Environmental and Social Report
2004
With a view to enhanced clarity, this year’s report has been
inquiries to:
Reporting period and scope
Next year’s environmental report is scheduled for publication
Parts of this report also cover the activities of the following
Publication of next report
Editorial policy
Sumitomo Forestry has acquired corporate-wide general ISO 14001
Reporting period: April 2003 to March 2004
Understanding the environmental impact of Group companies and
Activities Planned for 2004
Environmental and Social Report
Toward Sustainable Development
Corporate Philosophy and Sustainability
Compliance and Risk Management
Customer First
Environmental Vision
Green Procurement
Environmental Accounting
Domestic Forestry
Overseas Afforestation Projects
Using Timber Resources Effectively
Developing Environmental Technologies
Working to Prevent Global Warming
Reducing Wastes
Toward Green Office Management
Environmental Communication
Community and Social Contributions
Highlights of our Community and Social Activities
Activities Planned for 2004
Corporate Data

A Message from the President

The business of Sumitomo Forestry is based on forestry management. Our approach towards environmental preservation, which has been developed through our practices of sustainable forestry for many years, is best expressed through our Corporate Philosophy. This philosophy has been maintained up to the present as the foundation of all Sumitomo Forestry Group housing-related businesses, including timber building materials, building material manufacturing, housing construction, environmental businesses, and others.

Recently, it is pointed out that corporations in Japan and abroad attach too much importance to the economic aspects of their activities, and corporate responsibilities in regard to the environment and society are the subject of increased focus. Over the past three centuries since its foundation, Sumitomo Forestry has contributed to the natural environment of the earth. Today, as we continue to expand our corporate activities in a variety of fields, we are not only involved in maintaining and enhancing society and the environment, but also contribute to the formation of a sustainable society.

In the business of housing construction, Sumitomo Forestry promotes the use of domestic timber. The active use of domestic timber is important, not only in securing the sustainability and health of forests, but also in functioning as a sink for absorbing CO₂. For our GODAI housing series, we have developed our own Super Cypress engineered wood and lattice wall panels. Super Cypress wood is a laminated building material of Japanese cypress, produced by effective use of thinned wood and previously unused timber materials. Lattice panels are produced from domestic cedar. Last year, we succeeded in developing a laminate building material of Japanese larch, which was previously very difficult to produce. This is used in structural timber products, which are released only in the Sapporo area of northern Japan.

While developing corporate activities that utilize wood, a renewable natural material, we are also engaged in new forms of regeneration in the R&D field, which use the latest biotechnologies.

The feudal warlord H ideyoshi Toyotomi favored the “Togyu cherry” (Prunus pendula Maxim f. azandana at the well-known Daigoji Temple in Kyoto, for cherry blossom viewing. Sumitomo Forestry has succeeded in the large-scale tissue culture propagation of clone seedlings of this tree. The seedlings have subsequently multiplied and thrived, and they finally began flowering in March 2004. This weeping cherry tree was thought to be over 150 years old and approaching the end of its life. People historically wished to preserve the tree for its high cultural value. In the future, we hope to adopt and utilize this technology in preserving precious weeping cherry trees in other regions and other trees in danger of extinction.

Sumitomo Forestry recognizes anew the role and responsibility, expected by society in all areas of business at home and abroad, with its Corporate Philosophy and Environmental Policy. We will remain actively engaged in business activities that contribute to the formation of a sustainable society in the days to come.

This is the fourth edition of our environmental report. I hope it will provide you with the opportunity to observe our efforts and results in protecting the environment. Your feedback and comments are most welcome.

Ryu Yano, President
June 2004
### Principal Activities in FY2003

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<th>Integration of environmental management</th>
<th>Forestry Agency Director-General’s award</th>
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<td>In the past, we have used a different management system for environmental activities than for our everyday business. To reinforce the foundation of our environmental management, we decided to integrate the system we use for managing every-day business with the system for environmental activities. Our new integrated system was devised in FY2003 and started operating from FY2004.</td>
<td>The “twinned post” jointly developed by Sumitomo Forestry, Sumitomo Forest Service Co., Ltd., and Sanko Co., Ltd. of Hiyuga City, Miyazaki Prefecture won the Forestry Agency Director-General’s award. Our twinned post, whose commercialization began two years ago, is a two-piece laminated pillar created by longitudinally slicing the square cores produced from Japanese cedar logs, drying the two resulting halves, then gluing them together. This new method will enable bent logs, which could not previously be used as pillars, to be used effectively.</td>
<td>From fiscal 2002, Sumitomo Forestry has been monitoring the amount of CO₂ generated by its timber house construction activities. To confirm the tentative results for FY2002, in FY2003 we carried out surveys at 23 construction sites from Hokkaido to Kyushu. Thus, revealed an emission for the 23 sites surveyed of 1.65 tons of CO₂ per house. The average floor area of the houses surveyed was 155.25 m². Converting this to the floor area used for the FY2002 calculation returns a figure of 1.56 tons of CO₂ per house, thus confirming the validity of the results for the previous year.</td>
<td>Aiming to develop new forms of forest management that reflect the total forest ecosystem, including flora and fauna, air, water, soil and scenery, we are developing forests with an Ecosystem theme. In 1993, we built Forest House in Beashiyama in central Ehime Prefecture, and opened 1,890 hectares of company-owned forest to the public to allow hands-on contact with forests and forestry to elementary school children and others. In 2003, we encouraged children to participate in charcoal-making and collaborated in general educational activities associated with Ehimes forests.</td>
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<th>Three Group companies acquire ISO 14001 certification</th>
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<td>We are extending the scope of ISO 14001 certification to more Group companies whose management systems meet ISO 14001 criteria. In FY2003, two new Sumitomo Forestry Group companies obtained ISO 14001 certification: Sumitomo Forestry Crest Co., Ltd. and Sumitomo Forestry Two-by-Four Homes Co., Ltd. Overseas, Nelson Pine Industries Ltd. (NPIL) of New Zealand became our second foreign subsidiary after P.T. Kutai Timber Indonesia (KTI) to meet the ISO 14001 environmental standards.</td>
<td>The “Togu cherry” of the well-known Daigoji Temple in Kyoto, representing the Shingon sect of Buddhism, was favored by feudal warlord Hidayo Toyotomi for cherry blossom viewing. Sumitomo Forestry set itself the challenge of large-scale propagation of this venerable weeping cherry by tissue culture technology. Now we have produced over 1,000 thriving seedlings, the largest of which is now around five meters tall. The color and form of the first blossoms, which appeared in the spring of 2004, match those of the original Togu cherry.</td>
<td>On behalf of the Japanese Ministry of the Environment, since 1999 we have been carrying out a Clean Development Mechanism (CDM) feasibility study into the amount of CO₂ absorbed by an afforestation project in Indonesia and the project’s commercial feasibility. In FY2003, the study focused on the quantity of CO₂ absorbed by the afforestation activities of P.T. Kutai Timber Indonesia (KTI) and PT. Rimba Partikel Indonesia (RPI), and the amount of CO₂ emissions prevented by the use of biomass energy.</td>
<td>To mark its 30th anniversary, P.T. Kutai Timber Indonesia (KTI) established an educational foundation to provide scholarships for elementary and junior high school students. As of the end of 2003, it had awarded scholarships to 21 children in the Probolinggo area, 10 in the Sebulu region, and 10 in Krucl. In FY2004, KTI plans to increase the number of recipients along with the start of the new July semester. A fixed proportion of KTI’s profits will be set aside for the educational foundation every year from now on.</td>
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<th>Our own larch used in framings and interior fittings</th>
<th>CO₂ absorbed by our forests in 2003</th>
<th>Mt. Fuji Manabi no Mori natural reforestation project</th>
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<td>In May 2003, our Sapporo branch began selling homes using larch from Sumitomo Forestry forests in Hokkaido. The larch is processed as a laminate and used in poles, beams, and interior fittings. Larch makes up roughly one third of Hokkaido’s forests.</td>
<td>The amount of carbon dioxide (CO₂) absorbed by the 40,497 hectares of Sumitomo Forestry Group-owned forests in Japan was 275,525 tons in FY2002 and 248,639 tons in FY2003. This is about 2.9 times the amount of carbon dioxide emitted by the entire Sumitomo Forestry Group in the course of its business activities. In the future, the Sumitomo Forestry Group will continue forest management activities in Japan and promote activities to prevent global warming.</td>
<td>Every year we carry out volunteer afforestation and silvicultural activities at the Mt. Fuji Manabi no Mori forest. To make sure our afforestation efforts preserve the types of native trees growing on Mt. Fuji, we use species that seed themselves naturally on the slopes of the mountain. These include beech, oak, dogwood, zelkova, stewartia, maple, magnolia, cork tree, hinkui, and Fuji cherry. Thousands of people have participated in the program and a total of 36,369 trees have been planted.</td>
<td></td>
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For three centuries, Sumitomo Forestry has planted trees and cultivated forests as part of its ideal of sustainable forestry. Even though times change and the needs of society alter, the Sumitomo Forestry Group voluntarily acts in accordance with its corporate social responsibilities based on its Corporate Philosophy of sustainable endeavors, which it has consistently maintained from its inception.

Based on a philosophy nurtured and maintained over long decades, Sumitomo Forestry contributes to a sustainable society and carries out activities aimed at furthering sustainability.

Sumitomo Forestry’s origins
Founded in 1691, Sumitomo Forestry has consistently managed forests for more than three centuries. Over that time, it has built up forests covering one thousandth of Japan’s total land area. These forests are eventually harvested, their timber used, and their revenues returned to re-invest in creating new forests. This cycle of sustainable forestry has been maintained up to the present day.

Sumitomo Forestry’s Corporate Philosophy is manifested domestically and abroad in the fusion of economic sustainability with the environmental sustainability developed through its management of forests. Sumitomo Forestry maintains this fusion as the basis of all its activities.

Sumitomo Forestry’s business and sustainability
Sumitomo Forestry’s areas of business have diversified to timber and building materials distribution, building materials manufacturing, and housing construction, while the scope of its activities has broadened to include overseas as well as domestic operations. Guided by the following themes, we are also seeking to apply our sustainability policy to all areas of business and re-examine the responsibilities required to fulfill our expected role.

- Conducting environmental protection activities
- Co-existing harmoniously with the regions in which we operate
- Providing quality products that enhance people’s lives
- Returning profits to society
- Complying with laws and regulations
- Maintaining fair labor practices
- Other related themes

Working toward sustainability
We are maintaining sincere efforts to satisfy the needs of the times and the communities in which we operate. As a result of these efforts, we are able to carry out sustainable business in relation to the environment, society, and the economy, and meet our social obligations.

Some recent examples
- Mt. Fuji volunteer reforestation project
  As part of our social contribution activities, we took the lease of a typhoon-damaged state forest on the slopes of Mt. Fuji and organized ongoing volunteer activities to restore it to its original condition. (See page 32)
- Call center established
  In our housing business, we reviewed our after-sales service system to enable us to promptly respond to customer complaints and requests. As a result, we established the industry’s first 24-hour-a-day, 365-day-a-year call center so we can reply directly to customer inquiries. We are continuing to work hard to realize the customer-first approach emphasized in our Action Guidelines. (See page 9)

Reinforcing compliance
To strengthen self-regulatory functions, in December 2002 we established a Compliance Counter to offer advice on compliance infringements. The Counter is staffed by the general manager of our General Administrative Division and a consulting lawyer. (See page 8)

Personnel system revamped
In April 2003, we revamped our personnel system to introduce a performance-oriented approach. This reflects a commitment to move away from a fixed seniority-based personnel system to one that is fairer and more inclusive.

Educational foundation established
In Indonesia, P.T. Kutai Timber Indonesia (KTI), which produces plywood and timber building materials in east Java, Indonesia, established an educational foundation to provide funding assistance to the region’s poorer children so they can attend school. KTI also provides active recovery support when natural disasters strike, and works hard to live in harmony with the local community. (See page 33)
Compliance and Risk Management

We have created a Sumitomo Forestry Ethical Charter and are reinforcing compliance practices while focusing on risk management.

Our Ethical Charter and compliance

What is compliance?
We view compliance as far more than just observing laws and regulations. True compliance means wholeheartedly and sincerely meeting the expectations of all our stakeholders, including customers, shareholders, employees, clients, and the local community. We believe that this is the basis for gaining the trust of society and is the true meaning of compliance.

Sumitomo Forestry Ethical Charter
In 1998 we prepared the Sumitomo Forestry Ethical Charter to enable every employee to understand the concept of compliance and implement proper decisions and behavior as “good citizens” and “good employees,” guided by a strong commitment to compliance and ethical principles. We also prepared Ethical Action Guidelines as a concrete guide for the promotion of compliance. Along with our Corporate Philosophy and Environmental Philosophy, we also included the Sumitomo Forestry Ethical Charter in our Employee Handbook, which is distributed to all staff members.

“Compliance Corner” in Group newsletter
Every month we publish a “Compliance Corner” in the monthly Sumitomo Forestry Group Newsletter. This clearly explains to employees the meaning of compliance, its importance, and its role in everyday business. The aim is to raise staff awareness of compliance. From April 2004, we began circulating the Group Newsletter on an Intranet and plan to place it on a special compliance website.

Compliance Counter
To promptly identify and correct behavior difficult to rectify by ordinary business processes or actions that contravene corporate ethics, we established the Advisory Compliance Counter staffed by the general manager of our General Administrative Division and an in-house consulting lawyer. To ensure that all employees thoroughly understand compliance issues, details of the Compliance Counter are also made available through an in-house Intranet. Figures are taken to protect individual privacy so that no employee is penalized in his or her work as a result of information released through the Compliance Counter.

Strengthening risk management
To address risk management issues throughout the Group, we established a Risk Management Committee headed by the general manager of our General Administrative Division. In FY2003, the Committee produced an Information Security Handbook. This was distributed to all company employees to make them more aware of the demands of the information society.

Emergency hotline established
To provide a prompt and appropriate response in case of an emergency, a dedicated telephone hotline was established for staff throughout the entire Sumitomo Forestry Group. The hotline ensures that emergency information reaches the Risk Management Committee day or night, 365 days a year.

Compliance Counter system

Puting customer satisfaction first
We recognize that all the businesses throughout the whole Group are society-based. To contribute to society through our businesses, it is vital that each individual staff member takes the needs of our customers to heart and always puts the customer first. In our housing and other businesses, we are working on developing specific ways to keep the focus firmly on the customer.

Customer First
We were the first in the housing industry to offer a 24-hour-a-day, 365-day-a-year technician response service. Customer satisfaction is our primary concern in all business areas.

Customer service management
"Putting the customer first" is more than just an abstract ideal. Sumitomo Forestry ensures all its staff take "the customer-first" approach seriously in the performance of their daily duties. To realize this, we introduced customer service management company-wide to ensure that Corporate Philosophy of customer first is reflected in day-to-day customer service.

We have set specific goals for every period and are working to improve customer service. We use a PDCA (Plan, Do, Check, Action) cycle to carry out continuous customer service improvement in an effort to achieve still higher levels of customer satisfaction.

• Draw up plan (Plan)
• Execute plan (Do)
• Check and evaluate results (Check)
• Review (Action)

Long-term support system
The short lifecycle of Japan’s housing is severely inhibiting the emergence of a recycling mentality in Japan. Lengthening the lifecycle of the nation’s housing has become an urgent social priority, as highlighted in September 2002 by a Ministry of Land, Infrastructure and Transport report entitled “Establishment of Guidelines for the Development of Long-Life Housing.”

To address this social need, in April 2002 we launched our Long-Term Support System to provide a 60-year back-up for our homes. The main points of the system are:

• To ensure the principal structural parts of the house have a durability of 60 years.
• To determine a design life for each material, and design the home to facilitate inspections, repairs, and replacement.
• To implement regular inspections over the 60 years of the home.
• To implement proposals from the design stage that will accommodate changes in the lifestyle stages of the occupants.
• To propose maintenance programs that include maintenance management and renovation proposals over the 60-year life cycle.
• To use materials with a low environmental impact and recycle.

After-sales follow-up system
So that we can respond promptly to customer queries and complete repair work, we established an after-sales follow-up system based on the following detailed data:

• Inspectors visit buildings
• Chronology of project
• Computerized building plans
• Post-construction inspection data
Because the Customer Center and Call Center staff can refer to this and other data when responding to inquiries from customers, they can make preparations for repairs and provide on-the-spot emergency repair advice if necessary.

Customer first tools
Scene from ‘customer first’ video
Featuring real Sumitomo Forestry employees, this in-house training video demonstrates how sales discussions can go wrong, gives tips, and shows examples of particularly successful customer relationships. The video is used to train new staff and is shown in in-house training sessions.

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The weeping cherry tree at Kyoto’s Daigoji Temple

Inspired by the ideal of sustainable forestry, Sumitomo Forestry Group established our Environmental Philosophy and Environmental Policy.

We promote an environmental management style that aims to harmonize the interests of the environment with the needs of business. Taking seriously our commitment to be a good corporate citizen, we work to maintain the confidence of society, live in harmony with our local communities, and contribute to society wherever we can.

During the high-growth period that marked Japan’s postwar recovery, Japan chose a development path that prioritized economic prosperity. However, the sustainability of a socio-economic system based on mass production, mass consumption, and disposal of massive amounts of waste eventually began to be questioned and calls emerged for a switch to a sustainable development model. Environmentally friendly efficiencies were promoted, and society increasingly indicated a preference for a style of environmental management that protects the environment without sacrificing the economy.

This stance is closely mirrored in Sumitomo Forestry’s own approach, learned from nature through sustainable forestry based on a continuously repeating cycle of planting seedlings, nurturing them, harvesting, and replanting again to maintain the functions of the forest and the ecosystem.

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Environmental Vision

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Environmental and Social Report

Sumitomo Forestry Group and the Environment

We seek to identify environmental impact factors in every area of our business and work as a Group to minimize the impact.

Sumitomo Forestry's business operations
Founded in 1691, Sumitomo Forestry traces its roots to the management of woodlands that supplied timber to the Besshi Copper Mine on the island of Shikoku. To remedy the degradation caused by the mine development, the mine manager, Teigo Iba, an entrepreneur of the Sumitomo merchant family, prepared a forestation plan in a spirit of repaying what had been reaped from the land. This initiative was the origin of Sumitomo Forestry's stewardship. Today, with 40,497 hectares of forest land holdings in Hokkaido, Wakayama, Shikoku, and Kyushu, Sumitomo Forestry still practices sustainable forest management founded on ecological principles. In addition, we provide services across all aspects of the housing sector, including manufacturing and distribution of timber and building materials, construction and sales of custom-built wooden homes, and environmental projects such as overseas afforestation schemes.

Sumitomo Forestry Group operations

Domestic operations
With long experience in growing forests, Sumitomo Forestry is well aware of the amazing potential and value of wood as a natural product and building material. Our wealth of knowledge and experience, passed on to the Group companies working alongside us, has borne fruit in the manufacture and sales of housing materials, furnishings and fittings, and the provision of eco-friendly housing.

Principal domestic Group companies
- Sumitomo Forestry Co., Ltd: Manufacture and sale of plywood and building materials
- Sumitomo Forestry Two-by-Four Homes Co., Ltd: Design, construction, and sale of two-by-four homes
- Sumitomo Forestry Component House Co., Ltd: Manufacture, construction, and sale of component homes
- Sumitomo Forestry Home Tech Co., Ltd: Renovation of stand-alone homes and apartments
- Sumitomo Forestry Shelter Co., Ltd: Construction of timber housing
- Sumitomo Forestry Landscaping Co., Ltd: Urban greening, residential exterior work and landscaping
- Sumitomo Forestry Kogyo Co., Ltd: Sale of domestic timber, consigned forestry services
- Suminrin Agro Products Co., Ltd: Production and sale of soils for seedling cultivation, soil conditioning materials, and compost
- Suminrin Enterprises, Ltd: Insurance agency and other general services

Overseas operations
We established overseas affiliates in New Zealand, Australia, and Indonesia to manufacture and sell medium-density fiberboard (MDF), plywood, and particleboard. The sustainable management practices promoted by these companies include a silviculture project in Indonesia using the fast-growing tropical timber Paraserianthes falcataria.

Principal overseas Group companies
- Nelson Pine Industries Ltd (NPIL): Manufacture and sale of MDF and other products (New Zealand)
- Alpine MDF Industries Pty Limited: Manufacture and sale of MDF and other products (Australia)
- PT. Kutai Timber Indonesia (KTI): Manufacture and sale of plywood, etc.
- PT. Rimba Parahyanda Indonesia (RPI): Manufacture and sale of particleboard
- PT. AST Indonesia (ASTI): Manufacture of wooden audio speaker cabinets, etc.

Environmental impacts of our business activities

Direct impacts
- Impact of forestry management
  Through the process of photosynthesis, trees absorb and sequester CO₂, a major cause of global warming, and release oxygen. The timberlands owned by Sumitomo Forestry cover approximately one-thousandth of Japan's landmass and help absorb CO₂ from the atmosphere.
- Impact of timber and building materials
  The production of timber and building materials results in environmental impacts in the form of wastes and effluents input into the atmosphere and water system. The distribution of timber and building materials also results in environmental impacts from the vehicles used in their transportation.
- Impact of housing business
  Energy consumption and construction wastes in housing construction have environmental impacts.

Indirect impacts
As well as direct impacts, we are also conscious of the indirect, or potential downstream, effects of our activities. For example, the extent to which energy and resource efficiencies are incorporated into our housing development concepts affects the environmental impact when the housing is actually built and occupied.

To reduce such indirect effects, we formulate eco-friendly policies and circulate environmental information as part of our day-to-day operations.
Environmental Management System

We have succeeded in constructing an environmental management system (EMS), designed to ISO 14001 standards, to cover the entire Sumitomo Forestry Group, including our landscaping, housing, and housing materials production businesses.

Environmental management system

Sumitomo Forestry regards the environment as one of the most vital aspects of managing ISO 14001 certification. To effectively promote environmental management within the company, from 1995 we began constructing an EMS based on ISO 14001 standards. In August 1997, we became the first company in Japan’s housing industry to obtain ISO 14001 certification. Subsequently, we steadily expanded the scope of our forestry and timber and building materials divisions. In August 2002, the divisional certifications were upgraded to a general certification for the whole company.

In 2004, we obtained ISO 14001 certification for Group companies with management systems that meet the criteria. In FY2003, we expanded different types of management systems for environmental management and for our day-to-day business management. However, to further assimilate our environmental protection activities, we decided to integrate our business management and environmental management systems. In FY2003, environmental management was brought under our budget control systems and we will begin applying this approach from fiscal 2004.

Group environmental management

We expanded the scope of our ISO 14001 certification for Group companies with management systems that meet certification criteria in FY2002. ISO 14001 certification was extended to Sumitomo Forestry Landscape Co., Ltd., Sumitomo Forestry Housing Co., Ltd., and Sumitomo Forestry Component House Co., Ltd., and in September 2003, Sumitomo Forestry Crest Co., Ltd. and Sumitomo Forestry Two-by-Four Homes Co., Ltd. were also recognized as being ISO 14001 compliant. Overseas, Nelson Pine Industries Ltd. (NPIL) of New Zealand received ISO 14001 certification. 

Some examples of Group environmental management

Sumitomo Forestry Crest Co., Ltd.

Sumitomo Forestry Crest Co., Ltd. had already obtained ISO 9001 quality certification for its five business premises. Now, however, with its ISO 14001 certification, it can claim reliable management systems in the environmental area as well. Currently, Sumitomo Forestry Crest uses coniferous forest products from plantation radiata pine and Russian larch forests. In the future, it will aim at plywood production using Japanese timber in an effort to promote sustainable forestry.

From March 2003, Sumitomo Forestry Crest began shipping JAS standard FSC® products with low-formaldehyde emissions.

Sumitomo Forestry Two-by-Four Homes Co., Ltd.

Sumitomo Forestry Two-by-Four Homes Co., Ltd., which designs, builds, and sells two-by-four houses, uses external thermal insulation, which enhances the heating and cooling effect, in all its products. This construction method helps lower the environmental impact at the use stage; Sumitomo Forestry Two-by-Four Homes uses less energy and emits less CO2.

NPIL New Zealand’s Nelson Pine Industries Ltd. (NPIL), which produces and sells MDF and other products, gained ISO 14001 certification in July 2003. This was its second overseas subsidiary to be ISO 14001 certified after P.T. Kutai Timber Indonesia (KTI).

NPIL has used only plantation timber in the manufacture of its products for a long time. Its ISO 14001 certification will spur an even stronger commitment to green activities.

Environmental audits

The administration of environmental protection activities is verified by:

- Internal environmental audits
- Audits by an external certification body

Internal environmental auditing

To make environmental activities still more efficient, Sumitomo Forestry conducts internal environmental audits. These internal audits, in which different parts of the company audit each other, focus on the following two key points:
- Implementation of the EMS and progress toward achieving environmental aims and objectives.
- Audits are carried out by internal environmental auditors.

- Collection of audit findings
- The Green Environmental R&D Division*, which oversees our environmental protection activities, collects and reports all internal audit results to management. On the basis of the findings, management determines if improvements are required, and where necessary, issues improvement instructions to the section concerned. Information is shared with other sections wherever possible.
- As a result of reforms implemented in April 2004, the Environmental Management Division has inherited the role of the Green Environmental R&D Division.

Training of internal environmental auditors

Internal environmental auditor training courses are held twice a year. Employees who have completed the course are appointed as internal environmental auditors. As of the end of March 2004, a total of 544 staff had qualified.

Auditing by external certification bodies

In addition to internal environmental audits, annual ISO 14001 interim audits (surveillance visits) and three-yearly re-assessment audits are conducted by external certification bodies. In FY2003, we received an interim external audit between August 6 and 8, and were also audited at that time in regard to an extension of ISO 14001 certification to Sumitomo Forestry Crest and Sumitomo Forestry Two-by-Four Homes. The regular audit carried out assessed use of "no major (A) or minor (B) indications; proper systems responding appropriately." The audit for the extension of certification found: "No major indications (A). While the extension is judged to be reasonable, one minor indication (B) was found." We took remedial measures to address that indication.

Environmental education

To ensure that every employee is aware of environmental procedures and carries them out in their daily work, all employees must clearly understand their roles and be able to act responsibly. To this end, we conduct education programs aimed at all employees.

Types of environmental education

- General environmental education

For fully convey the company’s environmental policy, we display posters and issue policy cards to employees. All offices nationwide prepare an annual timetable, with training provided through seminars conducted by Green Environmental R&D Division personnel. The aim is to raise environmental awareness among all company members.

- Education of employees engaged in designated tasks

Company members engaged in designated tasks (with potentially significant environmental impact) receive training in:
- Necessary procedures and equipment
- Environmental-related legislation.

- Education system for new recruits

All new recruits attend induction training at Forester House, located at Beshiyama in Nihama City, Ehime Prefecture, Shikoku. The new recruits study Sumitomo Forestry’s history and forestry skills, and learn conservation concepts through practical work. They also take part in the Manabi no Mori volunteer tree-planting program on Mt. Fuji.

Preparedness and training for emergency situations

The types of emergencies anticipated at Sumitomo Forestry include fire outbreaks and major disasters. To prevent accidents and disasters, employees in all areas receive regular training to prepare them to respond to emergency situations.

- Fire training

Compounding the loss of valuable resources, fire releases CO₂ in the combustion process and causes damage to surrounding areas. Measures are devised to prevent fires occurring and reduce damage if a fire does break out. Regular drills are held on fire prevention and damage control procedures.

- Earthquake training

We prepared an Earthquake Manual, distributed to all company members, to protect their safety and that of their families in the event of a major earthquake. The manual also sets out a company system, including customer support, for responding to earthquakes. The manual includes:
- Standards for action in emergencies
- Methods of communication in emergencies
- Leadership systems, crisis management systems
- Emergency contact networks.

The Earthquake Manual

New recruits at a training session.
Environmental and Social Report

Green Procurement

We have developed our own green procurement standards, which we follow in an effort to reduce environmental impacts in our housing construction activities.

Our approach to green procurement
At Sumitomo Forestry, we recognize the impact of housing construction on the environment. To fulfill our social responsibility in trying to reduce that impact, we have prepared original Green Procurement Guidelines and from FY2003 began applying them to material sourcing.

Selection of suppliers
When selecting suppliers, we aim to assess them on the following criteria:
- Preventing environmental pollution
- Reducing environmental impacts
- Building a recycling-oriented economy and society

Essentially, our Green Procurement Guidelines assess potential suppliers from two angles: their activities and their products.
- Assessing corporate activities: The company’s stance toward the environment
- Assessing products: The product’s impact on the environment throughout its life cycle

In assessing a company’s activities, we look at its stance on protecting the environment, regardless of whether it has ISO 14001 or other environmental management certification.

Certifying green products
In product assessment, we classify products into 11 groups and evaluate them in regard to the following seven points. Products meeting our standards in this seven-point assessment are certified as green products, and we actively source these items. The seven points are:
1. Reduction of the use of substances or emissions that affect the environment or human health
2. Reduced consumption of energy resources
3. Sustainable use of renewable natural resources
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 life cycle

Results and issues in FY2003

<table>
<thead>
<tr>
<th>Category</th>
<th>Main activities</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformance to corporate activity assessment standards</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>Conformance to product assessment standards</td>
<td>93%</td>
<td></td>
</tr>
<tr>
<td>Since April 2003, we have been basing procurement on the Green Procurement Guidelines, and with the support of suppliers, we achieved the following results as of March 2004.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- 82% of our suppliers meet corporate activity assessment standards.
- 93% of our products meet product assessment standards.

Measures to prevent “sick house” syndrome
- “Sick house” syndrome, caused by formaldehyde emitted from construction materials and wallpaper glue, has become a social problem. As a way of tackling “sick house” syndrome, when purchasing such items as construction materials and wallpaper glue, we always use materials rated F☆☆☆☆ and F☆☆☆, ensuring low emissions of formaldehyde.
- Other preventive measures
  - Vinyl chloride
    - We no longer use vinyl chloride in interior decoration materials such as wallpaper and panels used to dress fittings because it can release harmful dioxins when incinerated and is suspected of containing endocrine disruptors.
  - Asbestos
    - We have also replaced all light-weight (slate) roofing materials with asbestos-free products. Roofing materials that contain asbestos are carcinogenic if the asbestos particles are inhaled during construction. We have therefore stopped using asbestos to improve safety during construction.

Creating safe housing environments
We are promoting the purchase of raw materials and components with lower environmental impacts in an effort to preserve the safety of the customers who buy our houses and the tradespeople who construct them.

Measures to prevent “sick house” syndrome
- “Sick house” syndrome

As a point of reference, we have started informing our customers about the situation.

Creating a safe home, “down to the last detail”

- Bathroom cabinet/linen F☆☆☆☆
- Ranges: F☆☆☆☆
- Box storage: F☆☆☆☆
- System kitchens: F☆☆☆☆
- Walls of Japanese-style room: Formaldehyde-free new Jutko coating
- Wall cloth: Vinyl chloride-free Glue: F☆☆☆☆
- Closet shelves: F☆☆☆☆
- Roofs: Wood glue foam
- Roofing glue: F☆☆☆☆
- Thatch mat: Thatch flooring with no polystyrene foam
- Ventilation cabinets: F☆☆☆☆
- Staircase: F☆☆☆☆
- Soil treatment: Non-organophosphorous inorganic insecticide
- Wood treatment: Non-organophosphorous ant and insecticide

Educating suppliers
We actively educate our suppliers on environmental issues, and hold seminars and training sessions for them.

Environmental Accounting

In the interests of promoting environmentally sound management, we monitor and publish our environmental conservation costs.

Sumitomo Forestry’s environmental accounting

Environmental costs were first published in our Environmental Report 2001. We recognized that to further promote environmental protection activities within our management framework, it was necessary to quantitatively assess the costs incurred and benefits derived from environmental protection, and to disclose this information to the numerous organizations and individuals involved with our company.

Assessment of environmental costs

Environmental costs are assessed according to the following conceptual framework:

- Business area costs (cost of environmental protection)
  - Expenditure on environmental management of company-owned forests for sustainable forestry development, expenditure in Japan and overseas relating to the Indonesian reforestation project.
  - Business area costs (cost of resource recycling)
    - Expenditure on the operation of our waste wood recycling distribution business, and sorting, recycling, appropriate treatment, transportation, and management of construction wastes.
  - Management activity costs
    - Office expenses and auditing costs relating to ISO 14001 certification and ongoing compliance; expenditure on publishing environmental information, including advertising and reporting.

FY2003 environmental accounting

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Business area costs</td>
<td>Costs of environmental protection</td>
<td>Sustainable forestry 525</td>
</tr>
<tr>
<td></td>
<td>Costs of resource recycling</td>
<td>Construction waste reduction and recycling 3,769</td>
</tr>
<tr>
<td></td>
<td>Waste wood recycling distribution operations 99</td>
<td></td>
</tr>
<tr>
<td>(2) Management activity costs</td>
<td>ISO 14001 compliance and operation 44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disclosure and administration of environmental information 59</td>
<td></td>
</tr>
<tr>
<td>(3) Research and development costs</td>
<td>R&amp;D related to environmental protection 305</td>
<td></td>
</tr>
<tr>
<td>(4) Social contribution costs</td>
<td>Mt. Fuji Mabari no Mori administration 27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forester House administration 25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sebulu Experimental Forest regeneration project administration 41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grants to the Keladen Nature Conservation Fund, etc. 2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,935</td>
<td></td>
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</tbody>
</table>

* Compared to the previous fiscal year, costs relating to the treatment of industrial wastes increased by approximately ¥390,000,000. Costs in other areas decreased.

Environmental benefits

<table>
<thead>
<tr>
<th>Category</th>
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</tr>
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<tbody>
<tr>
<td>(1) Business area benefits</td>
<td>CO2 sequestered by company-owned forests 249,639 (t-CO2/yr.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seaweed planted in Way Kambas (Indonesia) 130,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste wood recycled (volume of chips) 846,487 (t)</td>
<td></td>
</tr>
<tr>
<td>(2) Management activity benefits</td>
<td>Reduced copy paper usage (Tokyo Head Office only) Reduced 5.1% from FY2002 (annual reduction of 405 sheets/person)</td>
<td></td>
</tr>
<tr>
<td>(3) Social contribution benefits</td>
<td>Mt. Fuji Mabari no Mori (ten printing volunteers) 1,463.6 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of visitors to Forester House 6,131</td>
<td></td>
</tr>
</tbody>
</table>

Environmental costs (Unit: Yen millions)

<table>
<thead>
<tr>
<th>Category</th>
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</tr>
<tr>
<td>Total</td>
<td>4,935</td>
<td></td>
</tr>
</tbody>
</table>

Expenditure on environmental-related research conducted at Tsukuba Research Institute.

Social contribution costs

Our social contribution expenditure was spread over the following four areas:
- Expenditure on maintaining and managing Forester House
- Expenditure in Japan and overseas relating to the Sebulu Experimental Forest project in Indonesia
- Grant to Kedaden Nature Conservation Fund and other contributions

Number of visitors to Forester House 6,131
Environmental strategies for forestry management

Sumitomo Forestry began cultivating cedar and cypress seedlings and planting forests in Shikoku in the mid 19th century, and in 1894 devised and implemented a large-scale afforestation plan. In 1984 we drew up the first private-sector forestry management plan in Japan. This plan established our sustainable forestry philosophy: successive planting and wood production, repeated in perpetuity. Today, we ensure the amounts of timber we harvest stay within the annual incremental volume of timber our forests produce. Our forestry management activities reflect the needs of the environment and are designed to prevent flooding and erosion.

Domestic Forestry

Based on an ideal of sustainable forestry developed over the years, we work to maintain and develop sound forests, and practice sustainable forestry management.

Sumitomo Forestry-owned forests

Sumitomo Forestry-owned forests are located in Hokkaido, Shikoku, Kyushu, and Wakayama. They cover 40,497 hectares in total, representing about one thousandth of Japan’s land area. Our timberlands comprise 49% plantations and 52% natural forest.

Out of consideration for regional ecosystems, we allow no clear felling in any company-owned forests. Instead, we practice block-based selective logging, taking only the volume needed within replacement growth capability. We remain thoroughly committed to preserving the entire forest ecosystem.

The public benefits of our forests

Forests are not just sources of timber, but provide vital functions that benefit us all. These include:

- Sequestration of CO₂
- Prevention of soil erosion
- Conditioning of water resources (mitigating floods, purifying water)
- Provision of recreational spaces

If our forests were assigned a monetary value for these public functions, that figure would be around ¥110 billion. Of this, the total amount of CO₂, a cause of global warming, absorbed by our forests was estimated at around 250,000 tons. Our forests make a significant contribution to protecting the environment.

- From the Forestry Agency’s FY2001 White Paper on Forests and Forestry

Computerized forestry management

To streamline the management of our forests in different parts of the country, we have established an IT-based management system using a Geographic Information System (GIS) and a Global Positioning System (GPS).

Forestry management based on ISO standards

We have constructed an ISO 14001-based EMS for the environmental management of our forests and were the first in the forestry industry in Japan to obtain ISO 14001 environmental certification. Every year, we evaluate the impact of our forests on the environment, produce goals for the reduction of environmental impacts, and implement these as we continuously manage our forests in an environmentally sensitive way.

For example, when building forestry roads, which have a significant impact on surrounding ecosystems, we evaluate the potential environment impacts from the planning stage and carry out regular site checks during construction to minimize the effect of each road on the water system and environment.

When harvesting timber, we check for legal restrictions concerning, for example, conservation forests, and make any necessary submissions.

Distribution of Sumitomo Forestry timberlands

Hokkaido 15,314 ha

Shikoku 14,710 ha

Kyushu 8,214 ha

Wakayama 2,260 ha

Total area: 40,497 ha

Percentages of plantations and natural forests

Plantation: 23%

Natural forest: 71%

Other: 6%

Computerized forestry management

GIS supports sophisticated analysis and speedy decision-making by comprehensively managing and processing data reflecting information related to position and space (spatial data), and visually displaying the result. Using spatial analysis based on topographic maps and forestry survey records, GIS can be a useful tool for preparing forestry management plans.

By building a database using GPS data added to the GIS data, we can now manage such information as location, area, tree species, and density of standing trees, and control our huge area of company-owned woodlands in units of “stands.”

Domestic Forestry

Environmental and Social Report

Using thinnings effectively

Timber is one of the few renewable resources. Based on the ideal of sustainable forestry, we ensure that felling and planting remain in balance. We also use the thinnings that are an unavoidable part of forestry management as construction materials, such as lattice wall panels and Super Cypress engineered wood.

We make every effort to use valuable timber resources carefully and practice environmentally friendly forest management.

Thinnings used for environmental report paper

As part of our policy of promoting the use of thinnings, we have developed printing paper based on a mixture of 10% thinnings pulp and 90% pulp made from recycled paper. This “thinnings paper” has received both Eco-mark certification and the Thinnings mark. We began using this thinnings paper for our environmental reports from 2004 (this report).

How do you calculate the amount of CO₂ absorbed by forests?

When we surveyed readers of last year’s environmental report, this was one of the things they most wanted to know. Well, here is the answer.

How do we calculate the amount of CO₂ absorbed by forests?

The CO₂ absorbed by forests is calculated from the volume of trunk, branches, roots, and leaves produced by forests (trees) from sunlight, CO₂, and water.

After a specified number of years (set by us) have elapsed from planting, we calculate the volume of the trunks of the planted trees. Specifically, we measure the diameter at breast height (dbh) and height of the trunks and the number of trees, then apply a specified formula to calculate the total trunk volume (volume of standing trunks).

First, we carry out a survey, then we apply a growth algorithm to the volume of standing trunks calculated from the results of the survey to work out the volume of growth in a year. The growth algorithm varies according to such factors as the tree species, the number of years of growth, the region, and whether the forest is natural or a plantation.

The published volume of CO₂ absorbed in a year is derived by multiplying a coefficient by the volume of trunk growth in a year to seek the amount of growth of the forest (trees), including trunks, branches, roots, and leaves. The amount of CO₂ absorbed is calculated from this volume of growth.
Overseas Afforestation Projects

We carry out afforestation activities in Indonesia and New Zealand. The Overseas Development Aid (ODA) afforestation program, which started in November 2000 in Indonesia, was completed successfully in March 2004.

KTI afforestation project

P.T. Kutai Timber Indonesia (KTI) recognizes the benefits of forests and takes the following steps to utilize afforestation and plantation timber effectively:

- Develop housing materials based on species considered to have little value.
- Expand the scale of joint afforestation projects with local people, corporations, universities, and administrative bodies.
- Consider types of timber that will be needed in the future and conduct afforestation experiments into new fast-growing species.

By FY2003, KTI has planted around 2,550,000 trees. KTI has also conducted similar projects in Indonesia and New Zealand.

NPL sustainable forestry

Nelson Pine Industries Ltd. (N PIL) of New Zealand carries out sustainable forestry in order to protect the environment and secure stable supplies of timber. N PIL maintains around 3,500 hectares of forest (around 0.2% of New Zealand’s planted forest area) within a radius of 60km from the mill. By systematically planting the same area of forest as it falls, N PIL achieves sustainable forestry.

RPI afforestation project

P.T. Rimbah Partidil Indonesia (RPI), a producer of particleboard, began a joint afforestation project with local farmers in 2002 in an effort to further the economic development of the region and to secure a stable supply of materials. RPI supplies free seedlings of fast-growing species and guarantees to buy back the grown trees when they are ready to harvest.

Promoting use of domestic timber

Rate of use of Hokkaido timber

In May 2003, our Sapporo office began discussing timber from our Hokkaido forests into laminated wood and selling homes using larch poles, beams, and interior fittings. Larch, which makes up roughly 30% of Hokkaido’s plantation forest area, is a strong and durable wood. However, its modulus of elasticity, which indicates the difficulty of flexing in relation to the load, is higher than for cedar and cypress.

To address these problems, Sumitomo Forestry’s Tsukuba Research Institute has developed a proprietary drying technique with sensors attached to the wood, reducing the incidence of surface cracking even with shorter drying times. This efficient new system has achieved excellent productivity and energy-saving characteristics: approximately 1/4 the drying time and 1/2 the energy requirements of conventional kilns, no discoloration or interior cracking, and lower moisture content (15% or less) after drying. Tests indicate that the rate of non-standard square timber can be cut from 20% to 5%. Under the Housing Quality Assurance Law, strict control of wood quality is a key issue. With our state-of-the-art drying system, we are able to supply dried wood with excellent dimensional stability. Calculated in terms of 3-meter, 105-mm square posts, in FY2003 we shipped 10,995 cubic meters of MIZDAS-dried timber, equivalent to 332,000 posts. This compares to 10,000 9,809 m3 in FY2002. Shipments of MIZDAS-dried timber are used as well, there is no waste.

Using Timber Resources Effectively

We have been involved in scrap wood chip distribution since the second half of the 1950’s. We have also pioneered and developed methods of effectively utilizing thinnings, small logs, and unused materials. We have been involved in scrap wood chip distribution since the second half of the 1950’s. We have also pioneered and developed methods of effectively utilizing thinnings, small logs, and unused materials.

Environmental and Social Report

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Drying time

Shipments of MIZDAS-dried timber

Woodly Fit

The “twinned post” jointly developed by Sumitomo Forestry, Sumitomo Forest Service Co., Ltd., and Sanki Co., Ltd. of H.yuga City, Miyazaki Prefecture recently won the Forestry Agency Director-General’s Award.

Our twinned post, whose commercialization began two years ago, is a two-piece laminated cedar post created by longitudinally slicing the square core produced from Japanese cedar logs, drying the two resulting halves, then gluing them together by machine. This new process will enable bent logs, which could not previously be used as posts, to be used effectively.

Environmental and Social Report

Using Timber Resources Effectively

We have been involved in scrap wood chip distribution since the second half of the 1950’s. We have also pioneered and developed methods of effectively utilizing thinnings, small logs, and unused materials.
Effective use of thinnings and unused timber materials

<table>
<thead>
<tr>
<th>Lattice panels as wall linings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of lattice panels fitted</td>
</tr>
<tr>
<td>Thinned area (920 ha approx.)</td>
</tr>
</tbody>
</table>

Sumitomo Forestry has developed lattice panels, made primarily from domestic cedar, for use as wall linings.Offering exceptional strength and ventilation, the panels are made from 55-mm wide strips of wood glued diagonally at a 45° angle in a lattice work pattern. These airy, lightweight, easy to work with, and easy to run pipes through.

Typically utilized to any significant extent, these lattice panels are helping to boost rates of domestic timber usage.

In FY2003, we used 643,572 lattice panels. Calculating the total area thinned, based on the amount of cedar used in the lattice panels and past results from company-owned forests, yields an area of approximately 920 hectares, roughly equivalent to 196 Tokyo Domes.

Super Cypress Laminate

In FY2003, we used 28,457 cubic meters of Super Cypress. In terms of 105-mm, 3-meter square posts, this comes to about 860,000 posts. Calculating the total area thinned, based on the cypress used in the Super Cypress engineered wood and past results from company-owned forests, yields an area of approximately 1,820 hectares, roughly equivalent to 389 Tokyo Domes.

Rubber tree wood solid flooring

Solid flooring of rubber wood is now in standard use in our mainstay “GODAI One’s Story II” series, which went on from February 2004.

This flooring timber is from the rubber tree, which is widely cultivated in tropical Asia and other regions. Because rubber trees are grown in plantations to yield natural rubber, the use of this timber is regarded as environmentally friendly. The material used for the flooring is an effective use of the scrap wood that remains after the latex has been removed.

After the rubber tree has been felled, its wood tends to discolor and lose its shape. For this reason, it has simply been used as fuel in the past, but technological innovations now allow it to be used as a laminate in furniture, plywood cores, and building.

Thinned area corresponding to lattice panels, number of panels used

Promoting use of plantation timber

Nylon Pine Industries Limited (NPIL) of New Zealand produces medium-density fiberboard (MDF), an industrial wood material that utilizes the characteristics of timber but offers greatly improved processability, strength, and stability.

Normally when timber is produced from raw lumber, only 65 to 70% of the raw lumber is suitable for making into timber product. But with MDF, slender trees and crooked segments not fit for timber can also be used so that virtually 100% of the raw material can be made into product. In FY2003, NPIL produced 306,086 cubic meters of MDF.

NPIL’s eco-friendly approach

NPIL makes effective use of timber and conserves resources. It uses radiata pine from planned plantation forests as its raw material and does not throw away bark and defective wood arising from the production process but uses them as fuel. And, through its active commitment to producing MDF with low formaldehyde and other volatile organic compounds (VOCs) that can cause hyperactivity to chemical substances, NPIL contributes to post-construction indoor environmental safety.

Because of this approach, NPIL’s medium-density fiberboard was awarded Japan’s Eco-mark certification and qualifies as a green purchasing special procurement item.

LVL: All the advantages of natural timber plus ease of use

In addition to medium-density fiberboard, NPIL produces laminated veneer lumber (LVL), also from radiata pine. The comparatively thick and straight parts of plantation radiata pine logs are selected as the raw material for LVL, while crooked, slender, and shorter parts are used for MDF. This means that the most effective use of timber resources is made. To produce LVL, the log is first sliced into sheets, 2-4mm thick. These are then dried, any flawed parts are removed, and the slices are glued together in boards that maintain the same grain direction. These boards are used in trims, posts, and beams.

While providing all the advantages of a natural timber material, LVL provides stable strength and is not susceptible to splitting or warping. We also began using LVL in the rafters of our mainstay “GODAI One’s Story II” house series launched in February 2004. We plan to rationalize the supply system for LVL in the future and expand its use to other products.

Wood chip distribution

We have been involved in the waste wood chip distribution business since the late 1950’s. In producing timber, the milling process results in offsets that represent 20 to 25% of the raw timber, while very bent logs cannot be used at all. The demolition of houses also produces large volumes of waste timber. In this form, the waste can only be incinerated, but converting it into chips allows it to be efficiently used in paper-making, timber fiberboard production, or as a fuel.

Chips for raw materials

Chips for fuel

Sumitomo Forestry uses the network it has created in its timber distribution business to promote a scrap wood recycling circle that links the timber industry with other industries.

With the enactment of the Construction Materials Recycling Law, in recent years the volume of waste wood chips created from construction-related industry waste timber has been increasing, and the importance of the waste wood chip distribution business is growing.

We contribute to the effective use of timber resources through our chip distribution business. In FY2003, we handled 545,219 tons of chips for use as raw materials, and 99,268 tons for fuel. If the heat produced by this volume of fuel chips was to be generated by gas, around 53,000 kilowatts would be required.
Developing Environmental Technologies

Seedlings raised by culturing tissue from the famous weeping cherry tree of Kyoto’s Daigoji Temple began to flower in spring 2004. Among the many other environmental technologies we have developed is a mortar wash water treatment system.

Regenerating the famous weeping cherry trees of Kyoto

The “Togyu cherry” of Daigoji Temple in Kyoto was favored by feudal warlord Hideyoshi Toyotomi for cherry blossom viewing. Sumitomo Forestry has now succeeded in the large-scale propagation of these venerable trees by tissue culture. The weeping cherry of Daigoji Temple (Prunus pendula Maxim f. ascen) on their preservation is highly desirable. Grand old trees have the same cultural significance as historic buildings, and their preservation is highly desirable. However, the older a tree becomes, the harder it is to propagate by conventional techniques such as taking cuttings or grafting, and the development of a propagation method using biotechnology was sorely needed.

Weeping cherry tree seedlings

In cloned seedlings, because the parent genes are passed on directly, the characteristics of the more than 150-year-old Togyu parent are preserved intact, and its cloned tissues are rejuvenated. The development of this efficient weeping cherry propagation technology was a world first.

First blossoms appear spring 2004

Today, four years after the first cloned seedlings was planted in the ground, more than 1,000 clones of the Togyu cherry are developing healthily, with the largest now around 5 meters high. And this spring, the young trees flowered for the first time. All the blossoms of the clones matched the original Togyu cherry in color and shape.

In the future, this technology will be applied to help preserve valuable weeping cherry trees and other tree species that are in danger of extinction everywhere. We are also analyzing the genes of the weeping cherries in the grounds of Daigoji Temple in the hope of discovering more about its lineage and origins.

Mortblock mortar wash water treatment system

In the past, there was no effective method for treating wash water used for washing up after concrete and mortar had been poured on construction sites and in civil engineering projects, and disposing of this waste water caused considerable problems.

Sumitomo Forestry Landscaping Co., Ltd. developed Mortblock, a simple wash water treatment system suitable for small-scale sites where mortar or concrete is used, and began selling it from December 2002. Mortblock consists of a flocculent, a neutralizer, treatment container, and analysis kit. The mortar in the waste water is coagulated by the flocculent, a neutralizer, treatment container, and analysis kit. The mortar in the waste water is coagulated by the flocculent, precipitated out, separated from the water, and properly treated as an industrial waste. A neutralizer is added to the strongly alkaline wash water that remains, neutralizing it to a safe level. When the analysis kit indicates that a safe level is reached, the water can be flushed into a sewer or drain.

Environmentally friendly termite control system

Sumitomo Forestry is the first housing manufacturer to install an environmentally friendly termite control system in its new homes. Compared to conventional termite control, the Sentricon system is safe for humans and pets, and has a minimal impact on the environment.

Features of Sentricon system

Conventional termite control systems have generally relied on treating soil, foundations, or poles with insecticide. The Sentricon system, however, protects homes from termites by regular monitoring and cleverly exploiting the biology of the termite colony.

• Bait stations (wood) are placed around the circumference of the house to reveal any termite activity. A Sentricon specialist regularly checks the bait stations and confirms whether termites are present.

• If present, the bait stations are removed and replaced with very small amounts of pesticide (hexaflumuron). The termites that have eaten this transmit it to other members of the colony, and several months later the entire colony is exterminated.

• The active ingredient, hexaflumuron, an insect growth regulator, works only on insects and other creatures that shed their exoskeletons, disrupting the shedding that is essential to their growth (via a chitinous substance inhibiting effect) and eventually wiping out the entire termite colony.

For safe and healthy living

Sumitomo Forestry and the Tsukuba Research Institute carried out performance verification experiments in nine completed Sumitomo Forestry homes in Kyushu and at the Institute to confirm the efficacy of the Sentricon termite control system. These experiments confirmed that the Sentricon system is effective for eliminating and preventing the common Yama and Formosan termite species.

Because the Sentricon system uses only trace amounts of the active ingredient hexaflumuron, it is guaranteed highly safe for humans, pets, and the surrounding environment. And because there is no longer any need to get under the house and spray pesticide, there is very little danger to the pest control operator.

We hope to spread the use of the effective Sentricon system nationwide. We will continue to develop a range of environmental technologies that are friendly to the pest control operator.

In soil

Baiting

Monitoring

We will continue to develop a range of environmentally friendly termite control systems suitable for small-scale sites where mortar or concrete is used, and began selling it from December 2002. Mortblock consists of a flocculent, a neutralizer, treatment container, and analysis kit. The mortar in the waste water is coagulated by the flocculent, precipitated out, separated from the water, and properly treated as an industrial waste. A neutralizer is added to the strongly alkaline wash water that remains, neutralizing it to a safe level. When the analysis kit indicates that a safe level is reached, the water can be flushed into a sewer or drain.

Environmentally friendly Group products

The Sumitomo Forestry Group develops various environmentally friendly products and contributes to the environmental activities of its customers.

■ Weedy Mats

Designed to preserve Japan’s disappearing countryside, this is a wild grass mat with mainly native field grasses already growing on it.

Example of Weedy Mats along a waterway in Tsurumi, Chubu

■ Rooftop greening system

We have developed and market a rooftop greening system to effectively grow rooftop lawns (Zoysia japonica grass) on the tops of city buildings.

■ Flameproof board based on recycled materials

As part of our recycling business, we produce a flameproof board using wastes from other industries and use it in such applications as home exteriors.

■ Tsurii Taro potting mix

Sumirin Agro-Products Co., Ltd. produces Tsurii Taro potting mix from sawmillings bark and sediment from water purification plants. Developed jointly with Chiba, Aichi, and other local authorities, this venture plays a significant role in recycling sediments generated at water purifying plants.
Mitigating Global Warming

The amount of carbon dioxide (CO2) absorbed by Sumitomo Forestry Group-owned forests is about 2.9 times the amount of carbon dioxide emitted by the Group’s business activities. As part of our efforts to mitigate global warming, we implement life-cycle assessments (LCA) to work to reduce CO2 emissions.

CO2 absorption by Sumitomo Forestry Group forests

The amount of carbon dioxide (CO2) absorbed by the 40,497 hectares of Sumitomo Forestry Group-owned forests in Japan was 275,525 tons in FY2002 and 248,639 tons in FY2003. This is about 2.9 times the amount of CO2 emitted by the entire Sumitomo Forestry Group in the group’s business activities.

In the future, the Sumitomo Forestry Group will continue sustainable forest management activities in Japan and promote measures to prevent global warming.

CO2 emissions from business activities

To control emissions of CO2, which contribute to global warming, and lessen its impact on the environment, the Sumitomo Forestry Group began monitoring CO2 emissions from business activities since FY2002. While we assume the housing segment is the Group’s biggest emitter of CO2, we have not yet established an authorized calculation method for identifying CO2 emissions relating to housing construction.

To calculate emissions relating to our housing construction activities, we therefore referred to methods published by government and industry bodies. To calculate emissions relating to other activities, such as distribution and administration, we applied Ministry of the Environment guidelines. These efforts revealed that Sumitomo Forestry itself was responsible for 39,929 tons of CO2 emissions in FY2003, while the activities of the entire Group within Japan generated 84,606 tons.

In FY2003, we carried out surveys at 23 construction sites from Hokkaido to Kyushu in an effort to verify the results of our FY2002 trial calculations. This revealed an average emission for the 23 sites surveyed of 1.65 tons of CO2 per house. The average floor area of the houses surveyed was 155.25m2. Converting this to the floor area used for the FY2002 calculations (147.39m2) returns a figure of 1.56 tons of CO2 per house, thus confirming the validity of the tentative results for the previous year.

The input data for our estimates were limited to power used on the construction site, the fuel for operating construction machinery, and the transportation costs incurred by workers in traveling to the site. The CO2 generated in the production and transportation of the materials used is part of the CO2 emissions calculations of other industries and was not included in our estimate.

CO2 emissions in sales and administration

Referring to the FY2002 Ministry of the Environment Guidelines, these calculations cover CO2 emissions relating to city water and sewage for offices, use of power, and fuel expended in sales activities. To increase accuracy, we repeated the calculations in FY2003.

1. Our own estimates based on Eco-Action 21 (Japan Prefabricated Construction Suppliers and Manufacturers Association, 2002)

Reducing CO2 emissions

Reducing CO2 emissions in house use

Operational energy-saving specifications

The sun is capable of providing unlimited energy to support our daily lives. We are working to promote the use of solar power generating systems so that this energy can be utilized as electricity.

Improving the thermal insulation performance of windows and roofs

About 90% of the heat lost from a room escapes through the walls, and of that, more than 50% disappears through windows and doors. Thus, the most effective way of improving energy efficiency is to upgrade the insulation performance of windows and doors. Accordingly, we are working to expand use of high-insulation-type Low-E double-paned glass and sashes that provide excellent heat insulation and prevent condensation, and have begun making these a standard part of our mainstay housing product, the “GODAI One’s Story II” series launched in FY2003. In the future, we will gradually make Low-E double-paned glass a standard feature of all our housing products.

Most of the CO2 emitted during construction are related to the actual period, but because it also leads to lower energy consumption and a more comfortable living environment.

Bradent home with improved energy performance

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Measuring total CO2 emissions in the housing life-cycle

To measure housing-related CO2 emissions, we have been conducting life-cycle assessments (LCA) on our houses since FY2002. In FY2003, we carried out a life-cycle assessment of CO2 emissions on our “GODAI One’s Story II” (standard new energy-saving specifications) house launched in February 2004. Our LCA revealed that most of the volume of CO2 emitted by a standard house over a period of 30 years was emitted in the use of the house (70.8%), as against 0.6% in its construction. This confirmed the results of the previous year’s LCA.

Most of the CO2 emitted during construction related to power used on the construction site and fuel needed to transport construction workers and run heavy machinery. Our assessment revealed that the amount of CO2 emitted in actual production and building was relatively small.

Based on this result, we are working to reduce the CO2 emitted at the construction stage, as well as the amount expended in the process of living in the house.

1. Estimation method was based on the Construction Life-Cycle Energy Calculation Program (Building Research Institute, Ministry of Construction, 1997)
2. Estimation method was based on the Construction Life-Cycle Energy Calculation Program (Building Research Institute, Ministry of Construction, 1997)

Reducing CO2 emissions in housing construction

While amounts of CO2 emitted at the construction stage are relatively small compared to the emissions over the entire life cycle of the house, this is the only part of the life cycle where housing manufacturers like us can directly involved. Working with our suppliers, we are trying to reform systems and develop construction methods designed to reduce the volume of CO2 emissions.

Promoting use of precast structural members and unit technology

As a way of reducing CO2 emissions on construction sites, we precast all structural members. Precasting the members in batches at highly mechanized factories helps cut down work on the construction site and reduce onsite CO2 emissions.

We have already successfully implemented precutting of main structural members and are currently working to extend this approach to materials such as eaves, external wall sheathing and other members.

Streamlining distribution

In many cases, the various kinds of building materials used on the construction site arrive by truck in separate deliveries. To reduce the CO2 emissions accompanying these deliveries, we are working with suppliers to streamline distribution.

On behalf of the Japanese Ministry of the Environment, since 1999 we have been carrying out a CO2 Neutral Mechanism (CDM) feasibility study into the amount of CO2 absorbed by afforestation projects in Indonesia and the project’s commercial feasibility.

In FY2003, the study focused on the quantity of CO2 absorbed by the afforestation activities of P.T. Kutai Timmer Indonesia (KTI) and P.T. Rimbah Partikid Indonesia (RPI), and the amount of CO2 emissions prevented by the use of biomass energy. We also studied the regional socio-economic impact of CDM projects and confirmed that the participation of large numbers of people in joint afforestation projects is very positive.

Survey of RPI

We calculated the effects of P.T. Rimbah Partikid Indonesia (RPI) activities in the following two areas:

1. The increase in the amount of scrap wood purchased for the production of particleboard and the saving in fuel oil used for power generation (reduction in CO2 emissions) as a result of using biomass energy
2. The CO2 absorbed by afforestation

Our calculations revealed that RPI is curbing its CO2 emissions by around 21,000 tons a year; in the first ten years, the forest planted should absorb around 9 tons per hectare.

Survey of KTI

We calculated the effects of P.T. Kutai Timmer Indonesia (KTI) activities in the following two areas:

1. Conversion to bioenergy power generation and the saving in purchased electricity (reduction in CO2 emissions) as a result of using scrap timber from own factory
2. The CO2 absorbed by afforestation

Our calculations revealed that KTI is curbing its CO2 emissions by around 40,000 tons a year; in the first ten years, the forests it planted should absorb around 10 tons per hectare.
In an attempt to reduce, re-use, and recycle construction wastes, we have built a waste timber recycling system and are promoting other waste reduction strategies such as using precut materials.

Appropriate treatment of construction wastes

As a means of preventing waste, we are committed to reducing, re-using, and recycling construction wastes.
- Reducing: To reduce wastes, we have adopted the practice of factory precutting to avoid bringing potential waste onto building sites.
- Re-using: We are reviewing the types of materials that can be recovered and re-used.
- Recycling: We established a Construction By-Products Recycling Project and initiated a timber waste recycling system.

As a result of these efforts, we achieved a wood scrap recycling rate of 78% in FY2003. In the future, by establishing a recycling route for our construction- and demolition-related wastes, we hope to achieve a recycling rate of 95% by 2005, five years earlier than the government.

Building a wood-waste recycling system

Wood waste is a designated material under the Construction Materials Recycling Law, but as the law applies only to new construction projects with a floor area of at least 500m², the majority of Sumitomo Forestry building projects are not subject to legal recycling controls. Though there may be no legal obligation to do so, we have voluntarily established recycling routes because we recognize the importance of wood waste recycling.

Routing out for wood scraps

Waste wood recycling rate 91%

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- Reducing: To reduce wastes, we have adopted the practice of factory precutting to avoid bringing potential waste onto building sites.
- Re-using: We are reviewing the types of materials that can be recovered and re-used.
- Recycling: We established a highly transparent recycling system.

As a result of these efforts, we achieved a wood scrap recycling rate of 91% of our construction waste through designated recycling routes.

Recycling route for construction waste

Demolition waste recycling rate 71%

For waste from demolition sites, the demolition contractor transports the scrap lumber to an intermediate treatment plant we have nominated. Here, the waste is chipped, then delivered to the proper recycling manufacturer. By taking an active part in the flow of waste materials, we are able to control how they are handled and maintain transparency. In FY2003, we recycled 71% of our demolition waste through designated recycling routes.

Demolition sites: Recycling roofing tiles, gypsum board, and mixed waste

Even before the enactment of the Construction Materials Recycling Law, we have been promoting dismantling and recycling to effectively reuse resources and reduce waste generated at demolition sites.

- We have generally finished putting in place methods of recycling materials such as concrete rubble, scrap timber, and scrap metal.
- However, no effective method has yet been found to recycle roofing tiles (glass, ceramics, and pottery), gypsum board, or other mixed waste.

We regard the recycling of these types of materials as an important future challenge in reducing the amount of waste going to landfills.

RPI - Dedicated to the Environment

P.T. Rimba Parsipel Indonesia (RPI), a manufacturer of particleboard, has a factory near the coast on the outskirts of Semarang City on the central Indonesian island of Java. Wood waste discharged from this factory consists mainly of a urea based adhesive cleaning liquid mixed with wood powder. The factory is surrounded by a prawn-raising pond. As a result of these efforts, RPI has built a sedimentation tank for the treatment of the effluent before it enters the decomposition tank. By keeping the concentration of the effluent to enter the decomposition tank constant, RPI succeeded in improving the efficiency of the breakdown of the organic matter in the effluent.

Incineration of those wastes ourselves.
Green Office Management

Identifying areas of priority, Sumitomo Forestry promotes resource reduction and energy saving in its offices. We also practice green purchasing for stationery and re-use and recycle our computers.

Electronic ordering system introduced in the office

Office work produces paper and other wastes and uses energy, particularly for lighting and air-conditioning. We have identified the following priorities to encourage resource recycling and conservation of energy. Our goals are to:

- Reduce paper usage
- Promote green purchasing
- Reduce electricity usage
- Reduce waste

At our Tokyo Head Office, waste paper is sorted and the office has a centrally managed air-conditioning system.

Reducing paper usage

Paperless documentation

In February 2002, the Production & Building Materials Procurement Division of Housing Headquarters switched to an online system for communications to its branches and affiliated construction offices. These communications are mainly essential messages relating to matters such as lumber to be used in housing headquarters products, changes in specifications, and price revisions. Putting these communications online has sped up the transmission of information, made information easier to disseminate, and considerably reduced the amount of paper used.

Electronic ordering system introduced

Because numerous construction offices are involved in the construction of our houses, there is a huge amount of communications to be processed, generating a vast amount of paper. To streamline this new system was introduced in October 2003 and already nearly 1,000 affiliated construction offices are using it. From April 2004, around 200 interior contractors also switched to the new ordering system.

In-house information goes online

To reduce the volume of printed material, we set up an in-house intranet website called Inforest. This promotes sharing of information within the company, speeding up the communication of information, and reduces the use of paper resources. The site also enables us to cut back on our in-house publications; we now publish our company newsletter Jukai every three months instead of monthly.

Green purchasing

Green purchasing of stationery

In purchasing office equipment and supplies, Sumitomo Forestry practices “green purchasing,” prioritizing items that are less environmentally harmful. For copy paper, from 2002 our domestic offices throughout Japan began purchasing only products that meet our green purchasing criteria. For other office supplies, we give priority to items that meet the green purchasing criteria; this produced a green purchasing rate of 84.1%. In the future, we will continue to promote green purchasing at all Group companies.

Rate of green purchasing for stationery

Green purchasing (stationary)

Reuse and recycling of personal computers

PC-to-use: 30%

PC materials recycling: 79%

Sumitomo Forestry leases the PCs it uses from Sumirin Enterprises, Ltd. Every year, 800 to 1,000 of these are returned to Sumirin Enterprises when their leases expire. Many of these machines, however, are re-usable if serviced. Instead of simply scrapping these returned machines, Sumirin Enterprises has effectively utilized them. In FY2003, Sumirin Enterprises managed to give 30% of its returned computer’s new lease on life as second-hand machines (in FY2002 the figure was 15%). Used PCs also contain useful metals, and PC’s that cannot be reused can still be recycled for their materials. In FY2003 Sumirin Enterprises recycled 70% of returned computers (82% in FY2002).

Environmental and Social Report

Electronic and Social Report

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In September 1996, a typhoon swept across central Japan, devastating a swathe of 50- to 60-year-old Japanese cypress (hinoki) trees in a planted national forest on the southern slopes of Mt. Fuji. As part of our commitment to contribute to the local community, Sumitomo Forestry initiated the Mt. Fuji Mabuni no Mori natural forest restoration project. To help govern the restoration activities, we set up a steering committee composed of representatives from local government (Shizuoka Prefecture and Fujinomiya City), environmental volunteer groups, universities, media representatives, and others. We also solicited input from the project for the project. We also utilized the networks we gained through this project to carry out a range of other environmental activities as well.

Mt. Fuji natural forest restoration activities
Every year, volunteers plant seedlings and nurture the young trees as part of the Mt. Fuji Mabuni no Mori project. To make sure our afforestation efforts preserve the types of native trees growing on Mt. Fuji, we use species that seed themselves naturally on the slopes of the mountain. These include beech, oak, dogwood, zelkova, stewartia, maple, magnolia, cork tree, hinoki, and Fuji cherry. Thousands of people have participated in the project and a total of 36,369 trees have been planted.

Vegetation monitoring program
To watch over the Mt. Fuji Mabuni no Mori project, we requested the Tokyo University of Agriculture and Technology to run a vegetation-monitoring program. One objective was to monitor the growth of trees planted in groups and study changes in rates in which trees formed stands. A second aim was to survey the process of recovery by natural regeneration recovery by the force of nature without human intervention. The project is helping manage the swift natural recovery of the forest and is collecting data on how the eco-system is recovering.

Wildlife habitat survey
We requested the Wild Bird Society of Japan to monitor the fauna in the area by conducting ongoing surveys of bird species and populations, territories of individual species, and types of mammals.

Forest Ark
In October 1999, we set up Forest Ark, a volunteer activities support center within Mabuni no Mori based on the ideal of co-existence with nature. In building the center, we recycled some demolition materials from old houses, established a bio-toilet (using microorganisms to break down excrement), a solar power generator, and a rainwater tank system.

We also created a biotope in the vicinity, and use Forest Ark as an educational center to raise awareness of the importance of environmental conservation among large numbers of people. As part of their induction training, new volunteers learn about the relationship between plants and the soil and how potting mix is made. At the end of the class, the children were presented with a reminder of what they had learned in the form of packs of Tsuchi Taro potting mix, made by Sumirin Agro-Products Co., Ltd. for use in schools as educational materials.

Environmental education at elementary schools
New education curriculum guidelines, introduced in stages from FY2000 to FY2003, established “integrated learning time” with the aim of instilling a robust reverence for life for children. Under the new guidelines, schools have adopted new and creative approaches to education.

As part of this program, a researcher from our Tsukuba Research Institute was sent to Oita-Gi gakki Elementary School in Shizuoka City to offer integrated education instruction in response to a request received in November 2003 from the school. Using slides and videos, the researcher gave a general talk about environmental problems and described the relationship between plants and the soil and how potting mix is made. At the end of the class, the children were presented with a reminder of what they had learned in the form of packs of Tsuchi Taro potting mix, made by Sumirin Agro-Products Co., Ltd. for use in schools as educational materials.

The head office factory of Sumitomo Forestry Component House Co., Ltd. is situated in an industrial park on the south side of the Watarase River. This industrial park is now an attractive environment as a result of greening and pollution prevention arrangements with Tatebayashi City.

In 2002, the factory shut down and dismantled its incinerator, which had been fueled by waste wood, and is now working toward achieving zero emissions. Every year since 1998, we have carried out social activities within this industrial park and held clean-up campaigns with staff volunteers. In FY2003, we organized clean-up days in June, October, and March. Honoring our commitment to maintain close ties to the region, we also organize family factory tours and tours for the elderly people of the region. These are sponsored by Tatebayashi City.

Neighborhood cleanup campaigns
We also created a biotope in the vicinity, and we use Forest Ark as an educational center to raise awareness of the importance of environmental conservation among large numbers of people. As part of their induction training, new volunteers learn about the relationship between plants and the soil and how potting mix is made. At the end of the class, the children were presented with a reminder of what they had learned in the form of packs of Tsuchi Taro potting mix, made by Sumirin Agro-Products Co., Ltd. for use in schools as educational materials.

Integrated learning promotion activities
In November 2003, we organized integrated learning activities with a forestry theme in Forest Ark under the sponsorship of the Forestry Section of the Trade and Industry Department of the Imabari Local Affairs Bureau of Ehime Prefecture. Twenty-five fifth- and sixth-year pupils of Kitaura Elementary School in Hikata-cho visited Forester House to learn about the history of forestry and how forests develop.

Tropical forest regeneration project completed in Sebulu, Indonesia
We have now completed a 13-year rain forest regeneration project begun in 1991 at Sebulu in East Kalimantan, Indonesia. The project is located in a huge 3,000-hectare experimental forest and has been led by the Silviculture Laboratory of the University of Tokyo's Faculty of Agriculture. With full support from P.T. Sumitomo Forestry Indonesia, the project has been fueled by waste wood, and is now working toward achieving zero emissions. Every year since 1998, we have carried out social activities within this industrial park and held clean-up campaigns with staff volunteers. In FY2003, we organized clean-up days in June, October, and March. Honoring our commitment to maintain close ties to the region, we also organize family factory tours and tours for the elderly people of the region. These are sponsored by Tatebayashi City.

Clean-up campaign around factory by staff volunteers

Social forestry contributes to area
A further goal of the Sebulu project is to contribute to the region by establishing “social forestry” in the area. By establishing a harmonious mix of farming and forestry, we aim to create a system that allows the local people to earn a livelihood without excessive slash-and-burn farming.

Sebulu project’s research results
The results of the Sebulu project, which reached completion in FY2003, utilized in the Daigo Temple weeping cherry tree regeneration project in Japan and in a grant aid ODA project. In the future, Sumitomo Forestry will continue to fully support tropical forest restoration projects.
Highlights of Our Environmental and Social Activities

2004
- Tropical forest regeneration project completed (East Kalimantan, Indonesia)
- Environmental Business Promotion Division established
- ISO 14001 certification obtained for Sumitomo Forestry Crest Co., Ltd., Sumitomo Forestry Home Service Co., Ltd.

2003
- ISO 14001 certification obtained for P.T. Kutai Timber Indonesia (KTI)
- ISO 14001 company-wide certification implemented at all divisions
- Sumitomo Forestry’s Environmental Philosophy formulated
- Sunirin Component House Co., Ltd.

2002
- ISO 14001 certification obtained for all divisions of Sumitomo Forestry Co., Ltd. (excluding overseas affiliates)
- Group companies obtain ISO 14001 certification
- Sumitomo Forestry Component House Industry Co., Ltd.
- Kanto Regional Division

2001
- Successful tissue culture of tropical timber species by Tsukuba Research Institute
- Mt. Fuji Marobi no Mori project began to restore state-owned forest destroyed by a typhoon
- ISO 14001 certification obtained for the Housing Headquarters, Eastern Japan Housing Division

2000
- Tropical rain forest regeneration project began in East Kalimantan, Indonesia
- Forestration project started in Way Kambas National Park, Indonesia
- “Forest Ark” volunteers’ activity center completed
- ISO 14001 certification obtained for Sumitomo Forestry Crest Co., Ltd.

1999
- Successful house culture of tropical timber species by Tsukuba Research Institute
- At Sumitomo Forestry House certified as environmentally sound
- ISO 14001 certification obtained for Sumitomo Forestry Crest Co., Ltd.

1998
- Environmental Business Promotion Division established
- Company-wide Environmental Policy instituted
- ISO 14001 certification obtained for five Housing Headquarters divisions and for the Northern Kanto Regional Division

1997
- Sumitomo Forestry BMS implemented company-wide
- Green Environmental R&D Division established
- Tropical rain forest regeneration project began in East Kalimantan, Indonesia

Business activities

<table>
<thead>
<tr>
<th>Priority</th>
<th>Methodology</th>
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<tbody>
<tr>
<td>Prevention of global warming</td>
<td>- Promote sustainable management of forests</td>
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<td>- Expand sale and use of products using sustainable forest resources as raw materials</td>
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<td>- Expand handling of fuel chips as a biomass energy source</td>
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<td>- Contribute to the reduction of CO2 emissions of occupied houses by developing energy-saving products</td>
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<td>- Try to reduce number of delivery vehicle trips</td>
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<td>- Promote planting of trees for exterior work (Sumitomo Forestry Landscaping Co., Ltd.)</td>
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<tr>
<td>- Reduce factory production-related CO2 emissions (Sumitomo Forestry Co., Ltd.)</td>
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Activities Planned for FY2004

Corporate Data

<table>
<thead>
<tr>
<th>Net sales (Sumitomo Forestry Co., Ltd. non-consolidated)</th>
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<tbody>
<tr>
<td>800,000</td>
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<tr>
<td>600,000</td>
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<tr>
<td>400,000</td>
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<tr>
<td>200,000</td>
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Head Office (Tokyo)
Shinjuku Green Tower Bldg., 6-14-1, Nishi-Shinjuku, Shinjuku-ku, Tokyo 160-8650, Japan

Head Office (Osaka)
Sumitomo Building No.2, 4-7-28 Kitahama, Chuo-ku, Osaka 541-0041, Japan

Paid-in capital: 27,672 million
Incorporated: February 20, 1948

Operations: Forest management; purchase and sale 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 sale of custom built housing; purchase and sale of developed housing and housing lots; purchase and sale of interior products; construction, purchase, sale, and rental of multi-unit residential and office buildings.

Employees: 4,762 (as of March 31, 2004)