Group Manager Forest Management Division

# Proactive Use of Japanese Timber

## Why use domestic timber?

Forests cover 65% of land in Japan, with around 40% of that, or 10 million hectares, consisting of planted forests, representing an abundance of timber resources. And yet Japanese forestry has gone into decline since domestic timber usage has fallen in step with rising imports from overseas. Now 80% of timber used throughout Japan is imported, leading to an increasing number of inadequately maintained domestic forests that have been left to go without thinning or pruning.

Forests perform important functions, moderating water flows in times of heavy rain, for instance, to prevent disaster, and providing a habitat for a diversity of life. In other words, they play a major role in the lives of flora and fauna, not just of humans. They also absorb the  $CO_2$  in the air, thereby helping to stem global warming. In order to increase the effectiveness of forests, it is necessary to thin and maintain them, and to appropriately fell and then use trees that are ready for harvesting. This is why Sumitomo Forestry is actively promoting the use of domestic timber.

# Domestic timber as a housing material

Sumitomo Forestry is making a committed effort to utilize domestic timber in housing construction. Those efforts include the development of technologies that allow the effective use of thinnings and short timber, for example in *Super Cypress* and *Cross Panels*, and the development of MIZDAS technology for the efficient drying of timber. *MyForest* and other Sumitomo Forestry houses are built using domestic timber materials. Domestic timber currently comprises around 50% of principal structural members. We are working hard to develop and supply domestic timber products to increase that percentage further. The Group company Sumitomo Forestry Crest has also increased its usage of Japanese cedar as lumber for plywood by a factor of 1.8.

Approximately 90% of the timber used to build the Hyuga Forestry Office, which was completed in March 2006, was from company-owned and local forests, and comprised mainly Japanese cedar and cypress.

#### • Super Cypress and Cross Panel usage (Housing Headquarters)



#### • Volume of MIZDAS-dried wood (Business Headquarters)



# **Overseas Forestation Projects**

# Forestation projects of overseas Group companies

Group companies in Indonesia, New Zealand and other countries are cooperating on forestation projects in their respective regions. The objective is to stabilize the supply of raw lumber, protect natural forests and contribute to the economic development of local communities.

•New Zealand

Nelson Pine Industries (NPIL) owns around 3,500 hectares of forest within a radius of 60 kilometers from the mill. The company systematically plants an area of forest equivalent to the area it fells. A total of 899 hectares of forest was planted between 2000 and 2005.

## •Indonesia

Kutai Timber Indonesia (KTI) is expanding the afforestation projects it carries out jointly with local residents, corporations, universities and local government. The company conducts afforestation experiments with new fast-growing species and selects quality trees. Rimba Partikel Indonesia (RPI) has been planting forests together with local farmers since 2002. KTI and RPI had planted a total of 3,878 hectares of forest, or 5,851,000 trees by the end of fiscal 2005.

Afforestation projects go beyond the planting of trees; given the spin-off effects they could be described as regional development projects. Sumitomo Forestry plans to further expand these afforestation efforts and the broad-ranging benefits accompanying them.



NPIL radiata pine forest

#### •Afforestation in Indonesia



# **Global Warming Prevention**

Viewing the reduction of CO<sub>2</sub> emissions as an important social responsibility, Sumitomo Forestry will make efforts to reduce CO<sub>2</sub> emissions generated not only by business activities, but also by customer households in the residential stage.

# Reducing CO<sub>2</sub> Emissions from Business Activities

The entire Group is working to reduce emissions of CO<sub>2</sub>, with a framework for tabulating the energy consumption of all Group locations, including overseas affiliates, having been in place since fiscal 2004. Our goal in fiscal 2005 was to cut CO<sub>2</sub> emissions per sales unit by 1% from the previous year. We sought to conserve energy in offices by making an appeal to employees to follow "Cool Biz" and "Warm Biz"\* dress codes that would help reduce energy consumption and save power. We have also endorsed "eco-cars," which meet national fuel economy and emissions standards, for use as company vehicles. In fiscal 2005, 85.5% of replacement vehicles were eco-cars.

CO<sub>2</sub> emitted directly from domestic business activities during fiscal 2005 totaled 51,517 tons, while overseas activities emitted 98,246 tons. The Sumitomo Forestry Group emitted a total of 186,102 tons of CO<sub>2</sub> when including indirect emissions from on-site construction and other activities. As for our reduction target, we managed to reduce CO<sub>2</sub> emissions per sales unit to 207.3 kg/¥ million in real terms across the scope of calculation, representing a 1.4% reduction from fiscal 2004.

We have established a new goal of reducing emissions per sales unit by 6% compared to fiscal 2004 figures, by 2010. Company mergers were one factor in the emissions decrease for fiscal 2005, but we intend to keep making solid progress on  $CO_2$  reductions by setting annual targets aimed at lowering emissions compared to the previous year.

\* See notes 3 and 4 on page 3.

# Reducing CO<sub>2</sub> Emissions from Factories

Factories in the Sumitomo Forestry Group belong to two domestic companies (total of seven factories) and five overseas companies. Existing factories of Sumitomo Forestry Crest carried out various activities, including switching to electric forklifts, fitting inverters and changing lighting, and improving production efficiency and reducing the number of defective products. At the Komatsujima Factory, the company has been promoting the use of Japanese cedar as a raw material and has managed to save energy by improving production yield through ingenuity in its processing methods. Meanwhile, in April 2006 the Shizuoka Factory relocated and became a state-of-the-art environmentally-friendly factory following the introduction of energy-saving facilities, including a heat transfer biomass boiler system for office air-conditioning, high-efficiency mercury lamps and roof insulation.

Overseas, the five factories of NPIL, Alpine MDF, KTI, RPI and ASTI generate almost all of the emissions from Group companies. These plants aimed to reduce CO<sub>2</sub> emissions through initiatives such as reducing consumption of fossil fuels by encouraging the use of waste wood, conducting thorough maintenance, and improving production efficiency. NPIL was able to reduce CO<sub>2</sub> emissions by about 8,640 tons by switching fuels from coal to wood waste from the manufacturing process.

#### CO<sub>2</sub> emissions from business activities



Scope of calculation

Direct emissions: Covers CO<sub>2</sub> emissions from electricity and gasoline consumption in office activities, and from energy consumption in the production activities of factories. In real terms, Toyo Plywood Group, the Fuji Factory of Sumitomo Forestry Crest, and Sumitomo Forestry Component House are not covered. Indirect emissions: Covers activities such as on-site construction of houses. The scope of estimates is unchanged from fiscal 2004.

#### • CO<sub>2</sub> emissions from factories



\* Fiscal 2005 addition to calculation scope: Toyo Plywood. (The Fuji Factory of Sumitomo Forestry Crest and Sumitomo Forestry Component House are excluded from fiscal 2005.)

# Reducing CO2 Emissions from Construction Sites (including distribution and structural member processing)

The use of precut timber at housing construction sites has improved work efficiency and therefore reductions in CO<sub>2</sub> emissions. Our effective utilization of resources is adding to those reductions through the use of waste materials and yield rate improvements. We estimated the effect of these efficiency improvements on CO<sub>2</sub> emissions based on standard processes for constructing a typical model in each of the years from 1990 to the present. We estimated construction machinery and tool operation hours, numbers of workers, and other factors, and then used vehicle fuel and emission coefficients to calculate the volume of CO<sub>2</sub> emissions. We found that CO<sub>2</sub> emissions per house had fallen from around 2.77 tons in 1990 to 2.51 tons in 2005.

Improving the efficiency of timber and material transportation to the building site is another important challenge, and we are making progress in terms of distribution efficiency having examined new distribution methods. These include first storing materials together at distribution centers and then delivering them to several sites at once to match work schedules. The transportation of workers and materials to and from building sites represents a large proportion of the CO<sub>2</sub> emitted during onsite construction. In an appeal to building contractors to use energy-efficient travel to reduce emissions, environmental education programs were conducted at 42 branch offices (covering 1,352 people).





# Reducing CO<sub>2</sub> Emissions at the Residential Stage

# Housing Life Cycle Assessments (LCAs)

Our aim is to lessen the environmental impact of houses throughout their entire lifecycle from the manufacture of building materials and construction, to occupancy, retrofitting and scrapping of materials. An LCA of a *MyForest* home revealed that usage of a house by an average household accounts for a large proportion (65%) of the CO<sub>2</sub> emitted by a house over a period of 30 years. For this reason we hope to realize, together with our customers, homes that consume low levels of energy and yet offer comfortable living. We will also reduce the amount of CO<sub>2</sub> emitted by houses by extending their lifecycle, through enhanced durability, long-term support and appropriate renovation.

## Ryouonbou natural heating and cooling

Sumitomo Forestry's *Ryouonbou* design concept was the product of turning to traditional Japanese living styles in search of ideas for environmentally-symbiotic homes. It is an architectural approach that makes the most of nature's blessings to allow for a cool living environment in summer and warmth in winter using minimal energy, thereby removing conventional over-reliance on air-conditioning systems. Through our clever use of natural forces, we are drawing upon traditional wisdom in conventional home design.

# Adoption of next-generation energy conservation standards

In order to reduce CO<sub>2</sub> emissions at the residential stage, Sumitomo Forestry established next-generation energy conservation standards, which boast high insulation efficiency, for our housing specifications from fiscal 2005. The new standards are estimated to achieve a 29% reduction of energy usage compared to the earlier energy conservation standards established in 1992. In fiscal 2005, next-generation energy conservation standards were used in 69% of specifications.

## Promoting solar power systems

We are promoting the use of solar power generation, which makes use of sunlight as a natural energy source. Electricity is generated via solar cell modules installed on roofs, converted into alternating current (AC) using a power conditioner, and then fed throughout the home through a power distribution board. Surplus power is sold on to power companies, being automatically channeled through line connections. Fuel cell units used as cogeneration systems utilize energy efficiently to simultaneously generate electricity and heat water, and enable CO<sub>2</sub> emission reductions of up to 40%. We seek ways to incorporate these systems to best suit the living styles of our customers.

## Energy-efficient renovation

Sumitomo Forestry Home Tech carries out heat and energy efficient renovation of homes that prevents heat from escaping and stops outside air coming in. Through the insulation of ceilings, windows and floors, the company creates healthy, comfortable and economical living spaces.

#### MyForest LCA



#### • Comparison of CO<sub>2</sub> emissions from houses using Eco Assessment Charts\*



observation point (Urawa City, Saitama Prefecture); Region IV building insulation; Floor space: 132.49m<sup>2</sup>

 Average annual maximum temperature: 19.6°C; Average annual minimum temperature: 10.8°C; Average annual temperature range: 8.8°C

\* Eco Assessment Chart: Assessment record of CO<sub>2</sub> emissions and air-conditioning expenses for each house plan calculated based on the insulation specification used and other assumptions, and on regional AMeDAS climate data for the house location. Environmental design is carried out based on this assessment record.

#### • Percentage of houses conforming to nextgeneration energy conservation standards



Perspectives

## Independent air circulation systems



Yasuo Tanaka Team Manager Technology Division Housing Headquarters Sumitomo Forestry houses are made to comply with next-generation energy conservation standards and they incorporate *Ryouonbou* design methods that draw fully upon the natural environment. *Ryouonbou* design helps cut air-conditioning use, and therefore reduce energy consumption during occupation, by blocking out the sun and creating good airflow during summer, while capturing and retaining heat from the sun in winter. We intend to develop *Ryouonbou*  further, organically combining passive methods and active methods (including fuel cells and other cogeneration systems, solar heat collection, highefficiency air-conditioning and hot water systems, and radiant heating and cooling systems) to construct environmentally-symbiotic homes allowing independent air circulation systems to best suit customer requirements.

# Effective Resource Utilization and Waste Reduction

Sumitomo Forestry is making efforts to reduce, reuse and recycle the construction waste generated at our building sites. We have set up a unique system for recycling wood waste from demolition work and are trying to promote greater use of chips made from wood waste.

# **Policy on Resources**

The principal structural members and materials for one house use approximately 78.6 tons of resources, around 14.6 tons of which are timber materials. This mass utilization of resources obligates Sumitomo Forestry to vigorously tackle the issue of resource conservation. We are taking action to reduce construction waste from both new housing construction sites and demolition sites. In new housing construction, for example, precutting helps to 'reduce' the amount of waste generated at the construction site, and construction materials are recovered for 'reuse.' In demolition work, we 'recycle' concrete, as well as wood waste into chips to be used as raw material through our own recycling system.

On top of that, site surveys are carried out at least twice a year at our approximately 450 industrial waste treatment contractors (intermediate treatment plants) in order to verify that industrial waste is being properly treated.

# New Housing Construction Waste and Proper Treatment

The precutting of wood materials is contributing to effective timber utilization and to reductions in waste generated by construction. Another system has been created, with the cooperation of manufacturers, whereby materials are supplied in small lots so that only the required amount is delivered to the site, and packing materials have also been reduced through the use of returnable boxes. The volume of waste generated in fiscal 2005 remained around the same level as the previous year.

Sumitomo Forestry's recycling rate, too, has been improved through careful onsite sorting of waste to facilitate recycling, and the outsourcing of waste treatment to intermediate treatment contractors that themselves boast a high recycling rate.

# Appropriate Handling of Demolition Waste

Sumitomo Forestry has been carrying out careful sorting and recycling of dismantled materials from before the enactment of the Construction Materials Recycling Act. Recycling procedures for concrete, wood and metals are almost fully in place, whereas we are still without effective methods for recycling tiles, glass, ceramics, gypsum board and composite materials. The development of recycling routes is one of our main challenges.

In fiscal 2005, 97% of demolition wood waste was delivered to recycling plants. This was achieved five years earlier than the government-set target of 95% by 2010.

# Effective Utilization of Wood Chips

Offcuts from the timber milling process and timber waste from construction and demolition sites can be turned into chips for use in paper-making, particle board or as fuel. Sumitomo Forestry employs the networks it has developed through its timber distribution business, creating its own recycling routes to promote the use of wood chips.

# **Expectations of Sumitomo Forestry**

Our company is contracted to carry out housing demolition and intermediate treatment of construction waste at our Recycling Center. The recycling rate for construction waste can be improved if more time is spent on the demolition process, but that requires an understanding from housing manufacturers and their customers due to the extra costs involved. Currently, there is an overwhelming surplus of recycled materials that have no forward destination and therefore the

Perspectives

use of recycled materials needs to be encouraged further still if recycling is to become more widespread. The situation could be turned around if recycled materials were to be employed in new houses. On top of that, houses consist of many different kinds of materials these days, which makes demolition more complicated than in the past. When designing houses, I would like more consideration to be shown to the ease of demolition and recycling.

Volume of waste from new housing construction



#### • Recycling rate for demolition wood waste



# Volume of wood chips handled



Sadayuki Tarui Director General Manager Hachioji Division Marutone Apex



# **Promotion of Environmental Business**

Sumitomo Forestry is developing its environmental business, believing that the technology and experience we have amassed over the years in relation to trees and forests should be employed broadly in the public domain.

# Overseas afforestation consultancy

Sumitomo Forestry has been asked to provide consulting services, from planning to planting, for the environmental afforestation project being pursued by Mitsui Sumitomo Insurance over the six years commencing 2005. Drawing upon the know-how we have so far developed through tropical forest regeneration, we are helping to regenerate around 300 hectares of forest within the Paliyan Wildlife Sanctuary, located in the Yogyakarta Special Region on the island of Java, Indonesia, which has been devastated by illegal logging. Through the planting of native tall tree species, as well as fruit trees, the project aims to regenerate tropical forest while contributing at the same time to the local economy.



Tree-planting ceremony held in December 2005

## Eco-Asset service—consultation on using corporate green zones in CSR activity

In 2004, Sumitomo Forestry Landscaping, together with InterRisk Research Institute & Consulting, Kajima Corporation and Kokusai Kogyo launched the Eco-Asset service offering consultation on the use of corporate green zones as a means to fulfill corporate social responsibility (CSR). The service targets mainly companies that have a large impact on the environment or consume large amounts of energy. It involves making recommendations on how to make the best use of green zones at plants and on rooftops or walls of office buildings, as well as recreational facilities and other company-owned green spaces or forests, as part of CSR activities or environmental management programs. Technological assistance was also given to a wall-greening system exhibited at EXPO 2005 Aichi, Japan.

# **Environmental Conservation in the Office**

Sumitomo Forestry is trying to lessen the environmental impact of office work through three key areas—green purchasing, reduction of paper usage and reduction of power consumption. We have even introduced vending machines that contain only paper drink containers made from thinnings taken from domestic forests.

#### Green purchasing

Sumitomo Forestry practices "green purchasing" of office equipment and supplies. As part of this initiative, vending machines throughout the Head Office were replaced in October 2005 with machines that contain only "Cartocans" (paper drink containers made using thinnings pulp). Domestic wood chips from thinnings and offcuts account for approximately 30% of the materials used to make a Cartocan, which means more thinnings are being effectively utilized. Used Cartocans are able to be recycled in the same way as milk cartons. We are also recommending the vending machines to branch offices and group companies and are making the most of the opportunity to convey the significance of domestic timber use to employees.

Active partaking in green purchasing of office and other items during fiscal 2005 helped the Head Office achieve a green purchasing rate of 75.9%. In fiscal 2006, green purchasing rate improvements will be sought across the entire Sumitomo Forestry Group through environmental budgets.

## Reducing the environmental impact of information systems

As of August 2005, a video conferencing system has been available for communication between the Head Office in Tokyo and the Chiba Branch. Already some 30 meetings have taken place via the system, contributing to a reduction in travel-related CO<sub>2</sub> emissions. In the same month, the Housing Headquarters launched the Electronic Ordering System. The move is an effort to achieve large reductions in paper usage by switching from fax to a network-based electronic system for ordering of materials, as had been done for construction-related orders.

## ■Participation in Team -6%

Sumitomo Forestry is a participant in the Japanese government-led greenhouse gas reduction campaign, "Team -6%," and is actively promoting "Cool Biz" and "Warm Biz" dress codes among employees. We have created stickers featuring our mascot, Kikorin, that are being used to help raise employee awareness. A survey of general managers revealed there was 90% agreement that Cool Biz should continue to be implemented in and after 2006.

## • Green purchasing rate at Head Office





A Cartocan drink container made from domestic wood chips sold by Sumitomo Forestry



Sticker featuring Kikorin appealing to office employees to save energy

# **Development of Environmental Technologies**

Sumitomo Forestry is pursuing technological development with emphasis on three main themes—utilization of domestic timber, lessening environmental impact, and responding to diversity. The goal is to help realize a sustainable society.

# **R&D** Policy

Sumitomo Forestry's policy on future research and development was determined in November 2005. Technological development must support the needs of social and market environments, as well as the various domains of Sumitomo Forestry Group businesses, and will focus on: (1) utilization of domestic timber; (2) lessening environmental impact; and (3) responding to diversity. Technology will be vital for responding adequately to major social changes, such as an aging population with fewer children, while paying consideration to growing environmental concerns such as global warming and waste. We also recognize the importance of R&D in maintaining business sustainability, and therefore we intend to contribute to the realization of a sustainable society through the development and spread of new technologies.

# Utilization of domestic timber Timber drying system helps promote domestic timber use

Sumitomo Forestry has developed and promoted its MIZDAS system, which is incorporated into timber drying equipment to automatically control temperature and humidity via a computer. Sensors are attached to a portion of the timber to be dried to measure the moisture content and temperature of the wood inside the drying kiln. Conditions are adjusted accordingly to appropriate temperature and humidity levels. This system reduces cracking, distortion and other damage to the timber, making it possible to deliver highly competitive structural materials at low cost and to a high level of quality, and thereby helping to stimulate the market for domestic timber. 120 of these systems are in operation nationwide. A new MIZDAS system was successfully developed in March 2006 that measures timber shrinkage when adjusting drying conditions to offer even higher precision, and we are now developing methods for practical application of the new system.

# Lessening environmental impact Tropical forest cultivation in Indonesia

Since 2003, we have been using part of a cacao plantation on the island of Java, Indonesia, to pursue development of technology related to the cultivation of tropical forests. We are currently planting fast-growing falcata (*Albizia falcataria*) trees for the development of easy-to-use timber species and research into efficient forestry methods. Any new product to emerge from these activities should lead to a stable supply of timber resources, for which worldwide demand is ballooning, and a reduction in the amount of timber harvested from natural tropical forests.

## Lessening environmental impact Using natural forces to develop homes less reliant on air-conditioning

In July 2004, an experimental environmentally-symbiotic home was built at our Tsukuba Research Institute. The concept of the building is *Ryouonbou*, the natural heating and cooling design approach conceived by Sumitomo Forestry. The idea is to remove the reliance on air-conditioning by employing ingenuity in design to fully utilize natural forces such as sunlight, thereby producing a greater level of comfort with minimum energy. In the experimental home we verify the improvements to indoor comfort and energy-saving effects achieved through enhanced ceiling insulation, shading devices, improved cross ventilation and the planting of deciduous trees on the south facing side of the house. Our investigations in 2005 found that room temperatures had dropped by up to 3°C in summer and risen by over 1°C in winter, creating a more comfortable indoor environment compared with homes built according to 1992 energy conservation standards.

## Responding to Diversity Construction of the Universal Design House

In October 2005, the Universal Design House was built at the Tsukuba Research Institute to help highlight the importance of universal design (UD). The space is designed according to Sumitomo Forestry's UD concept so that it can be flexibly rearranged to match changes in lifestyle. The test home will be employed in training for sales and design staff from around Japan, who can then use that knowledge to make proposals to customers.

#### •R&D policy





Briefing held at the Tsukuba Research Institute on the new MIZDAS system



Comparative testing of falcata species



The Universal Design House, which can be stayed in overnight, is used for real-time, actual design verification and employee training. It also incorporates *Ryouonbou* design.

# Perspectives

# Applying the Ryouonbou concept to put forward new living styles to customers

People were put in charge of product development and working groups were established, then we spent a year on development related to environmentallysymbiotic homes. One upshot was the *Ryouonbou* concept, which was incorporated into the *MyForest* product. To take full advantage of *Ryouonbou*, houses need to change their appearance with the seasons. For example, sun shades should fold away in winter when they are no longer required. But *Ryouonbou*  only works when the occupant puts in the effort and so we have to do more than just sell houses; we have to communicate the benefits of this way of living to our customers. Having employees experience it for themselves at the Tsukuba Research Institute experimental facilities is effective in this respect. I would also like to let customers become acquainted with the merits of *Ryouonbou* through the model homes we have on display nationwide.



# **Economic Report**

# **Financial Performance**

Sumitomo Forestry strives to proactively disclose financial information, believing that a company, in addition to securing reasonable profit through business operations, must submit prompt and accurate information to its stakeholders for the enterprise to continue to exist.

# 2005 Financial Results

The Sumitomo Forestry Group is building on the success of our Structural Reforms in Management Initiative which was implemented to bring about improved profitability by fiscal 2005 by pressing ahead with production cost reductions and closer expenditure management. Meanwhile, the Group has adopted a more aggressive management approach from fiscal 2005, allocating managerial resources as up-front

#### • Trend in consolidated net sales (billion yen) 791.128 800 723.193 673.779 644 730 645 100 600 400 200 0 2001 2002 2003 2004 2005 (FY)





## Consolidated cash flows

(Unit: billion yen)	FY2004	FY2005
Cash flows from operating activities	6.685	16.626
Cash flows from investment activities	-12.895	-8.998
Cash flows from financing activities	-7.087	-14.039
Cash and cash equivalents at the end of the year	55.928	49.628

investment aimed at expanding future business. Objectives include enhancing competitiveness and earning power, and strengthening consolidated management.

The above has resulted in a 9.4% year-on-year increase in consolidated net sales to \$791.128 billion, and a 10.1% decrease in consolidated recurring income to \$16.8 billion.





## • Trend in consolidated net income



• Number of custom-built detached houses completed and trend in share\* of nationwide owner-occupied housing construction starts



\*Share = Number of custom-built detached houses completed by Sumitomo Forestry Group ÷ Number of nationwide owner-occupied housing construction starts

# Third Party Evaluation

We asked Toshihiko Goto, Executive Director of Global Reporting Initiative Forum Japan, for his comments on this report. In order to provide him with a fuller view of our initiatives, we also invited him to visit a company-owned forest in the vicinity of Niihama City in Ehime Prefecture, Forester House, Sumitomo Forestry Crest Niihama Factory, the Niihama model home, and other facilities.



Toshihiko Goto Executive Director Global Reporting Initiative Forum Japan; Chair

Environmental Auditing Research Group (EARG)

In the "Dialogue with the President" section, President Yano notes that, "Coexistence between society and the forests is going to be essential," and that, "Sumitomo Forestry has a major role to play in advancing ... [the] theme of living in harmony with the environment." Experts both in Japan and around the world are beginning to recognize the proposition that traditional Japanese forest culture is perhaps the only means of achieving sustainability for human society. Environmental business advancement by Sumitomo Forestry is extremely important in this sense, and I hope to see continued strides forward in terms of knowledge and performance, with the results spread throughout the world.

It is often said that the longest period for which corporations can undertake concrete policy planning is about five years. The official formation of "Team 2020," then, is particularly striking in this context, and I look forward to seeing the implementation of the team's proposals.

The positive image of forestry and timber is different from the question of whether actual corporate activity is truly contributing to sustainability. Founding spirit, corporate philosophies, and charters are well and good, but I find that the difficulty of achieving those sorts of ideals is a never-ending task. Many companies claim that their founding spirit is corporate social responsibility (CSR) in itself, and is embedded in their corporate DNA. Nevertheless, the reason why such companies can become overtaken by scandals is that they have become drunk with words and have failed to connect them with concrete actions. The realization of high ideals requires checks and reviews to see how they are being tied to policies, goals and specific measures. From this perspective, while the report contains "plan" and "do" type information, there is room for improvement by adding more "check" and "act" type information.

A related point that I find necessary to bring up is the paucity of quantitative information in the "Social Report" section. I realize of course that some things can only be presented qualitatively in the current report, but I would suggest a transition to a more quantitative stance, that is creative efforts at increased visibility. The Environmental Report section could probably be improved by presenting the degree of diffusion and customer evaluations with respect to the *Ryouonbou* natural heating and cooling concept. A separate issue is that even while industrial waste regulations are placing increasing responsibility on the entities that produce waste, the common perception is that waste producer attitudes are not keeping pace. I for one would welcome an honest statement of the differences in awareness and effort that may exist internally among different departments and divisions. Could zero emissions be held up as a goal for waste created by new construction?

The Japanese archipelago is one of 34 locations in the world designated as a hot spot for biodiversity. It is somewhat disappointing to see almost no mention of biodiversity-related efforts by such a prominent Japanese owner of mountain forestland. I would hope in the future to find clear policies, goals, specific measures, and results regarding the preservation of biodiversity in terms of genes, seeds, and ecosystems.

I was able to see for myself various efforts and technological developments to utilize domestic timber, and I found these to be quite impressive. However, I wasn't able to feel that sense of wonderment from the report itself. Underutilization of domestic timber cannot be due solely to prices, which is precisely why technological development is needed. The report could be evaluated more highly if, as the industry leader, Sumitomo Forestry would state in easily understood terms what the problems are, what is required in order to revitalize Japan's forestry industry, and what is being done in response.

It is certainly no easy task to integrate these sorts of suggestions in a manner suitable to all stakeholders. One method would be to coordinate detailed and specialist information with the website to allow easy searching.

In closing, I would note the undoubtedly proud fact of being included in major SRI indexes. And while it may be superfluous to say so, I would also mention that continued improvement in sustainability performance and information disclosure will be necessary to maintain such an esteemed position.



Inspecting forestry management (Sumitomo Forestry-owned forest, Shikoku)

# Reply to Third Party Evaluation

Thank you very much for your valuable assessment. History has many examples of deforestation leading to the downfall of civilizations, and we take it as a great responsibility to be expected to spread Japan's "culture of coexistence with forests" throughout the world via our businesses.

Based on the Medium-Term Environmental Management Policy established in fiscal 2005 and the views expressed in the Third Party Evaluation, we will work hard to achieve our budgetary goals and improve the environmental awareness of all Sumitomo Forestry Group employees. Furthermore, we shall endeavor to improve upon the issues pointed out and make even greater efforts in raising the effectiveness of our environmental and CSR activities in order to help realize a sustainable society.

> Hidekazu Tanaka General Manager Environmental Management Division

# **GRI Content Index**

The following table has been taken from the GRI Guidelines.

1 Vision a	Indicators	Correspond Pages
	nd Strategy	
1.1	Statement of the organisation's vision and strategy regarding its contribution to sustainable development.	9-10
1.2	Statement from the CEO (or equivalent senior manager) describing key elements of the report.	3-6
2 Profile	onal Profile	
2.1	Name of reporting organisation.	1
2.2	Major products and/or services, including brands if appropriate.	1
2.3	Operational structure of the organisation.	44
2.4	Description of major divisions, operating companies, subsidiaries, and joint ventures.	2
2.5	Countries in which the organisation's operations are located.	1
2.6	Nature of ownership; legal form.	1
2.8	Scale of the reporting organisation.	1, 44
Report Sco	ipe	
2.10	Contact person(s) for the report, including e-mail and web addresses.	2
2.11	Reporting period (e.g., fiscal/calendar year) for information provided.	2
2.12	Date of most recent previous report (if any).	2
2.13	Boundaries of report (countries/regions, products/services, divisions/facilities/joint ventures/ subsidiaries) and any specific limitations on the scope.	2
Report Pro	file	
2.18	Criteria/definitions used in any accounting for economic, environmental, and social costs and benefits.	36
2.20	Policies and internal practices to enhance and provide assurance about the accuracy, completeness, and	2
	reliability that can be placed on the sustainability report. Means by which report users can obtain additional information and reports about economic,	
2.22	environmental, and social aspects of the organisation's activities, including facility-specific information (if	2
2.0	available).	
	Ince Structure and Management Systems	
Structure a	and Governance Governance structure of the organisation, including major committees under the board of directors that	
3.1	are responsible for setting strategy and for oversight of the organisation.	21
3.6	Organisational structure and key individuals responsible for oversight, implementation, and audit of	33
	economic, environmental, social, and related policies. Mission and values statements, internally developed codes of conduct or principles, and polices relevant	
3.7	to economic, environmental, and social performance and the status of implementation.	9-10, 3
Stakeholde	er Engagement	
3.10	Approaches to stakeholder consultation reported in terms of frequency of consultations by type and by	17-18
0.11	stakeholder group.	22, 25
3.11 3.12	Type of information generated by stakeholder consultations. Use of information resulting from stakeholder engagements.	17-18, 2
	ig Policies and Management Systems	17-18
3.13	Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	21, 34
		23, 25
3.16	Policies and/or systems for managing upstream and downstream impacts.	40, 41
3.17	Reporting organisation's approach to managing indirect economic, environmental, and social impacts resulting from its activities.	34, 37-3
3.19	Programmes and procedures pertaining to economic, environmental, and social performance.	33-43
3.20	Status of certification pertaining to economic, environmental, and social management systems.	33
4 GRI Con		
	A table identifying location of each element of the GRI Report Content, by section and indicator.	46
		40
5 Perform	ance Indicators	40
		40
Integrated Cross- cutting	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn	39
Integrated Cross- cutting ndicators	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio.	
Integrated Cross- cutting ndicators	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators	
Integrated Cross- cutting ndicators Economic I	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts	
Integrated Cross- cutting ndicators Economic I Direct Impa Core Indica	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators	
Integrated Cross- cutting ndicators Economic I Direct Impa Core Indica	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators	
Integrated Cross- cutting ndicators Economic I Direct Impa Core Indica Customers EC1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators . Monetary flow indicator: Net sales.	39
Integrated Cross- cutting ndicators Economic I Direct Impa Core Indica Customers	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over,) Performance Indicators acts tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind	39
Integrated Cross- cutting Indicators Economic I Direct Impr Core Indica Customers EC1 Public Sec EC10	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over,) Performance Indicators acts acts acts tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group.	39
Integrated Cross- cutting ndicators Economic I Direct Impi Core Indica Customers EC1 Public Sec EC10 Environme	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over,) Performance Indicators acts tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. ttal Performance Indicators	39
ntegrated Cross- cutting dicators conomic D Direct Imp. Core Indica Customers EC1 Public Sec EC10 ENVironmer Core Indica	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over,) Performance Indicators acts tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. ttal Performance Indicators	39
ntegrated Cross- cutting dicators conomic D Direct Imp. Core Indica Customers EC1 Public Sec EC10 ENVironmer Core Indica	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over,) Performance Indicators acts tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. ttal Performance Indicators	39
ntegrated Cross- cutting ndicators Economic I Direct Impe Core Indica Customers EC1 Public Sec EC10 Environme Core Indica Materials EN1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over,) Performance Indicators acts tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. ttal Performance Indicators ators	39
ntegrated Cross- cutting ndicators Economic I Direct Impe Core Indica Customers EC1 Public Sec EC10 Environme Core Indica Materials EN1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over,) Performance Indicators acts tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. ttal Performance Indicators ators	39
ntegrated Cross- cutting ndicators Economic I Direct Impa Core Indica Customers EC1 Public Sec EC10 Environmer Core Indica Materials EN1 Energy	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators Monetary flow indicator: Net sales. tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. ntal Performance Indicators ators Total materials use other than water, by type.	39 39 44 44 30 30 32
Integrated Cross- cutting indicators Economic Direct Impic Core Indica Core Indica EC10 EC10 EN10 Environme Core Indica Materials EN1 Energy EN3 EN4	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators Monetary flow indicator: Net sales. tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. tal Performance Indicators ators ator	39 39 44 30 30 32 32
Integrated Cross- cutting indicators Economic Direct Impic Core Indica Core Indica EC10 EC10 EN10 Environme Core Indica Materials EN1 Energy EN3 EN4	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators Monetary flow indicator: Net sales. tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. tal Performance Indicators ators ator	39 39 44 30 30 32 32
ntegrated Cross- cutting indicators Direct Impandiators EC1 Core Indicators EC1 EC1 EC1 EC1 EC1 EC1 EC1 EC1 EC1 EC1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators Community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. Intal Performance Indicators Total materials use other than water, by type. Direct energy use segmented by primary source. Indirect energy use segmented by primary source. Indirect energy use. Total water use.	39 39 44 30 32 32 32 39
ntegrated Cross- cutting indicators Direct Impandiators EC1 Core Indicators EC1 EC1 EC1 EC1 EC1 EC1 EC1 EC1 EC1 EC1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts ators Community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. Intal Performance Indicators Total materials use other than water, by type. Direct energy use segmented by primary source. Indirect energy use segmented by primary source. Indirect energy use. Total water use.	39 44 30 32 32 32 39
Integrated Cross- cutting indicators Direct Impandiators EC1 Core Indicators EC1 EC10 EN/ION EN10 EN10 EN10 EN10 EN10 EN10 EN10 EN1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts acts acts actor Monetary flow indicator: Net sales. for Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. netal Performance Indicators actor Total materials use other than water, by type. Direct energy use segmented by primary source. Indirect energy use. y Location and size of land owned, leased, or managed in biodiversity-rich habitats. Description of the major impacts on biodiversity associated with activities and/or products and services	39 44 30 30 32 32 32 32
Integrated Cross- cutting Economic le Economic le Econ	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts acts acts acts acts acts active Monetary flow indicator: Net sales. tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. Total materials use other than water, by type. Direct energy use segmented by primary source. Indirect energy use. y Location and size of land owned, leased, or managed in biodiversity-rich habitats. Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, freshwater, and marine environments.	39 44 30 30 32 32 39 32 32 39
Integrated Cross- curting Economic le Economic le Core Indicators EC1 Direct Impunct Core Indicators EC1 Public Sec EC1 Environme EN1 EN1 EN1 EN1 EN1 EN1 EN1 EN1 EN1 EN1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts acts actor Monetary flow indicator: Net sales. for Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. netal Performance Indicators actor Total materials use other than water, by type. Direct energy use segmented by primary source. Indirect energy use. y Location and size of land owned, leased, or managed in biodiversity-rich habitats. Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, freshwater, and marine environments. Effuents, and Waste	39 44 30 32 32 39 32 32 39
Integrated Cross- cutting Economic le Economic le Econ	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts acts acts acts acts acts active Monetary flow indicator: Net sales. tor Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. Total materials use other than water, by type. Direct energy use segmented by primary source. Indirect energy use. y Location and size of land owned, leased, or managed in biodiversity-rich habitats. Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, freshwater, and marine environments.	39 44 30 32 32 39 32 39 32 37 37
Integrated Cross- curting Economic le Economic le Core Indicators EC1 Direct Impunct Core Indicators EC1 Public Sec EC1 Environme EN1 EN1 EN1 EN1 EN1 EN1 EN1 EN1 EN1 EN1	Indicators Two or more dimensions of economic, environmental, and social performance as a ratio. Eco-efficiency measures (e.g., the amount of emissions per unit of output or per monetary unit of turn over.) Performance Indicators acts acts actor Monetary flow indicator: Net sales. for Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group. netal Performance Indicators actor Total materials use other than water, by type. Direct energy use segmented by primary source. Indirect energy use. y Location and size of land owned, leased, or managed in biodiversity-rich habitats. Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, freshwater, and marine environments. Effuents, and Waste	39 39 44 30 30 32 32 39 32 32 37 37 37

	Indicators	Correspond Pages
Products a	and Services	
EN14	Significant environmental impacts of principal products and services.	40
Compliand		
EN16	Incidents of and fines for non-compliance with all applicable international declarations/conventions/ treaties, and national, sub-national, regional, and local regulations associated with environmental issues. Explain in terms of countries of operation.	34
Additional	Indicators	
Energy		
EN17	Initiatives to use renewable energy sources and to increase energy efficiency.	39-40
EN18	Energy consumption footprint (i.e., annualised lifetime energy requirements) of major products.	40
EN19	Other indirect (upstream/downstream) energy use and implications, such as organisational travel, product lifecycle management, and use of energy-intensive materials.	40
Biodiversi		
EN23	Total amount of land owned, leased, or managed for production activities or extractive use.	37
EN25	Impacts of activities and operations on protected and sensitive areas.	37
EN26	Changes to natural habitats resulting from activities and operations and percentage of habitat protected or restored.	37-38
EN27	Objectives, programmes, and targets for protecting and restoring native ecosystems and species in degraded areas.	42
Transport		
EN34	Significant environmental impacts of transportation used for logistical purposes.	39
Overall		
EN35	Total environmental expenditures by type.	36
	formance Indicators:	
	actices and Decent Work	
Core Indic		
Employme LA2		27
LA2 Health and	Net employment creation and average turnover segmented by region/country.	21
	Standard injury, lost day, and absentee rates and number of work-related fatalities (including	
LA7	subcontracted workers).	25
Training a	nd Education	
LA9	Average hours of training per year per employee by category of employee.	27
Diversity a	and Opportunity	
LA10	Description of equal opportunity policies or programmes, as well as monitoring systems to ensure compliance and results of monitoring.	27
Additional	Indicators	
Employme	ant	
LA12	Employee benefits beyond those legally mandated.	27-28
Health and	d Safety	
LA15	Description of formal agreements with trade unions or other bona fide employee representatives covering health and safety at work and proportion of the workforce covered by any such agreements.	27
Training a	nd Education	
LA16	Description of programmes to support the continued employability of employees and to manage career endings.	28
LA17	Specific policies and programmes for skills management or for lifelong learning.	28
Human Ri	ghts	
Additional	Indicators	
Strategy a	and Management	
HR8	Employee training on policies and practices concerning all aspects of human rights relevant to operations.	28
	Include type of training, number of employees trained, and average training duration. rv Practices	
HR9	Description of appeal practices, including, but not limited to, human rights issues.	21
	Description of non-retaliation policy and effective, confidential employee grievance system (including, but	
HR10	not limited to, its impact on human rights).	21
Society		
	Indicators	
Communit		
S04	Awards received relevant to social, ethical, and environmental performance.	19
	esponsibility	
Core Indic		
Gustomer	Health and Safety           Description of policy for preserving customer health and safety during use of products and services, and	
PR1	beschpiol of policy for preserving customer hearin and safety during use of products and services, and extent to which this policy is visibly stated and applied, as well as description of procedures/programmes to address this issue, including monitoring systems and results of monitoring.	23
	and Services	
Products a	Description of policy, procedures/management systems, and compliance mechanisms related to	23
Products a		
PR2	product information and labelling.	
PR2 Respect fo	or Privacy	91
PR2 Respect fo PR3	or Privacy Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy.	21
PR2 Respect fo PR3 Additional	or Privacy Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy. Indicators	21
PR2 Respect fo PR3 Additional Customer	r Privacy Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy. Indicators Health and Safety	
PR2 Respect fo PR3 Additional	or Privacy Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy. Indicators	21
PR2 Respect fo PR3 Additional Customer PR6	or Privacy Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy. Indicators Health and Safety Voluntary code compliance, product labels or awards with respect to social and/or environmental	
PR2 Respect fo PR3 Additional Customer PR6	P Privacy Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy. Indicators Health and Safety Voluntary code compliance, product labels or awards with respect to social and/or environmental responsibility that the reporter is qualified to use or has received. and Services Number and type of instances of non-compliance with regulations concerning product information and	
PR2 Respect for PR3 Additional Customer PR6 Products a	or Privacy Description of policy, procedures/management systems, and compliance mechanisms for consumer privacy. Indicators Health and Safety Voluntary code compliance, product labels or awards with respect to social and/or environmental responsibility that the reporter is qualified to use or has received. and Services	19

\* GRI Guidelines: A set of international guidelines for sustainability reporting created by the Global Reporting Initiative (GRI), an NGO headquartered in The Netherlands. The guidelines advocate that organizations report on their business from the perspectives of economic, environmental, and social performance.



# SUMITOMO FORESTRY CO., LTD.

Marunouchi Trust Tower N, 1-8-1, Marunouchi, Chiyoda-ku, Tokyo, JAPAN 100-8270

- Environmental Management Division Tel: +81-3-6730-3520 Fax: +81-3-6730-3521
- Corporate Communications Group Tel: +81-3-6730-3501 Fax: +81-3-6730-3504
- General Administrative Division
- CSR Promotion Office General Administrative Division

Tel: +81-3-6730-3500 Fax: +81-3-6730-3504